



# GE LAMPS CATALOG

LED & TRADITIONAL

2025

Current 

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GE lamps provide unmatched  
**peace of mind.**



# We are:

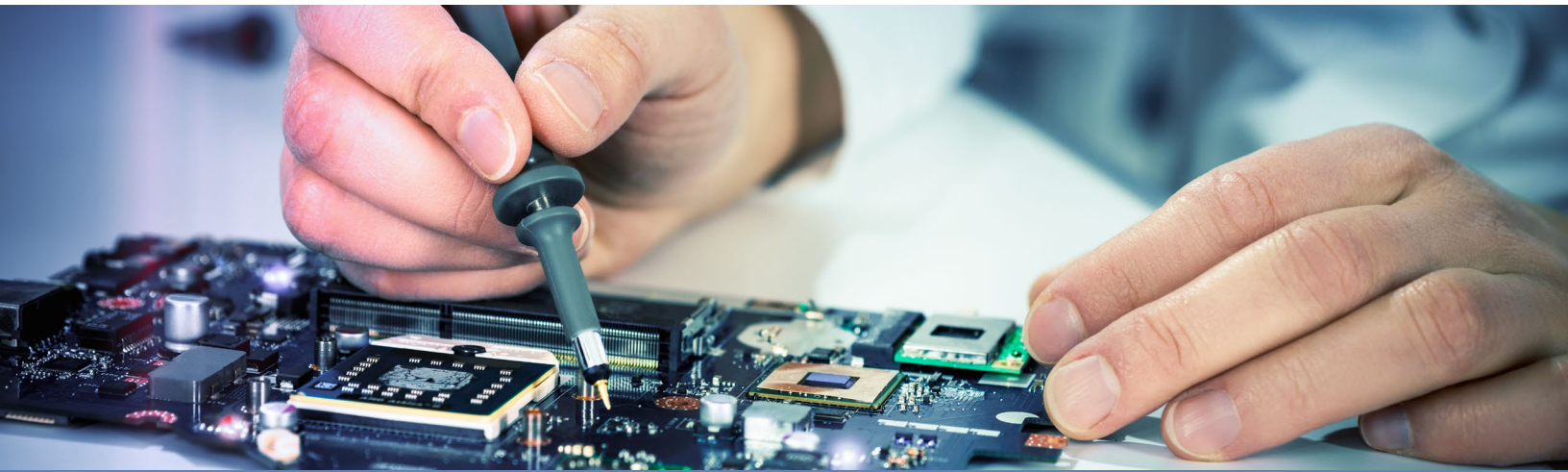
## COMPLETE

Current's comprehensive offering of GE lamps includes high performance LED lighting solutions in addition to popular Traditional products. GE lamps cover a wide range of Linear Fluorescent, High Intensity Discharge, Compact Fluorescent, Halogen, Incandescent and Ballast applications.



## INNOVATIVE

Current's exceptional engineering professionals use deep knowledge of Traditional lamp applications to create industry-leading LED lamps that provide the right amount of light while saving energy and lasting longer. Use them to transform the look and efficiency of your facilities.







# DEPENDABLE

GE lamps have provided the exceptional light quality that you know and love for years. Current's engineers continue to develop reliable GE LED Lamps that fit Traditional applications and meet industry standards for equivalency claims.



# TRUSTED

A reputation for quality and reliability is our legacy. Current continues the proud tradition today, creating GE LED Lamps that last up to 70,000 hours and delivering superior solutions for even the most challenging replacement lamp applications.



# Selectable LED Lamps



## LumenChoice®

Optimize light levels and power consumption instantly, maximizing energy savings immediately

Make lumen/wattage selections easily at any time with integrated switch, no tools required

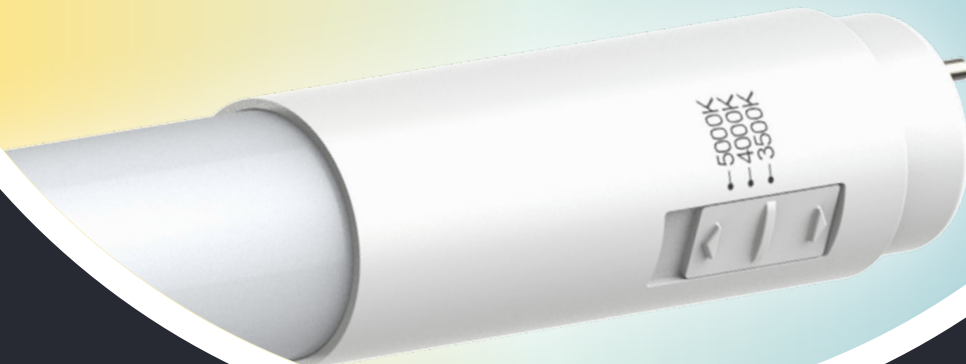
## LumenChoice® + SpectraChoice™



## SpectraChoice™

Match the color of lighting across a facility or choose to change the aesthetic of a space

Make color temperature selections easily at any time with integrated switch, no tools required



pg. **20**  
LED Tubes



### Reduce Inventory

Reduce SKU count and inventory dollars



### Simplify Projects

Simplify BOMs, project management, MRO  
Maintain utility rebates



### Optimize Solutions

Create flexibility for  
installers to react on-site

Take **control** of your lighting & inventory with our full line of Selectable **LED Lamps**



pg. **44**

LED HID



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LED Plug-In



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LED RS Cans



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LED Reflectors



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LED A-Line





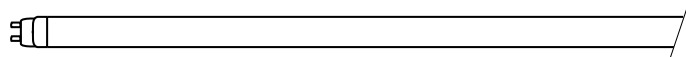
# LED Lamps



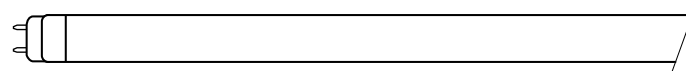
# LED Lamps – Tubes



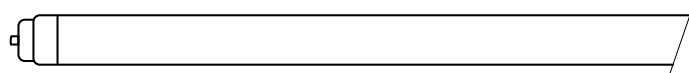
Lamp **Drawings** (not drawn to scale)



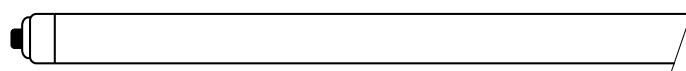
T5 (5/8" diameter) Miniature Bi-Pin Base (G5)



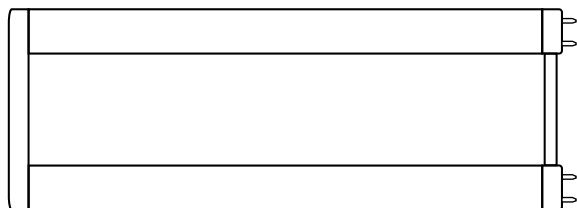
T8 (1" diameter) Medium Bi-Pin Base (G13)



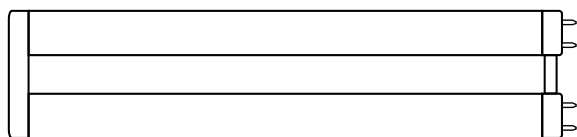
T8 (1" diameter) Single Pin Base (Fa8)



T8 (1" diameter) Recessed Double Contact Base (R17d)



T8 (1" diameter) U6 Medium Bi-Pin Base (2G13)

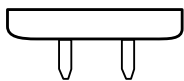


T8 (1" diameter) U1-5/8 Medium Bi-Pin Base (2G13)

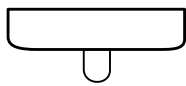
Base **Identification** (not drawn to scale)



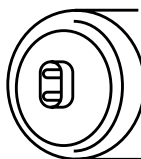
Min BiPin  
G5



Med BiPin  
G13



Single Pin  
Fa8



Recessed Double  
Contact  
R17D



# LED Lamps – Tubes

**LED Tubes**, sometimes referred to as "TLEDs," are meant to use linear fluorescent sockets and fixtures. LED Tubes have the same length and pins as the linear fluorescent lamps they are intended to replace. The details of how the fixture is wired and the auxiliary equipment used may vary, depending on the LED Tube solution.

The lighting industry refers to three basic Types of LED Tubes:

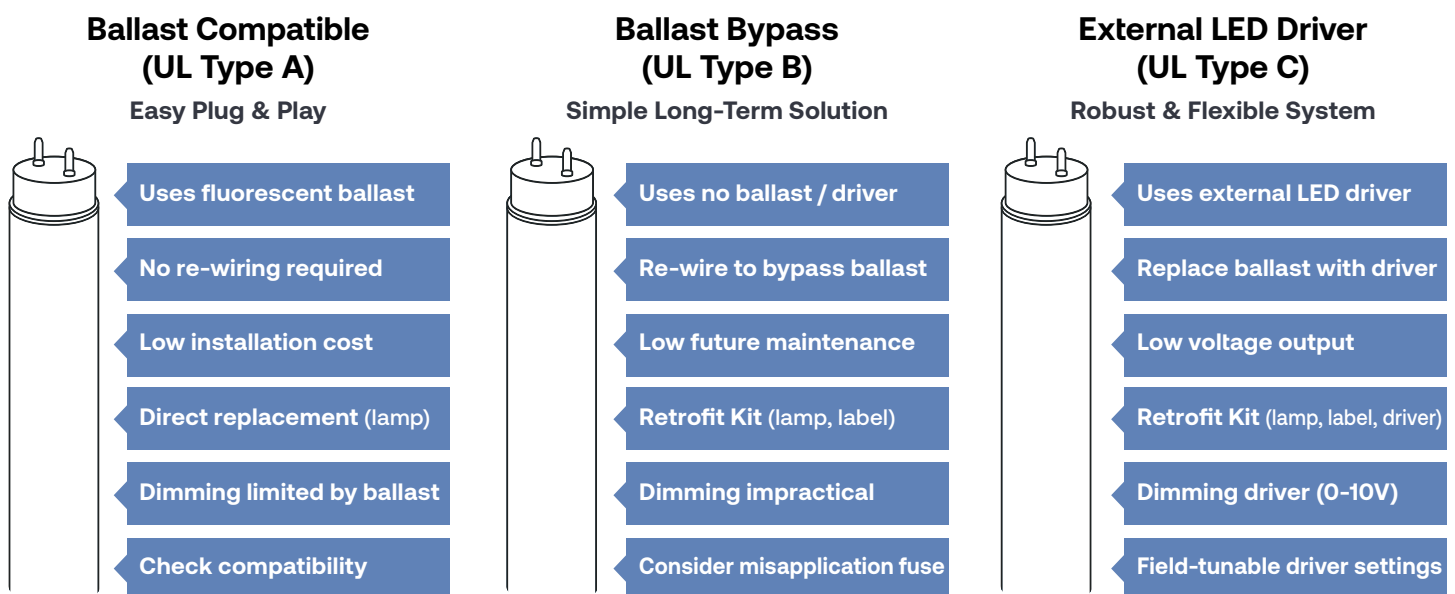
- **Type A LED Tubes** are intended to be used as direct replacements for linear fluorescent lamps, with no modification to the fixture. Type A LED Tubes operate from fluorescent ballasts.
- **Type B LED Tubes** operate from mains voltage. The ballast is bypassed and the fixture is re-wired according to the installation instructions that come with the lamp. Wiring may vary across Type B LED Tubes from different manufacturers. A retrofit fixture label indicating the LED Tube used and that the fixture has been re-wired is provided to be applied to the fixture.
- **Type C LED Tubes** operate from dedicated remote (external) LED drivers. Instead of a ballast, a remote driver is used to provide the proper voltage and current for the Type C LED Tubes. A retrofit fixture label indicating the LED Tube and Driver used is provided to be applied to the fixture. Type C LED Tube and Driver solutions vary across the industry – they are not yet standardized like linear fluorescent lamps and ballasts.

There are also "hybrid" lamps that can cover multiple Types of LED Tubes, depending on how they are implemented.

Current offers a wide range of GE LED Tubes to replace linear fluorescent lamps, including all of the Types above. Each Type of LED Tube offers different advantages, so the right solution may vary by application.

## Which LED Tube is right for you?

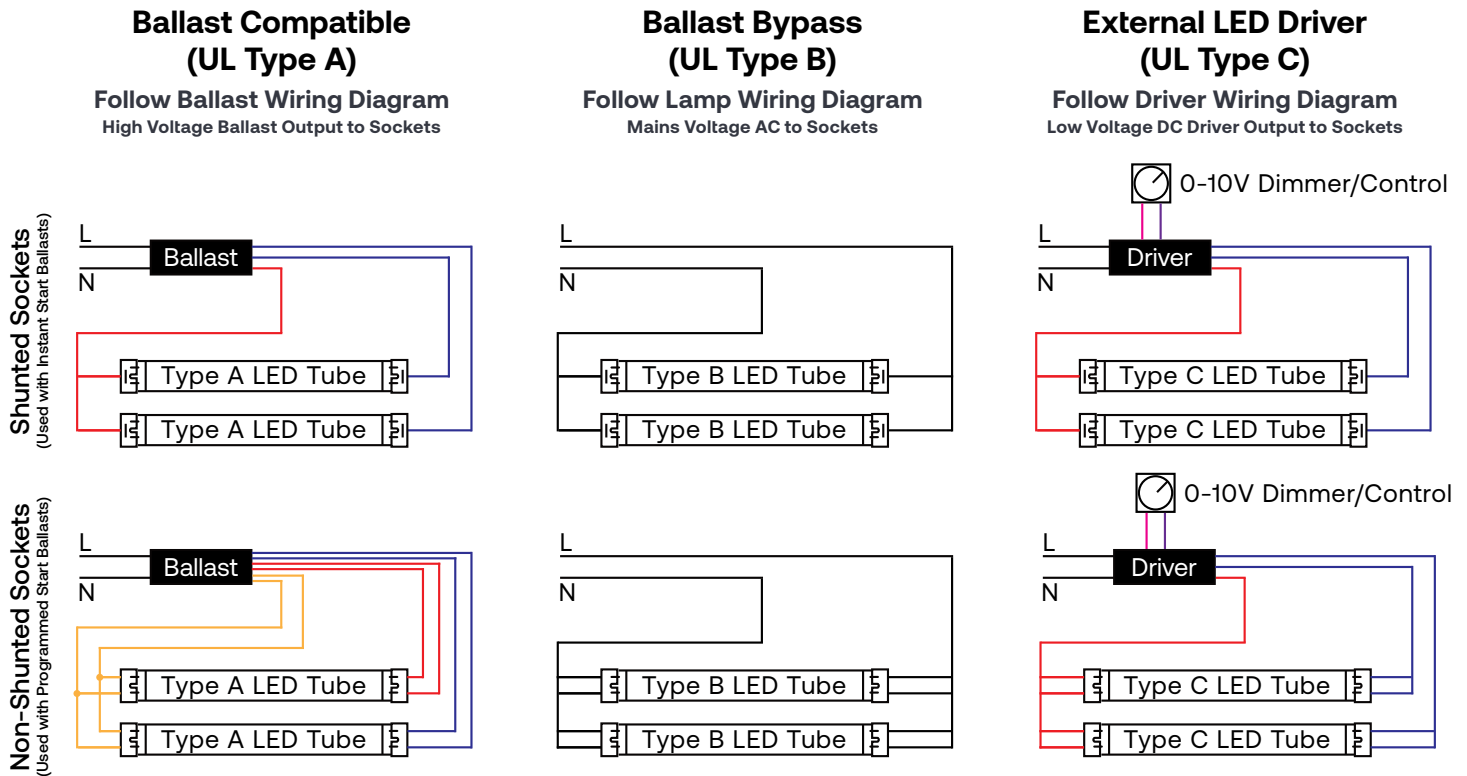
A basic comparison of the Types of LED Tubes is provided below. For more detailed information, please contact your Current sales representative.





## LED Tube Wiring Basics:

The wiring diagrams below are provided as general guidance for GE LED Tubes. Other manufacturers' may vary. Refer to installation guides provided with GE LED Tubes for more detailed directions. If sockets are in good condition, no socket replacement should be necessary for GE LED Tubes. Add a jumper to non-shunted sockets, or tie both wires from a non-shunted socket to the incoming power as shown.



## LED Tube Construction, Coating, & covRguard®:

GE LED Tubes are primarily constructed of glass tubes with an internal coating for diffusion. This is similar to linear fluorescent construction that has been used for decades. Glass is a stable material and works well for most applications. The coating inside the glass provides good diffusion, spreading out the light and eliminating hot spots and pixilation from the individual LEDs.

GE LED Tubes are also offered with PET coating. This white coating is heat-shrunk onto a clear glass tube. Diffusion is supplied by the PET coating, which also provides some shatter resistance. These lamps are NSF Splash Zone rated.

GE LED Tubes are also available with covRguard®. Similar to covRguard® on linear fluorescent lamps, a polycarbonate sleeve is applied over the glass tube and affixed to the lamp end caps. This construction provides excellent shatter protection. These lamps are NSF Food Zone (Non-contact) rated.

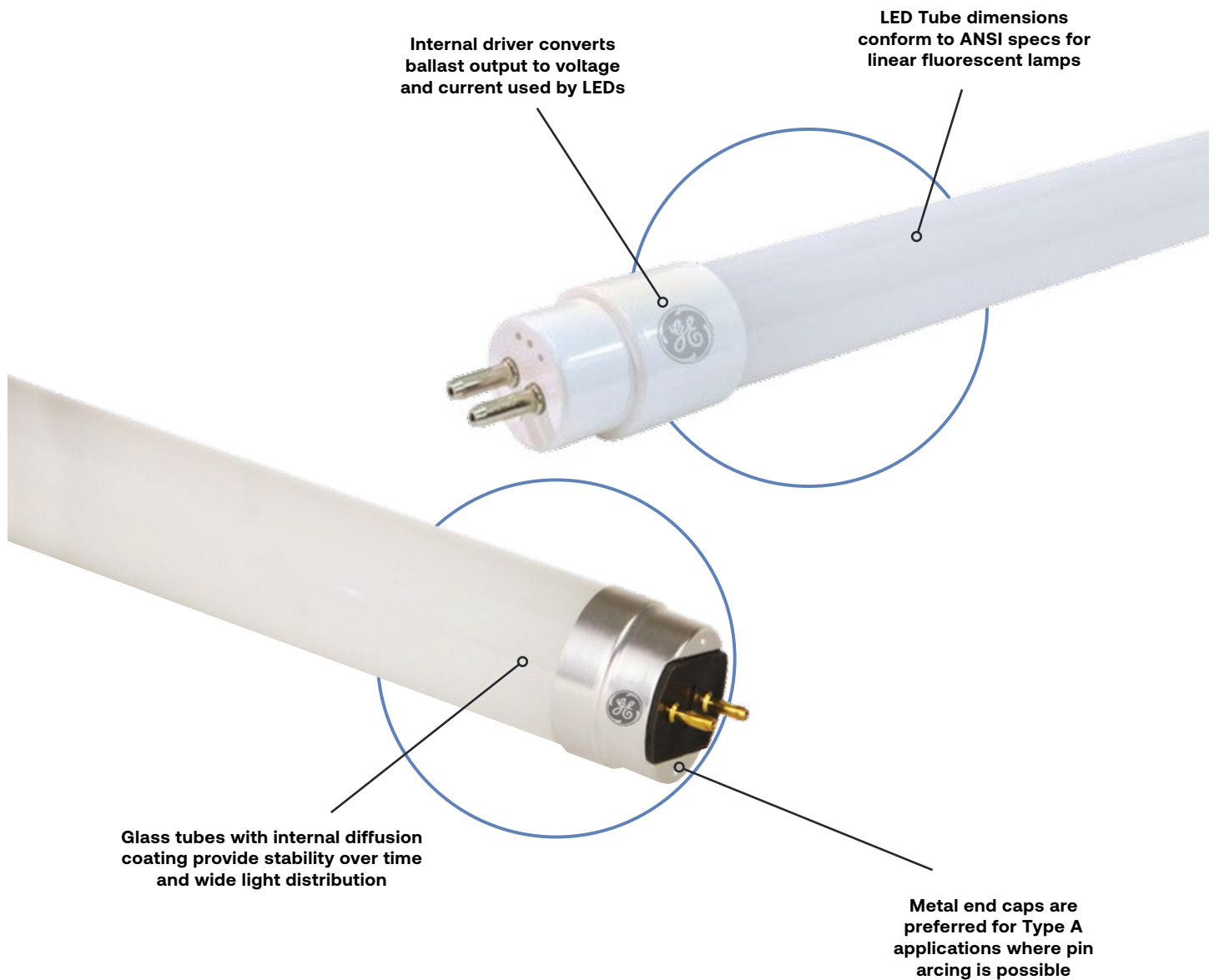


# LED Lamps – Tubes – Type A



## LED Tubes – Type A

GE Type A LED Tubes offer a fast and easy upgrade to LED. No modification to the fixture is necessary. Simply replace the linear fluorescent lamp with the Type A LED Tube. The ballast remains in the circuit, powering the lamps. Confirm ballast compatibility at [www.LED.com/LEDTUBES-ballast-compatibility](http://www.LED.com/LEDTUBES-ballast-compatibility).



# LED Lamps – Tubes – Type A



## Catalog Logic:

### Bulb Shape:

Bulb shape followed by its size (the maximum diameter of the bulb expressed in eighths of an inch).

### Lamp Watts:

Typical Lamp Watts on Normal Ballast Factor (does not include ballast consumption)

### Order Code:

Use the order code when ordering to ensure that you receive the exact product you require

### Description:

Lamp Model Description

### Carton Quantity:

Number of lamps packed in a carton

### MOL (in):

Maximum Overall Length in inches

### System Watts:

Total input watts, including ballast and lamp consumption typical of each Ballast Factor

### Lumens (initial):

Typical lamp lumens when operating on each Ballast Factor

### Rated Life L70:

Hours of operation the lamp will provide before reaching 70% of its original lumen output

### Color Rendering Index (CRI or R):

An indication of the ability of the lamp to render object colors in a normal natural way. The higher the number (0-100), the better the color appearance.

### Color Temperature (K):

A measure of the visual "warmth" or "coolness" of the light from the lamp. The higher the value, the whiter or "cooler" the light appears.

### DLC:

Indicates whether product is listed on the DesignLights Consortium® Qualified Products List

### Location Rating:

Location Rating as defined for LED Lamps by UL 1993

### Additional Information:

Typical application and/or other important information.

|                                                                                 |           |                         |            |                  |                         |          |              | Low Ballast Factor |              | Normal Ballast Factor |              | High Ballast Factor |                      |     |                                   |                  |                              |                        |  |
|---------------------------------------------------------------------------------|-----------|-------------------------|------------|------------------|-------------------------|----------|--------------|--------------------|--------------|-----------------------|--------------|---------------------|----------------------|-----|-----------------------------------|------------------|------------------------------|------------------------|--|
| Bulb Shape                                                                      | Base Type | Lamp Watts <sup>5</sup> | Order Code | Description      | Carton Qty <sup>2</sup> | MOL (in) | System Watts | Lumens (Initial)   | System Watts | Lumens (Initial)      | System Watts | Lumens (Initial)    | Color Temp (Initial) | CRI | Rated Life L70 (Hrs) <sup>1</sup> | DLC <sup>4</sup> | Location Rating <sup>3</sup> | Additional Information |  |
| Integrated 4ft Glass Tubes (operates on Instant Start or Program Start Ballast) |           |                         |            |                  |                         |          |              |                    |              |                       |              |                     |                      |     |                                   |                  |                              |                        |  |
| T8                                                                              | G13       | 18                      | 35767      | LFD18ET8/G/4/830 | 20                      | 48       | 17           | 2100               | 20           | 2500                  | 26           | 3250                | 3000K                | 80  | 70,000                            | Yes              | Damp                         | Instant or PRS Ballast |  |

# LED Lamps – Tubes – Type A



## Integrated Glass Tubes – Type A

| Bulb Shape                                                                            | Base Type | Lamp Watts <sup>5</sup> | Order Code | Description      | Carton Qty <sup>2</sup> | MOL (in) | Low Ballast Factor |                  | Normal Ballast Factor |                  | High Ballast Factor |                  | Color Temp (Initial) | CRI | Rated Life L70 (Hrs) <sup>1</sup> | DLC <sup>3</sup> ID <sup>4</sup> | Location Rating <sup>3</sup> | Additional Information |
|---------------------------------------------------------------------------------------|-----------|-------------------------|------------|------------------|-------------------------|----------|--------------------|------------------|-----------------------|------------------|---------------------|------------------|----------------------|-----|-----------------------------------|----------------------------------|------------------------------|------------------------|
|                                                                                       |           |                         |            |                  |                         |          | System Watts       | Lumens (Initial) | System Watts          | Lumens (Initial) | System Watts        | Lumens (Initial) |                      |     |                                   |                                  |                              |                        |
| Integrated 4ft Glass Tubes (operates on Instant Start or Program Start Ballast)       |           |                         |            |                  |                         |          |                    |                  |                       |                  |                     |                  |                      |     |                                   |                                  |                              |                        |
| T8                                                                                    | G13       | 18                      | 35767      | LED18ET8/G/4/830 | 20                      | 48       | 17                 | 2100             | 20                    | 2500             | 26                  | 3250             | 3000K                | 80  | 70,000                            | PXTA9H72                         | Damp                         |                        |
|                                                                                       | G13       | 18                      | 35768      | LED18ET8/G/4/835 | 20                      | 48       | 17                 | 2100             | 20                    | 2500             | 26                  | 3250             | 3500K                | 80  | 70,000                            | P3FTDF97                         | Damp                         |                        |
|                                                                                       | G13       | 18                      | 35769      | LED18ET8/G/4/840 | 20                      | 48       | 17                 | 2150             | 20                    | 2600             | 26                  | 3400             | 4000K                | 80  | 70,000                            | P9HNH1U8                         | Damp                         |                        |
|                                                                                       | G13       | 18                      | 35772      | LED18ET8/G/4/850 | 20                      | 48       | 17                 | 2150             | 20                    | 2600             | 26                  | 3400             | 5000K                | 80  | 70,000                            | PMHB5Y1H                         | Damp                         |                        |
|                                                                                       | G13       | 18                      | 35773      | LED18ET8/G/4/865 | 20                      | 48       | 17                 | 2150             | 20                    | 2600             | 26                  | 3400             | 6500K                | 80  | 70,000                            | -                                | Damp                         |                        |
|                                                                                       | G13       | 15                      | 35790      | LED15ET8/G/4/830 | 20                      | 48       | 15                 | 1850             | 17                    | 2150             | 23                  | 2900             | 3000K                | 80  | 70,000                            | PNH7QX7P                         | Damp                         |                        |
|                                                                                       | G13       | 15                      | 35791      | LED15ET8/G/4/835 | 20                      | 48       | 15                 | 1850             | 17                    | 2200             | 23                  | 2950             | 3500K                | 80  | 70,000                            | PC3FZA9X                         | Damp                         |                        |
|                                                                                       | G13       | 15                      | 35793      | LED15ET8/G/4/840 | 20                      | 48       | 15                 | 1950             | 17                    | 2300             | 23                  | 3100             | 4000K                | 80  | 70,000                            | PXTTMMVUC                        | Damp                         |                        |
|                                                                                       | G13       | 15                      | 35797      | LED15ET8/G/4/850 | 20                      | 48       | 15                 | 1950             | 17                    | 2300             | 23                  | 3100             | 5000K                | 80  | 70,000                            | PDHK69J3                         | Damp                         |                        |
|                                                                                       | G13       | 15                      | 35798      | LED15ET8/G/4/865 | 20                      | 48       | 15                 | 1950             | 17                    | 2300             | 23                  | 3100             | 6500K                | 80  | 70,000                            | -                                | Damp                         |                        |
|                                                                                       | G13       | 10                      | 34277      | LED10ET8/G/4/830 | 20                      | 48       | 11.5               | 1350             | 13                    | 1600             | 17.5                | 2100             | 3000K                | 80  | 70,000                            | -                                | Damp                         |                        |
|                                                                                       | G13       | 10                      | 34279      | LED10ET8/G/4/835 | 20                      | 48       | 11.5               | 1400             | 13                    | 1600             | 17.5                | 2150             | 3500K                | 80  | 70,000                            | PRHQNZN1                         | Damp                         |                        |
|                                                                                       | G13       | 10                      | 34280      | LED10ET8/G/4/840 | 20                      | 48       | 11.5               | 1450             | 13                    | 1700             | 17.5                | 2300             | 4000K                | 80  | 70,000                            | P7YZOA29                         | Damp                         |                        |
|                                                                                       | G13       | 10                      | 34282      | LED10ET8/G/4/850 | 20                      | 48       | 11.5               | 1450             | 13                    | 1700             | 17.5                | 2300             | 5000K                | 80  | 70,000                            | PSVXE1E0                         | Damp                         |                        |
| Integrated 4ft Value Glass Tubes (operates on Instant Start or Program Start Ballast) |           |                         |            |                  |                         |          |                    |                  |                       |                  |                     |                  |                      |     |                                   |                                  |                              |                        |
| T8                                                                                    | G13       | 14                      | 34283      | LED14ET8/G/4/830 | 20                      | 48       | 15                 | 1700             | 17                    | 2050             | 23                  | 2700             | 3000K                | 80  | 50,000                            | P8P45K7K                         | Damp                         |                        |
|                                                                                       | G13       | 14                      | 34289      | LED14ET8/G/4/835 | 20                      | 48       | 15                 | 1700             | 17                    | 2050             | 23                  | 2700             | 3500K                | 80  | 50,000                            | PKO4WU91                         | Damp                         |                        |
|                                                                                       | G13       | 14                      | 34291      | LED14ET8/G/4/840 | 20                      | 48       | 15                 | 1750             | 17                    | 2100             | 23                  | 2750             | 4000K                | 80  | 50,000                            | PLVH468G                         | Damp                         |                        |
|                                                                                       | G13       | 14                      | 34300      | LED14ET8/G/4/850 | 20                      | 48       | 15                 | 1750             | 17                    | 2100             | 23                  | 2750             | 5000K                | 80  | 50,000                            | P1XY7L6                          | Damp                         |                        |
|                                                                                       | G13       | 11                      | 93107390   | LED11ET8/G/4/830 | 20                      | 48       | 12.5               | 1450             | 14                    | 1700             | 19                  | 2300             | 3000K                | 80  | 50,000                            | -                                | Damp                         |                        |
|                                                                                       | G13       | 11                      | 93107391   | LED11ET8/G/4/835 | 20                      | 48       | 12.5               | 1450             | 14                    | 1700             | 19                  | 2300             | 3500K                | 80  | 50,000                            | PTB81YWO                         | Damp                         |                        |
|                                                                                       | G13       | 11                      | 93107392   | LED11ET8/G/4/840 | 20                      | 48       | 12.5               | 1450             | 14                    | 1700             | 19                  | 2300             | 4000K                | 80  | 50,000                            | PTIWPW1J                         | Damp                         |                        |
|                                                                                       | G13       | 11                      | 93107393   | LED11ET8/G/4/850 | 20                      | 48       | 12.5               | 1450             | 14                    | 1700             | 19                  | 2300             | 5000K                | 80  | 50,000                            | PZ9A65MO                         | Damp                         |                        |
| Integrated 3ft Glass Tubes (operates on Instant Start or Program Start Ballast)       |           |                         |            |                  |                         |          |                    |                  |                       |                  |                     |                  |                      |     |                                   |                                  |                              |                        |
| T8                                                                                    | G13       | 10.5                    | 35783      | LED11ET8/G/3/830 | 20                      | 36       | 11.5               | 1350             | 13                    | 1600             | 18                  | 2150             | 3000K                | 80  | 70,000                            | PCEIN3O5                         | Damp                         |                        |
|                                                                                       | G13       | 10.5                    | 35784      | LED11ET8/G/3/835 | 20                      | 36       | 11.5               | 1350             | 13                    | 1600             | 18                  | 2150             | 3500K                | 80  | 70,000                            | PL2XF8BQ                         | Damp                         |                        |
|                                                                                       | G13       | 10.5                    | 35788      | LED11ET8/G/3/840 | 20                      | 36       | 11.5               | 1350             | 13                    | 1600             | 18                  | 2150             | 4000K                | 80  | 70,000                            | PFERF8MX                         | Damp                         |                        |
|                                                                                       | G13       | 10.5                    | 35789      | LED11ET8/G/3/850 | 20                      | 36       | 11.5               | 1400             | 13                    | 1650             | 18                  | 2250             | 5000K                | 80  | 70,000                            | PQKLC9K                          | Damp                         |                        |
| Integrated 2ft Glass Tubes (operates on Instant Start or Program Start Ballast)       |           |                         |            |                  |                         |          |                    |                  |                       |                  |                     |                  |                      |     |                                   |                                  |                              |                        |
| T8                                                                                    | G13       | 8.5                     | 35775      | LED8ET8/G/2/830  | 20                      | 24       | 9.5                | 1200             | 11                    | 1350             | 15                  | 1850             | 3000K                | 80  | 70,000                            | -                                | Damp                         |                        |
|                                                                                       | G13       | 8.5                     | 35776      | LED8ET8/G/2/835  | 20                      | 24       | 9.5                | 1200             | 11                    | 1350             | 15                  | 1850             | 3500K                | 80  | 70,000                            | PJDHZYEY                         | Damp                         |                        |
|                                                                                       | G13       | 8.5                     | 35778      | LED8ET8/G/2/840  | 20                      | 24       | 9.5                | 1200             | 11                    | 1350             | 15                  | 1850             | 4000K                | 80  | 70,000                            | P557S4DE                         | Damp                         |                        |
|                                                                                       | G13       | 8.5                     | 35779      | LED8ET8/G/2/850  | 20                      | 24       | 9.5                | 1200             | 11                    | 1400             | 15                  | 1950             | 5000K                | 80  | 70,000                            | PU5UYRCN                         | Damp                         |                        |

## Metric Integrated Glass Tubes – Type A

|                                                                                    |           |                         |            |                       |                         |          | Low Ballast Factor |                  | Normal Ballast Factor |                  | High Ballast Factor |                  |                      |     |                                   |                                  |                              |                        |
|------------------------------------------------------------------------------------|-----------|-------------------------|------------|-----------------------|-------------------------|----------|--------------------|------------------|-----------------------|------------------|---------------------|------------------|----------------------|-----|-----------------------------------|----------------------------------|------------------------------|------------------------|
| Bulb Shape                                                                         | Base Type | Lamp Watts <sup>5</sup> | Order Code | Description           | Carton Qty <sup>2</sup> | MOL (in) | System Watts       | Lumens (Initial) | System Watts          | Lumens (Initial) | System Watts        | Lumens (Initial) | Color Temp (Initial) | CRI | Rated Life L70 (Hrs) <sup>1</sup> | DLC <sup>3</sup> ID <sup>4</sup> | Location Rating <sup>3</sup> | Additional Information |
| Metric Integrated Glass Tubes (operates on Instant Start or Program Start Ballast) |           |                         |            |                       |                         |          |                    |                  |                       |                  |                     |                  |                      |     |                                   |                                  |                              |                        |
| T8                                                                                 | G13       | 14                      | 93312131   | LED14ET8/G/835/METRIC | 20                      | 45.67    | 15                 | 1700             | 17                    | 2050             | 23                  | 2700             | 3500K                | 80  | 50,000                            | -                                | Damp                         |                        |
|                                                                                    | G13       | 14                      | 93312133   | LED14ET8/G/840/METRIC | 20                      | 45.67    | 15                 | 1750             | 17                    | 2100             | 23                  | 2750             | 4000K                | 80  | 50,000                            | -                                | Damp                         |                        |

## Integrated Plastic Tubes – Type A

|                                                                                  |           |                         |            |                 |                         |          | Low Ballast Factor | Normal Ballast Factor | High Ballast Factor |                  | Color        |                  | CRI   | Rated Life L70 (Hrs) <sup>1</sup> | DLC <sup>3</sup> ID <sup>4</sup> | Location Rating <sup>3</sup> | Additional Information |
|----------------------------------------------------------------------------------|-----------|-------------------------|------------|-----------------|-------------------------|----------|--------------------|-----------------------|---------------------|------------------|--------------|------------------|-------|-----------------------------------|----------------------------------|------------------------------|------------------------|
| Bulb Shape                                                                       | Base Type | Lamp Watts <sup>5</sup> | Order Code | Description     | Carton Qty <sup>2</sup> | MOL (in) | System Watts       | Lumens (Initial)      | System Watts        | Lumens (Initial) | System Watts | Lumens (Initial) |       |                                   |                                  |                              |                        |
| Integrated U6 Plastic Tubes (operates on Instant Start or Program Start Ballast) |           |                         |            |                 |                         |          |                    |                       |                     |                  |              |                  |       |                                   |                                  |                              |                        |
| T8-U6                                                                            | 2G13      | 13                      | 43120      | LED13ET8/U6/830 | 12                      | 22.5     | 13                 | 1500                  | 15                  | 1800             | 20.5         | 2400             | 3000K | 80                                | 50,000                           | P4CDITRI                     | Damp                   |
|                                                                                  | 2G13      | 13                      | 43125      | LED13ET8/U6/835 | 12                      | 22.5     | 13                 | 1550                  | 15                  | 1850             | 20.5         | 2450             | 3500K | 80                                | 50,000                           | PFX71YXR                     | Damp                   |
|                                                                                  | 2G13      | 13                      | 43129      | LED13ET8/U6/840 | 12                      | 22.5     | 13                 | 1600                  | 15                  | 1900             | 20.5         | 2500             | 4000K | 80                                | 50,000                           | PTXOPXE                      | Damp                   |
|                                                                                  | 2G13      | 13                      | 43130      | LED13ET8/U6/850 | 12                      | 22.5     | 13                 | 1600                  | 15                  | 1900             | 20.5         | 2500             | 5000K | 80                                | 50,000                           | PSF41B80                     | Damp                   |

<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

<sup>2</sup> Minimum order quantity = Carton Qty

<sup>3</sup> UL 1993 Environmental Requirements for LED LAMPS

Damp Location – Exterior or interior location that is normally or periodically subject to condensation of moisture in, on, or adjacent to electrical equipment, including partially protected locations

<sup>4</sup> Not all product variations on this page are DLC qualified. Visit [qpl.designlights.org/solid-state-lighting](http://qpl.designlights.org/solid-state-lighting) to confirm qualification.

<sup>5</sup> Bare lamp wattage operated on Normal Ballast Factor. Measured performance on Low (0.78), Normal (0.88) and High (1.18) Ballast Factors is provided for reference. Performance may vary depending on ballast model and age. Check ballast compatibility at [www.LED.com/LEDTUBES-ballast-compatibility](http://www.LED.com/LEDTUBES-ballast-compatibility).



# LED Lamps – Tubes – Type A



## Integrated covRguard® Plastic Sleeved Glass Tubes – Type A

|                                                                                                            |           |                         |                     |                     |                         |          | Low Ballast Factor |                  | Normal Ballast Factor |                  | High Ballast Factor |                  |                      |        |                                   |                                  |                              |                        |
|------------------------------------------------------------------------------------------------------------|-----------|-------------------------|---------------------|---------------------|-------------------------|----------|--------------------|------------------|-----------------------|------------------|---------------------|------------------|----------------------|--------|-----------------------------------|----------------------------------|------------------------------|------------------------|
| Bulb Shape                                                                                                 | Base Type | Lamp Watts <sup>5</sup> | Order Code          | Description         | Carton Qty <sup>2</sup> | MOL (in) | System Watts       | Lumens (Initial) | System Watts          | Lumens (Initial) | System Watts        | Lumens (Initial) | Color Temp (Initial) | CRI    | Rated Life L70 (Hrs) <sup>1</sup> | DLC <sup>3</sup> ID <sup>4</sup> | Location Rating <sup>3</sup> | Additional Information |
| Integrated 4ft covRguard® Plastic Sleeved Glass Tubes (operates on Instant Start or Program Start Ballast) |           |                         |                     |                     |                         |          |                    |                  |                       |                  |                     |                  |                      |        |                                   |                                  |                              |                        |
| T8                                                                                                         | G13       | 18                      | 93135924            | LED18ET8/G/4/830CVG | 20                      | 48       | 17                 | 2050             | 20                    | 2450             | 26                  | 3200             | 3000K                | 80     | 70,000                            | PWZVF5V0                         | Damp                         | NSF Food Zone          |
|                                                                                                            | G13       | 18                      | 93135946            | LED18ET8/G/4/835CVG | 20                      | 48       | 17                 | 2100             | 20                    | 2500             | 26                  | 3250             | 3500K                | 80     | 70,000                            | PF5EUKL2                         | Damp                         | NSF Food Zone          |
|                                                                                                            | G13       | 18                      | 93135947            | LED18ET8/G/4/840CVG | 20                      | 48       | 17                 | 2100             | 20                    | 2500             | 26                  | 3250             | 4000K                | 80     | 70,000                            | PSKVG35W                         | Damp                         | NSF Food Zone          |
|                                                                                                            | G13       | 18                      | 93135948            | LED18ET8/G/4/850CVG | 20                      | 48       | 17                 | 2150             | 20                    | 2600             | 26                  | 3400             | 5000K                | 80     | 70,000                            | P65JROO4                         | Damp                         | NSF Food Zone          |
|                                                                                                            | G13       | 15                      | 93135823            | LED15ET8/G/4/835CVG | 20                      | 48       | 15                 | 1850             | 17                    | 2200             | 23                  | 2950             | 3500K                | 80     | 70,000                            | PYIS7JSD                         | Damp                         | NSF Food Zone          |
|                                                                                                            | G13       | 15                      | 93135824            | LED15ET8/G/4/840CVG | 20                      | 48       | 15                 | 1850             | 17                    | 2200             | 23                  | 2950             | 4000K                | 80     | 70,000                            | PPXC7238                         | Damp                         | NSF Food Zone          |
|                                                                                                            | G13       | 15                      | 93135846            | LED15ET8/G/4/850CVG | 20                      | 48       | 15                 | 1900             | 17                    | 2250             | 23                  | 3000             | 5000K                | 80     | 70,000                            | PU8LNXAM                         | Damp                         | NSF Food Zone          |
|                                                                                                            | G13       | 10                      | 93135714            | LED10ET8/G/4/835CVG | 20                      | 48       | 11.5               | 1400             | 13                    | 1600             | 17.5                | 2150             | 3500K                | 80     | 70,000                            | PUCLMBOV                         | Damp                         | NSF Food Zone          |
|                                                                                                            | G13       | 10                      | 93135715            | LED10ET8/G/4/840CVG | 20                      | 48       | 11.5               | 1400             | 13                    | 1600             | 17.5                | 2150             | 4000K                | 80     | 70,000                            | PUW18WQG                         | Damp                         | NSF Food Zone          |
| G13                                                                                                        | 10        | 93135716                | LED10ET8/G/4/850CVG | 20                  | 48                      | 11.5     | 1400               | 13               | 1650                  | 17.5             | 2250                | 5000K            | 80                   | 70,000 | PI7FRGBP                          | Damp                             | NSF Food Zone                |                        |
| Integrated 3ft covRguard® Plastic Sleeved Glass Tubes (operates on Instant Start or Program Start Ballast) |           |                         |                     |                     |                         |          |                    |                  |                       |                  |                     |                  |                      |        |                                   |                                  |                              |                        |
| T8                                                                                                         | G13       | 10.5                    | 93135659            | LED11ET8/G/3/835CVG | 20                      | 36       | 11.5               | 1350             | 13                    | 1600             | 18                  | 2150             | 3500K                | 80     | 70,000                            | PSBVQAZE                         | Damp                         | NSF Food Zone          |
|                                                                                                            | G13       | 10.5                    | 93135660            | LED11ET8/G/3/840CVG | 20                      | 36       | 11.5               | 1350             | 13                    | 1600             | 18                  | 2150             | 4000K                | 80     | 70,000                            | P5QTVCPX                         | Damp                         | NSF Food Zone          |
|                                                                                                            | G13       | 10.5                    | 93135661            | LED11ET8/G/3/850CVG | 20                      | 36       | 11.5               | 1400             | 13                    | 1650             | 18                  | 2250             | 5000K                | 80     | 70,000                            | PJ78M875                         | Damp                         | NSF Food Zone          |
| Integrated 2ft covRguard® Plastic Sleeved Glass Tubes (operates on Instant Start or Program Start Ballast) |           |                         |                     |                     |                         |          |                    |                  |                       |                  |                     |                  |                      |        |                                   |                                  |                              |                        |
| T8                                                                                                         | G13       | 8.5                     | 93135655            | LED8ET8/G/2/835CVG  | 20                      | 24       | 9.5                | 1200             | 11                    | 1350             | 15                  | 1850             | 3500K                | 80     | 70,000                            | PVDR8UFU                         | Damp                         | NSF Food Zone          |
|                                                                                                            | G13       | 8.5                     | 93135656            | LED8ET8/G/2/840CVG  | 20                      | 24       | 9.5                | 1200             | 11                    | 1350             | 15                  | 1850             | 4000K                | 80     | 70,000                            | PDP040JM                         | Damp                         | NSF Food Zone          |
|                                                                                                            | G13       | 8.5                     | 93135657            | LED8ET8/G/2/850CVG  | 20                      | 24       | 9.5                | 1200             | 11                    | 1350             | 15                  | 1850             | 5000K                | 80     | 70,000                            | POY2CIVW                         | Damp                         | NSF Food Zone          |

## Integrated PET Plastic Coated Glass Tubes – Type A

|                                                                                                    |           |                         |            |                   |                         |          |              | Low Ballast Factor |              | Normal Ballast Factor |              | High Ballast Factor |                      |     |                                   |                                  |                              |                        |  |
|----------------------------------------------------------------------------------------------------|-----------|-------------------------|------------|-------------------|-------------------------|----------|--------------|--------------------|--------------|-----------------------|--------------|---------------------|----------------------|-----|-----------------------------------|----------------------------------|------------------------------|------------------------|--|
| Bulb Shape                                                                                         | Base Type | Lamp Watts <sup>5</sup> | Order Code | Description       | Carton Qty <sup>2</sup> | MOL (in) | System Watts | Lumens (Initial)   | System Watts | Lumens (Initial)      | System Watts | Lumens (Initial)    | Color Temp (Initial) | CRI | Rated Life L70 (Hrs) <sup>1</sup> | DLC <sup>3</sup> ID <sup>4</sup> | Location Rating <sup>3</sup> | Additional Information |  |
| Integrated 4ft PET Plastic Coated Glass Tubes (operates on Instant Start or Program Start Ballast) |           |                         |            |                   |                         |          |              |                    |              |                       |              |                     |                      |     |                                   |                                  |                              |                        |  |
| T8                                                                                                 | G13       | 14                      | 93107394   | LED14ET8/G4/830CT | 20                      | 48       | 15           | 1700               | 17           | 2050                  | 23           | 2700                | 3000K                | 80  | 50,000                            | -                                | Damp                         | NSF Splash Zone        |  |
|                                                                                                    | G13       | 14                      | 93107506   | LED14ET8/G4/835CT | 20                      | 48       | 15           | 1700               | 17           | 2050                  | 23           | 2700                | 3500K                | 80  | 50,000                            | PG06MMSK                         | Damp                         | NSF Splash Zone        |  |
|                                                                                                    | G13       | 14                      | 93107507   | LED14ET8/G4/840CT | 20                      | 48       | 15           | 1750               | 17           | 2100                  | 23           | 2750                | 4000K                | 80  | 50,000                            | PI234OJJ                         | Damp                         | NSF Splash Zone        |  |
|                                                                                                    | G13       | 14                      | 93107510   | LED14ET8/G4/850CT | 20                      | 48       | 15           | 1750               | 17           | 2100                  | 23           | 2750                | 5000K                | 80  | 50,000                            | PJ6AUR4D                         | Damp                         | NSF Splash Zone        |  |

<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

<sup>2</sup> Minimum order quantity = Carton Qty

<sup>3</sup> UL 1993 Environmental Requirements for LED LAMPS

Damp Location – Exterior or interior location that is normally or periodically subject to condensation of moisture in, on, or adjacent to electrical equipment, including partially protected locations

<sup>4</sup> Not all product variations on this page are DLC qualified. Visit [qpl.designlights.org/solid-state-lighting](http://qpl.designlights.org/solid-state-lighting) to confirm qualification.

<sup>5</sup> Bare lamp wattage operated on Normal Ballast Factor. Measured performance on Low (0.78), Normal (0.88) and High (1.18) Ballast Factors is provided for reference. Performance may vary depending on ballast model and age. Check ballast compatibility at [www.LED.com/LEDTUBES-ballast-compatibility](http://www.LED.com/LEDTUBES-ballast-compatibility).

# LED Lamps – Tubes – Type A



## Integrated Glass Tubes – Type A – T5

| Bulb Shape                                                       | Base Type | Lamp Watts <sup>6</sup> | Order Code | Description      | Carton Qty <sup>2</sup> | MOL (In) | System Watts (BF=1.0) | Lumens (Initial) | Color Temp. (Initial) | CRI | Rated Life L70 (Hrs) <sup>1</sup> | DLC ID <sup>4</sup> | Location Rating <sup>3</sup> | Additional Information |
|------------------------------------------------------------------|-----------|-------------------------|------------|------------------|-------------------------|----------|-----------------------|------------------|-----------------------|-----|-----------------------------------|---------------------|------------------------------|------------------------|
| <b>Integrated 4ft T5 HO Glass Tubes (operates on T5 Ballast)</b> |           |                         |            |                  |                         |          |                       |                  |                       |     |                                   |                     |                              |                        |
| T5                                                               | G5        | 25.5                    | 19203      | LED26ET5/G/4/830 | 20                      | 46       | 32                    | 3650             | 3000K                 | 80  | 50,000                            | PWNBNEB9            | Damp                         | Requires T5 HO Ballast |
|                                                                  | G5        | 25.5                    | 19221      | LED26ET5/G/4/835 | 20                      | 46       | 32                    | 3750             | 3500K                 | 80  | 50,000                            | POB2VN8V            | Damp                         | Requires T5 HO Ballast |
|                                                                  | G5        | 25.5                    | 19227      | LED26ET5/G/4/840 | 20                      | 46       | 32                    | 3800             | 4000K                 | 80  | 50,000                            | PUS7DGCWC           | Damp                         | Requires T5 HO Ballast |
|                                                                  | G5        | 25.5                    | 19348      | LED26ET5/G/4/850 | 20                      | 46       | 32                    | 3900             | 5000K                 | 80  | 50,000                            | P99UF0IO            | Damp                         | Requires T5 HO Ballast |
|                                                                  | G5        | 25.5                    | 19488      | LED26ET5/G/4/865 | 20                      | 46       | 32                    | 3800             | 6500K                 | 80  | 50,000                            | -                   | Damp                         | Requires T5 HO Ballast |
| <b>Integrated 2ft T5 HO Glass Tubes (operates on T5 Ballast)</b> |           |                         |            |                  |                         |          |                       |                  |                       |     |                                   |                     |                              |                        |
| T5                                                               | G5        | 11                      | 34413      | LED11ET5/G/2/830 | 20                      | 22       | 13.5                  | 1500             | 3000K                 | 80  | 50,000                            | -                   | Damp                         | Requires T5 HO Ballast |
|                                                                  | G5        | 11                      | 34417      | LED11ET5/G/2/835 | 20                      | 22       | 13.5                  | 1550             | 3500K                 | 80  | 50,000                            | -                   | Damp                         | Requires T5 HO Ballast |
|                                                                  | G5        | 11                      | 34418      | LED11ET5/G/2/840 | 20                      | 22       | 13.5                  | 1600             | 4000K                 | 80  | 50,000                            | -                   | Damp                         | Requires T5 HO Ballast |
|                                                                  | G5        | 11                      | 34424      | LED11ET5/G/2/850 | 20                      | 22       | 13.5                  | 1600             | 5000K                 | 80  | 50,000                            | -                   | Damp                         | Requires T5 HO Ballast |
| <b>Integrated 4ft T5 HE Glass Tubes (operates on T5 Ballast)</b> |           |                         |            |                  |                         |          |                       |                  |                       |     |                                   |                     |                              |                        |
| T5                                                               | G5        | 13                      | 34351      | LED13ET5G4/830HE | 20                      | 46       | 16                    | 1900             | 3000K                 | 80  | 50,000                            | P3D2AHME            | Damp                         | Requires T5 HE Ballast |
|                                                                  | G5        | 13                      | 34354      | LED13ET5G4/835HE | 20                      | 46       | 16                    | 1950             | 3500K                 | 80  | 50,000                            | P9QL3V95            | Damp                         | Requires T5 HE Ballast |
|                                                                  | G5        | 13                      | 34355      | LED13ET5G4/840HE | 20                      | 46       | 16                    | 2000             | 4000K                 | 80  | 50,000                            | PIN820KS            | Damp                         | Requires T5 HE Ballast |
|                                                                  | G5        | 13                      | 34367      | LED13ET5G4/850HE | 20                      | 46       | 16                    | 2000             | 5000K                 | 80  | 50,000                            | PXRH4DM6            | Damp                         | Requires T5 HE Ballast |
| <b>Integrated 3ft T5 HE Glass Tubes (operates on T5 Ballast)</b> |           |                         |            |                  |                         |          |                       |                  |                       |     |                                   |                     |                              |                        |
| T5                                                               | G5        | 10                      | 34371      | LED10ET5G3/830HE | 20                      | 34       | 13                    | 1500             | 3000K                 | 80  | 50,000                            | -                   | Damp                         | Requires T5 HE Ballast |
|                                                                  | G5        | 10                      | 34376      | LED10ET5G3/835HE | 20                      | 34       | 13                    | 1550             | 3500K                 | 80  | 50,000                            | -                   | Damp                         | Requires T5 HE Ballast |
|                                                                  | G5        | 10                      | 34401      | LED10ET5G3/840HE | 20                      | 34       | 13                    | 1600             | 4000K                 | 80  | 50,000                            | -                   | Damp                         | Requires T5 HE Ballast |
|                                                                  | G5        | 10                      | 34402      | LED10ET5G3/850HE | 20                      | 34       | 13                    | 1600             | 5000K                 | 80  | 50,000                            | -                   | Damp                         | Requires T5 HE Ballast |
| <b>Integrated 2ft T5 HE Glass Tubes (operates on T5 Ballast)</b> |           |                         |            |                  |                         |          |                       |                  |                       |     |                                   |                     |                              |                        |
| T5                                                               | G5        | 7                       | 34403      | LED7ET5/G2/830HE | 20                      | 22       | 10                    | 1000             | 3000K                 | 80  | 50,000                            | -                   | Damp                         | Requires T5 HE Ballast |
|                                                                  | G5        | 7                       | 34404      | LED7ET5/G2/835HE | 20                      | 22       | 10                    | 1100             | 3500K                 | 80  | 50,000                            | -                   | Damp                         | Requires T5 HE Ballast |
|                                                                  | G5        | 7                       | 34411      | LED7ET5/G2/840HE | 20                      | 22       | 10                    | 1150             | 4000K                 | 80  | 50,000                            | -                   | Damp                         | Requires T5 HE Ballast |
|                                                                  | G5        | 7                       | 34412      | LED7ET5/G2/850HE | 20                      | 22       | 10                    | 1150             | 5000K                 | 80  | 50,000                            | -                   | Damp                         | Requires T5 HE Ballast |

<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

<sup>2</sup> Minimum order quantity = Carton Qty

<sup>3</sup> UL 1993 Environmental Requirements for LED LAMPS

Damp Location – Exterior or interior location that is normally or periodically subject to condensation of moisture in, on, or adjacent to electrical equipment, including partially protected locations

<sup>4</sup> Not all product variations on this page are DLC qualified. Visit [qpl.designlights.org/solid-state-lighting](http://qpl.designlights.org/solid-state-lighting) to confirm qualification.

<sup>6</sup> Bare lamp wattage operated on T5 Ballasts. Measured performance on T5 ballasts (Ballast Factor = 1.0) is provided for reference. Performance may vary depending on ballast model and age.

Check ballast compatibility at [www.LED.com/LEDTUBES-ballast-compatibility](http://www.LED.com/LEDTUBES-ballast-compatibility).

# LED Lamps – Tubes – Type A+B



## Dual Mode Glass Tubes – Type A+B

GE Type A+B Tubes offer the flexibility to be used in either Type A (ballast driven) or Type B (ballast bypass) applications. The notes about each separate Type apply. Type A+B Tubes might be installed as Type A and then when the ballast fails or if it is found to be incompatible, switched to Type B. To use Type A+B lamps as Type B, the same re-wiring process must be done as for Type B lamps.

## Selectable SpectraChoice™ Dual Mode Glass Tubes – Type A+B

|                                      |           |                         |            |                  |                         |          | TYPE A MODE        |                  |                       |                  |                     |                  | TYPE B MODE   |       |                  |              |     |                                   |                                   |                    |                              |
|--------------------------------------|-----------|-------------------------|------------|------------------|-------------------------|----------|--------------------|------------------|-----------------------|------------------|---------------------|------------------|---------------|-------|------------------|--------------|-----|-----------------------------------|-----------------------------------|--------------------|------------------------------|
| Bulb Shape                           | Base Type | Lamp Watts <sup>5</sup> | Order Code | Description      | Carton Qty <sup>2</sup> | MOL (in) | Low Ballast Factor |                  | Normal Ballast Factor |                  | High Ballast Factor |                  | Input Voltage | Watts | Lumens (Initial) | Power Factor | CRI | Selectable Color Temp. (Initial)* | Rated Life L70 (Hrs) <sup>1</sup> | DLC <sup>3,4</sup> | Location Rating <sup>3</sup> |
|                                      |           |                         |            |                  |                         |          | System Watts       | Lumens (Initial) | System Watts          | Lumens (Initial) | System Watts        | Lumens (Initial) |               |       |                  |              |     |                                   |                                   |                    |                              |
| Dual Mode 4ft Glass Tubes (Type A+B) |           |                         |            |                  |                         |          |                    |                  |                       |                  |                     |                  |               |       |                  |              |     |                                   |                                   |                    |                              |
| T8                                   | G13       | 14.5                    | 93319135   | LED14ABT8/G4/8SC | 25                      | 48       | 15.5               | 1850             | 18.5                  | 2200             | 26                  | 2950             | 120-277       | 14.5  | 2000             | >0.9         | 80  | 3000K                             | 50,000                            | S-L5ZXZP           | Damp                         |
|                                      |           |                         |            |                  |                         |          | 15.5               | 1900             | 18.5                  | 2250             | 26                  | 3000             | 120-277       | 14.5  | 2050             | >0.9         | 80  | 3500K                             | 50,000                            | S-L5ZXZP           | Damp                         |
|                                      |           |                         |            |                  |                         |          | 15.5               | 1900             | 18.5                  | 2250             | 26                  | 3000             | 120-277       | 14.5  | 2050             | >0.9         | 80  | 4000K*                            | 50,000                            | S-L5ZXZP           | Damp                         |
|                                      |           |                         |            |                  |                         |          | 15.5               | 1850             | 18.5                  | 2200             | 26                  | 2950             | 120-277       | 14.5  | 2000             | >0.9         | 80  | 5000K                             | 50,000                            | S-L5ZXZP           | Damp                         |
| Dual Mode 3ft Glass Tubes (Type A+B) |           |                         |            |                  |                         |          |                    |                  |                       |                  |                     |                  |               |       |                  |              |     |                                   |                                   |                    |                              |
| T8                                   | G13       | 12                      | 93320992   | LED12ABT8/G3/8SC | 25                      | 36       | 10                 | 1100             | 11.5                  | 1350             | 17.5                | 1850             | 120-277       | 12    | 1650             | >0.9         | 80  | 3000K                             | 50,000                            | -                  | Damp                         |
|                                      |           |                         |            |                  |                         |          | 10                 | 1150             | 11.5                  | 1400             | 17.5                | 1900             | 120-277       | 12    | 1650             | >0.9         | 80  | 3500K                             | 50,000                            | -                  | Damp                         |
|                                      |           |                         |            |                  |                         |          | 10                 | 1200             | 11.5                  | 1450             | 17.5                | 1950             | 120-277       | 12    | 1700             | >0.9         | 80  | 4000K*                            | 50,000                            | -                  | Damp                         |
|                                      |           |                         |            |                  |                         |          | 10                 | 1200             | 11.5                  | 1450             | 17.5                | 1950             | 120-277       | 12    | 1700             | >0.9         | 80  | 5000K                             | 50,000                            | -                  | Damp                         |
| Dual Mode 2ft Glass Tubes (Type A+B) |           |                         |            |                  |                         |          |                    |                  |                       |                  |                     |                  |               |       |                  |              |     |                                   |                                   |                    |                              |
| T8                                   | G13       | 8                       | 93320998   | LED8ABT8/G2/8SC  | 25                      | 24       | 9.5                | 1050             | 11                    | 1300             | 17                  | 1700             | 120-277       | 8     | 1100             | >0.9         | 80  | 3000K                             | 50,000                            | -                  | Damp                         |
|                                      |           |                         |            |                  |                         |          | 9.5                | 1100             | 11                    | 1300             | 17                  | 1750             | 120-277       | 8     | 1100             | >0.9         | 80  | 3500K                             | 50,000                            | -                  | Damp                         |
|                                      |           |                         |            |                  |                         |          | 9.5                | 1150             | 11                    | 1350             | 17                  | 1800             | 120-277       | 8     | 1150             | >0.9         | 80  | 4000K*                            | 50,000                            | -                  | Damp                         |
|                                      |           |                         |            |                  |                         |          | 9.5                | 1150             | 11                    | 1350             | 17                  | 1800             | 120-277       | 8     | 1150             | >0.9         | 80  | 5000K                             | 50,000                            | -                  | Damp                         |

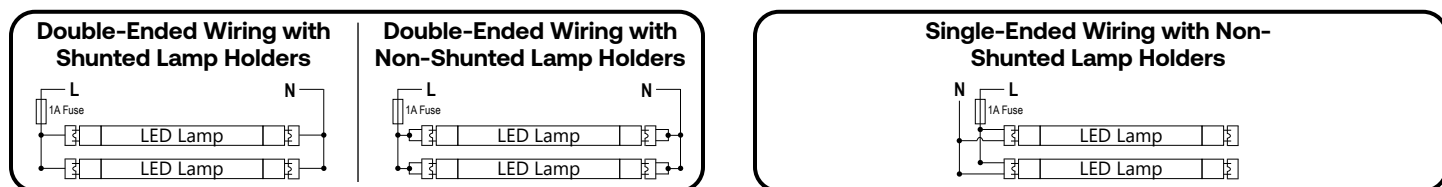
## Selectable SpectraChoice™ Dual Mode Glass Tubes – Dimmer Compatibility

Lamps are dimmable on 120V on the below reverse phase dimmers.

| Brand                                       | Model Number  |
|---------------------------------------------|---------------|
| <b>Compatible Reverse Phase Dimmer List</b> |               |
| LUTRON                                      | DVELV-300P-** |
| LUTRON                                      | DVELV-303P-** |
| LUTRON                                      | MAELV-600-**  |

If lamp holders are shunted, follow instructions for double-ended wiring.

If lamp holders are not shunted, single-ended or double-ended wiring may be used.



<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

<sup>2</sup> Minimum order quantity = Carton Qty

<sup>3</sup> UL 1993 Environmental Requirements for LED LAMPS

Damp Location – Exterior or interior location that is normally or periodically subject to condensation of moisture in, on, or adjacent to electrical equipment, including partially protected locations

<sup>4</sup> Not all product variations on this page are DLC qualified. Visit [qpl.designlights.org/solid-state-lighting](http://qpl.designlights.org/solid-state-lighting) to confirm qualification.

<sup>5</sup> Bare lamp wattage operated on Normal Ballast Factor. Measured performance on Low (0.78), Normal (0.88) and High (1.18) Ballast Factors is provided for reference. Performance may vary depending on ballast model and age. Check ballast compatibility at [www.LED.com/LEDTUBES-ballast-compatibility](http://www.LED.com/LEDTUBES-ballast-compatibility).

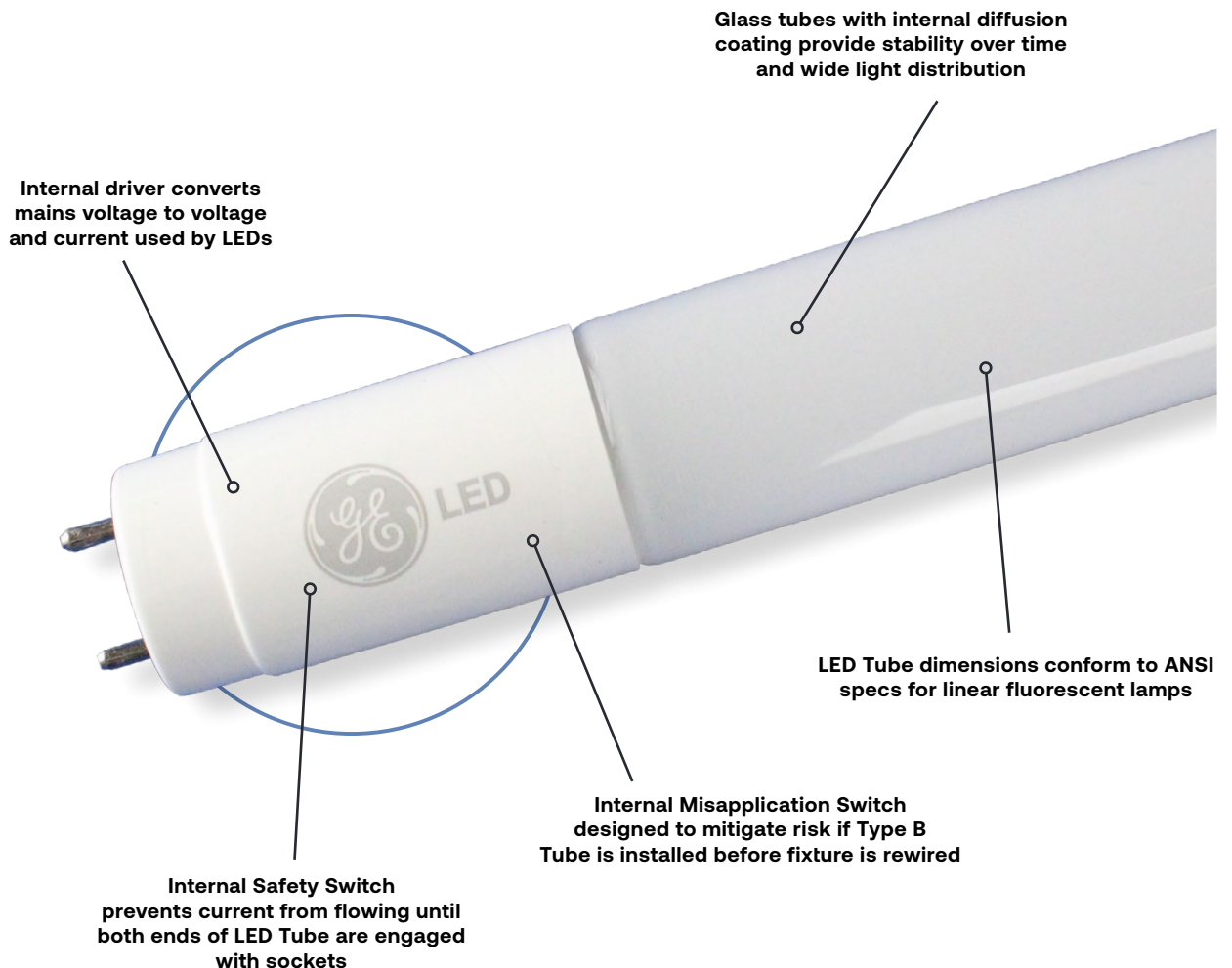
\* Default wattage and color temperature settings noted by "\*" in tables above.

# LED Lamps – Tubes – Type B



## LED Tubes – Type B

GE Type B LED Tubes offer a simple long-term solution for linear applications. The fixture is re-wired to bypass the ballast, taking mains voltage directly to the lampholders. This eliminates the ballast as a potential failure point, eliminates the ballast energy consumption and reduces future maintenance. GE Type B LED Tubes have multiple safety features designed into the lamp. Current also offers an external misapplication fuse kit for added protection and peace of mind.



# LED Lamps – Tubes – Type B



## Catalog Logic:

### Bulb Shape:

Bulb shape followed by its size (the maximum diameter of the bulb expressed in eighths of an inch)

### Watts:

Energy Used (as defined by FTC Lamp Label Rules)

### Description:

Lamp Model Description

### MOL (in):

Maximum Overall Length in inches

### Lumens:

Light output (as defined by FTC Lamp Label Rules)

### Rated Life L70:

Hours of operation the lamp will provide before reaching 70% of its original lumen output

### Color Temperature (K):

A measure of the visual "warmth" or "coolness" of the light from the lamp. The higher the value, the whiter or "cooler" the light appears.

### Power Factor:

A measure of the phase difference between voltage and current drawn by an electrical device

### DLC:

Indicates whether product is listed on the DesignLights Consortium® Qualified Products List

### Location Rating:

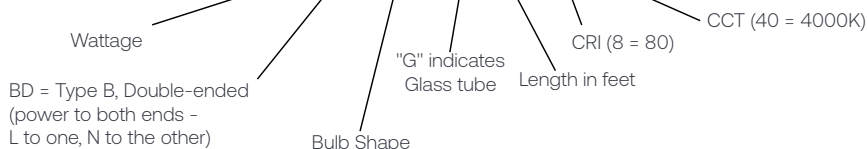
Location Rating as defined for LED Lamps by UL 1993

### Additional Information:

Typical application and/or other important information

| Bulb Shape                       | Base Type | Watts | Order Code | Description      | Volts   | Carton Qty <sup>2</sup> | MOL (in) | Lumens (Initial) | Color Temp. (Initial) | CRI | Rated Life L70 (Hrs) <sup>1</sup> | Power Factor | DLC <sup>04</sup> | Location Rating <sup>3</sup> | Additional Information |
|----------------------------------|-----------|-------|------------|------------------|---------|-------------------------|----------|------------------|-----------------------|-----|-----------------------------------|--------------|-------------------|------------------------------|------------------------|
| Ballast Bypass - 4ft Glass Tubes |           |       |            |                  |         |                         |          |                  |                       |     |                                   |              |                   |                              |                        |
| T8                               | G13       | 14    | 39498      | LED14BDT8/G4/840 | 120-277 | 20                      | 48       | 1800             | 4000K                 | 80  | 50,000                            | >0.9         | Yes               | Damp                         |                        |

## LED14BDT8/G4/840





# LED Lamps - Tubes - Type B



Current offers unmatched flexibility in a single **Type B LED Tube**.  
Select wattage and color temperature at the flick of a switch.

LumenChoice® + SpectraChoice™ Selectable LED Tubes maximize the potential to reduce inventory and streamline product lists. These lamps allow installers to react to a wide variety of needs, providing the ability to adjust both the color temperature of the light and the brightness.

But what about when it's known a site prefers 4000K? LumenChoice® Selectable LED Tubes can be used to optimize the light levels throughout a facility with just one SKU. Reducing the wattage can save more energy and improve the comfortability of overlit spaces.



## LumenChoice®

Optimize light levels and power consumption instantly, maximizing energy savings immediately

Make lumen/wattage selections easily at any time with integrated switch, no tools required

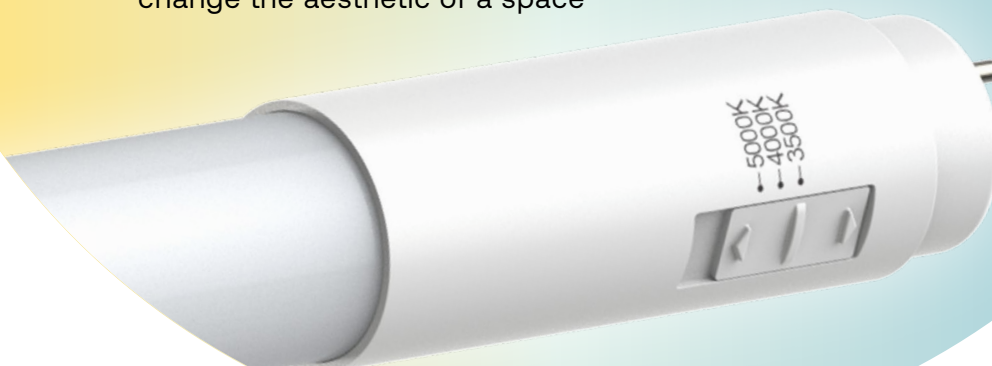
# LumenChoice® + SpectraChoice™



## SpectraChoice™

Match the color of lighting across a facility or choose to change the aesthetic of a space

Make color temperature selections easily at any time with integrated switch, no tools required



# LED Lamps – Tubes – Type B



## Ballast Bypass Selectable LumenChoice® + SpectraChoice™ Glass Tubes - Double Ended - Type B

| Bulb Shape                                | Base Type | Order Code | Description                | Volts   | Carton Qty <sup>2</sup> | MOL (in) | Selectable Watts* | Selectable Lumens (Initial)* | Selectable Color Temp. (Initial)* | CRI | Rated Life L70 (Hrs) <sup>1</sup> | Power Factor | DLC <sup>3</sup> ID <sup>4</sup> | Location Rating <sup>3</sup> | Additional Information |
|-------------------------------------------|-----------|------------|----------------------------|---------|-------------------------|----------|-------------------|------------------------------|-----------------------------------|-----|-----------------------------------|--------------|----------------------------------|------------------------------|------------------------|
| Ballast Bypass (Type B) - 4ft Glass Tubes |           |            |                            |         |                         |          |                   |                              |                                   |     |                                   |              |                                  |                              |                        |
| T8                                        | G13       | 93301824   | LEDLCBDT8/G4/8SC           | 120-277 | 20                      | 48       | 8<br>12*<br>16    | 1100<br>1600*<br>2000        | 3500K<br>4000K*<br>5000K          | 80  | 70,000                            | >0.9         | S-3Q0BDP                         | Damp                         |                        |
| T8                                        | G13       | 93313525   | LEDLCBDT8/G4/8SCXL/120-347 | 120-347 | 20                      | 48       | 10<br>13*<br>16   | 1650<br>2050*<br>2550        | 3000K<br>3500K<br>4000K*<br>5000K | 80  | 70,000                            | >0.9         | S-3PNRN2                         | Damp                         |                        |
| Ballast Bypass (Type B) - 3ft Glass Tubes |           |            |                            |         |                         |          |                   |                              |                                   |     |                                   |              |                                  |                              |                        |
| T8                                        | G13       | 93313565   | LEDLCBDT8/G3/8SC/120-347   | 120-347 | 20                      | 36       | 10<br>12*<br>14   | 1400<br>1650*<br>1800        | 3000K<br>3500K<br>4000K*<br>5000K | 80  | 70,000                            | >0.9         | S-6N1DV1                         | Damp                         |                        |
| Ballast Bypass (Type B) - 2ft Glass Tubes |           |            |                            |         |                         |          |                   |                              |                                   |     |                                   |              |                                  |                              |                        |
| T8                                        | G13       | 93313567   | LEDLCBDT8/G2/8SC/120-347   | 120-347 | 20                      | 24       | 7<br>9*<br>11     | 950<br>1150*<br>1350         | 3000K<br>3500K<br>4000K*<br>5000K | 80  | 70,000                            | >0.9         | S-HXPL6T                         | Damp                         |                        |

## Ballast Bypass Selectable LumenChoice® Glass Tubes - Double Ended - Type B

| Bulb Shape                                | Base Type | Order Code | Description      | Volts   | Carton Qty <sup>2</sup> | MOL (in) | Selectable Watts* | Selectable Lumens (Initial)* | Color Temp. (Initial) | CRI | Rated Life L70 (Hrs) <sup>1</sup> | Power Factor | DLC <sup>3</sup> ID <sup>4</sup> | Location Rating <sup>3</sup> | Additional Information |
|-------------------------------------------|-----------|------------|------------------|---------|-------------------------|----------|-------------------|------------------------------|-----------------------|-----|-----------------------------------|--------------|----------------------------------|------------------------------|------------------------|
| Ballast Bypass (Type B) - 4ft Glass Tubes |           |            |                  |         |                         |          |                   |                              |                       |     |                                   |              |                                  |                              |                        |
| T8                                        | G13       | 93301783   | LEDLCBDT8/G4/840 | 120-277 | 20                      | 48       | 8<br>12*<br>16    | 1100<br>1600*<br>2000        | 4000K                 | 80  | 70,000                            | >0.9         | S-Z2H9M3                         | Damp                         |                        |

## Ballast Bypass Selectable SpectraChoice™ Glass Tubes - Double Ended - Type B

| Bulb Shape                                  | Base Type | Order Code | Description                  | Volts   | Carton Qty <sup>2</sup> | MOL (in) | Watts | Lumens (Initial)*             | Selectable Color Temp. (Initial)* | CRI | Rated Life L70 (Hrs) <sup>1</sup> | Power Factor | DLC <sup>3</sup> ID <sup>4</sup> | Location Rating <sup>3</sup> | Additional Information |
|---------------------------------------------|-----------|------------|------------------------------|---------|-------------------------|----------|-------|-------------------------------|-----------------------------------|-----|-----------------------------------|--------------|----------------------------------|------------------------------|------------------------|
| Ballast Bypass (Type B) - 8ft Glass Tubes   |           |            |                              |         |                         |          |       |                               |                                   |     |                                   |              |                                  |                              |                        |
| T8                                          | Fa8       | 93319020   | LED42BDT8/G8/Fa8/8SC/120-347 | 120-347 | 10                      | 96       | 42    | 5300<br>5500<br>5500*<br>5400 | 3500K<br>4000K<br>5000K*<br>6500K | 80  | 50,000                            | >0.9         | S-FVL70T                         | Damp                         |                        |
| Ballast Bypass (Type B) - 4ft Glass Tubes   |           |            |                              |         |                         |          |       |                               |                                   |     |                                   |              |                                  |                              |                        |
| T8                                          | G13       | 93313519   | LED16BDT8/G4/8SCXL/120-347   | 120-347 | 20                      | 48       | 16    | 2550                          | 3000K<br>3500K<br>4000K*<br>5000K | 80  | 70,000                            | >0.9         | S-Y9PPM3                         | Damp                         |                        |
| T8                                          | G13       | 93313501   | LED13BDT8/G4/8SCXL/120-347   | 120-347 | 20                      | 48       | 13    | 2050                          | 3000K<br>3500K<br>4000K*<br>5000K | 80  | 70,000                            | >0.9         | S-77F6BV                         | Damp                         |                        |
| T8                                          | G13       | 93313483   | LED10BDT8/G4/8SCXL/120-347   | 120-347 | 20                      | 48       | 10    | 1650                          | 3000K<br>3500K<br>4000K*<br>5000K | 80  | 70,000                            | >0.9         | S-MY0H3W                         | Damp                         |                        |
| T8                                          | G13       | 93315883   | LED14BDT8/G4/8SC             | 120-277 | 20                      | 48       | 14    | 1850                          | 3000K<br>3500K<br>4000K*<br>5000K | 80  | 50,000                            | >0.9         | S-C04HBD                         | Damp                         |                        |
| Ballast Bypass (Type B) - 18 in Glass Tubes |           |            |                              |         |                         |          |       |                               |                                   |     |                                   |              |                                  |                              |                        |
| T8                                          | G13       | 93319892   | LED7BDT8/G18/8SC/120-347     | 120-347 | 20                      | 18       | 7     | 900<br>1000<br>1000<br>950    | 3000K<br>3500K<br>4000K*<br>5000K | 80  | 70,000                            | >0.9         | -                                | Damp                         |                        |

For Selectable R17d Signage and Standard Glass Tubes, refer to page 30

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<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

<sup>2</sup> Minimum order quantity from Current = Case Qty

<sup>3</sup> UL 1993 Environmental Requirements for LED LAMPS

Damp Location – Exterior or interior location that is normally or periodically subject to condensation of moisture in, on, or adjacent to electrical equipment, including partially protected locations

<sup>4</sup> Visit [qpl.designlights.org/solid-state-lighting](http://qpl.designlights.org/solid-state-lighting) to confirm qualification.

\* Default wattage and color temperature settings noted by "\*" in tables above.

# LED Lamps - Tubes - Type B



## Metric Ballast Bypass Selectable LumenChoice® + SpectraChoice™ Glass Tubes - Double Ended - Type B

| Bulb Shape                                       | Base Type | Order Code | Description            | Volts   | Carton Qty <sup>2</sup> | MOL (in) | Selectable Watts* | Selectable Lumens (Initial)* | Selectable Color Temp. (Initial)* | CRI | Rated Life L70 (Hrs) <sup>1</sup> | Power Factor | DLC ID <sup>4</sup> | Location Rating <sup>3</sup> | Additional Information |
|--------------------------------------------------|-----------|------------|------------------------|---------|-------------------------|----------|-------------------|------------------------------|-----------------------------------|-----|-----------------------------------|--------------|---------------------|------------------------------|------------------------|
| Ballast Bypass (Type B) - 46" Metric Glass Tubes |           |            |                        |         |                         |          |                   |                              |                                   |     |                                   |              |                     |                              |                        |
| T8                                               | G13       | 93319902   | LEDLCBDT8/G/8SC/METRIC | 120-347 | 20                      | 46       | 10                | 1,500                        | 3000K                             | 80  | 70,000                            | >0.9         | -                   | Damp                         |                        |
|                                                  |           |            |                        |         |                         |          |                   | 1,550                        | 3500K                             |     |                                   |              |                     |                              |                        |
|                                                  |           |            |                        |         |                         |          |                   | 1,600                        | 4000K                             |     |                                   |              |                     |                              |                        |
|                                                  |           |            |                        |         |                         |          |                   | 1,600                        | 5000K                             |     |                                   |              |                     |                              |                        |
|                                                  |           |            |                        |         |                         |          |                   | 1,800                        | 3000K                             |     |                                   |              |                     |                              |                        |
|                                                  |           |            |                        |         |                         |          | 13*               | 1,900                        | 3500K                             |     |                                   |              |                     |                              |                        |
|                                                  |           |            |                        |         |                         |          |                   | 2,000*                       | 4000K*                            |     |                                   |              |                     |                              |                        |
|                                                  |           |            |                        |         |                         |          |                   | 2,000                        | 5000K                             |     |                                   |              |                     |                              |                        |
|                                                  |           |            |                        |         |                         |          |                   | 2,350                        | 3000K                             |     |                                   |              |                     |                              |                        |
|                                                  |           |            |                        |         |                         |          | 16                | 2,450                        | 3500K                             |     |                                   |              |                     |                              |                        |
|                                                  |           |            |                        |         |                         |          |                   | 2,500                        | 4000K                             |     |                                   |              |                     |                              |                        |
|                                                  |           |            |                        |         |                         |          |                   | 2,500                        | 5000K                             |     |                                   |              |                     |                              |                        |

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<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

<sup>2</sup> Minimum order quantity from Current = Case Qty

<sup>3</sup> UL 1993 Environmental Requirements for LED LAMPS

Damp Location - Exterior or interior location that is normally or periodically subject to condensation of moisture in, on, or adjacent to electrical equipment, including partially protected locations

<sup>4</sup> Visit [qpl.designlights.org/solid-state-lighting](http://qpl.designlights.org/solid-state-lighting) to confirm qualification.

\* Default wattage and color temperature settings noted by "\*" in tables above.

# LED Lamps - Tubes - Type B



## Ballast Bypass Selectable LumenChoice® + SpectraChoice™ T5 Glass Tubes - Double Ended - Type B

| Bulb Shape                                | Base Type | Order Code | Description              | Volts   | Carton Qty <sup>2</sup> | MOL (in) | Selectable Watts* | Selectable Lumens (Initial)*              | Selectable Color Temp. (Initial)*         | CRI | Rated Life L70 (Hrs) <sup>1</sup> | Power Factor | DLC <sup>3</sup> ID <sup>4</sup> | Location Rating <sup>3</sup> | Additional Information |                                   |          |                          |         |    |    |      |                                           |                                           |    |        |      |   |      |                          |         |    |    |   |                                         |                                           |    |        |      |   |      |  |
|-------------------------------------------|-----------|------------|--------------------------|---------|-------------------------|----------|-------------------|-------------------------------------------|-------------------------------------------|-----|-----------------------------------|--------------|----------------------------------|------------------------------|------------------------|-----------------------------------|----------|--------------------------|---------|----|----|------|-------------------------------------------|-------------------------------------------|----|--------|------|---|------|--------------------------|---------|----|----|---|-----------------------------------------|-------------------------------------------|----|--------|------|---|------|--|
| Ballast Bypass (Type B) - 4ft Glass Tubes |           |            |                          |         |                         |          |                   |                                           |                                           |     |                                   |              |                                  |                              |                        |                                   |          |                          |         |    |    |      |                                           |                                           |    |        |      |   |      |                          |         |    |    |   |                                         |                                           |    |        |      |   |      |  |
| T5                                        | G5        | 93319129   | LEDLCBDT5/G4/8SC/120-347 | 120-347 | 20                      | 46       | 14                | 2,000<br>2,100<br>2,200<br>2,100<br>2,700 | 3000K<br>3500K<br>4000K<br>5000K<br>3000K | 80  | 50,000                            | >0.9         | S-YF01DJ                         | Damp                         |                        |                                   |          |                          |         |    |    |      |                                           |                                           |    |        |      |   |      |                          |         |    |    |   |                                         |                                           |    |        |      |   |      |  |
|                                           |           |            |                          |         |                         |          | 20                | 2,800<br>2,900<br>2,800                   | 3500K<br>4000K<br>5000K                   |     |                                   |              |                                  |                              |                        |                                   |          |                          |         |    |    |      |                                           |                                           |    |        |      |   |      |                          |         |    |    |   |                                         |                                           |    |        |      |   |      |  |
|                                           |           |            |                          |         |                         |          |                   | 25*                                       | 3,200<br>3,400<br>3,500*<br>3,400         |     |                                   |              |                                  |                              |                        | 3000K<br>3500K<br>4000K*<br>5000K |          |                          |         |    |    |      |                                           |                                           |    |        |      |   |      |                          |         |    |    |   |                                         |                                           |    |        |      |   |      |  |
|                                           |           |            |                          |         |                         |          |                   |                                           | Ballast Bypass (Type B) - 3ft Glass Tubes |     |                                   |              |                                  |                              |                        |                                   |          |                          |         |    |    |      |                                           |                                           |    |        |      |   |      |                          |         |    |    |   |                                         |                                           |    |        |      |   |      |  |
|                                           |           |            |                          |         |                         |          |                   |                                           | T5                                        |     |                                   |              |                                  |                              |                        | G5                                | 93319131 | LEDLCBDT5/G3/8SC/120-347 | 120-347 | 20 | 34 | 11.5 | 1,600<br>1,650<br>1,700<br>1,700<br>2,000 | 3000K<br>3500K<br>4000K<br>5000K<br>3000K | 80 | 50,000 | >0.9 | - | Damp |                          |         |    |    |   |                                         |                                           |    |        |      |   |      |  |
|                                           |           |            |                          |         |                         |          |                   |                                           |                                           |     |                                   |              |                                  |                              |                        |                                   |          |                          |         |    |    | 14.5 | 2,050<br>2,100<br>2,100                   | 3500K<br>4000K<br>5000K                   |    |        |      |   |      |                          |         |    |    |   |                                         |                                           |    |        |      |   |      |  |
|                                           |           |            |                          |         |                         |          | 18*               |                                           |                                           |     |                                   |              |                                  |                              |                        |                                   |          |                          |         |    |    |      | 2,400<br>2,450<br>2,500*<br>2,500         | 3000K<br>3500K<br>4000K*<br>5000K         |    |        |      |   |      |                          |         |    |    |   |                                         |                                           |    |        |      |   |      |  |
|                                           |           |            |                          |         |                         |          |                   | Ballast Bypass (Type B) - 2ft Glass Tubes |                                           |     |                                   |              |                                  |                              |                        |                                   |          |                          |         |    |    |      |                                           |                                           |    |        |      |   |      |                          |         |    |    |   |                                         |                                           |    |        |      |   |      |  |
|                                           |           |            |                          |         |                         |          |                   | T5                                        |                                           |     |                                   |              |                                  |                              |                        |                                   |          |                          |         |    |    |      | G5                                        | 93319133                                  |    |        |      |   |      | LEDLCBDT5/G2/8SC/120-347 | 120-347 | 20 | 22 | 7 | 950<br>1,000<br>1,050<br>1,050<br>1,250 | 3000K<br>3500K<br>4000K<br>5000K<br>3000K | 80 | 50,000 | >0.9 | - | Damp |  |
|                                           |           |            |                          |         |                         |          |                   |                                           |                                           |     |                                   |              |                                  |                              |                        |                                   |          |                          |         |    |    |      |                                           |                                           |    |        |      |   |      |                          |         |    |    | 9 | 1,300<br>1,350<br>1,350                 | 3500K<br>4000K<br>5000K                   |    |        |      |   |      |  |
|                                           |           |            |                          |         |                         |          |                   |                                           |                                           |     |                                   |              |                                  |                              |                        |                                   |          |                          |         |    |    | 11*  |                                           |                                           |    |        |      |   |      |                          |         |    |    |   | 1,500<br>1,550<br>1,600*<br>1,600       | 3000K<br>3500K<br>4000K*<br>5000K         |    |        |      |   |      |  |

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<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

<sup>2</sup> Minimum order quantity from Current = Case Qty

<sup>3</sup> UL 1993 Environmental Requirements for LED LAMPS

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\* Default wattage and color temperature settings noted by "\*" in tables above.

# LED Lamps - Tubes - Type B

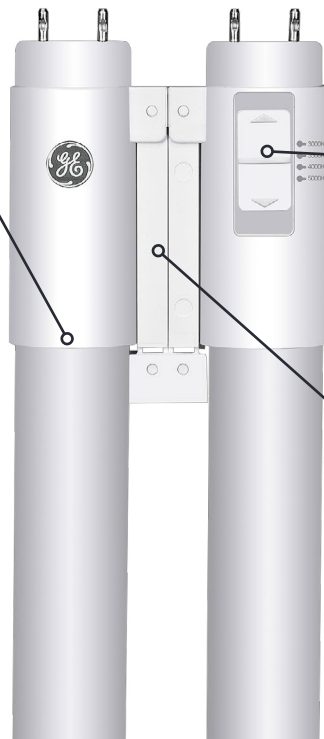


## U1/U6 Adjustable Lamp

Lamps ship 15 per carton with U 1-5/8" tube spacing to minimize carton size



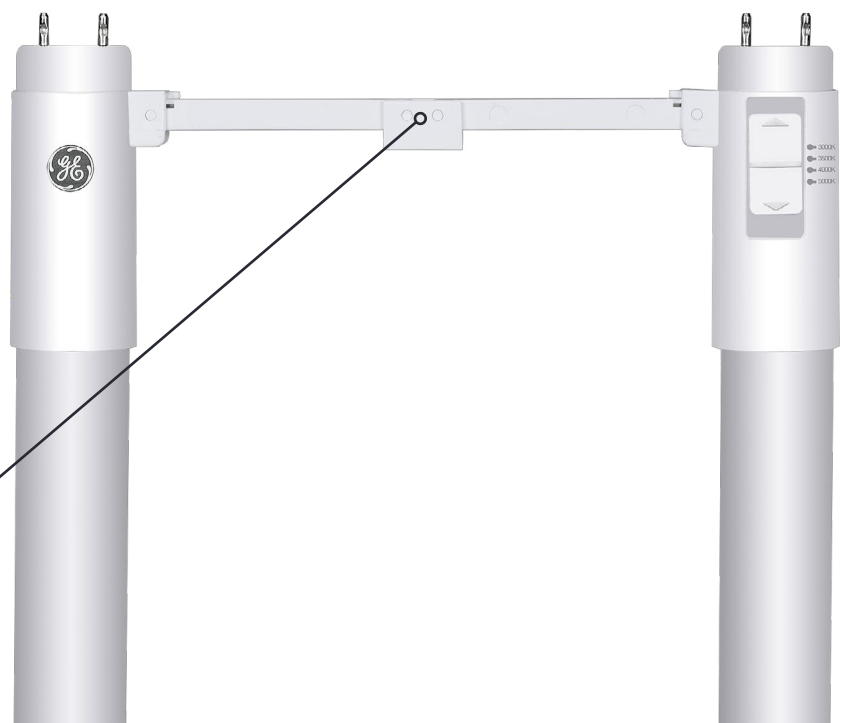
**Select** color temperature using built-in switch.



U 1-5/8" closed position

### Two Lamps in One

Easily transform the U 1-5/8" out of the box into a U 6" lamp by pulling apart the tubes, allowing the hinged frames to fully extend and snap into place.



Hinged frames fully extend and snap into place to transform the lamp into U 6" tube spacing



# LED Lamps - Tubes - Type B



Out of the box: U 1-5/8" configuration



Pull tubes apart to transform the lamp from U 1-5/8" tube spacing to the U 6" tube spacing



U 6" configuration with hinged frames fully extended



## Ballast Bypass Selectable SpectraChoice™ T8 U1/U6 Adjustable - Double Ended - Type B

| Bulb Shape                                             | Base Type | Order Code | Description                | Volts   | Carton Qty <sup>2</sup> | MOL (in) | Watts | Selectable Lumens (Initial)* | Selectable Color Temp. (Initial)* | CRI | Rated Life L70 (Hrs) <sup>1</sup> | Power Factor | DLC* ID <sup>4</sup> | Location Rating <sup>3</sup> | Additional Information |
|--------------------------------------------------------|-----------|------------|----------------------------|---------|-------------------------|----------|-------|------------------------------|-----------------------------------|-----|-----------------------------------|--------------|----------------------|------------------------------|------------------------|
| Ballast Bypass (Type B) - U1/U6 Adjustable Glass Tubes |           |            |                            |         |                         |          |       |                              |                                   |     |                                   |              |                      |                              |                        |
| T8                                                     | 2G13      | 93320487   | LED13BDT8/U/U6/8SC/120-347 | 120-347 | 15                      | 22.6     | 13    | 1,750<br>1,800<br>1,850*     | 3000K<br>3500K<br>4000K*<br>5000K | 80  | 50,000                            | >0.9         | -                    | Damp                         | Ballast Bypass         |
| Patent Pending                                         |           |            |                            |         |                         |          |       |                              |                                   |     |                                   |              |                      |                              |                        |

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<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

<sup>2</sup> Minimum order quantity from Current = Case Qty

<sup>3</sup> UL 1993 Environmental Requirements for LED LAMPS

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<sup>4</sup> Visit [qpl.designlights.org/solid-state-lighting](http://qpl.designlights.org/solid-state-lighting) to confirm qualification.

\* Default wattage and color temperature settings noted by "\*" in tables above.

# LED Lamps – Tubes – Type B



## Ballast Bypass Glass Tubes - Double Ended - Type B

| Bulb Shape                                                  | Base Type | Watts | Order Code | Description        | Volts   | Carton Qty <sup>2</sup> | MOL (in) | Lumens (Initial) | Color Temp. (Initial) | CRI | Rated Life L70 (Hrs) <sup>1</sup> | Power Factor | DLC <sup>3</sup> ID <sup>4</sup> | Location Rating <sup>5</sup> | Additional Information |
|-------------------------------------------------------------|-----------|-------|------------|--------------------|---------|-------------------------|----------|------------------|-----------------------|-----|-----------------------------------|--------------|----------------------------------|------------------------------|------------------------|
| <b>Ballast Bypass - 8ft Glass Tubes</b>                     |           |       |            |                    |         |                         |          |                  |                       |     |                                   |              |                                  |                              |                        |
| T8                                                          | R17d      | 43    | 93132591   | LED43BDT8/G8/835   | 120-277 | 20                      | 96       | 5000             | 3500K                 | 80  | 50,000                            | >0.9         | -                                | Damp                         |                        |
|                                                             | Fa8       | 34    | 93122170   | LED34BDT8/G/8/830  | 120-277 | 20                      | 96       | 4000             | 3000K                 | 80  | 50,000                            | >0.9         | PLAZBRXBAMGI                     | Damp                         |                        |
|                                                             | Fa8       | 34    | 93122171   | LED34BDT8/G/8/835  | 120-277 | 20                      | 96       | 4000             | 3500K                 | 80  | 50,000                            | >0.9         | PL8W5U9U2C38                     | Damp                         |                        |
| <b>Ballast Bypass - 4ft XL Glass Tubes</b>                  |           |       |            |                    |         |                         |          |                  |                       |     |                                   |              |                                  |                              |                        |
| T8                                                          | G13       | 16    | 93132588   | LED16BDT8/G4/840XL | 120-277 | 20                      | 48       | 2550             | 4000K                 | 80  | 70,000                            | >0.9         | P32UZP06                         | Damp                         |                        |
|                                                             | G13       | 16    | 93132589   | LED16BDT8/G4/850XL | 120-277 | 20                      | 48       | 2550             | 5000K                 | 80  | 70,000                            | >0.9         | PI7ZR2DY                         | Damp                         |                        |
|                                                             | G13       | 13    | 93132554   | LED13BDT8/G4/840XL | 120-277 | 20                      | 48       | 2050             | 4000K                 | 80  | 70,000                            | >0.9         | PN3DG2KK                         | Damp                         |                        |
|                                                             | G13       | 13    | 93132555   | LED13BDT8/G4/850XL | 120-277 | 20                      | 48       | 2050             | 5000K                 | 80  | 70,000                            | >0.9         | P33RC00B                         | Damp                         |                        |
|                                                             | G13       | 9.5   | 93132549   | LED9BDT8/G4/835XL  | 120-277 | 20                      | 48       | 1600             | 3500K                 | 80  | 70,000                            | >0.9         | PP3H2D0T                         | Damp                         |                        |
|                                                             | G13       | 9.5   | 93132550   | LED9BDT8/G4/840XL  | 120-277 | 20                      | 48       | 1650             | 4000K                 | 80  | 70,000                            | >0.9         | PE3WWYH0                         | Damp                         |                        |
|                                                             | G13       | 9.5   | 93132551   | LED9BDT8/G4/850XL  | 120-277 | 20                      | 48       | 1650             | 5000K                 | 80  | 70,000                            | >0.9         | P4X8QYGU                         | Damp                         |                        |
| <b>Ballast Bypass - 4ft Glass Tubes</b>                     |           |       |            |                    |         |                         |          |                  |                       |     |                                   |              |                                  |                              |                        |
| T8                                                          | G13       | 16    | 93123476   | LED16BDT8/G4/830   | 120-277 | 20                      | 48       | 2100             | 3000K                 | 80  | 50,000                            | >0.9         | P9U8R2XF                         | Damp                         |                        |
|                                                             | G13       | 16    | 93125618   | LED16BDT8/G4/835   | 120-277 | 20                      | 48       | 2150             | 3500K                 | 80  | 50,000                            | >0.9         | PW6IS4V8                         | Damp                         |                        |
|                                                             | G13       | 16    | 93125620   | LED16BDT8/G4/840   | 120-277 | 20                      | 48       | 2200             | 4000K                 | 80  | 50,000                            | >0.9         | PLWETXLG                         | Damp                         |                        |
|                                                             | G13       | 16    | 93125622   | LED16BDT8/G4/850   | 120-277 | 20                      | 48       | 2200             | 5000K                 | 80  | 50,000                            | >0.9         | P9DPDUA6                         | Damp                         |                        |
|                                                             | G13       | 14    | 39493      | LED14BDT8/G4/830   | 120-277 | 20                      | 48       | 1700             | 3000K                 | 80  | 50,000                            | >0.9         | PQJU40YO                         | Damp                         |                        |
|                                                             | G13       | 14    | 39494      | LED14BDT8/G4/835   | 120-277 | 20                      | 48       | 1750             | 3500K                 | 80  | 50,000                            | >0.9         | PE7DNV4V                         | Damp                         |                        |
|                                                             | G13       | 14    | 39498      | LED14BDT8/G4/840   | 120-277 | 20                      | 48       | 1800             | 4000K                 | 80  | 50,000                            | >0.9         | PFXFRIB9                         | Damp                         |                        |
|                                                             | G13       | 14    | 39519      | LED14BDT8/G4/850   | 120-277 | 20                      | 48       | 1850             | 5000K                 | 80  | 50,000                            | >0.9         | PYXSAU7Y                         | Damp                         |                        |
|                                                             | G13       | 11    | 93117212   | LED11BDT8/G4/830   | 120-277 | 20                      | 48       | 1600             | 3000K                 | 80  | 50,000                            | >0.9         | -                                | Damp                         |                        |
|                                                             | G13       | 11    | 93117213   | LED11BDT8/G4/835   | 120-277 | 20                      | 48       | 1650             | 3500K                 | 80  | 50,000                            | >0.9         | PIAW5H1B                         | Damp                         |                        |
|                                                             | G13       | 11    | 93117214   | LED11BDT8/G4/840   | 120-277 | 20                      | 48       | 1650             | 4000K                 | 80  | 50,000                            | >0.9         | P3Y9GW4E                         | Damp                         |                        |
|                                                             | G13       | 11    | 93117215   | LED11BDT8/G4/850   | 120-277 | 20                      | 48       | 1700             | 5000K                 | 80  | 50,000                            | >0.9         | P792993K                         | Damp                         |                        |
| <b>Ballast Bypass - 3ft Glass Tubes</b>                     |           |       |            |                    |         |                         |          |                  |                       |     |                                   |              |                                  |                              |                        |
| T8                                                          | G13       | 12    | 39547      | LED12BDT8/G3/835   | 120-277 | 20                      | 36       | 1500             | 3500K                 | 80  | 50,000                            | >0.9         | P1DV4D7M                         | Damp                         |                        |
|                                                             | G13       | 12    | 39554      | LED12BDT8/G3/840   | 120-277 | 20                      | 36       | 1550             | 4000K                 | 80  | 50,000                            | >0.9         | POEU7LZC                         | Damp                         |                        |
|                                                             | G13       | 12    | 39557      | LED12BDT8/G3/850   | 120-277 | 20                      | 36       | 1550             | 5000K                 | 80  | 50,000                            | >0.9         | P1WXGHZO                         | Damp                         |                        |
| <b>Ballast Bypass - 2ft Glass Tubes</b>                     |           |       |            |                    |         |                         |          |                  |                       |     |                                   |              |                                  |                              |                        |
| T8                                                          | G13       | 9     | 39560      | LED9BDT8/G2/835    | 120-277 | 20                      | 24       | 1150             | 3500K                 | 80  | 50,000                            | >0.9         | P41DJP7N                         | Damp                         |                        |
|                                                             | G13       | 9     | 39561      | LED9BDT8/G2/840    | 120-277 | 20                      | 24       | 1200             | 4000K                 | 80  | 50,000                            | >0.9         | P9VLH47P                         | Damp                         |                        |
|                                                             | G13       | 9     | 39563      | LED9BDT8/G2/850    | 120-277 | 20                      | 24       | 1200             | 5000K                 | 80  | 50,000                            | >0.9         | PQJS5X3I                         | Damp                         |                        |
| <b>Ballast Bypass - U1 Glass Tubes - 1-5/8" leg spacing</b> |           |       |            |                    |         |                         |          |                  |                       |     |                                   |              |                                  |                              |                        |
| T8-U1                                                       | 2G13      | 13    | 93107352   | LED13BDT8/U/835    | 120-277 | 20                      | 22.5     | 1800             | 3500K                 | 80  | 50,000                            | >0.9         | PUORES80                         | Damp                         | 1 - 5/8" leg spacing   |
|                                                             | 2G13      | 13    | 93107388   | LED13BDT8/U/840    | 120-277 | 20                      | 22.5     | 1850             | 4000K                 | 80  | 50,000                            | >0.9         | PA21GLQ2                         | Damp                         | 1 - 5/8" leg spacing   |
|                                                             | 2G13      | 13    | 93107389   | LED13BDT8/U/850    | 120-277 | 20                      | 22.5     | 1850             | 5000K                 | 80  | 50,000                            | >0.9         | PGEE9WIZ                         | Damp                         | 1 - 5/8" leg spacing   |
| <b>Ballast Bypass - U6 Glass Tubes - 6" leg spacing</b>     |           |       |            |                    |         |                         |          |                  |                       |     |                                   |              |                                  |                              |                        |
| T8-U6                                                       | 2G13      | 13    | 93133049   | LED13BDT8/U6/830   | 120-277 | 12                      | 22.5     | 1750             | 3000K                 | 80  | 50,000                            | >0.9         | PEW9A1M8                         | Damp                         | 6" leg spacing         |
|                                                             | 2G13      | 13    | 93133050   | LED13BDT8/U6/835   | 120-277 | 12                      | 22.5     | 1800             | 3500K                 | 80  | 50,000                            | >0.9         | PUWGR50L                         | Damp                         | 6" leg spacing         |
|                                                             | 2G13      | 13    | 93133051   | LED13BDT8/U6/840   | 120-277 | 12                      | 22.5     | 1850             | 4000K                 | 80  | 50,000                            | >0.9         | P5NYY5PI                         | Damp                         | 6" leg spacing         |
|                                                             | 2G13      | 13    | 93133052   | LED13BDT8/U6/850   | 120-277 | 12                      | 22.5     | 1850             | 5000K                 | 80  | 50,000                            | >0.9         | PWD1ZSNP                         | Damp                         | 6" leg spacing         |

<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

<sup>2</sup> Minimum order quantity from Carton Qty

<sup>3</sup> UL 1993 Environmental Requirements for LED LAMPS

<sup>4</sup> Damp Location – Exterior or interior location that is normally or periodically subject to condensation of moisture in, on, or adjacent to electrical equipment, including partially protected locations

<sup>5</sup> Not all product variations on this page are DLC qualified. Visit [qpl.designlights.org/solid-state-lighting](http://qpl.designlights.org/solid-state-lighting) to confirm qualification.

\* Default color temperature setting is 4000K.

# LED Lamps – Tubes – Type B



## Ballast Bypass covRguard® Plastic Sleeved Glass Tubes - Double Ended - Type B

| Bulb Shape                                                         | Base Type | Watts | Order Code | Description            | Volts   | Carton Qty <sup>2</sup> | MOL (in) | Lumens (Initial) | Color Temp. (Initial) | CRI | Rated Life L70 (Hrs) <sup>1</sup> | Power Factor | DLC <sup>3</sup> ID <sup>4</sup> | Location Rating <sup>3</sup> | Additional Information |
|--------------------------------------------------------------------|-----------|-------|------------|------------------------|---------|-------------------------|----------|------------------|-----------------------|-----|-----------------------------------|--------------|----------------------------------|------------------------------|------------------------|
| <b>Ballast Bypass - 4ft covRguard® Plastic Sleeved Glass Tubes</b> |           |       |            |                        |         |                         |          |                  |                       |     |                                   |              |                                  |                              |                        |
| T8                                                                 | G13       | 16    | 93154588   | LED16BDT8/G4/835XL/CVG | 120-277 | 20                      | 48       | 2400             | 3500K                 | 80  | 70,000                            | >0.9         | S-HSC8PZ                         | Damp                         | NSF Food Zone          |
|                                                                    | G13       | 16    | 93154589   | LED16BDT8/G4/840XL/CVG | 120-277 | 20                      | 48       | 2450             | 4000K                 | 80  | 70,000                            | >0.9         | S-KDB8N5                         | Damp                         | NSF Food Zone          |
|                                                                    | G13       | 16    | 93154586   | LED16BDT8/G4/850XL/CVG | 120-277 | 20                      | 48       | 2450             | 5000K                 | 80  | 70,000                            | >0.9         | S-398HOM                         | Damp                         | NSF Food Zone          |
|                                                                    | G13       | 13    | 93154613   | LED13BDT8/G4/835XL/CVG | 120-277 | 20                      | 48       | 1900             | 3500K                 | 80  | 70,000                            | >0.9         | S-PTI7MQ                         | Damp                         | NSF Food Zone          |
|                                                                    | G13       | 13    | 93154590   | LED13BDT8/G4/840XL/CVG | 120-277 | 20                      | 48       | 1950             | 4000K                 | 80  | 70,000                            | >0.9         | S-HVKBRT                         | Damp                         | NSF Food Zone          |
|                                                                    | G13       | 13    | 93154612   | LED13BDT8/G4/850XL/CVG | 120-277 | 20                      | 48       | 1950             | 5000K                 | 80  | 70,000                            | >0.9         | S-7VT10C                         | Damp                         | NSF Food Zone          |
|                                                                    | G13       | 9     | 93154615   | LED9BDT8/G4/835XL/CVG  | 120-277 | 20                      | 48       | 1550             | 3500K                 | 80  | 70,000                            | >0.9         | -                                | Damp                         | NSF Food Zone          |
|                                                                    | G13       | 9     | 93154616   | LED9BDT8/G4/840XL/CVG  | 120-277 | 20                      | 48       | 1600             | 4000K                 | 80  | 70,000                            | >0.9         | S-DEZYCO                         | Damp                         | NSF Food Zone          |

## Ballast Bypass PET Plastic Coated Glass Tubes - Double Ended - Type B

| Bulb Shape                                                      | Base Type | Watts | Order Code | Description        | Volts   | Carton Qty <sup>2</sup> | MOL (in) | Lumens (Initial) | Color Temp. (Initial) | CRI | Rated Life L70 (Hrs) <sup>1</sup> | Power Factor | DLC <sup>3</sup> ID <sup>4</sup> | Location Rating <sup>3</sup> | Additional Information |
|-----------------------------------------------------------------|-----------|-------|------------|--------------------|---------|-------------------------|----------|------------------|-----------------------|-----|-----------------------------------|--------------|----------------------------------|------------------------------|------------------------|
| <b>Ballast Bypass - 4ft PET Plastic Coated Glass Tubes</b>      |           |       |            |                    |         |                         |          |                  |                       |     |                                   |              |                                  |                              |                        |
| T8                                                              | G13       | 14    | 93123124   | LED14BDT8/G4/835CT | 120-277 | 20                      | 48       | 1750             | 3500K                 | 80  | 50,000                            | >0.9         | PK9D9IG0                         | Damp                         | NSF Splash Zone        |
|                                                                 | G13       | 14    | 93123316   | LED14BDT8/G4/840CT | 120-277 | 20                      | 48       | 1750             | 4000K                 | 80  | 50,000                            | >0.9         | P9R85C2W                         | Damp                         | NSF Splash Zone        |
|                                                                 | G13       | 14    | 93123317   | LED14BDT8/G4/850CT | 120-277 | 20                      | 48       | 1800             | 5000K                 | 80  | 50,000                            | >0.9         | PZL4PNH9                         | Damp                         | NSF Splash Zone        |
|                                                                 | G13       | 11    | 93129666   | LED11BDT8/G4/840CT | 120-277 | 20                      | 48       | 1650             | 4000K                 | 80  | 50,000                            | >0.9         | PKJQYIAK                         | Damp                         | NSF Splash Zone        |
| <b>Ballast Bypass - 3ft LED Tube - PET Plastic Coated Glass</b> |           |       |            |                    |         |                         |          |                  |                       |     |                                   |              |                                  |                              |                        |
| T8                                                              | G13       | 12    | 93154450   | LED12BDT8/G3/840CT | 120-277 | 20                      | 36       | 1450             | 4000K                 | 80  | 50,000                            | >0.9         | S-UYXL72                         | Damp                         | NSF Splash Zone        |
| <b>Ballast Bypass - 2ft LED Tube - PET Plastic Coated Glass</b> |           |       |            |                    |         |                         |          |                  |                       |     |                                   |              |                                  |                              |                        |
| T8                                                              | G13       | 9     | 93154445   | LED9BDT8/G2/840CT  | 120-277 | 20                      | 24       | 1100             | 4000K                 | 80  | 50,000                            | >0.9         | S-K7HOSB                         | Damp                         | NSF Splash Zone        |

## 120-347V Ballast Bypass Glass Tubes - Double Ended - Type B

| Bulb Shape                                       | Base Type | Watts | Order Code | Description                   | Volts   | Carton Qty <sup>2</sup> | MOL (in) | Lumens (Initial) | Color Temp. (Initial) | CRI | Rated Life L70 (Hrs) <sup>1</sup> | Power Factor | DLC <sup>3</sup> ID <sup>4</sup> | Location Rating <sup>3</sup> | Additional Information |
|--------------------------------------------------|-----------|-------|------------|-------------------------------|---------|-------------------------|----------|------------------|-----------------------|-----|-----------------------------------|--------------|----------------------------------|------------------------------|------------------------|
| <b>120-347V Ballast Bypass - 8ft Glass Tubes</b> |           |       |            |                               |         |                         |          |                  |                       |     |                                   |              |                                  |                              |                        |
| T8                                               | R17d      | 42    | 93309189   | LED42BDT8/G8/R17d/840/120-347 | 120-347 | 20                      | 96       | 5500             | 4000K                 | 80  | 50,000                            | >0.9         | -                                | Damp                         |                        |
|                                                  | Fa8       | 42    | 93309186   | LED42BDT8/G8/Fa8/850/120-347  | 120-347 | 20                      | 96       | 5500             | 5000K                 | 80  | 50,000                            | >0.9         | S-4FRUT9                         | Damp                         |                        |
| <b>120-347V Ballast Bypass - 4ft Glass Tubes</b> |           |       |            |                               |         |                         |          |                  |                       |     |                                   |              |                                  |                              |                        |
| T8                                               | G13       | 15    | 93150744   | LED15BDT8/G4/830/120-347      | 120-347 | 20                      | 48       | 2000             | 3000K                 | 80  | 50,000                            | >0.9         | PLEZ25LCZ18C                     | Damp                         |                        |
|                                                  | G13       | 15    | 93150745   | LED15BDT8/G4/835/120-347      | 120-347 | 20                      | 48       | 2100             | 3500K                 | 80  | 50,000                            | >0.9         | PL3AD91YOVYI                     | Damp                         |                        |
|                                                  | G13       | 15    | 93150774   | LED15BDT8/G4/840/120-347      | 120-347 | 20                      | 48       | 2200             | 4000K                 | 80  | 50,000                            | >0.9         | PLAVADEOC20D                     | Damp                         |                        |
|                                                  | G13       | 15    | 93150775   | LED15BDT8/G4/850/120-347      | 120-347 | 20                      | 48       | 2200             | 5000K                 | 80  | 50,000                            | >0.9         | PLMTIE87F98F                     | Damp                         |                        |
|                                                  | G13       | 11.5  | 93305112   | LED11BDT8/G4/830/120-347      | 120-347 | 20                      | 48       | 1700             | 3000K                 | 80  | 50,000                            | >0.9         | S-P96STW                         | Damp                         |                        |
|                                                  | G13       | 11.5  | 93305113   | LED11BDT8/G4/835/120-347      | 120-347 | 20                      | 48       | 1750             | 3500K                 | 80  | 50,000                            | >0.9         | S-FK874T                         | Damp                         |                        |
|                                                  | G13       | 11.5  | 93305115   | LED11BDT8/G4/840/120-347      | 120-347 | 20                      | 48       | 1800             | 4000K                 | 80  | 50,000                            | >0.9         | S-RBECUJ                         | Damp                         |                        |
|                                                  | G13       | 11.5  | 93305116   | LED11BDT8/G4/850/120-347      | 120-347 | 20                      | 48       | 1800             | 5000K                 | 80  | 50,000                            | >0.9         | S-32DTWS                         | Damp                         |                        |
| <b>120-347V Ballast Bypass - 3ft Glass Tubes</b> |           |       |            |                               |         |                         |          |                  |                       |     |                                   |              |                                  |                              |                        |
| T8                                               | G13       | 12    | 93309175   | LED12BDT8/G3/830/120-347      | 120-347 | 20                      | 36       | 1500             | 3000K                 | 80  | 50,000                            | >0.9         | S-1A830D                         | Damp                         |                        |
|                                                  | G13       | 12    | 93309176   | LED12BDT8/G3/835/120-347      | 120-347 | 20                      | 36       | 1550             | 3500K                 | 80  | 50,000                            | >0.9         | S-XIZYOE                         | Damp                         |                        |
|                                                  | G13       | 12    | 93309177   | LED12BDT8/G3/840/120-347      | 120-347 | 20                      | 36       | 1600             | 4000K                 | 80  | 50,000                            | >0.9         | S-4DG73F                         | Damp                         |                        |
|                                                  | G13       | 12    | 93309178   | LED12BDT8/G3/850/120-347      | 120-347 | 20                      | 36       | 1600             | 5000K                 | 80  | 50,000                            | >0.9         | S-CDWEX5                         | Damp                         |                        |
| <b>120-347V Ballast Bypass - 2ft Glass Tubes</b> |           |       |            |                               |         |                         |          |                  |                       |     |                                   |              |                                  |                              |                        |
| T8                                               | G13       | 7     | 93309179   | LED7BDT8/G2/830/120-347       | 120-347 | 20                      | 24       | 900              | 3000K                 | 80  | 50,000                            | >0.9         | S-Q73A5R                         | Damp                         |                        |
|                                                  | G13       | 7     | 93309180   | LED7BDT8/G2/835/120-347       | 120-347 | 20                      | 24       | 925              | 3500K                 | 80  | 50,000                            | >0.9         | S-WVHQ2L                         | Damp                         |                        |
|                                                  | G13       | 7     | 93309181   | LED7BDT8/G2/840/120-347       | 120-347 | 20                      | 24       | 950              | 4000K                 | 80  | 50,000                            | >0.9         | S-OL6XNA                         | Damp                         |                        |
|                                                  | G13       | 7     | 93309182   | LED7BDT8/G2/850/120-347       | 120-347 | 20                      | 24       | 950              | 5000K                 | 80  | 50,000                            | >0.9         | S-ZTFN9K                         | Damp                         |                        |

<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

<sup>2</sup> Minimum order quantity = Carton Qty

<sup>3</sup> UL 1993 Environmental Requirements for LED LAMPS

Damp Location – Exterior or interior location that is normally or periodically subject to condensation of moisture in, on, or adjacent to electrical equipment, including partially protected locations

<sup>4</sup> Not all product variations on this page are DLC qualified. Visit [qpl.designlights.org/solid-state-lighting](http://qpl.designlights.org/solid-state-lighting) to confirm qualification.

# LED Lamps – Tubes – Type B



## Ballast Bypass Glass Tubes - Double Ended - Type B - T5

| Bulb Shape                                    | Base Type | Watts | Order Code | Description      | Volts   | Carton Qty <sup>2</sup> | MOL (in) | Lumens (Initial) | Color Temp. (Initial) | CRI | Rated Life L70 (Hrs) <sup>1</sup> | Power Factor | DLC <sup>4</sup> ID <sup>4</sup> | Location Rating <sup>3</sup> | Additional Information |
|-----------------------------------------------|-----------|-------|------------|------------------|---------|-------------------------|----------|------------------|-----------------------|-----|-----------------------------------|--------------|----------------------------------|------------------------------|------------------------|
| <b>Ballast Bypass - 4ft T5 HO Glass Tubes</b> |           |       |            |                  |         |                         |          |                  |                       |     |                                   |              |                                  |                              |                        |
| T5                                            | G5        | 25    | 93100293   | LED25BDT5/G4/835 | 120-277 | 20                      | 46       | 3400             | 3500K                 | 80  | 50,000                            | >0.9         | PNWXCFY                          | Damp                         |                        |
|                                               | G5        | 25    | 93100294   | LED25BDT5/G4/840 | 120-277 | 20                      | 46       | 3500             | 4000K                 | 80  | 50,000                            | >0.9         | P56WVBL6                         | Damp                         |                        |
|                                               | G5        | 25    | 93100295   | LED25BDT5/G4/850 | 120-277 | 20                      | 46       | 3600             | 5000K                 | 80  | 50,000                            | >0.9         | P95QEGYA                         | Damp                         |                        |
| <b>Ballast Bypass - 3ft T5 HO Glass Tubes</b> |           |       |            |                  |         |                         |          |                  |                       |     |                                   |              |                                  |                              |                        |
| T5                                            | G5        | 17    | 93114626   | LED17BDT5/G3/835 | 120-277 | 20                      | 34       | 2400             | 3500K                 | 80  | 50,000                            | >0.9         | -                                | Damp                         |                        |
| <b>Ballast Bypass - 2ft T5 HO Glass Tubes</b> |           |       |            |                  |         |                         |          |                  |                       |     |                                   |              |                                  |                              |                        |
| T5                                            | G5        | 11    | 93114322   | LED11BDT5/G2/835 | 120-277 | 20                      | 22       | 1550             | 3500K                 | 80  | 50,000                            | >0.9         | -                                | Damp                         |                        |
|                                               | G5        | 11    | 93114324   | LED11BDT5/G2/850 | 120-277 | 20                      | 22       | 1650             | 5000K                 | 80  | 50,000                            | >0.9         | -                                | Damp                         |                        |
| <b>Ballast Bypass - 4ft T5 HE Glass Tubes</b> |           |       |            |                  |         |                         |          |                  |                       |     |                                   |              |                                  |                              |                        |
| T5                                            | G5        | 14    | 93128354   | LED14BDT5G4830HE | 120-277 | 20                      | 46       | 2050             | 3000K                 | 80  | 50,000                            | >0.9         | PBJKOYW                          | Damp                         |                        |
|                                               | G5        | 14    | 93128486   | LED14BDT5G4840HE | 120-277 | 20                      | 46       | 2150             | 4000K                 | 80  | 50,000                            | >0.9         | P80DMFGU                         | Damp                         |                        |
| <b>Ballast Bypass - 3ft T5 HE Glass Tubes</b> |           |       |            |                  |         |                         |          |                  |                       |     |                                   |              |                                  |                              |                        |
| T5                                            | G5        | 11    | 93128488   | LED11BDT5G3830HE | 120-277 | 20                      | 34       | 1600             | 3000K                 | 80  | 50,000                            | >0.9         | -                                | Damp                         |                        |
|                                               | G5        | 11    | 93128492   | LED11BDT5G3850HE | 120-277 | 20                      | 34       | 1700             | 5000K                 | 80  | 50,000                            | >0.9         | -                                | Damp                         |                        |
| <b>Ballast Bypass - 2ft T5 HE Glass Tubes</b> |           |       |            |                  |         |                         |          |                  |                       |     |                                   |              |                                  |                              |                        |
| T5                                            | G5        | 9     | 93128494   | LED9BDT5G2/830HE | 120-277 | 20                      | 22       | 1250             | 3000K                 | 80  | 50,000                            | >0.9         | -                                | Damp                         |                        |
|                                               | G5        | 9     | 93128495   | LED9BDT5G2/835HE | 120-277 | 20                      | 22       | 1300             | 3500K                 | 80  | 50,000                            | >0.9         | -                                | Damp                         |                        |
|                                               | G5        | 9     | 93128571   | LED9BDT5G2/850HE | 120-277 | 20                      | 22       | 1350             | 5000K                 | 80  | 50,000                            | >0.9         | -                                | Damp                         |                        |

## Ballast Bypass covRguard® Plastic Sleeved Glass Tubes - Double Ended - Type B - T5

| Bulb Shape                                                         | Base Type | Watts | Order Code | Description          | Volts   | Carton Qty <sup>2</sup> | MOL (in) | Lumens (Initial) | Color Temp. (Initial) | CRI | Rated Life L70 (Hrs) <sup>1</sup> | Power Factor | DLC <sup>4</sup> ID <sup>4</sup> | Location Rating <sup>3</sup> | Additional Information |
|--------------------------------------------------------------------|-----------|-------|------------|----------------------|---------|-------------------------|----------|------------------|-----------------------|-----|-----------------------------------|--------------|----------------------------------|------------------------------|------------------------|
| <b>Ballast Bypass - 4ft covRguard® Plastic Sleeved Glass Tubes</b> |           |       |            |                      |         |                         |          |                  |                       |     |                                   |              |                                  |                              |                        |
| T5                                                                 | G5        | 25    | 93155904   | LED25BDT5/G4/840/CVG | 120-277 | 20                      | 46       | 3400             | 4000K                 | 80  | 50,000                            | >0.9         | S-60DSL                          | Damp                         | NSF Food Zone          |
|                                                                    | G5        | 25    | 93155905   | LED25BDT5/G4/850/CVG | 120-277 | 20                      | 46       | 3400             | 5000K                 | 80  | 50,000                            | >0.9         | S-8STF01                         | Damp                         | NSF Food Zone          |

## 120-347V Ballast Bypass Glass Tubes - Double Ended - Type B - T5

| Bulb Shape                                             | Base Type | Watts | Order Code | Description              | Volts   | Carton Qty <sup>2</sup> | MOL (in) | Lumens (Initial) | Color Temp. (Initial) | CRI | Rated Life L70 (Hrs) <sup>1</sup> | Power Factor | DLC <sup>4</sup> ID <sup>4</sup> | Location Rating <sup>3</sup> | Additional Information |
|--------------------------------------------------------|-----------|-------|------------|--------------------------|---------|-------------------------|----------|------------------|-----------------------|-----|-----------------------------------|--------------|----------------------------------|------------------------------|------------------------|
| <b>120-347V Ballast Bypass - 4ft T5 HO Glass Tubes</b> |           |       |            |                          |         |                         |          |                  |                       |     |                                   |              |                                  |                              |                        |
| T5                                                     | G5        | 25    | 93305599   | LED25BDT5/G4/835/120-347 | 120-347 | 25                      | 46       | 3400             | 3500K                 | 80  | 50,000                            | >0.9         | S-8Q4DEM                         | Damp                         |                        |
|                                                        | G5        | 25    | 93305600   | LED25BDT5/G4/840/120-347 | 120-347 | 25                      | 46       | 3500             | 4000K                 | 80  | 50,000                            | >0.9         | S-HSUIZ9                         | Damp                         |                        |
|                                                        | G5        | 25    | 93305601   | LED25BDT5/G4/850/120-347 | 120-347 | 25                      | 46       | 3500             | 5000K                 | 80  | 50,000                            | >0.9         | S-15AOPF                         | Damp                         |                        |

## Type B Tube Misapplication Fuse Kit

Current offers this fuse kit for use in Type B Tube applications for protection against future misapplication of linear fluorescent lamps.

| Order Code | Description   | Kit Contents               |
|------------|---------------|----------------------------|
| 39017      | BT8-1AFUSEKIT | 1 Fuse (1A), 1 Fuse Holder |

<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

<sup>2</sup> Minimum order quantity = Carton Qty

<sup>3</sup> UL 1993 Environmental Requirements for LED LAMPS

Damp Location – Exterior or interior location that is normally or periodically subject to condensation of moisture in, on, or adjacent to electrical equipment, including partially protected locations

<sup>4</sup> Not all product variations on this page are DLC qualified. Visit [qpl.designlights.org/solid-state-lighting](http://qpl.designlights.org/solid-state-lighting) to confirm qualification.



## Why switch to LED Tubes?

**LED Tubes are the fast and easy way to upgrade from Linear Fluorescent to LED.**

Current offers a variety of LED Tube options, so you can choose the best solution for each application.



**No Mercury in LED**



**50% Energy Reduction**



**2x Longer Rated Life**



**Quick Payback**

**Fluorescent lamps will soon become unavailable for sale in a number of states with upcoming legislation. Are you ready?**

In an effort to regulate consumer products that contain mercury, state governments within the USA have passed legislation that will prohibit the sale and distribution of Linear and Compact Fluorescent lamps. For more information or to see if your state is impacted, please visit [www.LED.com/lamplighting](http://www.LED.com/lamplighting).



# LED Lamps - Tubes - Type B



## LED Tube Design for Signage Applications:

Standard GE LED Tubes are constructed of glass tubes with an internal coating, similar to linear fluorescent lamps. The coating inside the glass provides good diffusion, spreading out the light and eliminating hot spots and pixilation from the individual LEDs. However, since the LED board inside the tube is on one side, the output is directional. This can be an advantage in many applications where the lamps are in a ceiling and the light needs to point down.

Linear fluorescent lamps emit light equally all the way around the diameter of the tube. For double-sided signage applications, this uniformity is ideal. Signage ("SGN") GE LED Tubes are constructed similarly to standard tubes, but with two key differences designed to improve performance in signage applications. First, Signage GE LED Tubes incorporate a reflective strip inside the tube opposite the LED board. The strip bounces light back behind the LED board and reduces the intensity directly across from the LED board. This results in more uniform light distribution, which is preferred for double-sided signage cabinets. The second key feature of Signage LED Tubes is rotatable end caps. These allow the tube to be oriented properly regardless of the socket orientation inside the cabinet.

**SpectraChoice™** Allows you to easily make color temperature selections at any time with integrated switch, no tools required

Signage R17d LED Tube



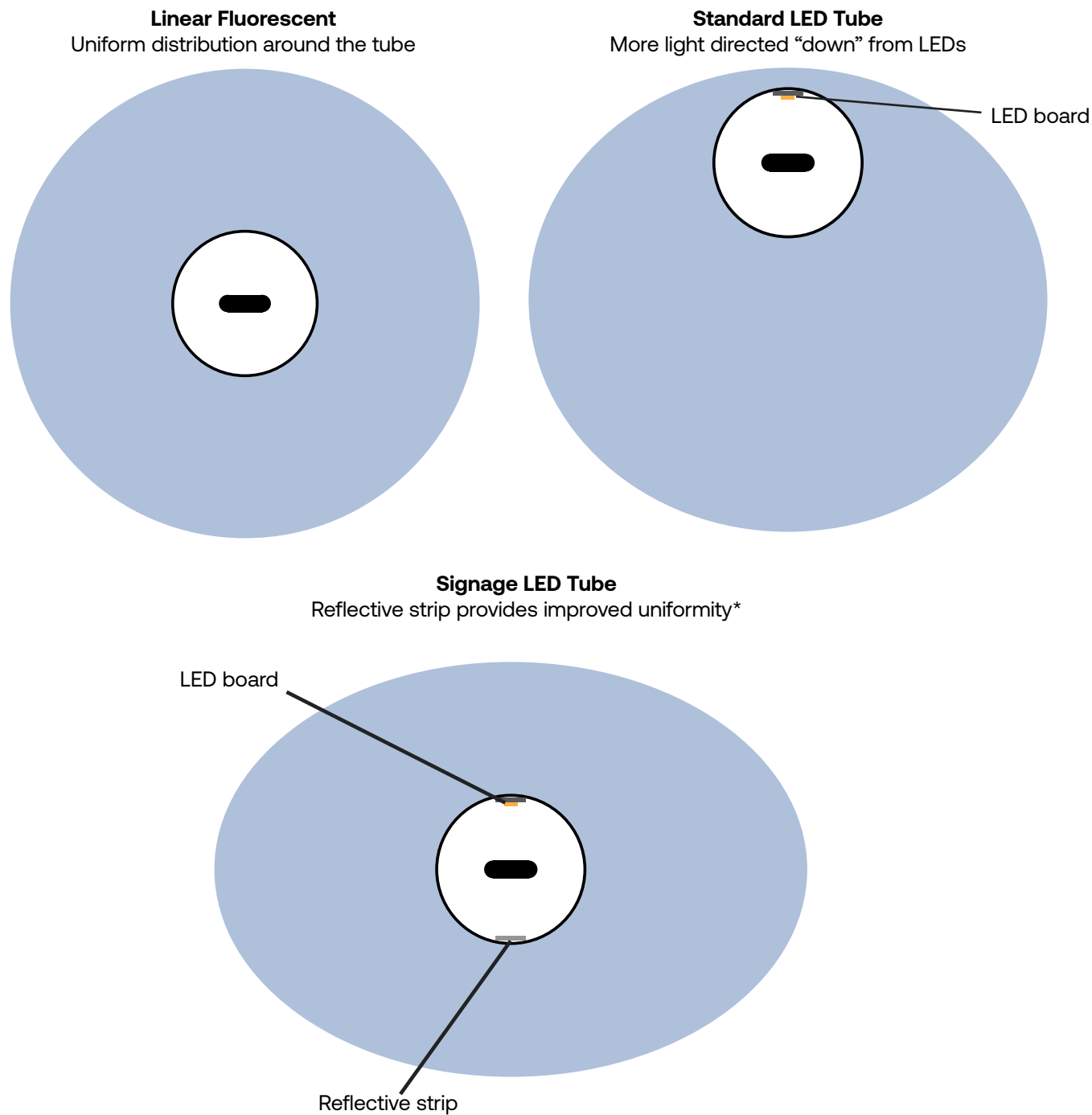
**SpectraChoice™**



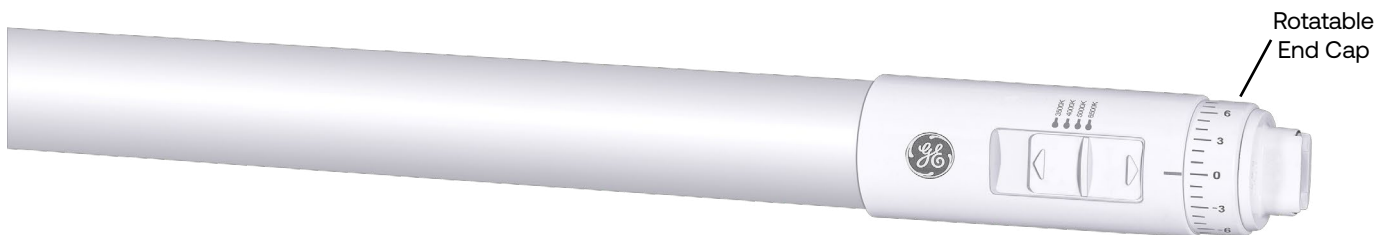
Standard R17d LED Tube



## Graphical Representation of Light Distribution from HO Tubes:



# LED Lamps - Tubes - Type B



Signage LED R17d HO Tube

## Signage Ballast Bypass Selectable SpectraChoice™ Glass HO Tubes - Double Ended - Type B

| Bulb Shape                                                                     | Base Type | Order Code | Description                | Volts   | Carton Qty <sup>2</sup> | Nominal Length (in) | Actual Length (in) | Watts | Selectable Lumens (Initial)*  | Selectable Color Temp. (Initial)* | CRI | Rated Life L70 (Hrs) <sup>1</sup> | Power Factor | Location Rating <sup>3</sup> | Additional Information |
|--------------------------------------------------------------------------------|-----------|------------|----------------------------|---------|-------------------------|---------------------|--------------------|-------|-------------------------------|-----------------------------------|-----|-----------------------------------|--------------|------------------------------|------------------------|
| Ballast Bypass (Type B) - High Output Recessed Double Contact (R17d) - Signage |           |            |                            |         |                         |                     |                    |       |                               |                                   |     |                                   |              |                              |                        |
| T8                                                                             | R17d      | 93319048   | LED14BDT8/G3/R17d/8SC/SGN  | 120-347 | 10                      | 36.0                | 33.91              | 14    | 1800<br>1900<br>1900<br>1850* | 3500K<br>4000K<br>5000K<br>6500K* | 80  | 50,000                            | >0.9         | Damp                         | Ballast Bypass         |
|                                                                                | R17d      | 93319046   | LED18BDT8/G4/R17d/8SC/SGN  | 120-347 | 10                      | 48.0                | 45.91              | 18    | 2400<br>2500<br>2500<br>2450* | 3500K<br>4000K<br>5000K<br>6500K* | 80  | 50,000                            | >0.9         | Damp                         | Ballast Bypass         |
|                                                                                | R17d      | 93319044   | LED24BDT8/G5/R17d/8SC/SGN  | 120-347 | 10                      | 60.0                | 57.91              | 24    | 2800<br>2950<br>2950<br>2850* | 3500K<br>4000K<br>5000K<br>6500K* | 80  | 50,000                            | >0.9         | Damp                         | Ballast Bypass         |
|                                                                                | R17d      | 93319042   | LED26BDT8/G64/R17d/8SC/SGN | 120-347 | 10                      | 64.0                | 61.91              | 26    | 3050<br>3200<br>3200<br>3100* | 3500K<br>4000K<br>5000K<br>6500K* | 80  | 50,000                            | >0.9         | Damp                         | Ballast Bypass         |
|                                                                                | R17d      | 93319040   | LED30BDT8/G6/R17d/8SC/SGN  | 120-347 | 10                      | 72.0                | 69.91              | 30    | 3500<br>3650<br>3650<br>3550* | 3500K<br>4000K<br>5000K<br>6500K* | 80  | 50,000                            | >0.9         | Damp                         | Ballast Bypass         |
|                                                                                | R17d      | 93319038   | LED35BDT8/G7/R17d/8SC/SGN  | 120-347 | 10                      | 84.0                | 81.91              | 35    | 4050<br>4250<br>4250<br>4150* | 3500K<br>4000K<br>5000K<br>6500K* | 80  | 50,000                            | >0.9         | Damp                         | Ballast Bypass         |
|                                                                                | R17d      | 93319036   | LED42BDT8/G8/R17d/8SC/SGN  | 120-347 | 10                      | 96.0                | 93.91              | 42    | 4900<br>5100<br>5100<br>5000* | 3500K<br>4000K<br>5000K<br>6500K* | 80  | 50,000                            | >0.9         | Damp                         | Ballast Bypass         |

Patent Pending

Information provided is subject to change without notice. Please verify all details with Current. All values are design or typical values when measured under laboratory conditions, and Current makes no warranty or guarantee, expressed or implied, that such performance will be obtained under end-use conditions.

<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

<sup>2</sup> Minimum order quantity from Current = Case Qty

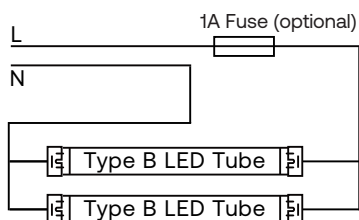
<sup>3</sup> UL 1993 Environmental Requirements for LED LAMPS

Damp Location - Exterior or interior location that is normally or periodically subject to condensation of moisture in, on, or adjacent to electrical equipment, including partially protected locations

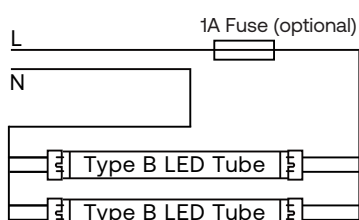
\* Default wattage and color temperature settings noted by "\*" in tables above.

### Wiring Diagrams for Double-Ended Type B LED Tubes

#### Shunted Sockets



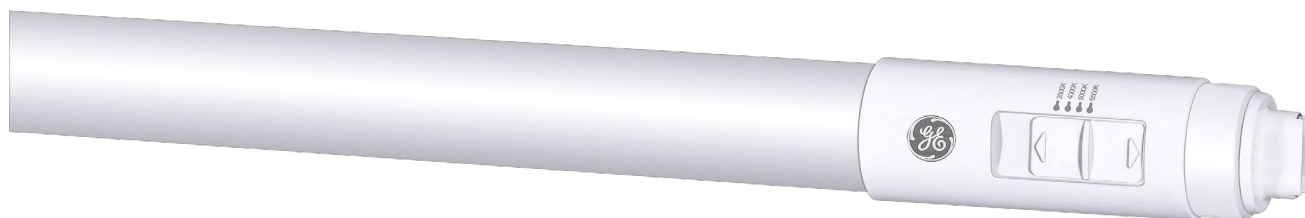
#### Unshunted Sockets



### Type B Tube Misapplication Fuse Kit

| Order Code | Description   | Kit Contents               |
|------------|---------------|----------------------------|
| 39017      | BT8-1AFUSEKIT | 1 Fuse (1A), 1 Fuse Holder |

# LED Lamps - Tubes - Type B



Standard LED R17d HO Tube

## Ballast Bypass Selectable SpectraChoice™ Glass HO Tubes - Double Ended - Type B

| Bulb Shape                                                           | Base Type | Order Code | Description                   | Volts   | Carton Qty <sup>2</sup> | Nominal Length (in) | Actual Length (in) | Watts | Selectable Lumens (Initial)*  | Selectable Color Temp. (Initial)* | CRI | Rated Life L70 (Hrs) <sup>1</sup> | Power Factor | Location Rating <sup>3</sup> | Additional Information |
|----------------------------------------------------------------------|-----------|------------|-------------------------------|---------|-------------------------|---------------------|--------------------|-------|-------------------------------|-----------------------------------|-----|-----------------------------------|--------------|------------------------------|------------------------|
| Ballast Bypass (Type B) - High Output Recessed Double Contact (R17d) |           |            |                               |         |                         |                     |                    |       |                               |                                   |     |                                   |              |                              |                        |
| T8                                                                   | R17d      | 93319034   | LED14BDT8/G3/R17d/8SC/120-347 | 120-347 | 10                      | 36.0                | 33.91              | 14    | 1900<br>2000<br>2000<br>1950* | 3500K<br>4000K<br>5000K<br>6500K* | 80  | 50,000                            | >0.9         | Damp                         | Ballast Bypass         |
|                                                                      | R17d      | 93319032   | LED18BDT8/G4/R17d/8SC/120-347 | 120-347 | 10                      | 48.0                | 45.91              | 18    | 2500<br>2600<br>2600<br>2550* | 3500K<br>4000K<br>5000K<br>6500K* | 80  | 50,000                            | >0.9         | Damp                         | Ballast Bypass         |
|                                                                      | R17d      | 93319030   | LED24BDT8/G5/R17d/8SC/120-347 | 120-347 | 10                      | 60.0                | 57.91              | 24    | 3050<br>3200<br>3200<br>3100* | 3500K<br>4000K<br>5000K<br>6500K* | 80  | 50,000                            | >0.9         | Damp                         | Ballast Bypass         |
|                                                                      | R17d      | 93319028   | LED26BDT8/G6/R17d/8SC/120-347 | 120-347 | 10                      | 64.0                | 61.91              | 26    | 3300<br>3450<br>3450<br>3350* | 3500K<br>4000K<br>5000K<br>6500K* | 80  | 50,000                            | >0.9         | Damp                         | Ballast Bypass         |
|                                                                      | R17d      | 93319026   | LED30BDT8/G6/R17d/8SC/120-347 | 120-347 | 10                      | 72.0                | 69.91              | 30    | 3800<br>4000<br>4000<br>3850* | 3500K<br>4000K<br>5000K<br>6500K* | 80  | 50,000                            | >0.9         | Damp                         | Ballast Bypass         |
|                                                                      | R17d      | 93319024   | LED35BDT8/G7/R17d/8SC/120-347 | 120-347 | 10                      | 84.0                | 81.91              | 35    | 4400<br>4600<br>4600<br>4500* | 3500K<br>4000K<br>5000K<br>6500K* | 80  | 50,000                            | >0.9         | Damp                         | Ballast Bypass         |
|                                                                      | R17d      | 93319022   | LED42BDT8/G8/R17d/8SC/120-347 | 120-347 | 10                      | 96.0                | 93.91              | 42    | 5300<br>5500<br>5500<br>5400* | 3500K<br>4000K<br>5000K<br>6500K* | 80  | 50,000                            | >0.9         | Damp                         | Ballast Bypass         |

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<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

<sup>2</sup> Minimum order quantity from Current = Case Qty

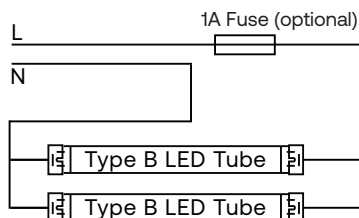
<sup>3</sup> UL 1993 Environmental Requirements for LED LAMPS

Damp Location - Exterior or interior location that is normally or periodically subject to condensation of moisture in, on, or adjacent to electrical equipment, including partially protected locations

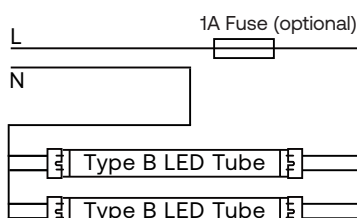
\* Default wattage and color temperature settings noted by "\*" in tables above.

### Wiring Diagrams for Double-Ended Type B LED Tubes

Shunted Sockets



Unshunted Sockets



### Type B Tube Misapplication Fuse Kit

| Order Code | Description   | Kit Contents               |
|------------|---------------|----------------------------|
| 39017      | BT8-1AFUSEKIT | 1 Fuse (1A), 1 Fuse Holder |

# LED Lamps – Tubes – Type C



## LED Tubes – Type C

GE Type C LED Tubes and Drivers are the preferred LED Tube choice for applications that demand dimming, controllability and flexibility.

GE Type C LED Tubes operate from the low voltage DC output of the drivers. The Class 2 output reduces risk of fire and shock compared to higher voltage alternatives. The same lamp may be used with various drivers.

In addition to the lamp-driver combination flexibility, LumenChoice® drivers are field-tunable. Installers can change the output to the lamps using built-in switches on the driver. This allows solutions to be optimized for each application, with potential for more energy savings by reducing the output in overlit spaces.

Dimming and controllability are readily implemented using the 0-10V dimming leads from the drivers. 0-10V dimming was common on dimming ballasts for linear fluorescent lamps, so implementation on existing systems is straightforward. 0-10V output allows for many drivers to be controlled by one device, a practical solution for LED Tube applications. The 0-10V dimming leads from GE Type C LED Tube drivers may also be combined with Current wireless controls. Contact your Current sales representative for more information.

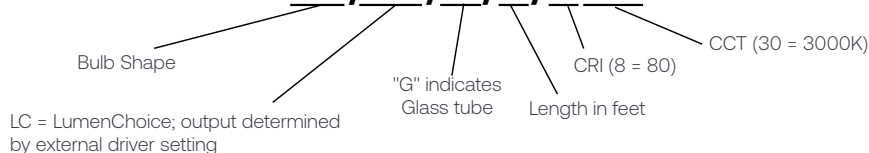
Driver wiring mimics that of instant start ballasts, making for simple installation. Each channel from the driver is independent, so running fewer lamps than the maximum does not impact the other outputs. Running three lamps from a four-lamp driver still provides the same output to each lamp as when four lamps are being operated.

With LumenChoice® Type C LED Tubes and Drivers, fewer SKUs can be used to address the needs of an entire facility. The performance tables in this section show the light output from lamps at each driver wattage setting.

### Catalog Logic:

| <b>Bulb Shape:</b><br>Bulb shape followed by its size (the maximum diameter of the bulb expressed in eighths of an inch). |           | <b>Order Code:</b><br>Use the order code when ordering to ensure that you receive the exact product you require |                  | <b>Color Rendering Index (CRI or R):</b><br>An indication of the ability of the lamp to render object colors in a normal natural way. The higher the number (0-100), the better the color appearance. |          | <b>Color Temperature (K):</b><br>A measure of the visual "warmth" or "coolness" of the light from the lamp. The higher the value, the whiter or "cooler" the light appears. |     | <b>Rated Life L70:</b><br>Hours of operation the lamp will provide before reaching 70% of its original lumen output |                    | <b>Initial Lumens at High Wattage Settings:</b><br>Lamp lumens at various wattages |                                          |      |      |      | <b>2-Lamp Driver:</b><br>2-Lamp Driver to be used with this lamp corresponding to the wattages in this table |                     | <b>4-Lamp Driver:</b><br>4-Lamp Driver to be used with this lamp corresponding to the wattages in this table |  |
|---------------------------------------------------------------------------------------------------------------------------|-----------|-----------------------------------------------------------------------------------------------------------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|---------------------------------------------------------------------------------------------------------------------|--------------------|------------------------------------------------------------------------------------|------------------------------------------|------|------|------|--------------------------------------------------------------------------------------------------------------|---------------------|--------------------------------------------------------------------------------------------------------------|--|
| <b>Base Type:</b><br>ANSI Base                                                                                            |           | <b>Description:</b><br>Lamp Model Description                                                                   |                  | <b>MOL (in):</b><br>Maximum Overall Length in inches                                                                                                                                                  |          | <b>Carton Quantity:</b><br>Number of lamps packed in a carton                                                                                                               |     | <b>Location Rating:</b><br>Location Rating as defined for LED Lamps by UL 1993                                      |                    |                                                                                    |                                          |      |      |      |                                                                                                              |                     |                                                                                                              |  |
| Bulb Shape                                                                                                                | Base Type | Order Code                                                                                                      | Description      | Carton Qty <sup>2</sup>                                                                                                                                                                               | MOL (in) | Color Temp. (Initial)                                                                                                                                                       | CRI | Rated Life L70 (Hrs) <sup>1</sup>                                                                                   | DLC <sup>3,4</sup> | Location Rating <sup>3</sup>                                                       | Initial Lumens at High Wattage Settings: |      |      |      |                                                                                                              | 2-Lamp Driver       | 4-Lamp Driver*                                                                                               |  |
| 18W                                                                                                                       | 19.5W     | 21W                                                                                                             | 23W*             | 25W*                                                                                                                                                                                                  |          |                                                                                                                                                                             |     |                                                                                                                     |                    |                                                                                    |                                          |      |      |      |                                                                                                              |                     |                                                                                                              |  |
| LumenChoice® 4ft Glass Tubes                                                                                              |           |                                                                                                                 |                  |                                                                                                                                                                                                       |          |                                                                                                                                                                             |     |                                                                                                                     |                    |                                                                                    |                                          |      |      |      |                                                                                                              |                     |                                                                                                              |  |
| T8                                                                                                                        | G13       | 3421H                                                                                                           | LEDT8/LC/G/4/830 | 20                                                                                                                                                                                                    | 48       | 3000K                                                                                                                                                                       | 80  | 70,000                                                                                                              | Yes                | Damp                                                                               | 2250                                     | 2500 | 2650 | 2850 | 2950                                                                                                         | 21383 LED/DR/D2L/HW | 21392 LED/DR/D4L/HW                                                                                          |  |

## LEDT8/LC/G/4/830

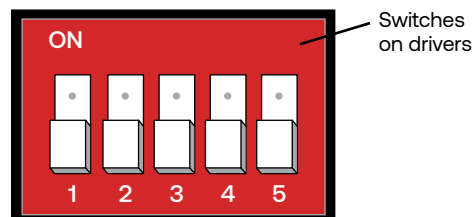


# LED Lamps – Tubes – Type C



## Programming LumenChoice™ Drivers

Before installation, LumenChoice™ Drivers must be set to the desired output. Lumen levels corresponding to the driver settings below are noted in the specification tables. Adjust the switches on the side of the driver to achieve the desired performance according to the table below.



| LOW WATTAGE DRIVER DESCRIPTION |                                                                                                | DRIVER PRODUCT CODE                                                                            |                                                                                                 |                                                                                                  |                                                                                            |
|--------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| LED/DR/D2L/LW                  |                                                                                                | 21378                                                                                          |                                                                                                 |                                                                                                  |                                                                                            |
| SYSTEM WATTS PER LAMP          | SWITCH CODE                                                                                    |                                                                                                |                                                                                                 |                                                                                                  |                                                                                            |
|                                | 1                                                                                              | 2                                                                                              | 3                                                                                               | 4                                                                                                | 5                                                                                          |
| 16.5                           | <br>OFF       | <br>OFF       | <br>OFF        | <br>OFF         | <br>OFF   |
| 15                             | <b>ON</b><br> | <br>OFF       | <br>OFF        | <br>OFF         | <br>OFF   |
| 12                             | <br>OFF       | <b>ON</b><br> | <br>OFF        | <br>OFF         | <br>OFF   |
| 9                              | <br>OFF      | <br>OFF      | <b>ON</b><br> | <br>OFF        | <br>OFF  |
| 8                              | <br>OFF     | <br>OFF     | <br>OFF      | <b>ON</b><br> | <br>OFF |

| LOW WATTAGE DRIVER DESCRIPTION |                                                                                            | DRIVER PRODUCT CODE                                                                        |                                                                                            |                                                                                            |                                                                                            |
|--------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| LED/DR/D4L/LW                  |                                                                                            | 21379                                                                                      |                                                                                            |                                                                                            |                                                                                            |
| SYSTEM WATTS PER LAMP          | SWITCH CODE                                                                                |                                                                                            |                                                                                            |                                                                                            |                                                                                            |
|                                | 1                                                                                          | 2                                                                                          | 3                                                                                          | 4                                                                                          | 5                                                                                          |
| 16.5                           | <br>OFF | <br>OFF | <br>OFF | <br>OFF | <br>OFF |
| 15                             | ON<br>  | <br>OFF | <br>OFF | <br>OFF | <br>OFF |
| 12                             | <br>OFF | ON<br>  | <br>OFF | <br>OFF | <br>OFF |
| 9                              | <br>OFF | <br>OFF | ON<br>  | <br>OFF | <br>OFF |
| 8                              | <br>OFF | <br>OFF | <br>OFF | ON<br>  | <br>OFF |

| HIGH WATTAGE DRIVER DESCRIPTION |                                                                                              | DRIVER PRODUCT CODE                                                                          |                                                                                              |                                                                                              |                                                                                              |
|---------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| LED/DR/D2L/HW                   |                                                                                              | 21383                                                                                        |                                                                                              |                                                                                              |                                                                                              |
| SYSTEM WATTS PER LAMP           | SWITCH CODE                                                                                  |                                                                                              |                                                                                              |                                                                                              |                                                                                              |
|                                 | 1                                                                                            | 2                                                                                            | 3                                                                                            | 4                                                                                            | 5                                                                                            |
| 25                              | <br>OFF   | <br>OFF   | <br>OFF   | <br>OFF   | <br>OFF   |
| 23                              | ON<br>   | <br>OFF  | <br>OFF  | <br>OFF  | <br>OFF  |
| 21                              | <br>OFF | ON<br>  | <br>OFF | <br>OFF | <br>OFF |
| 19.5                            | <br>OFF | <br>OFF | ON<br>  | <br>OFF | <br>OFF |
| 18                              | <br>OFF | <br>OFF | <br>OFF | ON<br>  | <br>OFF |

| HIGH WATTAGE DRIVER DESCRIPTION |             | DRIVER PRODUCT CODE |   |                                                |
|---------------------------------|-------------|---------------------|---|------------------------------------------------|
| LED/DR/D4L/HW                   |             | 21392               |   |                                                |
| SYSTEM WATTS PER LAMP           | SWITCH CODE |                     |   | NOTE:<br>THREE<br>SWITCHES ON<br>LED/DR/D4L/HW |
|                                 | 1           | 2                   | 3 |                                                |
| 21                              |             |                     |   |                                                |
| 19.5                            |             |                     |   |                                                |
| 18                              |             |                     |   |                                                |

# LED Lamps - Tubes - Type C



## Remote Drivers for Type C LED Tubes - Low Wattage

| Input Watts (Max.)                                                          | Order Code | Description   | Input Voltage | Carton Qty <sup>2</sup> | Length (in) | Width (in) | Height (in) | Freq. (Hz) | Power Factor | Output Voltage | Max. Output Current (A) | Min. Temp. <sup>1</sup> | Max. Temp. | 0-10V Dimmable | Default Wattage per Tube Setting | Additional Information       |
|-----------------------------------------------------------------------------|------------|---------------|---------------|-------------------------|-------------|------------|-------------|------------|--------------|----------------|-------------------------|-------------------------|------------|----------------|----------------------------------|------------------------------|
| <b>LumenChoice® Remote Drivers - Selectable Output for Type C LED Tubes</b> |            |               |               |                         |             |            |             |            |              |                |                         |                         |            |                |                                  |                              |
| 33                                                                          | 21378      | LED/DR/D2L/LW | 120-277 VAC   | 10                      | 9.5         | 1.3        | 1.2         | 60         | >0.9         | 26-34 VDC      | 0.48x2                  | -4° F                   | 104° F     | Yes            | 12W                              | Max. 2 Tubes; Class 2 Output |
| 66                                                                          | 21379      | LED/DR/D4L/LW | 120-277 VAC   | 10                      | 9.5         | 1.7        | 1.2         | 60         | >0.9         | 26-34 VDC      | 0.48x4                  | -4° F                   | 104° F     | Yes            | 12W                              | Max. 4 Tubes; Class 2 Output |

## LumenChoice® T8 Type C LED Tube and Driver System - T8 on Low Wattage Drivers

| Bulb Shape                                          | Base Type | Order Code | Description        | Carton Qty <sup>2</sup> | MOL (in) | Color Temp. (Initial) | CRI | Rated Life L70 (Hrs) <sup>1</sup> | DLC <sup>3</sup> ID <sup>4</sup> | Location Rating <sup>3</sup> | Initial Lumens at Low Wattage Settings: |      |      |      |      | 2-Lamp Driver       |                     | 4-Lamp Driver |  |
|-----------------------------------------------------|-----------|------------|--------------------|-------------------------|----------|-----------------------|-----|-----------------------------------|----------------------------------|------------------------------|-----------------------------------------|------|------|------|------|---------------------|---------------------|---------------|--|
| LumenChoice® 4 ft T8 XL Glass Tubes                 |           |            |                    |                         |          |                       |     |                                   |                                  |                              |                                         |      |      |      |      |                     |                     |               |  |
| T8                                                  | G13       | 93314798   | LEDT8/LC/G/4/835XL | 20                      | 48       | 3000K                 | 80  | 70,000                            | S-SLNM95/S-FZKGZB                | Damp                         | 1150                                    | 1450 | 1850 | 2250 | 2350 | 21378 LED/DR/D2L/LW | 21379 LED/DR/D4L/LW |               |  |
|                                                     | G13       | 93314800   | LEDT8/LC/G/4/840XL | 20                      | 48       | 3500K                 | 80  | 70,000                            | S-R2LVYY/S-OPSX3R                | Damp                         | 1200                                    | 1500 | 1900 | 2300 | 2400 | 21378 LED/DR/D2L/LW | 21379 LED/DR/D4L/LW |               |  |
|                                                     | G13       | 93314802   | LEDT8/LC/G/4/850XL | 20                      | 48       | 4000K                 | 80  | 70,000                            | S-KRKV6H/S-MRXVLK                | Damp                         | 1200                                    | 1500 | 1900 | 2300 | 2400 | 21378 LED/DR/D2L/LW | 21379 LED/DR/D4L/LW |               |  |
| LumenChoice® 4ft T8 Glass Tubes                     |           |            |                    |                         |          |                       |     |                                   |                                  |                              |                                         |      |      |      |      |                     |                     |               |  |
| T8                                                  | G13       | 34211      | LEDT8/LC/G/4/830   | 20                      | 48       | 3000K                 | 80  | 70,000                            | P0138IQ3/PAY71VOU                | Damp                         | 1050                                    | 1150 | 1550 | 1900 | 2000 | 21378 LED/DR/D2L/LW | 21379 LED/DR/D4L/LW |               |  |
|                                                     | G13       | 34227      | LEDT8/LC/G/4/835   | 20                      | 48       | 3500K                 | 80  | 70,000                            | P4WWYGOA/PRIHTZPW                | Damp                         | 1050                                    | 1200 | 1600 | 1950 | 2050 | 21378 LED/DR/D2L/LW | 21379 LED/DR/D4L/LW |               |  |
|                                                     | G13       | 34235      | LEDT8/LC/G/4/840   | 20                      | 48       | 4000K                 | 80  | 70,000                            | PHSUA5K1/PZEDYTJZ                | Damp                         | 1050                                    | 1200 | 1600 | 1950 | 2050 | 21378 LED/DR/D2L/LW | 21379 LED/DR/D4L/LW |               |  |
|                                                     | G13       | 34239      | LEDT8/LC/G/4/850   | 20                      | 48       | 5000K                 | 80  | 70,000                            | PSZ605M1/PMN7ZV5W                | Damp                         | 1050                                    | 1200 | 1600 | 1950 | 2050 | 21378 LED/DR/D2L/LW | 21379 LED/DR/D4L/LW |               |  |
| LumenChoice® 3ft T8 Glass Tubes                     |           |            |                    |                         |          |                       |     |                                   |                                  |                              |                                         |      |      |      |      |                     |                     |               |  |
| T8                                                  | G13       | 36394      | LEDT8/LC/G/3/830   | 20                      | 36       | 3000K                 | 80  | 70,000                            | P9293YKC                         | Damp                         | 1050                                    | 1150 | 1550 | 1900 | 2050 | 21378 LED/DR/D2L/LW | 21379 LED/DR/D4L/LW |               |  |
|                                                     | G13       | 36395      | LEDT8/LC/G/3/835   | 20                      | 36       | 3500K                 | 80  | 70,000                            | PE38VSYF                         | Damp                         | 1050                                    | 1200 | 1600 | 1950 | 2100 | 21378 LED/DR/D2L/LW | 21379 LED/DR/D4L/LW |               |  |
|                                                     | G13       | 36398      | LEDT8/LC/G/3/840   | 20                      | 36       | 4000K                 | 80  | 70,000                            | PNQOEIII                         | Damp                         | 1050                                    | 1200 | 1600 | 1950 | 2100 | 21378 LED/DR/D2L/LW | 21379 LED/DR/D4L/LW |               |  |
|                                                     | G13       | 36401      | LEDT8/LC/G/3/850   | 20                      | 36       | 5000K                 | 80  | 70,000                            | PJSRFHTI                         | Damp                         | 1050                                    | 1200 | 1600 | 1950 | 2100 | 21378 LED/DR/D2L/LW | 21379 LED/DR/D4L/LW |               |  |
| LumenChoice® 2ft T8 Glass Tubes                     |           |            |                    |                         |          |                       |     |                                   |                                  |                              |                                         |      |      |      |      |                     |                     |               |  |
| T8                                                  | G13       | 36406      | LEDT8/LC/G/2/830   | 20                      | 24       | 3000K                 | 80  | 70,000                            | -                                | Damp                         | 1000                                    | 1100 | 1450 |      |      | 21378 LED/DR/D2L/LW | 21379 LED/DR/D4L/LW |               |  |
|                                                     | G13       | 36408      | LEDT8/LC/G/2/835   | 20                      | 24       | 3500K                 | 80  | 70,000                            | PDNPT2AJ                         | Damp                         | 1050                                    | 1200 | 1550 |      |      | 21378 LED/DR/D2L/LW | 21379 LED/DR/D4L/LW |               |  |
|                                                     | G13       | 36409      | LEDT8/LC/G/2/840   | 20                      | 24       | 4000K                 | 80  | 70,000                            | PD3Q3TWL                         | Damp                         | 1050                                    | 1200 | 1550 |      |      | 21378 LED/DR/D2L/LW | 21379 LED/DR/D4L/LW |               |  |
|                                                     | G13       | 36413      | LEDT8/LC/G/2/850   | 20                      | 24       | 5000K                 | 80  | 70,000                            | PRKKG3AR4                        | Damp                         | 1050                                    | 1200 | 1550 |      |      | 21378 LED/DR/D2L/LW | 21379 LED/DR/D4L/LW |               |  |
| LumenChoice® U1 T8 Glass Tubes - 1*5/8" leg spacing |           |            |                    |                         |          |                       |     |                                   |                                  |                              |                                         |      |      |      |      |                     |                     |               |  |
| T8-U1                                               | 2G13      | 28084      | LED14T8/U/835      | 15                      | 22.5     | 3500K                 | 80  | 50,000                            | -                                | Damp                         | 950                                     | 1100 | 1550 |      |      | 21378 LED/DR/D2L/LW | 21379 LED/DR/D4L/LW |               |  |
|                                                     | 2G13      | 28164      | LED14T8/U/840      | 15                      | 22.5     | 4000K                 | 80  | 50,000                            | -                                | Damp                         | 950                                     | 1100 | 1550 |      |      | 21378 LED/DR/D2L/LW | 21379 LED/DR/D4L/LW |               |  |
| LumenChoice® U6 T8 Glass Tubes - 6" leg spacing     |           |            |                    |                         |          |                       |     |                                   |                                  |                              |                                         |      |      |      |      |                     |                     |               |  |
| T8-U6                                               | 2G13      | 43131      | LED15T8/G/U6/830   | 12                      | 22.5     | 3000K                 | 80  | 50,000                            | -                                | Damp                         | 950                                     | 1050 | 1450 | 1700 |      | 21378 LED/DR/D2L/LW | 21379 LED/DR/D4L/LW |               |  |
|                                                     | 2G13      | 43135      | LED15T8/G/U6/835   | 12                      | 22.5     | 3500K                 | 80  | 50,000                            | -                                | Damp                         | 1000                                    | 1100 | 1550 | 1800 |      | 21378 LED/DR/D2L/LW | 21379 LED/DR/D4L/LW |               |  |
|                                                     | 2G13      | 43143      | LED15T8/G/U6/840   | 12                      | 22.5     | 4000K                 | 80  | 50,000                            | -                                | Damp                         | 1000                                    | 1100 | 1550 | 1800 |      | 21378 LED/DR/D2L/LW | 21379 LED/DR/D4L/LW |               |  |
|                                                     | 2G13      | 43145      | LED15T8/G/U6/850   | 12                      | 22.5     | 5000K                 | 80  | 50,000                            | -                                | Damp                         | 1000                                    | 1100 | 1550 | 1800 |      | 21378 LED/DR/D2L/LW | 21379 LED/DR/D4L/LW |               |  |

## LumenChoice® T5 Type C LED Tube and Driver System - T5 on Low Wattage Drivers

| Bulb Shape                          | Base Type | Order Code | Description        | Carton Qty <sup>2</sup> | MOL (in) | Color Temp. (Initial) | CRI | Rated Life L70 (Hrs) <sup>1</sup> | DLC <sup>3</sup> ID <sup>4</sup> | Location Rating <sup>3</sup> | Initial Lumens at Low Wattage Settings: |      |      |      |      |       |               |       | 2-Lamp Driver | 4-Lamp Driver |
|-------------------------------------|-----------|------------|--------------------|-------------------------|----------|-----------------------|-----|-----------------------------------|----------------------------------|------------------------------|-----------------------------------------|------|------|------|------|-------|---------------|-------|---------------|---------------|
| LumenChoice® 4 ft T5 XL Glass Tubes |           |            |                    |                         |          |                       |     |                                   |                                  |                              |                                         |      |      |      |      |       |               |       |               |               |
| T5                                  | G5        | 93314792   | LEDT5/LC/G/4/835XL | 20                      | 46       | 3500K                 | 80  | 70,000                            | S-YWHR9W/S-K2J6CR                | Damp                         | 1400                                    | 1700 | 2150 | 2650 | 2800 | 21378 | LED/DR/D2L/LW | 21379 | LED/DR/D4L/LW |               |
|                                     | G5        | 93314794   | LEDT5/LC/G/4/840XL | 20                      | 46       | 4000K                 | 80  | 70,000                            | S-FKBT9H/S-TT2XLK                | Damp                         | 1450                                    | 1750 | 2200 | 2700 | 2850 | 21378 | LED/DR/D2L/LW | 21379 | LED/DR/D4L/LW |               |
|                                     | G5        | 93314796   | LEDT5/LC/G/4/850XL | 20                      | 46       | 5000K                 | 80  | 70,000                            | S-YN29B8/S-RLP1BP                | Damp                         | 1450                                    | 1750 | 2200 | 2700 | 2850 | 21378 | LED/DR/D2L/LW | 21379 | LED/DR/D4L/LW |               |
| LumenChoice® 4ft T5 HE Glass Tubes  |           |            |                    |                         |          |                       |     |                                   |                                  |                              |                                         |      |      |      |      |       |               |       |               |               |
| T5                                  | G5        | 38995      | LEDT5LC/G/4/835HE  | 20                      | 46       | 3500K                 | 80  | 70,000                            | -                                | Damp                         | 1150                                    | 1250 | 1650 | 1950 | 2150 | 21378 | LED/DR/D2L/LW | 21379 | LED/DR/D4L/LW |               |
|                                     | G5        | 38998      | LEDT5LC/G/4/840HE  | 20                      | 46       | 4000K                 | 80  | 70,000                            | -                                | Damp                         | 1200                                    | 1300 | 1700 | 2000 | 2200 | 21378 | LED/DR/D2L/LW | 21379 | LED/DR/D4L/LW |               |
|                                     | G5        | 38999      | LEDT5LC/G/4/850HE  | 20                      | 46       | 5000K                 | 80  | 70,000                            | -                                | Damp                         | 1200                                    | 1300 | 1700 | 2000 | 2200 | 21378 | LED/DR/D2L/LW | 21379 | LED/DR/D4L/LW |               |
| LumenChoice® 3ft T5 HE Glass Tubes  |           |            |                    |                         |          |                       |     |                                   |                                  |                              |                                         |      |      |      |      |       |               |       |               |               |
| T5                                  | G5        | 39001      | LEDT5LC/G/3/835HE  | 20                      | 34       | 3500K                 | 80  | 70,000                            | -                                | Damp                         | 1150                                    | 1250 | 1600 | 1950 | 2150 | 21378 | LED/DR/D2L/LW | 21379 | LED/DR/D4L/LW |               |
|                                     | G5        | 39002      | LEDT5LC/G/3/840HE  | 20                      | 34       | 4000K                 | 80  | 70,000                            | -                                | Damp                         | 1200                                    | 1300 | 1650 | 2000 | 2200 | 21378 | LED/DR/D2L/LW | 21379 | LED/DR/D4L/LW |               |
|                                     | G5        | 39003      | LEDT5LC/G/3/850HE  | 20                      | 34       | 5000K                 | 80  | 70,000                            | -                                | Damp                         | 1200                                    | 1300 | 1650 | 2000 | 2200 | 21378 | LED/DR/D2L/LW | 21379 | LED/DR/D4L/LW |               |
| LumenChoice® 2ft T5 Glass Tubes     |           |            |                    |                         |          |                       |     |                                   |                                  |                              |                                         |      |      |      |      |       |               |       |               |               |
| T5                                  | G5        | 38968      | LEDT5/LC/G/2/830   | 20                      | 22       | 3000K                 | 80  | 70,000                            | -                                | Damp                         | 1000                                    | 1200 | 1550 | 1800 | 2000 | 21378 | LED/DR/D2L/LW | 21379 | LED/DR/D4L/LW |               |
|                                     | G5        | 38980      | LEDT5/LC/G/2/835   | 20                      | 22       | 3500K                 | 80  | 70,000                            | -                                | Damp                         | 1050                                    | 1200 | 1600 | 1850 | 2050 | 21378 | LED/DR/D2L/LW | 21379 | LED/DR/D4L/LW |               |
|                                     | G5        | 38983      | LEDT5/LC/G/2/840   | 20                      | 22       | 4000K                 | 80  | 70,000                            | -                                | Damp                         | 1100                                    | 1250 | 1650 | 1900 | 2100 | 21378 | LED/DR/D2L/LW | 21379 | LED/DR/D4L/LW |               |
|                                     | G5        | 38992      | LEDT5/LC/G/2/850   | 20                      | 22       | 5000K                 | 80  | 70,000                            | -                                | Damp                         | 1100                                    | 1250 | 1650 | 1900 | 2100 | 21378 | LED/DR/D2L/LW | 21379 | LED/DR/D4L/LW |               |

<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

<sup>2</sup> Minimum order quantity - Carton Qty

<sup>3</sup> UL 1993 Environmental Requirements for LED LAMPS

Damp Location - Exterior or interior location that is normally or periodically subject to condensation of moisture in, on, or adjacent to electrical equipment, including partially protected locations

<sup>4</sup> Not all product variations on this page are DLC qualified. Visit [qpl.designlights.org/solid-state-lighting](http://qpl.designlights.org/solid-state-lighting) to confirm qualification.



# LED Lamps - Tubes - Type C



## Remote Drivers for Type C LED Tubes - 6-18W

| Input Watts (Max.)                                                            | Order Code | Description     | Input Voltage | Carton Qty <sup>2</sup> | Length (in) | Width (in) | Height (in) | Freq. (Hz) | Power Factor | Output Voltage | Max. Output Current (A) | Min. Temp. <sup>1</sup> | Max Temp. | 0-10V Dimmable | Default Wattage per Tube Setting | Additional Information       |
|-------------------------------------------------------------------------------|------------|-----------------|---------------|-------------------------|-------------|------------|-------------|------------|--------------|----------------|-------------------------|-------------------------|-----------|----------------|----------------------------------|------------------------------|
| 120-347V LumenChoice® Remote Drivers - Selectable Output for Type C LED Tubes |            |                 |               |                         |             |            |             |            |              |                |                         |                         |           |                |                                  |                              |
| 36                                                                            | 93313132   | LED/6-18/DR/D2L | 120-347 VAC   | 10                      | 9.5         | 1.3        | 1.2         | 60         | >0.9         | 26-34 VDC      | 0.53x2                  | -4° F                   | 104° F    | Yes            | 12W                              | Max. 2 Tubes; Class 2 Output |
| 72                                                                            | 93313181   | LED/6-18/DR/D4L | 120-347 VAC   | 10                      | 9.5         | 1.7        | 1.2         | 60         | >0.9         | 26-34 VDC      | 0.53x4                  | -4° F                   | 104° F    | Yes            | 12W                              | Max. 4 Tubes; Class 2 Output |

## LumenChoice® T8 Type C LED Tube and Driver System - T8 on 120-347V Drivers

| Bulb Shape                                          | Base Type | Order Code | Description        | Carton Qty <sup>2</sup> | MOL (in) | Color Temp. (Initial) | CRI | Rated Life L70 (Hrs) <sup>1</sup> | DLC <sup>3d</sup>     | Location Rating <sup>3</sup> | Initial Lumens at Low Wattage Settings: |      |      |      |      |                 | 2-Lamp Driver   | 4-Lamp Driver |
|-----------------------------------------------------|-----------|------------|--------------------|-------------------------|----------|-----------------------|-----|-----------------------------------|-----------------------|------------------------------|-----------------------------------------|------|------|------|------|-----------------|-----------------|---------------|
|                                                     |           |            |                    |                         |          |                       |     |                                   |                       |                              | 6W                                      | 9W   | 12W  | 15W  | 18W  |                 |                 |               |
| LumenChoice® 4 ft T8 XL Glass Tubes                 |           |            |                    |                         |          |                       |     |                                   |                       |                              |                                         |      |      |      |      |                 |                 |               |
| T8                                                  | G13       | 93314798   | LEDT8/LC/G/4/835XL | 20                      | 48       | 3500K                 | 80  | 70,000                            | S-9YTMRV/<br>S-4ZZZSL | Damp                         | 1000                                    | 1450 | 1850 | 2250 | 2600 | LED/6-18/DR/D2L | LED/6-18/DR/D4L |               |
|                                                     | G13       | 93314800   | LEDT8/LC/G/4/840XL | 20                      | 48       | 4000K                 | 80  | 70,000                            | S-GQG393/<br>S-HJPP10 | Damp                         | 1050                                    | 1500 | 1900 | 2300 | 2650 | LED/6-18/DR/D2L | LED/6-18/DR/D4L |               |
|                                                     | G13       | 93314802   | LEDT8/LC/G/4/850XL | 20                      | 48       | 5000K                 | 80  | 70,000                            | S-VJSSD3/<br>S-QW2PTZ | Damp                         | 1050                                    | 1500 | 1900 | 2300 | 2650 | LED/6-18/DR/D2L | LED/6-18/DR/D4L |               |
| LumenChoice® 4 ft T8 Glass Tubes                    |           |            |                    |                         |          |                       |     |                                   |                       |                              |                                         |      |      |      |      |                 |                 |               |
| T8                                                  | G13       | 34211      | LEDT8/LC/G/4/830   | 20                      | 48       | 3000K                 | 80  | 70,000                            | -                     | Damp                         | 750                                     | 1150 | 1550 | 1900 | 2250 | LED/6-18/DR/D2L | LED/6-18/DR/D4L |               |
|                                                     | G13       | 34227      | LEDT8/LC/G/4/835   | 20                      | 48       | 3500K                 | 80  | 70,000                            | -                     | Damp                         | 800                                     | 1200 | 1600 | 1950 | 2300 | LED/6-18/DR/D2L | LED/6-18/DR/D4L |               |
|                                                     | G13       | 34235      | LEDT8/LC/G/4/840   | 20                      | 48       | 4000K                 | 80  | 70,000                            | -                     | Damp                         | 800                                     | 1200 | 1600 | 1950 | 2300 | LED/6-18/DR/D2L | LED/6-18/DR/D4L |               |
|                                                     | G13       | 34239      | LEDT8/LC/G/4/850   | 20                      | 48       | 5000K                 | 80  | 70,000                            | -                     | Damp                         | 800                                     | 1200 | 1600 | 1950 | 2300 | LED/6-18/DR/D2L | LED/6-18/DR/D4L |               |
| LumenChoice® 3 ft T8 Glass Tubes                    |           |            |                    |                         |          |                       |     |                                   |                       |                              |                                         |      |      |      |      |                 |                 |               |
| T8                                                  | G13       | 36394      | LEDT8/LC/G/3/830   | 20                      | 36       | 3000K                 | 80  | 70,000                            | -                     | Damp                         | 750                                     | 1150 | 1550 | 1900 | 2250 | LED/6-18/DR/D2L | LED/6-18/DR/D4L |               |
|                                                     | G13       | 36395      | LEDT8/LC/G/3/835   | 20                      | 36       | 3500K                 | 80  | 70,000                            | -                     | Damp                         | 800                                     | 1200 | 1600 | 1950 | 2300 | LED/6-18/DR/D2L | LED/6-18/DR/D4L |               |
|                                                     | G13       | 36398      | LEDT8/LC/G/3/840   | 20                      | 36       | 4000K                 | 80  | 70,000                            | -                     | Damp                         | 800                                     | 1200 | 1600 | 1950 | 2300 | LED/6-18/DR/D2L | LED/6-18/DR/D4L |               |
|                                                     | G13       | 36401      | LEDT8/LC/G/3/850   | 20                      | 36       | 5000K                 | 80  | 70,000                            | -                     | Damp                         | 800                                     | 1200 | 1600 | 1950 | 2300 | LED/6-18/DR/D2L | LED/6-18/DR/D4L |               |
| LumenChoice® 2 ft T8 Glass Tubes                    |           |            |                    |                         |          |                       |     |                                   |                       |                              |                                         |      |      |      |      |                 |                 |               |
| T8                                                  | G13       | 36406      | LEDT8/LC/G/2/830   | 20                      | 24       | 3000K                 | 80  | 70,000                            | -                     | Damp                         | 700                                     | 1100 | 1450 |      |      | LED/6-18/DR/D2L | LED/6-18/DR/D4L |               |
|                                                     | G13       | 36408      | LEDT8/LC/G/2/835   | 20                      | 24       | 3500K                 | 80  | 70,000                            | -                     | Damp                         | 800                                     | 1200 | 1550 |      |      | LED/6-18/DR/D2L | LED/6-18/DR/D4L |               |
|                                                     | G13       | 36409      | LEDT8/LC/G/2/840   | 20                      | 24       | 4000K                 | 80  | 70,000                            | -                     | Damp                         | 800                                     | 1200 | 1550 |      |      | LED/6-18/DR/D2L | LED/6-18/DR/D4L |               |
|                                                     | G13       | 36413      | LEDT8/LC/G/2/850   | 20                      | 24       | 5000K                 | 80  | 70,000                            | -                     | Damp                         | 800                                     | 1200 | 1550 |      |      | LED/6-18/DR/D2L | LED/6-18/DR/D4L |               |
| LumenChoice® U1 T8 Glass Tubes - 1-5/8" leg spacing |           |            |                    |                         |          |                       |     |                                   |                       |                              |                                         |      |      |      |      |                 |                 |               |
| T8-U1                                               | 2G13      | 28084      | LED14T8/U/835      | 15                      | 22.5     | 3500K                 | 80  | 50,000                            | -                     | Damp                         | 700                                     | 1100 | 1550 |      |      | LED/6-18/DR/D2L | LED/6-18/DR/D4L |               |
|                                                     | 2G13      | 28164      | LED14T8/U/840      | 15                      | 22.5     | 4000K                 | 80  | 50,000                            | -                     | Damp                         | 700                                     | 1100 | 1550 |      |      | LED/6-18/DR/D2L | LED/6-18/DR/D4L |               |
| LumenChoice® U6 T8 Glass Tubes - 6" leg spacing     |           |            |                    |                         |          |                       |     |                                   |                       |                              |                                         |      |      |      |      |                 |                 |               |
| T8-U6                                               | 2G13      | 43131      | LED15T8/G/U/6/830  | 12                      | 22.5     | 3000K                 | 80  | 50,000                            | -                     | Damp                         | 650                                     | 1050 | 1450 | 1700 |      | LED/6-18/DR/D2L | LED/6-18/DR/D4L |               |
|                                                     | 2G13      | 43135      | LED15T8/G/U/6/835  | 12                      | 22.5     | 3500K                 | 80  | 50,000                            | -                     | Damp                         | 700                                     | 1100 | 1550 | 1800 |      | LED/6-18/DR/D2L | LED/6-18/DR/D4L |               |
|                                                     | 2G13      | 43143      | LED15T8/G/U/6/840  | 12                      | 22.5     | 4000K                 | 80  | 50,000                            | -                     | Damp                         | 700                                     | 1100 | 1550 | 1800 |      | LED/6-18/DR/D2L | LED/6-18/DR/D4L |               |
|                                                     | 2G13      | 43145      | LED15T8/G/U/6/850  | 12                      | 22.5     | 5000K                 | 80  | 50,000                            | -                     | Damp                         | 700                                     | 1100 | 1550 | 1800 |      | LED/6-18/DR/D2L | LED/6-18/DR/D4L |               |

## LumenChoice® T5 Type C LED Tube and Driver System - T5 on 120-347V Drivers

| Bulb Shape                          | Base Type | Order Code | Description        | Carton Qty <sup>2</sup> | MOL (in) | Color Temp. (Initial) | CRI | Rated Life L70 (Hrs) <sup>1</sup> | DLC <sup>3,4</sup>    | Location Rating <sup>3</sup> | Initial Lumens at Low Wattage Settings: |      |      |      |      |                 | 2-Lamp Driver   | 4-Lamp Driver |
|-------------------------------------|-----------|------------|--------------------|-------------------------|----------|-----------------------|-----|-----------------------------------|-----------------------|------------------------------|-----------------------------------------|------|------|------|------|-----------------|-----------------|---------------|
|                                     |           |            |                    |                         |          |                       |     |                                   |                       |                              | 6W                                      | 9W   | 12W  | 15W  | 18W  |                 |                 |               |
| LumenChoice® 4 ft T5 XL Glass Tubes |           |            |                    |                         |          |                       |     |                                   |                       |                              |                                         |      |      |      |      |                 |                 |               |
| T5                                  | G5        | 93314792   | LEDT5/LC/G/4/835XL | 20                      | 46       | 3500K                 | 80  | 70,000                            | S-5LR7MR/<br>S-7DMN55 | Damp                         | 1150                                    | 1700 | 2150 | 2650 | 3050 | LED/6-18/DR/D2L | LED/6-18/DR/D4L |               |
|                                     | G5        | 93314794   | LEDT5/LC/G/4/840XL | 20                      | 46       | 4000K                 | 80  | 70,000                            | S-XB09Y4/<br>S-MY2H69 | Damp                         | 1200                                    | 1750 | 2200 | 2700 | 3100 | LED/6-18/DR/D2L | LED/6-18/DR/D4L |               |
|                                     | G5        | 93314796   | LEDT5/LC/G/4/850XL | 20                      | 46       | 5000K                 | 80  | 70,000                            | S-FGTDPB/<br>S-R7439N | Damp                         | 1200                                    | 1750 | 2200 | 2700 | 3100 | LED/6-18/DR/D2L | LED/6-18/DR/D4L |               |
| LumenChoice® 4 ft T5 HE Glass Tubes |           |            |                    |                         |          |                       |     |                                   |                       |                              |                                         |      |      |      |      |                 |                 |               |
| T5                                  | G5        | 38995      | LEDT5LC/G/4/835HE  | 20                      | 46       | 3500K                 | 80  | 70,000                            | -                     | Damp                         | 850                                     | 1250 | 1650 | 1950 | 2300 | LED/6-18/DR/D2L | LED/6-18/DR/D4L |               |
|                                     | G5        | 38998      | LEDT5LC/G/4/840HE  | 20                      | 46       | 4000K                 | 80  | 70,000                            | -                     | Damp                         | 900                                     | 1300 | 1700 | 2000 | 2300 | LED/6-18/DR/D2L | LED/6-18/DR/D4L |               |
|                                     | G5        | 38999      | LEDT5LC/G/4/850HE  | 20                      | 46       | 5000K                 | 80  | 70,000                            | -                     | Damp                         | 900                                     | 1300 | 1700 | 2000 | 2300 | LED/6-18/DR/D2L | LED/6-18/DR/D4L |               |
| LumenChoice® 3 ft T5 HE Glass Tubes |           |            |                    |                         |          |                       |     |                                   |                       |                              |                                         |      |      |      |      |                 |                 |               |
| T5                                  | G5        | 39001      | LEDT5LC/G/3/835HE  | 20                      | 34       | 3500K                 | 80  | 70,000                            | -                     | Damp                         | 850                                     | 1250 | 1600 | 1950 | 2300 | LED/6-18/DR/D2L | LED/6-18/DR/D4L |               |
|                                     | G5        | 39002      | LEDT5LC/G/3/840HE  | 20                      | 34       | 4000K                 | 80  | 70,000                            | -                     | Damp                         | 900                                     | 1300 | 1650 | 2000 | 2300 | LED/6-18/DR/D2L | LED/6-18/DR/D4L |               |
|                                     | G5        | 39003      | LEDT5LC/G/3/850HE  | 20                      | 34       | 5000K                 | 80  | 70,000                            | -                     | Damp                         | 900                                     | 1300 | 1650 | 2000 | 2300 | LED/6-18/DR/D2L | LED/6-18/DR/D4L |               |
| LumenChoice® 2 ft T5 Glass Tubes    |           |            |                    |                         |          |                       |     |                                   |                       |                              |                                         |      |      |      |      |                 |                 |               |
| T5                                  | G5        | 38968      | LEDT5/LC/G/2/830   | 20                      | 22       | 3000K                 | 80  | 70,000                            | -                     | Damp                         | 800                                     | 1200 | 1550 | 1800 | 2150 | LED/6-18/DR/D2L | LED/6-18/DR/D4L |               |
|                                     | G5        | 38980      | LEDT5/LC/G/2/835   | 20                      | 22       | 3500K                 | 80  | 70,000                            | -                     | Damp                         | 800                                     | 1200 | 1600 | 1850 | 2200 | LED/6-18/DR/D2L | LED/6-18/DR/D4L |               |
|                                     | G5        | 38983      | LEDT5/LC/G/2/840   | 20                      | 22       | 4000K                 | 80  | 70,000                            | -                     | Damp                         | 850                                     | 1250 | 1650 | 1900 | 2200 | LED/6-18/DR/D2L | LED/6-18/DR/D4L |               |
|                                     | G5        | 38992      | LEDT5/LC/G/2/850   | 20                      | 22       | 5000K                 | 80  | 70,000                            | -                     | Damp                         | 850                                     | 1250 | 1650 | 1900 | 2200 | LED/6-18/DR/D2L | LED/6-18/DR/D4L |               |

<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

<sup>2</sup> Minimum order quantity - Carton Qty

<sup>3</sup> UL 1993 Environmental Requirements for LED LAMPS

Damp Location - Exterior or interior location that is normally or periodically subject to condensation of moisture in, on, or adjacent to electrical equipment, including partially protected locations

<sup>4</sup> Not all product variations on this page are DLC qualified. Visit [qpl.designlights.org/solid-state-lighting](http://qpl.designlights.org/solid-state-lighting) to confirm qualification.

# LED Lamps – Tubes – Type C



## Remote Drivers for Type C LED Tubes – High Wattage

| Input Watts (Max.)                                                   | Order Code | Description   | Input Voltage | Carton Qty <sup>2</sup> | Length (in) | Width (in) | Height (in) | Freq. (Hz) | Power Factor | Output Voltage | Max. Output Current (A) | Min. Temp. <sup>1</sup> | Max Temp. | 0-10V Dimmable | Default Wattage per Tube Setting | Additional Information       |
|----------------------------------------------------------------------|------------|---------------|---------------|-------------------------|-------------|------------|-------------|------------|--------------|----------------|-------------------------|-------------------------|-----------|----------------|----------------------------------|------------------------------|
| LumenChoice® Remote Drivers – Selectable Output for Type C LED Tubes |            |               |               |                         |             |            |             |            |              |                |                         |                         |           |                |                                  |                              |
| 50                                                                   | 21383      | LED/DR/D2L/HW | 120-277 VAC   | 10                      | 9.5         | 1.3        | 1.2         | 60         | >0.9         | 26-34 VDC      | 0.72x2                  | -4° F                   | 104° F    | Yes            | 21W                              | Max. 2 Tubes; Class 2 Output |
| 84                                                                   | 21392      | LED/DR/D4L/HW | 120-277 VAC   | 10                      | 9.5         | 1.7        | 1.2         | 60         | >0.9         | 26-34 VDC      | 0.62x4                  | -4° F                   | 104° F    | Yes            | 21W                              | Max. 4 Tubes; Class 2 Output |

## LumenChoice® T8 Type C LED Tube and Driver System – T8 on High Wattage Drivers

| Bulb Shape                      | Base Type | Order Code | Description      | Carton Qty <sup>2</sup> | MOL (in) | Color Temp. (Initial) | CRI | Rated Life L70 (Hrs) <sup>1</sup> | DLC <sup>3</sup> ID <sup>4</sup> | Location Rating <sup>3</sup> | Initial Lumens at High Wattage Settings: |       |      |      |      |                     | 2-Lamp Driver       | 4-Lamp Driver*<br>*Max setting is 21W |
|---------------------------------|-----------|------------|------------------|-------------------------|----------|-----------------------|-----|-----------------------------------|----------------------------------|------------------------------|------------------------------------------|-------|------|------|------|---------------------|---------------------|---------------------------------------|
|                                 |           |            |                  |                         |          |                       |     |                                   |                                  |                              | 18W                                      | 19.5W | 21W  | 23W* | 25W* |                     |                     |                                       |
| LumenChoice® 4ft T8 Glass Tubes |           |            |                  |                         |          |                       |     |                                   |                                  |                              |                                          |       |      |      |      |                     |                     |                                       |
| T8                              | G13       | 34211      | LEDT8/LC/G/4/830 | 20                      | 48       | 3000K                 | 80  | 70,000                            | PSR166LL / PM4YRS96              | Damp                         | 2250                                     | 2500  | 2650 | 2850 | 2950 | 21383 LED/DR/D2L/HW | 21392 LED/DR/D4L/HW |                                       |
|                                 | G13       | 34227      | LEDT8/LC/G/4/835 | 20                      | 48       | 3500K                 | 80  | 70,000                            | PWN2BURT / PJDU9X11              | Damp                         | 2300                                     | 2550  | 2700 | 2900 | 3000 | 21383 LED/DR/D2L/HW | 21392 LED/DR/D4L/HW |                                       |
|                                 | G13       | 34235      | LEDT8/LC/G/4/840 | 20                      | 48       | 4000K                 | 80  | 70,000                            | PS9SSR7Z / PFUM43BU              | Damp                         | 2300                                     | 2550  | 2700 | 2900 | 3000 | 21383 LED/DR/D2L/HW | 21392 LED/DR/D4L/HW |                                       |
|                                 | G13       | 34239      | LEDT8/LC/G/4/850 | 20                      | 48       | 5000K                 | 80  | 70,000                            | P21CODHU / PT5ZSP9V              | Damp                         | 2300                                     | 2550  | 2700 | 2900 | 3000 | 21383 LED/DR/D2L/HW | 21392 LED/DR/D4L/HW |                                       |

## LumenChoice® T5 Type C LED Tube and Driver System – T5 on High Wattage Drivers

| Bulb Shape                      | Base Type | Order Code | Description      | Carton Qty <sup>2</sup> | MOL (in) | Color Temp. (Initial) | CRI | Rated Life L70 (Hrs) <sup>1</sup> | DLC <sup>3</sup> ID <sup>4</sup> | Location Rating <sup>3</sup> | Initial Lumens at High Wattage Settings: |      |      |      |      | 2-Lamp Driver       | 4-Lamp Driver*<br>*Max setting is 21W |
|---------------------------------|-----------|------------|------------------|-------------------------|----------|-----------------------|-----|-----------------------------------|----------------------------------|------------------------------|------------------------------------------|------|------|------|------|---------------------|---------------------------------------|
| LumenChoice® 4ft T5 Glass Tubes |           |            |                  |                         |          |                       |     |                                   |                                  |                              |                                          |      |      |      |      |                     |                                       |
| T5                              | G5        | 38926      | LEDT5/LC/G/4/830 | 20                      | 46       | 3000K                 | 80  | 50,000                            | -                                | Damp                         | 2350                                     | 2500 | 2650 | 2850 | 3050 | 21383 LED/DR/D2L/HW | 21392 LED/DR/D4L/HW                   |
|                                 | G5        | 38934      | LEDT5/LC/G/4/835 | 20                      | 46       | 3500K                 | 80  | 50,000                            | -                                | Damp                         | 2400                                     | 2550 | 2750 | 2950 | 3150 | 21383 LED/DR/D2L/HW | 21392 LED/DR/D4L/HW                   |
|                                 | G5        | 38940      | LEDT5/LC/G/4/840 | 20                      | 46       | 4000K                 | 80  | 50,000                            | -                                | Damp                         | 2450                                     | 2600 | 2850 | 3050 | 3250 | 21383 LED/DR/D2L/HW | 21392 LED/DR/D4L/HW                   |
|                                 | G5        | 38946      | LEDT5/LC/G/4/850 | 20                      | 46       | 5000K                 | 80  | 50,000                            | -                                | Damp                         | 2450                                     | 2600 | 2850 | 3050 | 3250 | 21383 LED/DR/D2L/HW | 21392 LED/DR/D4L/HW                   |
| LumenChoice® 3ft T5 Glass Tubes |           |            |                  |                         |          |                       |     |                                   |                                  |                              |                                          |      |      |      |      |                     |                                       |
| T5                              | G5        | 38947      | LEDT5/LC/G/3/830 | 20                      | 34       | 3000K                 | 80  | 50,000                            | -                                | Damp                         | 2300                                     | 2450 | 2600 | 2800 | 3000 | 21383 LED/DR/D2L/HW | 21392 LED/DR/D4L/HW                   |
|                                 | G5        | 38948      | LEDT5/LC/G/3/835 | 20                      | 34       | 3500K                 | 80  | 50,000                            | -                                | Damp                         | 2350                                     | 2500 | 2700 | 2900 | 3100 | 21383 LED/DR/D2L/HW | 21392 LED/DR/D4L/HW                   |
|                                 | G5        | 38949      | LEDT5/LC/G/3/840 | 20                      | 34       | 4000K                 | 80  | 50,000                            | -                                | Damp                         | 2400                                     | 2550 | 2800 | 3000 | 3200 | 21383 LED/DR/D2L/HW | 21392 LED/DR/D4L/HW                   |
|                                 | G5        | 38955      | LEDT5/LC/G/3/850 | 20                      | 34       | 5000K                 | 80  | 50,000                            | -                                | Damp                         | 2400                                     | 2550 | 2800 | 3000 | 3200 | 21383 LED/DR/D2L/HW | 21392 LED/DR/D4L/HW                   |

<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

<sup>2</sup> Minimum order quantity – Carton Qty

<sup>3</sup> UL 1993 Environmental Requirements for LED LAMPS

Damp Location – Exterior or interior location that is normally or periodically subject to condensation of moisture in, on, or adjacent to electrical equipment, including partially protected locations

<sup>4</sup> Not all product variations on this page are DLC qualified. Visit [qpl.designlights.org/solid-state-lighting](http://qpl.designlights.org/solid-state-lighting) to confirm qualification.

# LED Lamps - Tubes - Type C



## Remote Drivers for Type C LED Tubes - 25W & 36W

| Input Watts (Max.)                                | Order Code | Description    | Input Voltage | Carton Qty <sup>2</sup> | Length (in) | Width (in) | Height (in) | Freq. (Hz) | Power Factor | Output Voltage | Max. Output Current (A) | Min. Temp. <sup>1</sup> | Max Temp. | 0-10V Dimmable | Default Wattage per Tube Setting | Additional Information           |
|---------------------------------------------------|------------|----------------|---------------|-------------------------|-------------|------------|-------------|------------|--------------|----------------|-------------------------|-------------------------|-----------|----------------|----------------------------------|----------------------------------|
| Fixed Wattage Remote Drivers for Type C LED Tubes |            |                |               |                         |             |            |             |            |              |                |                         |                         |           |                |                                  |                                  |
| 72                                                | 63126      | LED36T8/DR/D2L | 120-277 VAC   | 10                      | 9.5         | 1.7        | 1.2         | 60         | >0.9         | 26-34 VDC      | 1.06x2                  | -4° F                   | 104° F    | Yes            | 36W <sup>^</sup>                 | Max. 2 Tubes; Class 2 Output     |
| 100                                               | 93136147   | LED25T/DR/D4L  | 120-277 VAC   | 10                      | 16.7        | 1.7        | 1.2         | 60         | >0.9         | 26-34 VDC      | 0.72x4                  | -4° F                   | 104° F    | Yes            | 25W <sup>^</sup>                 | Max. 4 Tubes; LED Class 2 Output |

<sup>^</sup> Fixed Wattage Driver - no wattage adjustment

## 8ft T8 Type C LED Tube and Driver System - T8 on 36W Driver

| Bulb Shape                      | Base Type | Order Code | Description     | Carton Qty <sup>2</sup> | MOL (in) | Color Temp. (Initial) | CRI | Rated Life L70 (Hrs) <sup>1</sup> | DLC <sup>3</sup> ID <sup>4</sup> | Location Rating <sup>3</sup> | Input Watts per Lamp | Lumens (Initial) | 2-Lamp Driver        |
|---------------------------------|-----------|------------|-----------------|-------------------------|----------|-----------------------|-----|-----------------------------------|----------------------------------|------------------------------|----------------------|------------------|----------------------|
| LumenChoice® 8ft T8 Glass Tubes |           |            |                 |                         |          |                       |     |                                   |                                  |                              |                      |                  |                      |
| T8                              | Fa8       | 62327      | LED36T8/G/8/835 | 20                      | 96       | 3500K                 | 80  | 50,000                            | PZEBFURM                         | Damp                         | 36                   | 4400             | 63126 LED36T8/DR/D2L |
|                                 | Fa8       | 62329      | LED36T8/G/8/840 | 20                      | 96       | 4000K                 | 80  | 50,000                            | P2MIT03H                         | Damp                         | 36                   | 4400             | 63126 LED36T8/DR/D2L |
|                                 | Fa8       | 62349      | LED36T8/G/8/850 | 20                      | 96       | 5000K                 | 80  | 50,000                            | PIU8ZD2E                         | Damp                         | 36                   | 4400             | 63126 LED36T8/DR/D2L |

## 4ft T5 Type C LED Tube and Driver System - T5 on 25W Driver

| Bulb Shape                      | Base Type | Order Code | Description      | Carton Qty <sup>2</sup> | MOL (in) | Color Temp. (Initial) | CRI | Rated Life L70 (Hrs) <sup>1</sup> | DLC <sup>3</sup> ID <sup>4</sup> | Location Rating <sup>3</sup> | Input Watts per Lamp | Lumens (Initial) | 4-Lamp Driver          |
|---------------------------------|-----------|------------|------------------|-------------------------|----------|-----------------------|-----|-----------------------------------|----------------------------------|------------------------------|----------------------|------------------|------------------------|
| LumenChoice® 4ft T5 Glass Tubes |           |            |                  |                         |          |                       |     |                                   |                                  |                              |                      |                  |                        |
| T5                              | G5        | 38926      | LEDT5/LC/G/4/830 | 20                      | 46       | 3000K                 | 80  | 50,000                            | S-6PMWAG                         | Damp                         | 25                   | 3050             | 93136147 LED25T/DR/D4L |
|                                 | G5        | 38934      | LEDT5/LC/G/4/835 | 20                      | 46       | 3500K                 | 80  | 50,000                            | S-AOB1TF                         | Damp                         | 25                   | 3150             | 93136147 LED25T/DR/D4L |
|                                 | G5        | 38940      | LEDT5/LC/G/4/840 | 20                      | 46       | 4000K                 | 80  | 50,000                            | S-SBR6H9                         | Damp                         | 25                   | 3250             | 93136147 LED25T/DR/D4L |
|                                 | G5        | 38946      | LEDT5/LC/G/4/850 | 20                      | 46       | 5000K                 | 80  | 50,000                            | S-3QCBFR                         | Damp                         | 25                   | 3250             | 93136147 LED25T/DR/D4L |

## 4ft T5 Type C LED Tube and Driver System - T5 on 36W Driver

| Bulb Shape                      | Base Type | Order Code | Description      | Carton Qty <sup>2</sup> | MOL (in) | Color Temp. (Initial) | CRI | Rated Life L70 (Hrs) <sup>1</sup> | DLC <sup>3</sup> ID <sup>4</sup> | Location Rating <sup>3</sup> | Input Watts per Lamp | Lumens (Initial) | 2-Lamp Driver        |
|---------------------------------|-----------|------------|------------------|-------------------------|----------|-----------------------|-----|-----------------------------------|----------------------------------|------------------------------|----------------------|------------------|----------------------|
| LumenChoice® 4ft T5 Glass Tubes |           |            |                  |                         |          |                       |     |                                   |                                  |                              |                      |                  |                      |
| T5                              | G5        | 38926      | LEDT5/LC/G/4/830 | 20                      | 46       | 3000K                 | 80  | 50,000                            | PZ65QG10                         | Damp                         | 36                   | 4300             | 63126 LED36T8/DR/D2L |
|                                 | G5        | 38934      | LEDT5/LC/G/4/835 | 20                      | 46       | 3500K                 | 80  | 50,000                            | PTKZGZ6H                         | Damp                         | 36                   | 4350             | 63126 LED36T8/DR/D2L |
|                                 | G5        | 38940      | LEDT5/LC/G/4/840 | 20                      | 46       | 4000K                 | 80  | 50,000                            | PLE4I1AM                         | Damp                         | 36                   | 4400             | 63126 LED36T8/DR/D2L |
|                                 | G5        | 38946      | LEDT5/LC/G/4/850 | 20                      | 46       | 5000K                 | 80  | 50,000                            | PQP7QKG8                         | Damp                         | 36                   | 4400             | 63126 LED36T8/DR/D2L |

<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

<sup>2</sup> Minimum order quantity - Carton Qty

<sup>3</sup> UL 1993 Environmental Requirements for LED LAMPS

Damp Location - Exterior or interior location that is normally or periodically subject to condensation of moisture in, on, or adjacent to electrical equipment, including partially protected locations

<sup>4</sup> Not all product variations on this page are DLC qualified. Visit [qpl.designlights.org/solid-state-lighting](http://qpl.designlights.org/solid-state-lighting) to confirm qualification.





# LED Lamps - HID

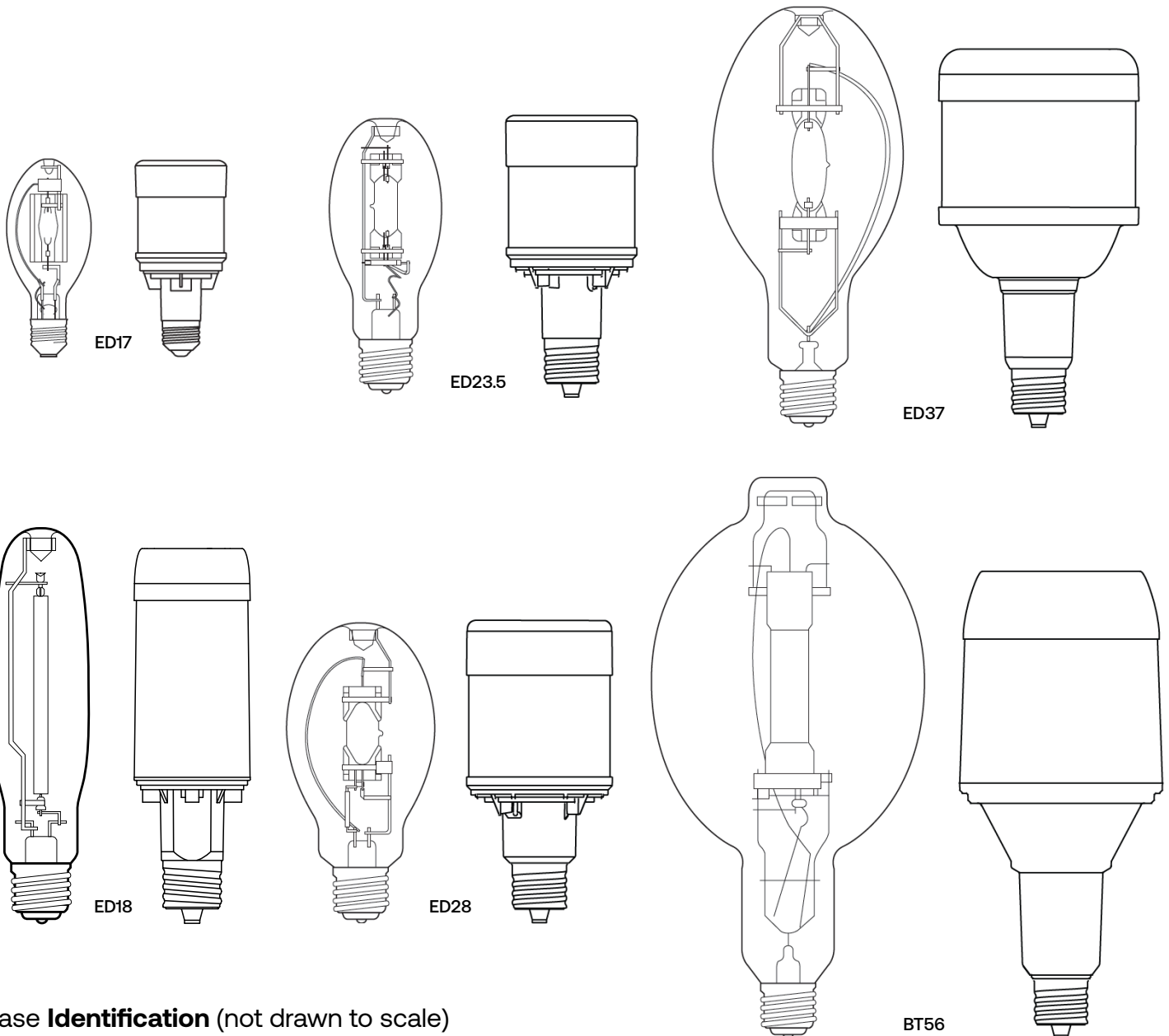


# LED Lamps - HID



GE LED lamps for HID replacement utilize a proprietary design with active cooling, which allows for high output from a compact size. The length and diameter match HID ANSI profiles. These lamps feature omnidirectional light output, with similar distribution to traditional HID lamps. This enables GE LED lamps to fit in a variety of fixtures while providing equivalent light levels to HID. All of the GE LED lamps in this category are Type B, which means the fixture is re-wired to bypass the ballast.

## Lamp **Drawings** (not drawn to scale)



## Base **Identification** (not drawn to scale)







## LED Lamps – HID Portfolio Snapshot



| Profile                      |                        | ED17                                                                                                                                |       |       | ED23.5                                                                                                                              |        | ED28                                                                                                                                |        | ED18                |                    | ED37                                                                                                    |  | BT56               |                    |         |         |
|------------------------------|------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-------|-------|-------------------------------------------------------------------------------------------------------------------------------------|--------|-------------------------------------------------------------------------------------------------------------------------------------|--------|---------------------|--------------------|---------------------------------------------------------------------------------------------------------|--|--------------------|--------------------|---------|---------|
| Base                         |                        | E26/EX39 Adapter                                                                                                                    |       |       | E26/EX39 Adapter<br>EX39                                                                                                            |        | EX39                                                                                                                                |        | EX39                |                    | EX39                                                                                                    |  | EX39               |                    |         |         |
| Standard<br>LED HID<br>Lamps | Voltage                | 120-277                                                                                                                             |       |       | 120-277<br>277-480                                                                                                                  |        | 120-277<br>277-480                                                                                                                  |        | 277-480             | 120-277<br>277-480 | 277-480                                                                                                 |  | 120-277<br>277-480 | 208-277<br>277-480 | 277-480 | 208-277 |
|                              | Color Temp.            | 3000K, 4000K, 5000K                                                                                                                 |       |       | 3000K, 4000K, 5000K                                                                                                                 |        | 3000K, 4000K, 5000K                                                                                                                 |        | 3000K, 4000K, 5000K |                    | 4000K or 5000K                                                                                          |  | 4000K or 5000K     |                    |         |         |
|                              | Wattage                | 21W                                                                                                                                 | 35W   | 45W   | 50W                                                                                                                                 | 80W    | 115W                                                                                                                                | 150W   | 120W                | 180W               | 360W                                                                                                    |  | 270W               | 450W               | 470W    | 520W    |
|                              | Lumens                 | 3,400                                                                                                                               | 5,000 | 7,000 | 7,500                                                                                                                               | 12,000 | 18,000                                                                                                                              | 23,500 | 20,000              | 30,000             | 53,000                                                                                                  |  | 40,000             | 65,000             | 85,000  | 106,000 |
|                              | NEMA MH<br>Equivalent  | 70W                                                                                                                                 | 100W  | 175W  | 150W                                                                                                                                | 250W   | 350W                                                                                                                                | 400W   | 360W                | 400W               | 750W                                                                                                    |  | 400W               | 1000W              | 1000W   | 1500W   |
|                              | NEMA HPS<br>Equivalent | 50W                                                                                                                                 | 70W   | 100W  | 100W                                                                                                                                | 150W   | 250W                                                                                                                                | 310W   | 250W                | 400W               | 600W                                                                                                    |  | 400W               | 750W               | 1000W   | 1000W   |
| Selectable<br>LED HID Lamps* |                        |  Lumen <b>Choice</b> ®+<br>Spectra <b>Choice</b> ™ |       |       |  Lumen <b>Choice</b> ®+<br>Spectra <b>Choice</b> ™ |        |  Lumen <b>Choice</b> ®+<br>Spectra <b>Choice</b> ™ |        |                     |                    |  Lumen <b>Choice</b> ® |  |                    |                    |         |         |
| HazLoc Offering**            |                        | 21W                                                                                                                                 | 35W   | 45W   | 80W                                                                                                                                 |        | 150W                                                                                                                                |        |                     |                    |                                                                                                         |  |                    |                    |         |         |

\*Please refer to page 44 for more details about Selectable LED HID Lamps

\*\*Please refer to page 54 for more details about Hazardous Location LED HID Lamps

## Catalog Logic:

|                                                                                      |                                                                                                                 |                                                                   |                                                                                                                                                                             |                                                      |                                                                     |                               |                                                                                             |                                                                                                                     |                                                                 |                                                                                                        |                                                                                |                            |                                         |                 |                          |                                      |
|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|---------------------------------------------------------------------|-------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|----------------------------|-----------------------------------------|-----------------|--------------------------|--------------------------------------|
| <b>Bulb Shape:</b><br>Bulb shape (corresponds to Traditional HID shape).             |                                                                                                                 | <b>Watts:</b><br>Energy Used (as defined by FTC Lamp Label Rules) | <b>Color Temperature (K):</b><br>A measure of the visual "warmth" or "coolness" of the light from the lamp. The higher the value, the whiter or "cooler" the light appears. |                                                      |                                                                     |                               |                                                                                             | normal natural way. The higher the number (0-100), the better the color appearance.                                 |                                                                 |                                                                                                        |                                                                                |                            |                                         |                 |                          |                                      |
| <b>Base Type:</b><br>ANSI Base                                                       | <b>Order Code:</b><br>Use the order code when ordering to ensure that you receive the exact product you require | <b>Volts:</b><br>Lamp data is based on operation at rated voltage | <b>MOD (in):</b><br>Maximum Overall Diameter in inches                                                                                                                      | <b>MOL (in):</b><br>Maximum Overall Length in inches | <b>Lumens:</b><br>Light output (as defined by FTC Lamp Label Rules) | <b>Color Temp. (Initial)</b>  | <b>Wattage Replacement:</b><br>Wattage of Traditional Lamp the LED Lamp is meant to replace | <b>Rated Life L70:</b><br>Hours of operation the lamp will provide before reaching 70% of its original lumen output | <b>Dimmable:</b><br>Indicates whether a lamp is dimmable or not | <b>DLC:</b> Indicates whether product is listed on the DesignLights Consortium Qualified Products List | <b>Location Rating:</b><br>Location Rating as defined for LED Lamps by UL 1993 |                            |                                         |                 |                          |                                      |
| <b>Description:</b><br>Lamp Model Description                                        | <b>Carton Quantity:</b><br>Number of lamps packed in a carton                                                   |                                                                   |                                                                                                                                                                             |                                                      |                                                                     |                               |                                                                                             |                                                                                                                     |                                                                 |                                                                                                        |                                                                                |                            |                                         |                 |                          |                                      |
| <b>Bulb Shape</b>                                                                    | <b>Base Type<sup>1</sup></b>                                                                                    | <b>Watts</b>                                                      | <b>Order Code</b>                                                                                                                                                           | <b>Description</b>                                   | <b>Volts</b>                                                        | <b>Carton Qty<sup>2</sup></b> | <b>MOL (in)</b>                                                                             | <b>MOD (in)</b>                                                                                                     | <b>Lumens (Initial)</b>                                         | <b>Color Temp. (Initial)</b>                                                                           | <b>CRI</b>                                                                     | <b>Wattage Replacement</b> | <b>Rated Life L70 (Hrs)<sup>1</sup></b> | <b>Dimmable</b> | <b>DLC<sup>3,4</sup></b> | <b>Location Rating<sup>5,6</sup></b> |
| <b>LED Replacement Lamps for HID - Ballast Bypass (Type B) - Hazardous Locations</b> |                                                                                                                 |                                                                   |                                                                                                                                                                             |                                                      |                                                                     |                               |                                                                                             |                                                                                                                     |                                                                 |                                                                                                        |                                                                                |                            |                                         |                 |                          |                                      |
| <b>ED17</b>                                                                          | <b>E26/EX39</b>                                                                                                 | <b>21</b>                                                         | <b>93134832</b>                                                                                                                                                             | <b>LED21ED17/730/HAZ</b>                             | <b>120-277</b>                                                      | <b>3</b>                      | <b>5.4</b>                                                                                  | <b>2.6</b>                                                                                                          | <b>3,000</b>                                                    | <b>3000K</b>                                                                                           | <b>&gt;70</b>                                                                  | <b>50W HPS / 70W MH</b>    | <b>50,000</b>                           | <b>-</b>        | <b>-</b>                 | <b>Damp</b>                          |





## NEMA LED HID Wattage Equivalency

In February of 2021, the National Electrical Manufacturers Association (NEMA) published NEMA LL 10-2020 *Replacing HID Lamps with LED Lamps: Light Output Equivalency Claims*. Current uses this Standard for LED products replacing HID lamps, meeting or exceeding the minimum LED light output for equivalency claims. The LED wattage equivalency varies based on the type of HID lamp being replaced - Metal Halide (MH) or High Pressure Sodium (HPS).

| Metal Halide Lamp Wattage (W) | Metal Halide Initial Light Output (lm) | Minimum LED Lamp Initial Light Output (lm) | Current LED Ordinary Location Retrofit Lamps Active Cooling | Current LED Selectable Ordinary Location Retrofit Lamps Active Cooling | Current LED Selectable Ordinary Location Retrofit Lamps Passive Cooling | Current LED <b>Hazardous Location</b> Retrofit Lamps Active Cooling |
|-------------------------------|----------------------------------------|--------------------------------------------|-------------------------------------------------------------|------------------------------------------------------------------------|-------------------------------------------------------------------------|---------------------------------------------------------------------|
| 50                            | 3,200                                  | 2,000                                      | LED21ED17                                                   | LED/LC/ED17                                                            | LED/LC/ED17P                                                            | LED21ED17/HAZ                                                       |
| 70                            | 5,200                                  | 3,000                                      | LED21ED17                                                   | LED/LC/ED17                                                            | LED/LC/ED17P                                                            | LED21ED17/HAZ                                                       |
| 100                           | 8,100                                  | 5,000                                      | LED35ED17; LED45ED17                                        | LED/LC/ED17                                                            |                                                                         | LED35ED17/HAZ; LED45ED17/HAZ                                        |
| 150                           | 12,000                                 | 7,500                                      | LED50ED23.5                                                 | LED/LC/ED23.5                                                          | LED/LC/ED23.5P; LED/LC/ED28P                                            |                                                                     |
| 175                           | 11,000                                 | 7,000                                      | LED45ED17; LED50ED23.5                                      | LED/LC/ED17; LED/LC/ED23.5                                             | LED/LC/ED23.5P; LED/LC/ED28P                                            |                                                                     |
| 250                           | 19,100                                 | 12,000                                     | LED80ED23.5                                                 | LED/LC/ED23.5                                                          | LED/LC/ED28P                                                            | LED80ED23.5/HAZ                                                     |
| 320                           | 25,600                                 | 16,500                                     | LED115ED28                                                  | LED/LC/ED28                                                            |                                                                         |                                                                     |
| 350                           | 28,400                                 | 18,000                                     | LED115ED28                                                  | LED/LC/ED28                                                            |                                                                         |                                                                     |
| 360                           | 29,400                                 | 19,000                                     | LED150ED28; LED120ED18                                      | LED/LC/ED28                                                            |                                                                         | LED150ED28/HAZ                                                      |
| 400                           | 33,100                                 | 21,500                                     | LED150ED28; LED180ED18                                      | LED/LC/ED28; LED/LC/ED37                                               |                                                                         | LED150ED28/HAZ                                                      |
| 750                           | 72,300                                 | 46,500                                     | LED360ED37                                                  | LED/LC/ED37                                                            |                                                                         |                                                                     |
| 1,000                         | 100,280                                | 65,000                                     | LED450BT56; LED470BT56                                      | LED/LC/ED37                                                            |                                                                         |                                                                     |
| 1,500                         | 153,000                                | 99,450                                     | LED520BT56                                                  |                                                                        |                                                                         |                                                                     |

| HPS Lamp Wattage (W) | HPS Initial Light Output (lm) | Minimum LED Lamp Initial Light Output (lm) | Current LED Ordinary Location Retrofit Lamps Active Cooling | Current LED Selectable Ordinary Location Retrofit Lamps Active Cooling | Current LED Selectable Ordinary Location Retrofit Lamps Passive Cooling | Current LED <b>Hazardous Location</b> Retrofit Lamps Active Cooling |
|----------------------|-------------------------------|--------------------------------------------|-------------------------------------------------------------|------------------------------------------------------------------------|-------------------------------------------------------------------------|---------------------------------------------------------------------|
| 50                   | 4,500                         | 2,500                                      | LED21ED17                                                   | LED/LC/ED17                                                            | LED/LC/ED17P                                                            | LED21ED17/HAZ                                                       |
| 70                   | 6,300                         | 4,000                                      | LED35ED17                                                   | LED/LC/ED17                                                            | LED/LC/ED17P                                                            | LED35ED17/HAZ                                                       |
| 100                  | 9,500                         | 6,000                                      | LED45ED17; LED50ED23.5                                      | LED/LC/ED17; LED/LC/ED23.5                                             | LED/LC/ED23.5P; LED/LC/ED28P                                            | LED45ED17/HAZ                                                       |
| 150                  | 13,000                        | 8,500                                      | LED80ED23.5                                                 | LED/LC/ED23.5                                                          | LED/LC/ED28P                                                            | LED80ED23.5/HAZ                                                     |
| 200                  | 19,500                        | 12,500                                     |                                                             | LED/LC/ED23.5                                                          |                                                                         |                                                                     |
| 250                  | 26,000                        | 17,000                                     | LED115ED28; LED120ED18                                      | LED/LC/ED28                                                            |                                                                         |                                                                     |
| 310                  | 33,200                        | 21,500                                     | LED150ED28                                                  | LED/LC/ED28                                                            |                                                                         | LED150ED28/HAZ                                                      |
| 400                  | 44,000                        | 29,000                                     | LED180ED18; LED270BT56                                      | LED/LC/ED37                                                            |                                                                         |                                                                     |
| 600                  | 66,000                        | 42,500                                     | LED360ED37                                                  | LED/LC/ED37                                                            |                                                                         |                                                                     |
| 750                  | 82,500                        | 53,500                                     | LED450BT56                                                  | LED/LC/ED37                                                            |                                                                         |                                                                     |
| 1,000                | 110,000                       | 73,000                                     | LED470BT56; LED520BT56                                      |                                                                        |                                                                         |                                                                     |

# LED Lamps - HID



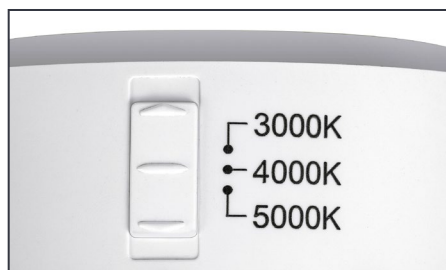
Current offers unmatched flexibility in a **HID LED Replacement Lamp**. Select wattage and color temperature at the flick of a switch.

LumenChoice® + SpectraChoice™ ED17, ED23.5 and ED28 lamps maximize the potential to reduce inventory and streamline product lists. These lamps allow installers to react to a wide variety of needs, providing the ability to adjust both the color temperature of the light and the brightness. Utilizing proprietary active cooling technology, Selectable LED HID lamps still match the length and diameter of the HID ANSI profile, so size isn't an issue when trying to fit these lamps into existing fixtures.

But what about when it's known a site prefers a specific color temperature? Selectable LumenChoice® ED37 replacement lamps provide a single color temperature SKU with lumen level selectability to ensure that you always have the perfect amount of light for any space at your site.



**Select** wattage (lumens)  
using built-in switch.



**Select** color temperature  
using built-in switch.



## Even more versatility

Each E26 lamp comes with a mogul base adapter. Lamps may be used in E26 or E39/EX39 sockets.

| Profile             | ED17               |       |       | ED23.5                   |        |        | ED28               |        |        | ED37               |        |        |
|---------------------|--------------------|-------|-------|--------------------------|--------|--------|--------------------|--------|--------|--------------------|--------|--------|
| Voltage             | 120-277<br>120-347 |       |       | 120-277<br>277-480       |        |        | 120-277<br>277-480 |        |        | 208-277<br>277-480 |        |        |
| Base                | E26/EX39 Adapter   |       |       | E26/EX39 Adapter<br>EX39 |        |        | EX39               |        |        | EX39               |        |        |
| Color Temperature   | SpectraChoice™     |       |       | SpectraChoice™           |        |        | SpectraChoice™     |        |        | 4000K or 5000K     |        |        |
|                     | 3000K              | 4000K | 5000K | 3000K                    | 4000K  | 5000K  | 3000K              | 4000K  | 5000K  |                    |        |        |
| Wattage             | LumenChoice®       |       |       | LumenChoice®             |        |        | LumenChoice®       |        |        | LumenChoice®       |        |        |
|                     | 21W                | 35W   | 45W   | 50W                      | 65W    | 80W    | 90W                | 115W   | 150W   | 200W               | 325W   | 450W   |
| Lumens              | 3,400              | 5,500 | 7,000 | 8,200                    | 10,500 | 12,500 | 14,000             | 18,000 | 23,500 | 35,000             | 53,500 | 68,000 |
| NEMA MH Equivalent  | 70W                | 100W  | 175W  | 150W                     | 150W   | 250W   | 250W               | 350W   | 400W   | 400W               | 750W   | 1000W  |
| NEMA HPS Equivalent | 50W                | 70W   | 100W  | 100W                     | 150W   | 150W   | 200W               | 250W   | 310W   | 400W               | 750W   | 750W   |



## Selectable LumenChoice® + SpectraChoice™ HID Replacement – Type B

| Bulb Shape                                             | Base Type | Order Code | Description               | Volts   | Carton Qty <sup>2</sup> | MOL (in) | MOD (in) | Selectable Watts* | Selectable Lumens (Initial)* | Selectable Color Temp. (Initial)* | Wattage Replacement <sup>7</sup>                               | CRI | Rated Life L70 (Hrs) <sup>1</sup> | DLC* ID <sup>3,4</sup> | Location Rating <sup>5,6</sup> |
|--------------------------------------------------------|-----------|------------|---------------------------|---------|-------------------------|----------|----------|-------------------|------------------------------|-----------------------------------|----------------------------------------------------------------|-----|-----------------------------------|------------------------|--------------------------------|
| LED Replacement Lamp for HID - Ballast Bypass (Type B) |           |            |                           |         |                         |          |          |                   |                              |                                   |                                                                |     |                                   |                        |                                |
| ED17                                                   | E26/ EX39 | 93303384   | LED/LC/ED17/7SC           | 120-277 | 3                       | 5.4      | 2.6      | 21 35* 45         | 3,400 5,500* 7,000           | 3000K 4000K* 5000K                | 50W HPS / 70W MH<br>70W HPS / 100W MH<br>100W HPS / 175W MH    | >70 | 50,000                            | -                      | Damp                           |
|                                                        | E26/ EX39 | 93314526   | LED/LC/ED17/7SC/120-347   | 120-347 | 3                       | 5.4      | 2.6      | 21 35* 45         | 3,400 5,500* 7,000           | 3000K 4000K* 5000K                | 50W HPS / 70W MH<br>70W HPS / 100W MH<br>100W HPS / 175W MH    | >70 | 50,000                            | -                      | Damp                           |
| ED23.5                                                 | E26/ EX39 | 93312104   | LED/LC/ED23.5M/7SC        | 120-277 | 3                       | 7.8      | 3.7      | 50 65 80*         | 8,200 10,500 12,500*         | 3000K 4000K 5000K*                | 100W HPS / 150W MH<br>150W HPS / 150W MH<br>150W HPS / 250W MH | >70 | 50,000                            | -                      | Damp                           |
|                                                        | EX39      | 93312106   | LED/LC/ED23.5/7SC         | 120-277 | 3                       | 7.8      | 3.7      | 50 65 80*         | 8,200 10,500 12,500*         | 3000K 4000K 5000K*                | 100W HPS / 150W MH<br>150W HPS / 150W MH<br>150W HPS / 250W MH | >70 | 50,000                            | S-4V5NOG               | Damp                           |
|                                                        | EX39      | 93314766   | LED/LC/ED23.5/7SC/277-480 | 277-480 | 3                       | 7.8      | 3.7      | 50 65 80*         | 8,200 10,500 12,500*         | 3000K 4000K 5000K*                | 100W HPS / 150W MH<br>150W HPS / 150W MH<br>150W HPS / 250W MH | >70 | 50,000                            | S-Y2WDPN / S-S2HLFY    | Damp                           |
| ED28                                                   | EX39      | 93312102   | LED/LC/ED28/7SC           | 120-277 | 3                       | 8.3      | 4.1      | 90 115 150*       | 14,000 18,000 23,500*        | 3000K 4000K 5000K*                | 200W HPS / 250W MH<br>250W HPS / 350W MH<br>310W HPS / 400W MH | >70 | 50,000                            | S-MB9GRL / S-NMTK94    | Damp                           |
|                                                        | EX39      | 93314772   | LED/LC/ED28/7SC/277-480   | 277-480 | 3                       | 8.3      | 4.1      | 90 115 150*       | 14,000 18,000 23,500*        | 3000K 4000K 5000K*                | 200W HPS / 250W MH<br>250W HPS / 350W MH<br>310W HPS / 400W MH | >70 | 50,000                            | S-WWN1WP / S-3WC1C9    | Damp                           |

## Selectable LumenChoice® HID Replacement – Type B

| Bulb Shape                                             | Base Type | Order Code | Description             | Volts   | Carton Qty <sup>2</sup> | MOL (in) | MOD (in) | Selectable Watts*  | Selectable Lumens (Initial)* | Color Temp. (Initial) | Wattage Replacement <sup>7</sup>                                | CRI | Rated Life L70 (Hrs) <sup>1</sup> | DLC* ID <sup>3,4</sup> | Location Rating <sup>5,6</sup> |
|--------------------------------------------------------|-----------|------------|-------------------------|---------|-------------------------|----------|----------|--------------------|------------------------------|-----------------------|-----------------------------------------------------------------|-----|-----------------------------------|------------------------|--------------------------------|
| LED Replacement Lamp for HID - Ballast Bypass (Type B) |           |            |                         |         |                         |          |          |                    |                              |                       |                                                                 |     |                                   |                        |                                |
| ED37                                                   | EX39      | 93321818   | LED/LC/ED37/740/208-277 | 208-277 | 3                       | 11.3     | 5.6      | 200<br>325<br>450* | 35,000<br>53,500<br>68,000*  | 4000K                 | 400W HPS / 400W MH<br>750W HPS / 750W MH<br>750W HPS / 1000W MH | >70 | 50,000                            | S-TQ7WXV               | Damp                           |
|                                                        | EX39      | 93311586   | LED/LC/ED37/740         | 277-480 | 3                       | 11.3     | 5.6      | 200<br>325<br>450* | 35,000<br>53,500<br>68,000*  | 4000K                 | 400W HPS / 400W MH<br>750W HPS / 750W MH<br>750W HPS / 1000W MH | >70 | 50,000                            | S-ZZMLJT               | Damp                           |
|                                                        | EX39      | 93321820   | LED/LC/ED37/750/208-277 | 208-277 | 3                       | 11.3     | 5.6      | 200<br>325<br>450* | 35,000<br>53,500<br>68,000*  | 5000K                 | 400W HPS / 400W MH<br>750W HPS / 750W MH<br>750W HPS / 1000W MH | >70 | 50,000                            | S-T4ZBKH               | Damp                           |
|                                                        | EX39      | 93311587   | LED/LC/ED37/750         | 277-480 | 3                       | 11.3     | 5.6      | 200<br>325<br>450* | 35,000<br>53,500<br>68,000*  | 5000K                 | 400W HPS / 400W MH<br>750W HPS / 750W MH<br>750W HPS / 1000W MH | >70 | 50,000                            | S-25L41Q               | Damp                           |

## Warm Selectable LumenChoice® + SpectraChoice™ HID Replacement – Type B

| Bulb Shape                                             | Base Type | Order Code | Description              | Volts   | Carton Qty <sup>2</sup> | MOL (in) | MOD (in) | Selectable Watts* | Selectable Lumens (Initial)* | Selectable Color Temp. (Initial)* | Wattage Replacement <sup>7</sup>                         | CRI | Rated Life L70 (Hrs) <sup>1</sup> | DLC* ID <sup>3,4</sup> | Location Rating <sup>5,6</sup> |
|--------------------------------------------------------|-----------|------------|--------------------------|---------|-------------------------|----------|----------|-------------------|------------------------------|-----------------------------------|----------------------------------------------------------|-----|-----------------------------------|------------------------|--------------------------------|
| LED Replacement Lamp for HID – Ballast Bypass (Type B) |           |            |                          |         |                         |          |          |                   |                              |                                   |                                                          |     |                                   |                        |                                |
| ED17                                                   | E26/EX39  | 93315986   | LED/LC/ED17/7WSC/120-347 | 120-347 | 3                       | 5.4      | 2.6      | 21                | 2,450<br>3,000<br>3,300      | 1800K<br>2200K<br>2700K           | 35W HPS / 50W MH<br>35W HPS / 50W MH<br>50W HPS / 50W MH | >70 | 50,000                            | -                      | Damp                           |
|                                                        |           |            |                          |         |                         |          |          | 35*               | 3,950<br>4,900*              | 1800K<br>2200K*                   | 35W HPS / 50W MH<br>50W HPS / 70W MH                     |     |                                   |                        |                                |
|                                                        |           |            |                          |         |                         |          |          |                   | 5,350<br>4,900               | 2700K<br>1800K                    | 70W HPS / 70W MH<br>50W HPS / 70W MH                     |     |                                   |                        |                                |
|                                                        |           |            |                          |         |                         |          |          | 45                | 6,200<br>6,650               | 2200K<br>2700K                    | 70W HPS / 70W MH<br>70W HPS / 100W MH                    |     |                                   |                        |                                |
|                                                        |           |            |                          |         |                         |          |          |                   |                              |                                   |                                                          |     |                                   |                        |                                |
|                                                        |           |            |                          |         |                         |          |          |                   |                              |                                   |                                                          |     |                                   |                        |                                |
|                                                        |           |            |                          |         |                         |          |          |                   |                              |                                   |                                                          |     |                                   |                        |                                |
|                                                        |           |            |                          |         |                         |          |          |                   |                              |                                   |                                                          |     |                                   |                        |                                |

<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

<sup>2</sup> Minimum order quantity = 1

<sup>3</sup> E26 based products are not eligible for DLC. Not all product variations on this page are DLC qualified. Visit [qpl.designlights.org/solid-state-lighting](http://qpl.designlights.org/solid-state-lighting) to confirm qualification.

<sup>4</sup> Do not use with phase-cut dimmers. Dimming functions only with external Variac control devices.

<sup>5</sup> UL 1993 Environmental Requirements for LED LAMPS

Damp Location – Exterior or interior location that is normally or periodically subject to condensation of moisture in, on, or adjacent to electrical equipment, including partially protected locations

<sup>6</sup> Not suitable for air-tight explosive or hazardous fixtures.

<sup>7</sup> Wattage Replacement levels correspond with wattage levels. Wattage Replacements based on NEMA Standards Publication LL 10-2020 *Replacing HID Lamps with LED Lamps: Light Output Equivalency Claims*.

\* Default wattage and color temperature settings noted by "\*" in tables above.

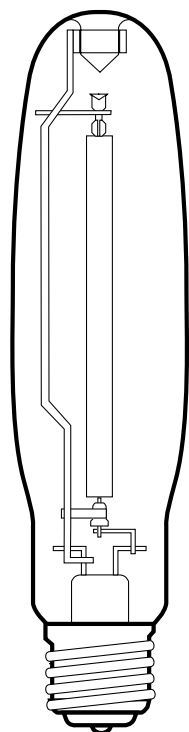
# LED Lamps - HID



Current offers an industry-exclusive **400W LED HID Replacement in an ED18 Shape**.

GE LED lamps for HID replacement utilize a proprietary design with active cooling, which allows for high output from a compact size. The length and diameter match HID ANSI profiles. These lamps feature omnidirectional light output, with similar distribution to traditional HID lamps. This enables GE LED lamps to fit in a variety of fixtures while providing equivalent light levels to HID, making it possible to upgrade more applications to LED without replacing an entire fixture. All of the GE LED lamps in this category are Type B, which means the fixture is re-wired to bypass the ballast.

## Lamp Drawings (not drawn to scale)



LU400

ED18



LED180

## ED18 HID Replacement - Type B

| Bulb Shape                                             | Base Type | Watts | Order Code | Description            | Volts   | Carton Qty <sup>2</sup> | MOL (in) | MOD (in) | Lumens (Initial) | Color Temp. | CRI | Wattage Replacement <sup>6</sup> | Rated Life L70 (Hrs) <sup>1</sup> | DLC <sup>4,5</sup> | Location Rating <sup>3</sup> |
|--------------------------------------------------------|-----------|-------|------------|------------------------|---------|-------------------------|----------|----------|------------------|-------------|-----|----------------------------------|-----------------------------------|--------------------|------------------------------|
| LED Replacement Lamp for HID - Ballast Bypass (Type B) |           |       |            |                        |         |                         |          |          |                  |             |     |                                  |                                   |                    |                              |
| ED18                                                   | EX39      | 120   | 93320018   | LED120ED18/730/277-480 | 277-480 | 3                       | 9.7      | 3.0      | 20,000           | 3000K       | >70 | 250W HPS/360W MH                 | 50,000                            | S-47FGTZ           | Damp                         |
|                                                        | EX39      | 120   | 93320024   | LED120ED18/740/277-480 | 277-480 | 3                       | 9.7      | 3.0      | 20,000           | 4000K       | >70 | 250W HPS/360W MH                 | 50,000                            | S-1NR1YH           | Damp                         |
|                                                        | EX39      | 120   | 93320030   | LED120ED18/750/277-480 | 277-480 | 3                       | 9.7      | 3.0      | 20,000           | 5000K       | >70 | 250W HPS/360W MH                 | 50,000                            | S-MQFM9J           | Damp                         |
|                                                        | EX39      | 180   | 93312096   | LED180ED18/730         | 120-277 | 3                       | 9.7      | 3.0      | 30,000           | 3000K       | >70 | 400W HPS/400W MH                 | 50,000                            | S-F26H3J           | Damp                         |
|                                                        | EX39      | 180   | 93312098   | LED180ED18/740         | 120-277 | 3                       | 9.7      | 3.0      | 30,000           | 4000K       | >70 | 400W HPS/400W MH                 | 50,000                            | S-WN2HR8           | Damp                         |
|                                                        | EX39      | 180   | 93312100   | LED180ED18/750         | 120-277 | 3                       | 9.7      | 3.0      | 30,000           | 5000K       | >70 | 400W HPS/400W MH                 | 50,000                            | S-BG0B87           | Damp                         |
|                                                        | EX39      | 180   | 93320000   | LED180ED18/730/277-480 | 277-480 | 3                       | 9.7      | 3.0      | 30,000           | 3000K       | >70 | 400W HPS/400W MH                 | 50,000                            | S-LCDXR9           | Damp                         |
|                                                        | EX39      | 180   | 93320006   | LED180ED18/740/277-480 | 277-480 | 3                       | 9.7      | 3.0      | 30,000           | 4000K       | >70 | 400W HPS/400W MH                 | 50,000                            | S-9792TD           | Damp                         |
|                                                        | EX39      | 180   | 93320012   | LED180ED18/750/277-480 | 277-480 | 3                       | 9.7      | 3.0      | 30,000           | 5000K       | >70 | 400W HPS/400W MH                 | 50,000                            | S-HYQC7Z           | Damp                         |

These products are covered by U.S. Patents 10788163 and 10508776. These products may also be covered by other U.S. patents or pending applications.

Information provided is subject to change without notice. Please verify all details with Current. All values are design or typical values when measured under laboratory conditions, and Current makes no warranty or guarantee, expressed or implied, that such performance will be obtained under end-use conditions.

<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

<sup>2</sup> Minimum order quantity from Current = 1

<sup>3</sup> UL 1993 Environmental Requirements for LED LAMPS

Damp Location - Exterior or interior location that is normally or periodically subject to condensation of moisture in, on, or adjacent to electrical equipment, including partially protected locations

<sup>4</sup> Not all product variations on this page are DLC qualified. Visit [qpl.designlights.org/solid-state-lighting](http://qpl.designlights.org/solid-state-lighting) to confirm qualification.

<sup>5</sup> Do not use with phase-cut dimmers. Dimming functions only with external Variac control devices.

<sup>6</sup> Wattage Replacements based on NEMA Standards Publication LL 10-2020 *Replacing HID Lamps with LED Lamps: Light Output Equivalency Claims*.

# LED Lamps – HID



## LED HID – Type B

| Bulb Shape                                              | Base Type                                                                                                                                           | Watts | Order Code | Description             | Volts   | Carton Qty <sup>2</sup> | MOL (in) | MOD (in) | Lumens (Initial) | Color Temp. (Initial) | CRI | Wattage Replacement <sup>7</sup> | Rated Life L70 (Hrs) <sup>1</sup> | DLC <sup>3</sup> ID <sup>3,4</sup> | Location Rating <sup>5,6</sup> |
|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-------|------------|-------------------------|---------|-------------------------|----------|----------|------------------|-----------------------|-----|----------------------------------|-----------------------------------|------------------------------------|--------------------------------|
| LED Replacement Lamps for HID – Ballast Bypass (Type B) |                                                                                                                                                     |       |            |                         |         |                         |          |          |                  |                       |     |                                  |                                   |                                    |                                |
| ED17                                                    | E26                                                                                                                                                 | 21    | 27729      | LED21ED17/740           | 120-277 | 3                       | 5.4      | 2.6      | 3,400            | 4000K                 | >70 | 50W HPS / 70W MH                 | 50,000                            | -                                  | Damp                           |
|                                                         | E26                                                                                                                                                 | 21    | 27732      | LED21ED17/750           | 120-277 | 3                       | 5.4      | 2.6      | 3,400            | 5000K                 | >70 | 50W HPS / 70W MH                 | 50,000                            | -                                  | Damp                           |
|                                                         | E26                                                                                                                                                 | 35    | 9311214    | LED35ED17/730           | 120-277 | 3                       | 5.4      | 2.6      | 5,000            | 3000K                 | >70 | 70W HPS / 100W MH                | 50,000                            | -                                  | Damp                           |
|                                                         | E26                                                                                                                                                 | 35    | 27602      | LED35ED17/740           | 120-277 | 3                       | 5.4      | 2.6      | 5,000            | 4000K                 | >70 | 70W HPS / 100W MH                | 50,000                            | -                                  | Damp                           |
|                                                         | E26                                                                                                                                                 | 35    | 27724      | LED35ED17/750           | 120-277 | 3                       | 5.4      | 2.6      | 5,000            | 5000K                 | >70 | 70W HPS / 100W MH                | 50,000                            | -                                  | Damp                           |
|                                                         | E26                                                                                                                                                 | 45    | 93116975   | LED45ED17/835           | 120-277 | 3                       | 5.4      | 2.6      | 6,000            | 3500K                 | >70 | 100W HPS / 100W MH               | 50,000                            | -                                  | Damp                           |
|                                                         | E26                                                                                                                                                 | 45    | 93148082   | LED45ED17/740           | 120-277 | 3                       | 5.4      | 2.6      | 7,000            | 4000K                 | >70 | 100W HPS / 175W MH               | 50,000                            | -                                  | Damp                           |
|                                                         | E26                                                                                                                                                 | 45    | 93148081   | LED45ED17/750           | 120-277 | 3                       | 5.4      | 2.6      | 7,000            | 5000K                 | >70 | 100W HPS / 175W MH               | 50,000                            | -                                  | Damp                           |
| ED23.5                                                  | E26                                                                                                                                                 | 80    | 22768      | LED80ED23.5M/740        | 120-277 | 3                       | 7.8      | 3.7      | 12,000           | 4000K                 | >70 | 150W HPS / 250W MH               | 50,000                            | -                                  | Damp                           |
|                                                         | E26                                                                                                                                                 | 80    | 93125008   | LED80ED23.5M/750        | 120-277 | 3                       | 7.8      | 3.7      | 12,000           | 5000K                 | >70 | 150W HPS / 250W MH               | 50,000                            | -                                  | Damp                           |
|                                                         | EX39                                                                                                                                                | 50    | 22679      | LED50ED23.5/740         | 120-277 | 3                       | 7.8      | 3.7      | 7,500            | 4000K                 | >70 | 100W HPS / 150W MH               | 50,000                            | P2LJ433Z                           | Damp                           |
|                                                         | EX39                                                                                                                                                | 50    | 22739      | LED50ED23.5/750         | 120-277 | 3                       | 7.8      | 3.7      | 7,500            | 5000K                 | >70 | 100W HPS / 150W MH               | 50,000                            | P9E7B4MB                           | Damp                           |
|                                                         | EX39                                                                                                                                                | 50    | 93154637   | LED50ED23.5/740/277/480 | 277-480 | 3                       | 7.8      | 3.7      | 7,500            | 4000K                 | >70 | 100W HPS / 150W MH               | 50,000                            | S-QSEC3A                           | Damp                           |
|                                                         | EX39                                                                                                                                                | 50    | 93154639   | LED50ED23.5/750/277/480 | 277-480 | 3                       | 7.8      | 3.7      | 7,500            | 5000K                 | >70 | 100W HPS / 150W MH               | 50,000                            | S-TGNWE4                           | Damp                           |
|                                                         | EX39                                                                                                                                                | 80    | 22635      | LED80ED23.5/740         | 120-277 | 3                       | 7.8      | 3.7      | 12,000           | 4000K                 | >70 | 150W HPS / 250W MH               | 50,000                            | PHJ4LA1W                           | Damp                           |
|                                                         | EX39                                                                                                                                                | 80    | 22676      | LED80ED23.5/750         | 120-277 | 3                       | 7.8      | 3.7      | 12,000           | 5000K                 | >70 | 150W HPS / 250W MH               | 50,000                            | PYL1MPL2                           | Damp                           |
|                                                         | EX39                                                                                                                                                | 80    | 93154642   | LED80ED23.5/740/277/480 | 277-480 | 3                       | 7.8      | 3.7      | 12,000           | 4000K                 | >70 | 150W HPS / 250W MH               | 50,000                            | S-TUGPZM                           | Damp                           |
|                                                         | EX39                                                                                                                                                | 80    | 93154640   | LED80ED23.5/750/277/480 | 277-480 | 3                       | 7.8      | 3.7      | 12,000           | 5000K                 | >70 | 150W HPS / 250W MH               | 50,000                            | S-1FJ4CK                           | Damp                           |
| ED28                                                    | EX39                                                                                                                                                | 115   | 93112197   | LED115ED28/730          | 120-277 | 3                       | 8.3      | 4.1      | 18,000           | 4000K                 | >70 | 250W HPS / 350W MH               | 50,000                            | PE646DNU / S-PIV8RX                | Damp                           |
|                                                         | EX39                                                                                                                                                | 115   | 22622      | LED115ED28/740          | 120-277 | 3                       | 8.3      | 4.1      | 18,000           | 4000K                 | >70 | 250W HPS / 350W MH               | 50,000                            | PONSAR2J / S-7Y6F60                | Damp                           |
|                                                         | EX39                                                                                                                                                | 115   | 22623      | LED115ED28/750          | 120-277 | 3                       | 8.3      | 4.1      | 18,000           | 5000K                 | >70 | 250W HPS / 350W MH               | 50,000                            | PZFIPZUL / S-VVTYR7                | Damp                           |
|                                                         | EX39                                                                                                                                                | 115   | 93139853   | LED115ED28/740/277/480  | 277-480 | 3                       | 8.3      | 4.1      | 18,000           | 4000K                 | >70 | 250W HPS / 350W MH               | 50,000                            | PZ3P5P7U/PEQF29S7                  | Damp                           |
|                                                         | EX39                                                                                                                                                | 115   | 93139854   | LED115ED28/750/277/480  | 277-480 | 3                       | 8.3      | 4.1      | 18,000           | 5000K                 | >70 | 250W HPS / 350W MH               | 50,000                            | PY31MNAU/PCV74KSL                  | Damp                           |
|                                                         | EX39                                                                                                                                                | 150   | 93112198   | LED150ED28/730          | 120-277 | 3                       | 8.3      | 4.1      | 23,500           | 3000K                 | >70 | 310W HPS / 400W MH               | 50,000                            | PAVD2D0E                           | Damp                           |
|                                                         | EX39                                                                                                                                                | 150   | 22611      | LED150ED28/740          | 120-277 | 3                       | 8.3      | 4.1      | 23,500           | 4000K                 | >70 | 310W HPS / 400W MH               | 50,000                            | P53Y3N60                           | Damp                           |
|                                                         | EX39                                                                                                                                                | 150   | 22613      | LED150ED28/750          | 120-277 | 3                       | 8.3      | 4.1      | 23,500           | 5000K                 | >70 | 310W HPS / 400W MH               | 50,000                            | PIEL9LHG                           | Damp                           |
|                                                         | EX39                                                                                                                                                | 150   | 93139849   | LED150ED28/740/277/480  | 277-480 | 3                       | 8.3      | 4.1      | 23,500           | 4000K                 | >70 | 310W HPS / 400W MH               | 50,000                            | PUGHU5LU/PYCNKIK7                  | Damp                           |
|                                                         | EX39                                                                                                                                                | 180   | 93320018   | LED180ED18/730/277-480  | 277-480 | 3                       | 9.7      | 3.0      | 20,000           | 3000K                 | >70 | 250W HPS / 360W MH               | 50,000                            | S-47FGTZ                           | Damp                           |
| ED18                                                    | EX39                                                                                                                                                | 180   | 93320024   | LED180ED18/740/277-480  | 277-480 | 3                       | 9.7      | 3.0      | 20,000           | 4000K                 | >70 | 250W HPS / 360W MH               | 50,000                            | S-1NR1YH                           | Damp                           |
|                                                         | EX39                                                                                                                                                | 180   | 93320030   | LED180ED18/750/277-480  | 277-480 | 3                       | 9.7      | 3.0      | 20,000           | 5000K                 | >70 | 250W HPS / 360W MH               | 50,000                            | S-MQFM9J                           | Damp                           |
|                                                         | EX39                                                                                                                                                | 180   | 93312096   | LED180ED18/730          | 120-277 | 3                       | 9.7      | 3.0      | 30,000           | 3000K                 | >70 | 400W HPS / 400W MH               | 50,000                            | S-F26H3J                           | Damp                           |
|                                                         | EX39                                                                                                                                                | 180   | 93312098   | LED180ED18/740          | 120-277 | 3                       | 9.7      | 3.0      | 30,000           | 4000K                 | >70 | 400W HPS / 400W MH               | 50,000                            | S-WN2HR8                           | Damp                           |
|                                                         | EX39                                                                                                                                                | 180   | 93312100   | LED180ED18/750          | 120-277 | 3                       | 9.7      | 3.0      | 30,000           | 5000K                 | >70 | 400W HPS / 400W MH               | 50,000                            | S-BG0B87                           | Damp                           |
|                                                         | EX39                                                                                                                                                | 180   | 93320000   | LED180ED18/730/277-480  | 277-480 | 3                       | 9.7      | 3.0      | 30,000           | 3000K                 | >70 | 400W HPS / 400W MH               | 50,000                            | S-LCDXR9                           | Damp                           |
|                                                         | EX39                                                                                                                                                | 180   | 93320006   | LED180ED18/740/277-480  | 277-480 | 3                       | 9.7      | 3.0      | 30,000           | 4000K                 | >70 | 400W HPS / 400W MH               | 50,000                            | S-9792TD                           | Damp                           |
|                                                         | EX39                                                                                                                                                | 180   | 93320012   | LED180ED18/750/277-480  | 277-480 | 3                       | 9.7      | 3.0      | 30,000           | 5000K                 | >70 | 400W HPS / 400W MH               | 50,000                            | S-HYQC7Z                           | Damp                           |
|                                                         | EX39                                                                                                                                                | 270   | 93153080   | LED270BT56/740/120/277  | 120-277 | 3                       | 12.3     | 5.6      | 40,000           | 4000K                 | >70 | 400W HPS / 400W MH               | 50,000                            | PG8499V4                           | Damp                           |
|                                                         | EX39                                                                                                                                                | 270   | 93153121   | LED270BT56/750/120/277  | 120-277 | 3                       | 12.3     | 5.6      | 40,000           | 5000K                 | >70 | 400W HPS / 400W MH               | 50,000                            | PIZKSQ30                           | Damp                           |
| BT56                                                    | EX39                                                                                                                                                | 270   | 93095547   | LED270BT56/740          | 277-480 | 3                       | 12.3     | 5.6      | 40,000           | 4000K                 | >70 | 400W HPS / 400W MH               | 50,000                            | PW0OLOQL                           | Damp                           |
|                                                         | EX39                                                                                                                                                | 270   | 93095553   | LED270BT56/750          | 277-480 | 3                       | 12.3     | 5.6      | 40,000           | 5000K                 | >70 | 400W HPS / 400W MH               | 50,000                            | PUZP8RVI                           | Damp                           |
|                                                         | EX39                                                                                                                                                | 360   | 93122144   | LED360ED37/740          | 277-480 | 3                       | 10.6     | 5.6      | 53,000           | 4000K                 | >70 | 600W HPS / 750W MH               | 50,000                            | P7WQGT4S                           | Damp                           |
| ED37                                                    | EX39                                                                                                                                                | 360   | 93122166   | LED360ED37/750          | 277-480 | 3                       | 10.6     | 5.6      | 53,000           | 5000K                 | >70 | 600W HPS / 750W MH               | 50,000                            | PK5HC9UY                           | Damp                           |
|                                                         | EX39                                                                                                                                                | 450   | 93153122   | LED450BT56/740/208/277  | 208-277 | 3                       | 12.3     | 5.6      | 65,000           | 4000K                 | >70 | 750W HPS / 1000W MH              | 50,000                            | POIL8M4C                           | Damp                           |
|                                                         | EX39                                                                                                                                                | 450   | 93153123   | LED450BT56/750/208/277  | 208-277 | 3                       | 12.3     | 5.6      | 65,000           | 5000K                 | >70 | 750W HPS / 1000W MH              | 50,000                            | PD4K2UXF                           | Damp                           |
| BT56                                                    | EX39                                                                                                                                                | 450   | 93096445   | LED450BT56/740          | 277-480 | 3                       | 12.3     | 5.6      | 65,000           | 4000K                 | >70 | 750W HPS / 1000W MH              | 50,000                            | PLNCOZ5Z                           | Damp                           |
|                                                         | EX39                                                                                                                                                | 450   | 93096547   | LED450BT56/750          | 277-480 | 3                       | 12.3     | 5.6      | 65,000           | 5000K                 | >70 | 750W HPS / 1000W MH              | 50,000                            | PH8F9ZNF                           | Damp                           |
|                                                         | EX39                                                                                                                                                | 470   | 93303389   | LED470BT56/740          | 277-480 | 3                       | 12.8     | 5.6      | 85,000           | 4000K                 | >70 | 1000W HPS / 1000W MH             | 50,000                            | S-E56HRP                           | Damp                           |
|                                                         | EX39                                                                                                                                                | 470   | 93303388   | LED470BT56/750          | 277-480 | 3                       | 12.8     | 5.6      | 85,000           | 5000K                 | >70 | 1000W HPS / 1000W MH             | 50,000                            | S-64APZW                           | Damp                           |
|                                                         | EX39                                                                                                                                                | 520   | 93320138   | LED520BT56/740/208-277  | 208-277 | 3                       | 12.8     | 5.6      | 106,000          | 4000K                 | >70 | 1000W HPS / 1500W MH             | 50,000                            | S-8J5CHR                           | Damp                           |
|                                                         | EX39                                                                                                                                                | 520   | 93320144   | LED520BT56/750/208-277  | 208-277 | 3                       | 12.8     | 5.6      | 106,000          | 5000K                 | >70 | 1000W HPS / 1500W MH             | 50,000                            | S-7CHFWS                           | Damp                           |
|                                                         | Additional Information for LED Replacement Lamps for HID: Open and Closed Rated - Ballast bypass required                                           |       |            |                         |         |                         |          |          |                  |                       |     |                                  |                                   |                                    |                                |
|                                                         | These products are covered by U.S. Patents 10788163 and 10508776. These products may also be covered by other U.S. patents or pending applications. |       |            |                         |         |                         |          |          |                  |                       |     |                                  |                                   |                                    |                                |

## LED HID Accessories

| Order Code | Description          | Carton Qty <sup>2</sup> | Additional Information     |
|------------|----------------------|-------------------------|----------------------------|
| 93151372   | LED/E26/EX39/ADAPTER | 60                      | E26/EX39 Socket Adapter    |
| 93313551   | LED-HID-TETHER-KIT   | 20                      | 1 Tether Kit               |
| 93313553   | LED-HID-4A-FUSE-KIT  | 20                      | 1 Fuse (4A), 1 Fuse Holder |
| 93313555   | LED-HID-8A-FUSE-KIT  | 20                      | 1 Fuse (8A), 1 Fuse Holder |

<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

<sup>2</sup> Minimum order quantity = 1

<sup>3</sup> E26 based products are not eligible for DLC. Not all product variations on this page are DLC qualified. Visit [qpl.designlights.org/solid-state-lighting](http://qpl.designlights.org/solid-state-lighting) to confirm qualification.

<sup>4</sup> Do not use with phase-cut dimmers. Dimming functions only with external Variac control devices.

<sup>5</sup> UL 1993 Environmental Requirements for LED LAMPS

Damp Location – Exterior or interior location that is normally or periodically subject to condensation of moisture in, on, or adjacent to electrical equipment, including partially protected locations

<sup>6</sup> Not suitable for air-tight explosive or hazardous fixtures.

<sup>7</sup> Wattage Replacement levels correspond with wattage levels. Wattage Replacements based on NEMA Standards Publication LL 10-2020 *Replacing HID Lamps with LED Lamps: Light Output Equivalency Claims*.



# LED Lamps - HID



Current offers a cost-effective LED conversion in a **Passive HID LED Replacement Lamp**. Select wattage and color temperature at the flick of a switch.

Current's Passive Selectable ED23.5 LED HID Replacement Lamps offer a cost effective solution for less demanding applications. Upgrade to LED in lower wattage HID applications that use the ED23.5 or ED28 shape (up to a 100W high pressure sodium, up to 175W metal halide), and significantly increase CRI compared to High Pressure Sodium Lamps, from 21 CRI to 70 CRI. The Passive cooling lamps (no fan) have electronic thermal management to gradually reduce the light as ambient temperatures increase.

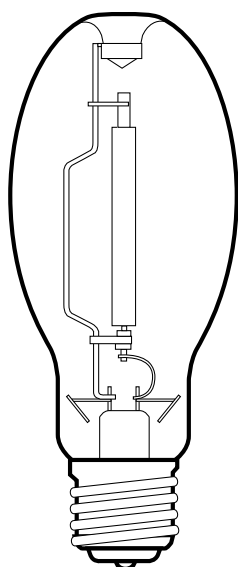
LumenChoice® + SpectraChoice™ ED23.5 lamps feature built-in switches to easily allow the change of wattage and color temperature, no tools required. One lamp can cover many applications, reducing inventory & simplifying BOMs.



Current's Passive Selectable LED HID Lamps maintain ANSI length and diameter, ensuring that the lamps will fit into fixtures and utilize existing optics. These lamps feature omnidirectional light output, with similar distribution to traditional HID lamps. This enables GE LED lamps to fit in a variety of fixtures while providing equivalent light levels to HID and utilizing the existing optics. All of the GE LED lamps in this category are Type B, which means the fixture is re-wired to bypass the ballast.

## Lamp Comparison

ED23.5 HID Lamp



Wattage Levels (W)  
Lumen Levels (lm)  
Color Temp. Levels (K)  
Base Options  
Length (in)  
Diameter (in)

Active Cooling  
Selectable ED23.5



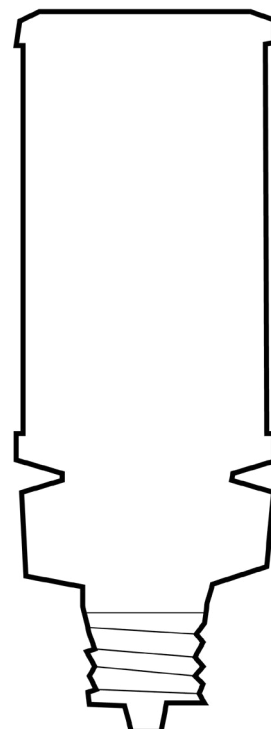
50 / 65 / 80  
8,000 / 10,300 / 12,000  
3000K / 4000K / 5000K  
E26 (with EX39 Adapter) or EX39  
7.8 in  
3.7 in

Passive Cooling  
Selectable ED23.5



32 / 39 / 46  
5,000 / 6,300 / 7,500  
3000K / 4000K / 5000K  
EX39  
7.8 in  
3.7 in

Other Passive Cooling  
LED Lamps



36 / 45 / 54  
5,040 / 6,300 / 7,560  
3000K / 4000K / 5000K  
EX39  
9.69 in  
3.35 in

# LED Lamps - HID



Select wattage (lumens) and color temperature using built-in switch



Passive Cooling Selectable ED17



## Passive Selectable LumenChoice® + SpectraChoice™ LED HID Replacement - Type B

| Bulb Shape                                             | Base Type | Order Code | Description              | Volts   | Carton Qty <sup>2</sup> | MOL (in) | MOD (in) | Selectable Watts* | Selectable Lumens (Initial)* | Selectable Color Temp. (Initial)* | Wattage Replacement <sup>6</sup>                               | CRI | Rated Life L70 (Hrs) <sup>1</sup> | DLC <sup>4,5</sup>  | Location Rating <sup>3</sup> |
|--------------------------------------------------------|-----------|------------|--------------------------|---------|-------------------------|----------|----------|-------------------|------------------------------|-----------------------------------|----------------------------------------------------------------|-----|-----------------------------------|---------------------|------------------------------|
| LED Replacement Lamp for HID - Ballast Bypass (Type B) |           |            |                          |         |                         |          |          |                   |                              |                                   |                                                                |     |                                   |                     |                              |
| ED17                                                   | E26       | 93316026   | LED/LC/ED17P/7SC/120-347 | 120-347 | 3                       | 5.6      | 2.6      | 13<br>19<br>25*   | 2,300<br>3,200<br>4,000*     | 3000K<br>4000K*<br>5000K          | 35W HPS / 50W MH<br>50W HPS / 70W MH<br>70W HPS / 70W MH       | >70 | 50,000                            | -                   | Damp                         |
| ED23.5                                                 | EX39      | 93314601   | LED/LC/ED23.5P/7SC       | 120-277 | 3                       | 7.8      | 3.7      | 32<br>39<br>46*   | 5,000<br>6,300<br>7,500*     | 3000K<br>4000K<br>5000K*          | 70W HPS / 150W MH<br>70W HPS / 150W MH<br>100W HPS / 175W MH   | >70 | 50,000                            | S-NDF684            | Damp                         |
| ED28                                                   | EX39      | 93318804   | LED/LC/ED28P/7SC         | 120-277 | 3                       | 8.3      | 4.1      | 46<br>58<br>70*   | 8,400<br>10,000<br>12,000*   | 3000K<br>4000K<br>5000K*          | 100W HPS / 150W MH<br>150W HPS / 150W MH<br>150W HPS / 250W MH | >70 | 50,000                            | S-CTTCL4 / S-6P5VLS | Damp                         |

These products are covered by U.S. Patent 10508776. These products may also be covered by other U.S. patents or pending applications.

## Passive Warm Selectable LumenChoice® + SpectraChoice™ HID Replacement - Type B

| Bulb Shape                                             | Base Type | Order Code | Description               | Volts   | Carton Qty <sup>2</sup> | MOL (in) | MOD (in) | Selectable Watts* | Selectable Lumens (Initial)* | Selectable Color Temp. (Initial)* | Wattage Replacement <sup>6</sup> | CRI | Rated Life L70 (Hrs) <sup>1</sup> | DLC <sup>4,5</sup> | Location Rating <sup>3</sup> |     |        |   |      |     |        |   |      |     |        |   |      |
|--------------------------------------------------------|-----------|------------|---------------------------|---------|-------------------------|----------|----------|-------------------|------------------------------|-----------------------------------|----------------------------------|-----|-----------------------------------|--------------------|------------------------------|-----|--------|---|------|-----|--------|---|------|-----|--------|---|------|
| LED Replacement Lamp for HID - Ballast Bypass (Type B) |           |            |                           |         |                         |          |          |                   |                              |                                   |                                  |     |                                   |                    |                              |     |        |   |      |     |        |   |      |     |        |   |      |
| ED17                                                   | E26       | 93318489   | LED/LC/ED17P/7WSC/120-347 | 120-347 | 3                       | 5.6      | 2.6      | 13                | 1,600                        | 1800K                             | 35W HPS / 50W MH                 | >70 | 50,000                            | -                  | Damp                         |     |        |   |      |     |        |   |      |     |        |   |      |
|                                                        |           |            |                           |         |                         |          |          |                   | 2,000                        | 2200K                             | 35W HPS / 50W MH                 |     |                                   |                    |                              |     |        |   |      |     |        |   |      |     |        |   |      |
|                                                        |           |            |                           |         |                         |          |          |                   | 2,200                        | 2700K                             | 35W HPS / 50W MH                 |     |                                   |                    |                              |     |        |   |      |     |        |   |      |     |        |   |      |
|                                                        |           |            |                           |         |                         |          |          | 19                | 2,200                        | 1800K                             | 35W HPS / 50W MH                 |     |                                   |                    |                              | >70 | 50,000 | - | Damp |     |        |   |      |     |        |   |      |
|                                                        |           |            |                           |         |                         |          |          |                   | 2,700                        | 2200K                             | 35W HPS / 50W MH                 |     |                                   |                    |                              |     |        |   |      |     |        |   |      |     |        |   |      |
|                                                        |           |            |                           |         |                         |          |          |                   | 3,000                        | 2700K                             | 35W HPS / 50W MH                 |     |                                   |                    |                              |     |        |   |      |     |        |   |      |     |        |   |      |
|                                                        |           |            |                           |         |                         |          |          | 25*               | 2,800                        | 1800K                             | 35W HPS / 50W MH                 |     |                                   |                    |                              |     |        |   |      | >70 | 50,000 | - | Damp |     |        |   |      |
|                                                        |           |            |                           |         |                         |          |          |                   | 3,400*                       | 2200K*                            | 35W HPS / 50W MH                 |     |                                   |                    |                              |     |        |   |      |     |        |   |      |     |        |   |      |
|                                                        |           |            |                           |         |                         |          |          |                   | 3,900                        | 2700K                             | 50W HPS / 70W MH                 |     |                                   |                    |                              |     |        |   |      |     |        |   |      |     |        |   |      |
|                                                        |           |            |                           |         |                         |          |          | 46                | 6,300                        | 1800K                             | 70W HPS / 70W MH                 |     |                                   |                    |                              |     |        |   |      |     |        |   |      | >70 | 50,000 | - | Damp |
|                                                        |           |            |                           |         |                         |          |          |                   | 7,600                        | 2200K                             | 70W HPS / 100W MH                |     |                                   |                    |                              |     |        |   |      |     |        |   |      |     |        |   |      |
|                                                        |           |            |                           |         |                         |          |          |                   | 8,400                        | 2700K                             | 100W HPS / 150W MH               |     |                                   |                    |                              |     |        |   |      |     |        |   |      |     |        |   |      |
|                                                        |           |            |                           |         |                         |          |          |                   | 7,600                        | 1800K                             | 70W HPS / 100W MH                |     |                                   |                    |                              |     |        |   |      |     |        |   |      |     |        |   |      |
| 58                                                     | 9,300     | 2200K      | 100W HPS / 100W MH        | >70     | 50,000                  | -        | Damp     |                   |                              |                                   |                                  |     |                                   |                    |                              |     |        |   |      |     |        |   |      |     |        |   |      |
|                                                        | 10,000    | 2700K      | 150W HPS / 150W MH        |         |                         |          |          |                   |                              |                                   |                                  |     |                                   |                    |                              |     |        |   |      |     |        |   |      |     |        |   |      |
| 70*                                                    | 9,000     | 1800K      | 100W HPS / 100W MH        |         |                         |          |          | >70               | 50,000                       | -                                 | Damp                             |     |                                   |                    |                              |     |        |   |      |     |        |   |      |     |        |   |      |
|                                                        | 11,000*   | 2200K*     | 150W HPS / 100W MH        |         |                         |          |          |                   |                              |                                   |                                  |     |                                   |                    |                              |     |        |   |      |     |        |   |      |     |        |   |      |
|                                                        | 12,000    | 2700K      | 150W HPS / 150W MH        |         |                         |          |          |                   |                              |                                   |                                  |     |                                   |                    |                              |     |        |   |      |     |        |   |      |     |        |   |      |

These products are covered by U.S. Patent 10508776. These products may also be covered by other U.S. patents or pending applications.

Information provided is subject to change without notice. Please verify all details with Current. All values are design or typical values when measured under laboratory conditions, and Current makes no warranty or guarantee, expressed or implied, that such performance will be obtained under end-use conditions.

<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

<sup>2</sup> Minimum order quantity from Current = 1

<sup>3</sup> UL 1993 Environmental Requirements for LED LAMPS

Damp Location - Exterior or interior location that is normally or periodically subject to condensation of moisture in, on, or adjacent to electrical equipment, including partially protected locations

<sup>4</sup> Not all product variations on this page are DLC qualified. Visit [qpl.designlights.org/solid-state-lighting](http://qpl.designlights.org/solid-state-lighting) to confirm qualification.

<sup>5</sup> Do not use with phase-cut dimmers. Use integrated switch for dimming.

<sup>6</sup> Wattage Replacements based on NEMA Standards Publication LL 10-2020 Replacing HID Lamps with LED Lamps: Light Output Equivalency Claims.

\*Default wattage and color temperature settings noted by "\*" in tables above.

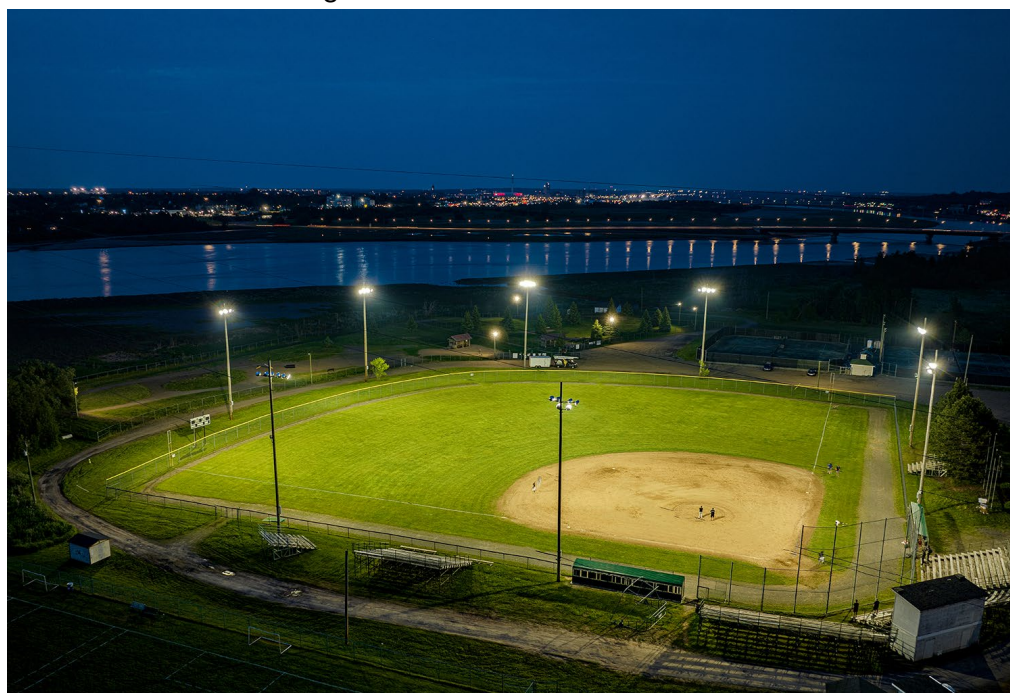


## HID LED Replacement Lamp Case Studies

470W High Output BT56 LED Replacement lamps were used to retrofit 1500W Metal Halide fixtures at a baseball field in Riverview, New Brunswick, Canada. For more details around the retrofit and the resulting benefits that they realized, visit [www.LED.com/inspiration/ballfield-benefits-from-new-high-output-led-lamp](http://www.LED.com/inspiration/ballfield-benefits-from-new-high-output-led-lamp).



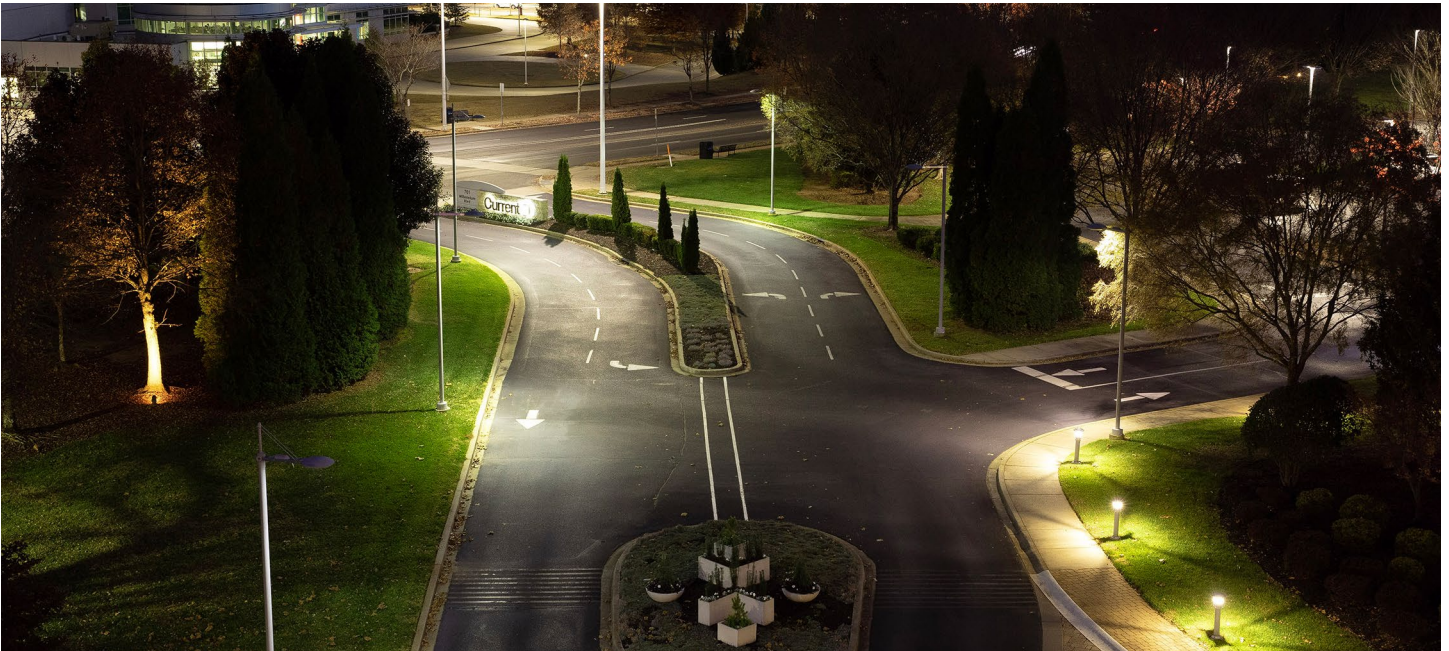
Drone images capture the before and after of the baseball field highlighting the uniform light coverage after the LED BT56 installation.





## HID LED Replacement Lamp Case Studies

Improvements in lighting can make a huge impact on the safety and security of a site. In the example below, 250W Metal Halide HID Lamps were replaced with 80W Type B ED23.5 LED HID Lamps, resulting in a noticeable improvement in visibility and light coverage.



Before: 250W Metal Halide Lamps



After: 80W ED23.5 LED HID Lamps



## HID LED Replacement Lamp Case Studies

Residential post top street lights in New Brunswick were upgraded using GE LED Lamps. Warm SpectraChoice™ Selectable ED17 lamps replaced 100W High Pressure Sodium lamps. The 2700K color temperature setting maintained a warm feel for residents, whiter than HPS but not too blue, and the 45W setting provided plenty of light.



Before: 100W High Pressure Sodium HID Lamps

After: LED HID Warm SpectraChoice™ ED17 Lamp, 45W 2700K



**Before:** 100W High Pressure Sodium (HPS) lamps emit a yellow-orange glow throughout the neighborhood, washing out colors due to low CRI. Warm white lights on the houses appear to be a cooler blue color temperature relative to HPS.

**After:** 45W LED lamps produce a warm white light, and improved CRI allows colors to be seen, like the orange driveway markers. The light appears visually brighter. Warm white lights on the houses appear to be consistent with the 2700K LED street lights.



# LED Lamps - HID

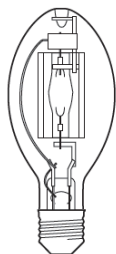


Lamp Drawings (not drawn to scale)

ED17 HID Lamp

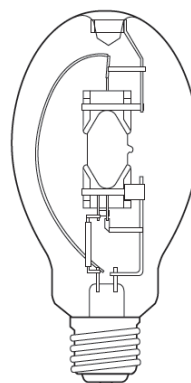
Active Cooling  
Selectable ED17

Passive Cooling  
Selectable ED17



ED28 HID Lamp

Passive Cooling  
Selectable ED28



## Warm Selectable LumenChoice® + SpectraChoice™ HID Replacement - Type B

| Bulb Shape                                             | Base Type | Order Code | Description              | Volts   | Carton Qty <sup>2</sup> | MOL (in) | MOD (in) | Selectable Watts* | Selectable Lumens (Initial)* | Selectable Color Temp. (Initial)* | Wattage Replacement <sup>6</sup> | CRI | Rated Life L70 (Hrs) <sup>1</sup> | DLC <sup>3,7</sup> | Location Rating <sup>4,5</sup> |
|--------------------------------------------------------|-----------|------------|--------------------------|---------|-------------------------|----------|----------|-------------------|------------------------------|-----------------------------------|----------------------------------|-----|-----------------------------------|--------------------|--------------------------------|
| LED Replacement Lamp for HID - Ballast Bypass (Type B) |           |            |                          |         |                         |          |          |                   |                              |                                   |                                  |     |                                   |                    |                                |
| ED17                                                   | E26/EX39  | 93315986   | LED/LC/ED17/7WSC/120-347 | 120-347 | 3                       | 5.4      | 2.6      | 21                | 2,450                        | 1800K                             | 35W HPS / 50W MH                 | >70 | 50,000                            | -                  | Damp                           |
|                                                        |           |            |                          |         |                         |          |          |                   | 3,000                        | 2200K                             | 35W HPS / 50W MH                 |     |                                   |                    |                                |
|                                                        |           |            |                          |         |                         |          |          |                   | 3,300                        | 2700K                             | 50W HPS / 50W MH                 |     |                                   |                    |                                |
|                                                        |           |            |                          |         |                         |          |          |                   | 3,950                        | 1800K                             | 35W HPS / 50W MH                 |     |                                   |                    |                                |
|                                                        |           |            |                          |         |                         |          |          | 35*               | 4,900*                       | 2200K*                            | 50W HPS / 70W MH                 |     |                                   |                    |                                |
|                                                        |           |            |                          |         |                         |          |          |                   | 5,350                        | 2700K                             | 70W HPS / 70W MH                 |     |                                   |                    |                                |
|                                                        |           |            |                          |         |                         |          |          |                   | 4,900                        | 1800K                             | 50W HPS / 70W MH                 |     |                                   |                    |                                |
|                                                        |           |            |                          |         |                         |          |          | 45                | 6,200                        | 2200K                             | 70W HPS / 70W MH                 |     |                                   |                    |                                |
|                                                        |           |            |                          |         |                         |          |          |                   | 6,650                        | 2700K                             | 70W HPS / 100W MH                |     |                                   |                    |                                |
|                                                        |           |            |                          |         |                         |          |          |                   |                              |                                   |                                  |     |                                   |                    |                                |

## Passive Warm Selectable LumenChoice® + SpectraChoice™ HID Replacement - Type B

| Bulb Shape                                             | Base Type | Order Code | Description               | Volts   | Carton Qty <sup>2</sup> | MOL (in) | MOD (in) | Selectable Watts* | Selectable Lumens (Initial)* | Selectable Color Temp. (Initial)* | Wattage Replacement <sup>6</sup> | CRI | Rated Life L70 (Hrs) <sup>1</sup> | DLC <sup>3,7</sup> | Location Rating <sup>4,5</sup> |     |        |   |      |
|--------------------------------------------------------|-----------|------------|---------------------------|---------|-------------------------|----------|----------|-------------------|------------------------------|-----------------------------------|----------------------------------|-----|-----------------------------------|--------------------|--------------------------------|-----|--------|---|------|
| LED Replacement Lamp for HID - Ballast Bypass (Type B) |           |            |                           |         |                         |          |          |                   |                              |                                   |                                  |     |                                   |                    |                                |     |        |   |      |
| ED17                                                   | E26       | 93318489   | LED/LC/ED17P/7WSC/120-347 | 120-347 | 3                       | 5.6      | 2.6      | 13                | 1,600                        | 1800K                             | 35W HPS / 50W MH                 | >70 | 50,000                            | -                  | Damp                           |     |        |   |      |
|                                                        |           |            |                           |         |                         |          |          |                   | 2,000                        | 2200K                             | 35W HPS / 50W MH                 |     |                                   |                    |                                |     |        |   |      |
|                                                        |           |            |                           |         |                         |          |          |                   | 2,200                        | 2700K                             | 35W HPS / 50W MH                 |     |                                   |                    |                                |     |        |   |      |
|                                                        |           |            |                           |         |                         |          |          | 19                | 2,200                        | 1800K                             | 35W HPS / 50W MH                 |     |                                   |                    |                                | >70 | 50,000 | - | Damp |
|                                                        |           |            |                           |         |                         |          |          |                   | 2,700                        | 2200K                             | 35W HPS / 50W MH                 |     |                                   |                    |                                |     |        |   |      |
|                                                        |           |            |                           |         |                         |          |          |                   | 3,000                        | 2700K                             | 35W HPS / 50W MH                 |     |                                   |                    |                                |     |        |   |      |
|                                                        |           |            |                           |         |                         |          |          | 25*               | 2,800                        | 1800K                             | 35W HPS / 50W MH                 |     |                                   |                    |                                | >70 | 50,000 | - | Damp |
|                                                        |           |            |                           |         |                         |          |          |                   | 3,400*                       | 2200K*                            | 35W HPS / 50W MH                 |     |                                   |                    |                                |     |        |   |      |
|                                                        |           |            |                           |         |                         |          |          |                   | 3,900                        | 2700K                             | 50W HPS / 70W MH                 |     |                                   |                    |                                |     |        |   |      |
|                                                        |           |            |                           |         |                         |          |          |                   | 6,300                        | 1800K                             | 70W HPS / 70W MH                 |     |                                   |                    |                                |     |        |   |      |
|                                                        |           |            |                           |         |                         |          |          |                   | 7,600                        | 2200K                             | 70W HPS / 100W MH                |     |                                   |                    |                                |     |        |   |      |
|                                                        |           |            |                           |         |                         |          |          |                   | 8,400                        | 2700K                             | 100W HPS / 150W MH               |     |                                   |                    |                                |     |        |   |      |
| ED28                                                   | EX39      | 93319614   | LED/LC/ED28P/7WSC         | 120-277 | 3                       | 8.3      | 4.1      | 46                | 7,600                        | 1800K                             | 70W HPS / 100W MH                | >70 | 50,000                            | -                  | Damp                           |     |        |   |      |
|                                                        |           |            |                           |         |                         |          |          |                   | 9,300                        | 2200K                             | 100W HPS / 100W MH               |     |                                   |                    |                                |     |        |   |      |
|                                                        |           |            |                           |         |                         |          |          |                   | 10,000                       | 2700K                             | 150W HPS / 150W MH               |     |                                   |                    |                                |     |        |   |      |
|                                                        |           |            |                           |         |                         |          |          | 58                | 9,000                        | 1800K                             | 100W HPS / 100W MH               |     |                                   |                    |                                | >70 | 50,000 | - | Damp |
|                                                        |           |            |                           |         |                         |          |          |                   | 11,000*                      | 2200K*                            | 150W HPS / 100W MH               |     |                                   |                    |                                |     |        |   |      |
|                                                        |           |            |                           |         |                         |          |          |                   | 12,000                       | 2700K                             | 150W HPS / 150W MH               |     |                                   |                    |                                |     |        |   |      |
|                                                        |           |            |                           |         |                         |          |          | 70*               | 11,000*                      | 2200K*                            | 150W HPS / 100W MH               |     |                                   |                    |                                | >70 | 50,000 | - | Damp |
|                                                        |           |            |                           |         |                         |          |          |                   | 12,000                       | 2700K                             | 150W HPS / 150W MH               |     |                                   |                    |                                |     |        |   |      |

These products are covered by U.S. Patent 10508776. These products may also be covered by other U.S. patents or pending applications.

<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

<sup>2</sup> Minimum order quantity = 1

<sup>3</sup> E26 based products are not eligible for DLC. Not all product variations on this page are DLC qualified. Visit [qpl.designlights.org/solid-state-lighting](http://qpl.designlights.org/solid-state-lighting) to confirm qualification.

<sup>4</sup> UL 1993 Environmental Requirements for LED LAMPS

Damp Location - Exterior or interior location that is normally or periodically subject to condensation of moisture in, on, or adjacent to electrical equipment, including partially protected locations

<sup>5</sup> Not suitable for air-tight explosive or hazardous fixtures.

<sup>6</sup> Wattage Replacement levels correspond with wattage levels. Wattage Replacements based on NEMA Standards Publication LL 10-2020 *Replacing HID Lamps with LED Lamps: Light Output Equivalency Claims*.

<sup>7</sup> Do not use with phase-cut dimmers. Use integrated switch for dimming.

\* Default wattage and color temperature settings noted by "\*" in tables above.

# LED Lamps - HID - Hazardous Locations



## LED Lamps – HID for Hazardous Locations

Current offers the industry's most extensive portfolio of LED Lamps certified for use in hazardous locations. LED hazardous location lamps offer an opportunity to realize the benefits of an upgrade to LED lighting at an affordable cost. Retrofits certified to UL844 allow existing hazardous location fixtures to be used, while replacing old HID lamps and bypassing the ballasts. Lamps can provide an attractive ROI when entire fixture upgrades may be cost prohibitive, allowing hazardous location facilities to save on energy costs and improve light quality and reliability without compromising safety.

LED HID Lamps approved for hazardous locations provide customers an innovative lighting solution. These lamps maintain the key features of standard GE LED HID Lamps, with a proprietary active cooling design that allows high output from a compact form, with omnidirectional light output. With E26-based hazardous location lamps, Current also includes an E39 socket adapter in the kit for mogul base applications. This eliminates the possibility of ordering a lamp with the wrong base. The heat profile of Current's LED lamps is lower than traditional HID, which equates to a lower overall temperature code. This may provide additional benefits to a facility, beyond the lower energy consumption and increased longevity of the lamps themselves.



## LED HID - Type B - Hazardous Locations

| Bulb Shape                                                                                                                                          | Base Type <sup>6</sup> | Watts | Order Code | Description                 | Volts   | Carton Qty <sup>2</sup> | MOL (in) | MOD (in) | Lumens (Initial) | Color Temp. (Initial) | CRI | Wattage Replacement <sup>3</sup> | Rated Life L70 (Hrs) <sup>1</sup> | DLC <sup>4</sup> ID <sup>3,4</sup> | Location Rating <sup>5,6</sup> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------|------------|-----------------------------|---------|-------------------------|----------|----------|------------------|-----------------------|-----|----------------------------------|-----------------------------------|------------------------------------|--------------------------------|
| <b>LED Replacement Lamps for HID - Ballast Bypass (Type B) - Hazardous Locations</b>                                                                |                        |       |            |                             |         |                         |          |          |                  |                       |     |                                  |                                   |                                    |                                |
| <b>ED17</b>                                                                                                                                         | E26/EX39               | 21    | 93134832   | LED21ED17/730/HAZ           | 120-277 | 3                       | 5.4      | 2.6      | 3,000            | 3000K                 | >70 | 50W HPS / 70W MH                 | 50,000                            | -                                  | Damp                           |
|                                                                                                                                                     | E26/EX39               | 21    | 93134833   | LED21ED17/740/HAZ           | 120-277 | 3                       | 5.4      | 2.6      | 3,000            | 4000K                 | >70 | 50W HPS / 70W MH                 | 50,000                            | -                                  | Damp                           |
|                                                                                                                                                     | E26/EX39               | 21    | 93134834   | LED21ED17/750/HAZ           | 120-277 | 3                       | 5.4      | 2.6      | 3,000            | 5000K                 | >70 | 50W HPS / 70W MH                 | 50,000                            | -                                  | Damp                           |
|                                                                                                                                                     | E26/EX39               | 35    | 93134830   | LED35ED17/740/HAZ           | 120-277 | 3                       | 5.4      | 2.6      | 5,000            | 4000K                 | >70 | 70W HPS / 100W MH                | 50,000                            | -                                  | Damp                           |
|                                                                                                                                                     | E26/EX39               | 35    | 93134831   | LED35ED17/750/HAZ           | 120-277 | 3                       | 5.4      | 2.6      | 5,000            | 5000K                 | >70 | 70W HPS / 100W MH                | 50,000                            | -                                  | Damp                           |
|                                                                                                                                                     | E26/EX39               | 45    | 93134846   | LED45ED17/730/HAZ           | 120-277 | 3                       | 5.4      | 2.6      | 6,000            | 3000K                 | >70 | 100W HPS / 100W MH               | 50,000                            | -                                  | Damp                           |
|                                                                                                                                                     | E26/EX39               | 45    | 93134847   | LED45ED17/740/HAZ           | 120-277 | 3                       | 5.4      | 2.6      | 6,000            | 4000K                 | >70 | 100W HPS / 100W MH               | 50,000                            | -                                  | Damp                           |
|                                                                                                                                                     | E26/EX39               | 45    | 93134848   | LED45ED17/750/HAZ           | 120-277 | 3                       | 5.4      | 2.6      | 6,000            | 5000K                 | >70 | 100W HPS / 100W MH               | 50,000                            | -                                  | Damp                           |
| <b>ED23.5</b>                                                                                                                                       | E26/EX39               | 80    | 93141934   | LED80ED23.5/740/HAZ         | 120-277 | 3                       | 7.8      | 3.7      | 12,000           | 4000K                 | >70 | 150W HPS / 250W MH               | 50,000                            | -                                  | Damp                           |
|                                                                                                                                                     | E26/EX39               | 80    | 93141935   | LED80ED23.5/750/HAZ         | 120-277 | 3                       | 7.8      | 3.7      | 12,000           | 5000K                 | >70 | 150W HPS / 250W MH               | 50,000                            | -                                  | Damp                           |
|                                                                                                                                                     | EX39                   | 80    | 93148146   | LED80ED23.5/740/277/480/HAZ | 277-480 | 3                       | 7.8      | 3.7      | 12,000           | 4000K                 | >70 | 150W HPS / 250W MH               | 50,000                            | S-3GZE5Y                           | Damp                           |
|                                                                                                                                                     | EX39                   | 80    | 93148147   | LED80ED23.5/750/277/480/HAZ | 277-480 | 3                       | 7.8      | 3.7      | 12,000           | 5000K                 | >70 | 150W HPS / 250W MH               | 50,000                            | S-048JK5                           | Damp                           |
| <b>ED28</b>                                                                                                                                         | EX39                   | 150   | 93154635   | LED150ED28/740/HAZ          | 120-277 | 3                       | 8.3      | 4.1      | 23,500           | 4000K                 | >70 | 310W HPS / 400W MH               | 50,000                            | S-EB9LHA                           | Damp                           |
|                                                                                                                                                     | EX39                   | 150   | 93154636   | LED150ED28/750/HAZ          | 120-277 | 3                       | 8.3      | 4.1      | 23,500           | 5000K                 | >70 | 310W HPS / 400W MH               | 50,000                            | S-S2QAV1                           | Damp                           |
|                                                                                                                                                     | EX39                   | 150   | 93154647   | LED150ED28/740/277/480/HAZ  | 277-480 | 3                       | 8.3      | 4.1      | 23,500           | 4000K                 | >70 | 310W HPS / 400W MH               | 50,000                            | S-ZN9G32                           | Damp                           |
|                                                                                                                                                     | EX39                   | 150   | 93154648   | LED150ED28/750/277/480/HAZ  | 277-480 | 3                       | 8.3      | 4.1      | 23,500           | 5000K                 | >70 | 310W HPS / 400W MH               | 50,000                            | S-6UW8HL                           | Damp                           |
| Additional Information for LED Replacement Lamps for HID: Open and Closed Rated - Ballast bypass required                                           |                        |       |            |                             |         |                         |          |          |                  |                       |     |                                  |                                   |                                    |                                |
| These products are covered by U.S. Patents 10788163 and 10508776. These products may also be covered by other U.S. patents or pending applications. |                        |       |            |                             |         |                         |          |          |                  |                       |     |                                  |                                   |                                    |                                |

\* EX39 socket adapter is included with HAZ E26 based lamps for mogul base applications.

<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

<sup>2</sup> Minimum order quantity = 1

<sup>3</sup> E26 based products are not eligible for DLC. Not all product variations on this page are DLC qualified. Visit [qpl.designlights.org/solid-state-lighting](http://qpl.designlights.org/solid-state-lighting) to confirm qualification.

<sup>4</sup> Do not use with phase-cut dimmers. Dimming functions only with external Variac control devices.

<sup>5</sup> UL 1993 Environmental Requirements for LED LAMPS

Damp Location - Exterior or interior location that is normally or periodically subject to condensation of moisture in, on, or adjacent to electrical equipment, including partially protected locations

<sup>6</sup> Wattage Replacement levels correspond with wattage levels. Wattage Replacements based on NEMA Standards Publication LL 10-2020 *Replacing HID Lamps with LED Lamps: Light Output Equivalency Claims*.

© See Installation Guide for applicable Hazardous Location luminaire fittings

## What's Considered a Hazardous Location?

The National Electrical Code (NEC) defines hazardous locations in terms of CLASS, DIVISION and GROUP:

- **CLASS I** locations are those in which flammable gases or vapors are or may be present in the air in quantities sufficient to produce explosive or ignitable mixtures.
- **CLASS II** locations are those that are hazardous because of the presence of combustible dust.

Each CLASS is further defined as either DIVISION 1 or DIVISION 2.

- **DIVISION 1** is an environment that is normally hazardous.
- **DIVISION 2** is an environment that is not normally hazardous.

**GROUP** defines the specific hazardous material in the surrounding atmosphere. See the table below for specific examples.

| NEC Class              | Division                 | Group | Typical Atmosphere and Auto-ignition Temperatures                                                                                                                 |
|------------------------|--------------------------|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I - Gases, Vapors      | 2 - Not normally present | A     | Acetylene (305°C, 581°F)                                                                                                                                          |
|                        |                          | B     | Hydrogen (502°C, 986°F) manufactured gases containing more than 30% hydrogen (by volume)                                                                          |
|                        |                          | C     | Ethylene (450°C, 842°F)<br>Cyclopropane (503°C, 938°F)                                                                                                            |
|                        |                          | D     | Hexane (225°C, 437°F)<br>Butane (288°C, 550°F)<br>Propane (450°C, 842°F)<br>Acetone (465°C, 869°F)<br>Benzene (420°C, 788°F)<br>Gasoline (280°-471°C, 536°-880°F) |
| II - Combustible Dusts | 1 - Normally present     | E     | Metal Dusts (Aluminum, Magnesium)                                                                                                                                 |
|                        | 2 - Not normally present | F     | Carbonaceous Dusts (Coal, Carbon black, Charcoal, Coke)                                                                                                           |
|                        |                          | G     | Dusts not in Groups E or F (Flour, Grain, Wood, Plastic)                                                                                                          |

*Typical Hazardous Substances and Auto-ignition Temperatures by Group*

## How are LED Retrofits Certified?

UL evaluates Retrofit Luminaire Conversion Kits for Use in Hazardous Locations in accordance with the appropriate Standards. LED Lamps are UL-certified as part of Retrofit Kits that also include an installation guide detailing instructions for retrofitting hazardous location luminaires and a fixture label that indicates the lamp being used and associated new temperature code.

[See lamp installation guides for full luminaire fitting details.](#)

## Current Hazardous Location Lamps – Approved UL Fixtures by Classification

| Classifications: Class 1, Division 2, Groups A, B, C, D |      |        |      | Classifications: Class 2, Division 1, Groups E, F, G;<br>Class 2, Division 2, Groups F, G |      |        |      |
|---------------------------------------------------------|------|--------|------|-------------------------------------------------------------------------------------------|------|--------|------|
| UL HazLoc Fixture Type                                  | ED17 | ED23.5 | ED28 | UL HazLoc Fixture Type                                                                    | ED17 | ED23.5 | ED28 |
| GE Filtr-Gard® H2                                       | Yes  | Yes    | Yes  | GE Filtr-Gard® H2                                                                         | -    | -      | -    |
| GE Powr-Gard® H9                                        | -    | -      | -    | GE Powr-Gard® H9                                                                          | Yes  | Yes    | -    |
| Appleton Mercmaster™ II                                 | Yes  | Yes    | Yes  | Appleton Mercmaster™ II                                                                   | Yes  | Yes    | Yes  |
| Appleton Mercmaster™ III                                | Yes  | Yes    | Yes  | Appleton Mercmaster™ III                                                                  | Yes  | Yes    | Yes  |
| Crouse-Hinds Champ® VMV                                 | Yes  | Yes    | Yes  | Crouse-Hinds Champ® VMV                                                                   | Yes  | -      | Yes  |
| Thomas & Betts Hazlux® 3                                | Yes  | Yes    | Yes  | Thomas & Betts Hazlux® 3                                                                  | Yes  | Yes    | Yes  |
| Hubbell Killark® VM Series                              | Yes  | Yes    | Yes  | Hubbell Killark® VM Series                                                                | Yes  | Yes    | Yes  |
| Holophane Petrolux® P3M                                 | Yes  | Yes    | -    | Holophane Petrolux® P3M                                                                   | Yes  | Yes    | -    |
| Holophane Petrolux® II PETL                             | -    | -      | Yes  | Holophane Petrolux® II PETL                                                               | -    | -      | Yes  |

# LED Lamps – HID – Hazardous Locations



## Ohio Manufacturing Facility Replaces Dated HPS Lamps with New Current LED HID Lamps Approved for Hazardous Locations



Before: 250W High Pressure Sodium Lamps

After: 45W ED17 LED HID Lamps

An Ohio-based company needed a solution for a dimly lit manufacturing plant, and Current jumped at the opportunity to help. This wasn't a normal lamp refit, but Current knew its expansive LED Lamp portfolio had a product up for the challenge.

From the outset of the project, it was apparent that the customer needed lamps that would fit into traditional hazardous rated High Pressure Sodium (HPS) fixtures. Installation needed to be quick to avoid downtime, and budgets were tight, so avoiding significant renovations was preferred. The new LED HID replacement lamps needed to be approved for hazardous rated fixtures, as the plant deals with hazardous materials in its processes.

### The Solution

Current recommended its Hazardous LED HID Replacement Lamps. These LED lamps are designed for those rugged environments where long lasting performance is a necessity. Current's LED HID replacement lamps for hazardous locations are certified for use in a variety of hazardous location luminaires, including Class I Division 2, Class II Division 1, and Class II Division 2 applications.

With a much longer life compared to a standard HID lamp, these LED lamps would provide consistent, dependable lighting in a facility that desperately needed it. The LED lamps use much less energy compared with their HPS counterparts. This not only saves money, but it also provides the facility with an improved temperature code. This is important as it reduces the ambient temperature of the fixture by an average of 95°C in the most commonly used fixtures. By lowering the temperature code, you decrease the air temperature around the fixture, which makes for a safer operating environment. This allows customers the ability to install higher lumen lamps in locations that they were previously only able to provide low wattage/lumen lamps.

### Why Current's Lamps

One consideration for this plant was ongoing maintenance. Its existing lighting was not easy to replace and required significant manpower to maintain or update. Current was able to give them a solution that would last 2.5 times longer while still delivering a more efficient and effective solution. At the beginning of the installation, the team quickly realized they had fixtures with both medium (E26) and mogul (E39) sockets, which posed an issue with managing multiple lamp designs for the installation. Current's product team prepared for this exact scenario by including a mogul-base (E39) adapter with each lamp. Current's product strategy eliminated the possibility of ordering a lamp with the wrong base and the installer having to come back at a later date at an additional charge. This also reduces the SKU count for a project.

In addition to the longer life of LEDs, the industrial plant was also drawn to the fact that Current's lamps can go from a 250W HPS Lamp all the way down to 45W, which means increased savings in addition to longer life. The plant is now realizing \$25,000 annual savings compared to their traditional lamps. Over the life of the lamp, they will save \$125,000, and switching to Current's Hazardous Location LED HID replacement lamps will help them achieve payback in just 9 months.

Many manufacturing areas face uneven light distribution and dark spots. Most common is burned out lamps that cost time and money to replace because operations have to stop while these are fixed. Current's hazardous location lamps offer a five-year/50,000-hour warranty to give the end user peace of mind and avoid these issues.



# LED Lamps – HID – Hazardous Locations



## The Results

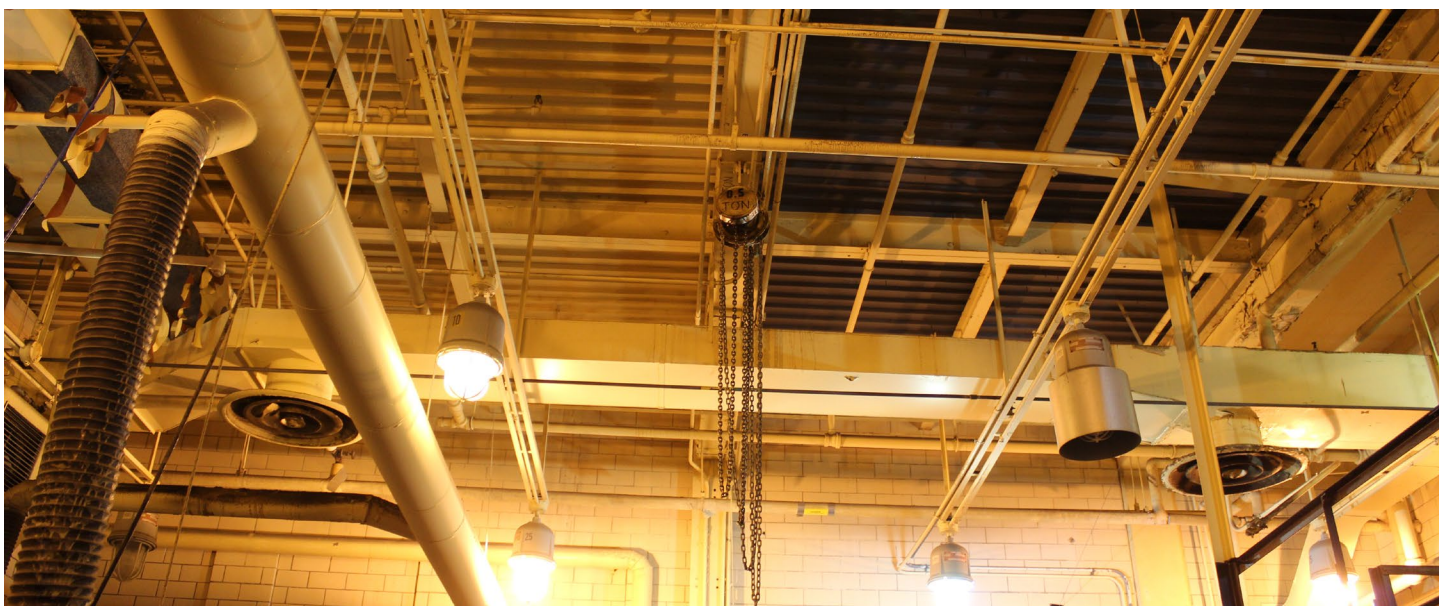
Installing the lamps was a smooth process. Once the new lights were turned on, the change was obvious: Areas were brighter.

The feedback from members working in the facility is overwhelmingly positive. They report that spaces are much brighter, providing better visibility in places that used to be very dark, and making the plant look and feel like a better place to work. In fact, the facility has already requested additional lamp retrofits in the plant due to the success and effectiveness they are witnessing after just a few weeks.

“The rooms look fantastic, it’s way easier to work and see, and instantly modernizes and brightens the entire area. It’s hard to believe, and somewhat embarrassing, that we lived with and just accepted the old lighting for so long,” the plant manager said.

Another worker added, “The new LED lamps make a drastic difference throughout our facility. With the new upgrade from the old yellow tinted HPS lights, some areas that once had a dark and gloomy feeling have now become areas where our employees want to work. It is amazing how something so little can improve the area and the site’s morale so much.”

Current’s Hazardous Location LED HID Replacement Lamps were the perfect solution for this manufacturing plant. Now, with better lighting, lower maintenance costs and reduced energy expenses, the facility can be safer and more productive.



# LED Lamps - Plug-in - Type A



## LED Lamps - Type A Plug-ins

Type A LED plug-in lamps are direct replacements for pin-based compact fluorescent lamps. These lamps operate from CFL ballasts. Horizontal and vertical orientation lamps are offered in order to minimize energy consumption and improve fixture efficiency. Choose the lamp orientation that suits the application.



# LED Lamps - Plug-in - Type A



## Catalog Logic:

### Bulb Shape:

Bulb shape followed by its size (the maximum diameter of the bulb expressed in eighths of an inch).

### Watts:

Nominal Lamp Watts on ballast

### Lumens:

Light output (as defined by FTC Lamp Label Rules)

### Color Rendering Index (CRI or R):

An indication of the ability of the lamp to render object colors in a normal natural way. The higher the number (0-100), the better the color appearance.

### Dimmable:

Indicates whether a lamp is dimmable or not

### Base Type:

ANSI Base

### Order Code:

Use the order code when ordering to ensure that you receive the exact product you require

### MOL (in):

Maximum Overall Length in inches

### Carton Quantity:

Number of lamps packed in a carton

### Description:

Lamp Model Description

### Color Temperature (K):

A measure of the visual "warmth" or "coolness" of the light from the lamp. The higher the value, the whiter or "cooler" the light appears.

### Wattage Replacement:

Wattage of Traditional Lamp the LED Lamp is meant to replace

### Additional Information:

Typical application and/or other important information

### Location Rating:

Location Rating as defined for LED Lamps by UL 1993

### DLC:

Indicates whether product is listed on the DesignLights Consortium Qualified Products List

### Rated Life L70:

Hours of operation the lamp will provide before reaching 70% of its original lumen output

| Bulb Shape            | Base Type  | Lamp Watts | Order Code | Description    | Carton Qty <sup>2</sup> | MOL (in) | Lumens (Initial) | Color Temp (Initial) | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | Dimmable | DLC <sup>4</sup> | Location Rating <sup>3</sup> | Additional Information <sup>4</sup>         |
|-----------------------|------------|------------|------------|----------------|-------------------------|----------|------------------|----------------------|-----|---------------------|-----------------------------------|----------|------------------|------------------------------|---------------------------------------------|
| Vertical Type A 4-pin |            |            |            |                |                         |          |                  |                      |     |                     |                                   |          |                  |                              |                                             |
| Plug-In               | G24q/GX24q | 9          | 33994      | LED9G24Q-H/827 | 6                       | 5.31     | 1100             | 2700K                | 80  | 13/18/26            | 50,000                            | -        | S-6PKGMC         | Damp                         | Requires Electronic Ballast, Fully Enclosed |

## LED9GX24Q-H/827

Wattage

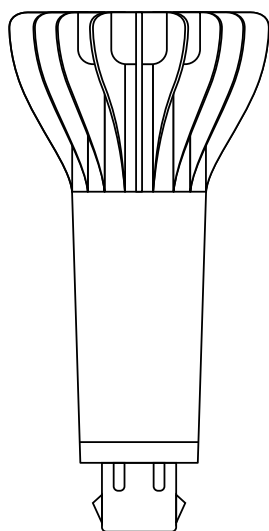
Base

Orientation (H = Horizontal, V = Vertical)

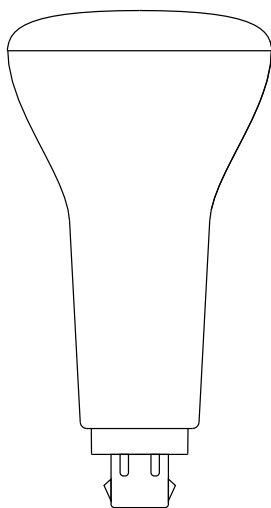
CCT (27 = 2700K)

CRI (8 = 80)

## Lamp Drawings (not drawn to scale)

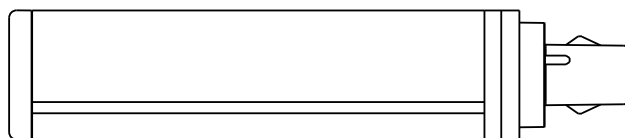


Type A  
GX24q

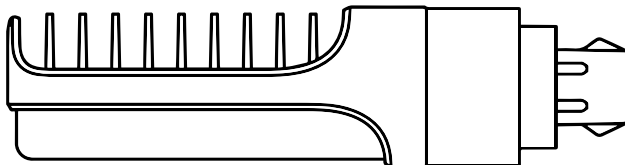


Type A  
G24q

Type A  
G24d



Type A  
G24q

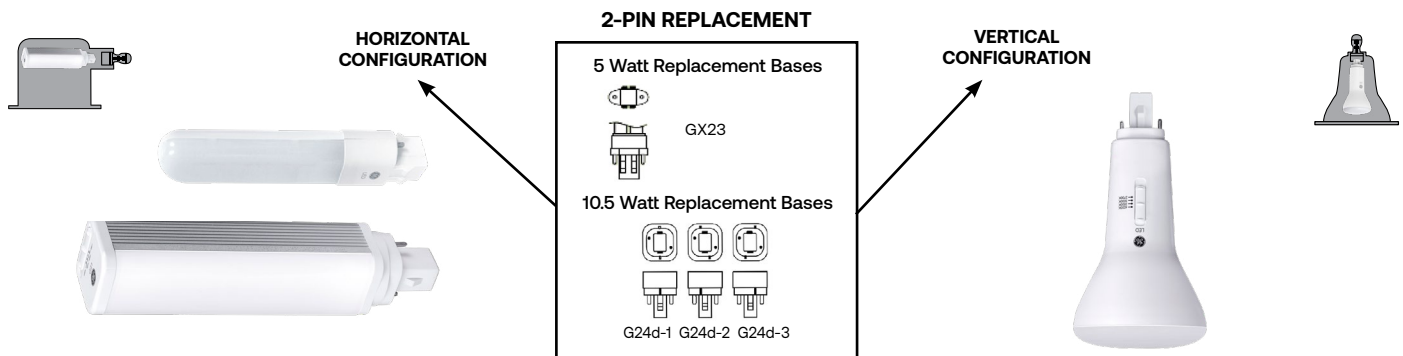




# LED Lamps - Plug-in - Type A



## Type A - 2-pin Plug-ins



## Selectable SpectraChoice™ 2-pin Plug-in Lamps - Type A

| Bulb Shape                          | Base Type | Lamp Watts | Order Code | Description        | Carton Qty <sup>2</sup> | MOL (In) | Lumens (Initial)*             | Color Temp* (Initial)             | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | DLC <sup>4</sup> ID <sup>4</sup> | Location Rating <sup>3</sup> | Additional Information <sup>^</sup>                                                                            |
|-------------------------------------|-----------|------------|------------|--------------------|-------------------------|----------|-------------------------------|-----------------------------------|-----|---------------------|-----------------------------------|----------------------------------|------------------------------|----------------------------------------------------------------------------------------------------------------|
| <b>Vertical Type A G24d 2-pin</b>   |           |            |            |                    |                         |          |                               |                                   |     |                     |                                   |                                  |                              |                                                                                                                |
| <b>Plug-In</b>                      | G24d      | 10.5       | 93300091   | LED1G24d-V/8SC-4PK | 24                      | 6.2      | 1000<br>1100<br>1100<br>1100* | 2700K<br>3000K<br>3500K<br>4000K* | 80  | 13/18/26            | 50,000                            | -                                | Damp                         | SpectraChoice™ Selectable Color Temperature (4000K Default), Requires Magnetic Ballast, Fully Enclosed, 4 pack |
| <b>Horizontal Type A G24d 2-Pin</b> |           |            |            |                    |                         |          |                               |                                   |     |                     |                                   |                                  |                              |                                                                                                                |
| <b>Plug-In</b>                      | G24d      | 10.5       | 93300090   | LED1G24d-H/8SC-4PK | 24                      | 6.6      | 1000<br>1100<br>1100<br>1100* | 2700K<br>3000K<br>3500K<br>4000K* | 80  | 13/18/26            | 50,000                            | -                                | Damp                         | SpectraChoice™ Selectable Color Temperature (4000K Default), Requires Magnetic Ballast, Fully Enclosed, 4 pack |

## 2-pin Plug-in Lamps - Type A

| Bulb Shape               | Base Type | Lamp Watts | Order Code | Description  | Carton Qty <sup>2</sup> | MOL (In) | Lumens (Initial) | Color Temp (Initial) | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | DLC <sup>4</sup> ID <sup>4</sup> | Location Rating <sup>3</sup> | Additional Information <sup>^</sup>       |
|--------------------------|-----------|------------|------------|--------------|-------------------------|----------|------------------|----------------------|-----|---------------------|-----------------------------------|----------------------------------|------------------------------|-------------------------------------------|
| <b>Type A GX23 2-pin</b> |           |            |            |              |                         |          |                  |                      |     |                     |                                   |                                  |                              |                                           |
| <b>Plug-In</b>           | GX23      | 5          | 91404      | LED5GX23/827 | 6                       | 6.7      | 500              | 2700K                | 80  | 13                  | 50,000                            | -                                | Damp                         | Requires Magnetic Ballast, Fully Enclosed |
|                          | GX23      | 5          | 91405      | LED5GX23/830 | 6                       | 6.7      | 530              | 3000K                | 80  | 13                  | 50,000                            | -                                | Damp                         | Requires Magnetic Ballast, Fully Enclosed |
|                          | GX23      | 5          | 91407      | LED5GX23/835 | 6                       | 6.7      | 545              | 3500K                | 80  | 13                  | 50,000                            | -                                | Damp                         | Requires Magnetic Ballast, Fully Enclosed |
|                          | GX23      | 5          | 91408      | LED5GX23/840 | 6                       | 6.7      | 560              | 4000K                | 80  | 13                  | 50,000                            | -                                | Damp                         | Requires Magnetic Ballast, Fully Enclosed |
|                          | GX23      | 5          | 91410      | LED5GX23/850 | 6                       | 6.7      | 565              | 5000K                | 80  | 13                  | 50,000                            | -                                | Damp                         | Requires Magnetic Ballast, Fully Enclosed |

<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

<sup>2</sup> Minimum order quantity = Carton Qty

<sup>3</sup> UL 1993 Environmental Requirements for LED LAMPS

Damp Location - Exterior or interior location that is normally or periodically subject to condensation of moisture in, on, or adjacent to electrical equipment, including partially protected locations

<sup>4</sup> DLC® does not have a category for two-pin plug-in lamps

\* Default wattage and color temperature settings noted by "\*" in tables above.

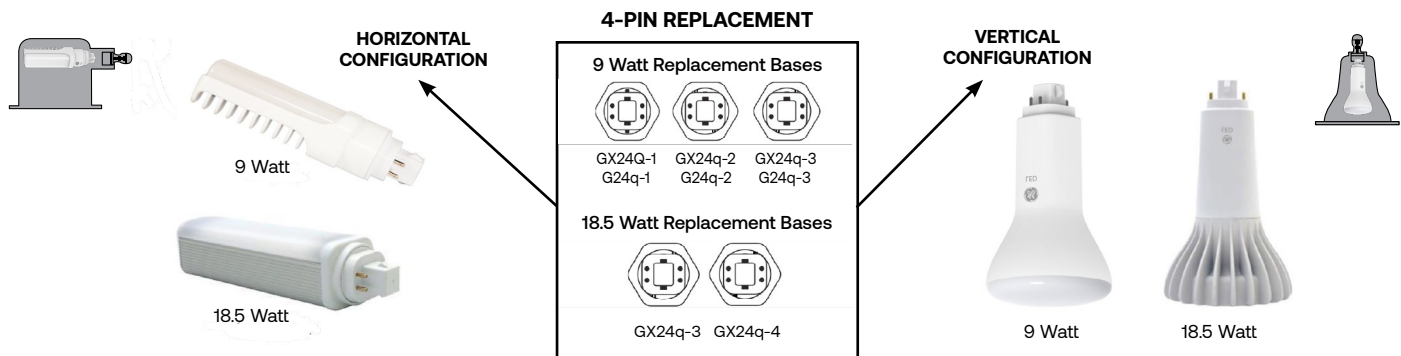
<sup>^</sup> Check ballast compatibility at LED.com/LED2pin-compatibility



# LED Lamps - Plug-in - Type A



## Type A - 4-pin Plug-ins



## Selectable SpectraChoice™ 4-pin Plug-in Lamps - Type A

| Bulb Shape                     | Base Type  | Lamp Watts | Order Code | Description        | Carton Qty <sup>2</sup> | MOL (In) | Lumens (Initial)*             | Color Temp* (Initial)             | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | DLC <sup>3</sup> ID <sup>4</sup> | Location Rating <sup>3</sup> | Additional Information <sup>4</sup>                                                                                    |
|--------------------------------|------------|------------|------------|--------------------|-------------------------|----------|-------------------------------|-----------------------------------|-----|---------------------|-----------------------------------|----------------------------------|------------------------------|------------------------------------------------------------------------------------------------------------------------|
| <b>Vertical Type A 4-pin</b>   |            |            |            |                    |                         |          |                               |                                   |     |                     |                                   |                                  |                              |                                                                                                                        |
| Plug-In                        | G24q/GX24q | 9          | 93300089   | LED9G24q-V/8SC-4PK | 24                      | 5.9      | 1000<br>1100<br>1100<br>1100  | 2700K<br>3000K<br>3500K<br>4000K* | 80  | 13/18/26            | 50,000                            | S-WU5YE2                         | Damp                         | SpectraChoice™<br>Selectable Color Temperature (4000K Default),<br>Requires Electronic Ballast, Fully Enclosed, 4 pack |
| Plug-In                        | GX24q      | 18.5       | 93314806   | LED19GX24q-V/8SC   | 12                      | 6.5      | 1850<br>1850<br>1850<br>1850* | 2700K<br>3000K<br>3500K<br>4000K* | 80  | 32/42               | 50,000                            | -                                | Damp                         | SpectraChoice™<br>Selectable Color Temperature (4000K Default),<br>Requires Electronic Ballast                         |
| <b>Horizontal Type A 4-pin</b> |            |            |            |                    |                         |          |                               |                                   |     |                     |                                   |                                  |                              |                                                                                                                        |
| Plug-In                        | GX24q      | 18.5       | 93314804   | LED19GX24q-H/8SC   | 12                      | 6.8      | 1850<br>1850<br>1850<br>1850* | 2700K<br>3000K<br>3500K<br>4000K* | 80  | 32/42               | 50,000                            | -                                | Damp                         | SpectraChoice™<br>Selectable Color Temperature (4000K Default),<br>Requires Electronic Ballast                         |

## 4-pin Plug-in Lamps - Type A

| Bulb Shape                     | Base Type  | Lamp Watts | Order Code | Description    | Carton Qty <sup>2</sup> | MOL (In) | Lumens (Initial) | Color Temp (Initial) | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | DLC <sup>3</sup> ID <sup>4</sup> | Location Rating <sup>3</sup> | Additional Information <sup>4</sup>         |
|--------------------------------|------------|------------|------------|----------------|-------------------------|----------|------------------|----------------------|-----|---------------------|-----------------------------------|----------------------------------|------------------------------|---------------------------------------------|
| <b>Horizontal Type A 4-pin</b> |            |            |            |                |                         |          |                  |                      |     |                     |                                   |                                  |                              |                                             |
| Plug-In                        | G24q/GX24q | 9          | 33994      | LED9G24Q-H/827 | 6                       | 5.31     | 1100             | 2700K                | 80  | 13/18/26            | 50,000                            | S-6PKGMC                         | Damp                         | Requires Electronic Ballast, Fully Enclosed |
|                                | G24q/GX24q | 9          | 33997      | LED9G24Q-H/830 | 6                       | 5.31     | 1200             | 3000K                | 80  | 13/18/26            | 50,000                            | S-RVMHOC                         | Damp                         | Requires Electronic Ballast, Fully Enclosed |
|                                | G24q/GX24q | 9          | 33998      | LED9G24Q-H/835 | 6                       | 5.31     | 1200             | 3500K                | 80  | 13/18/26            | 50,000                            | S-HOEDLY                         | Damp                         | Requires Electronic Ballast, Fully Enclosed |
|                                | G24q/GX24q | 9          | 33999      | LED9G24Q-H/840 | 6                       | 5.31     | 1200             | 4000K                | 80  | 13/18/26            | 50,000                            | S-3FW29C                         | Damp                         | Requires Electronic Ballast, Fully Enclosed |

## High Lumen Biax 2G11 Plug-in Lamps - Type A

| Bulb Shape                           | Base Type | Lamp Watts | Order Code | Description      | Carton Qty <sup>2</sup> | MOL (In) | Lumens (Initial) | Color Temp (Initial) | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | DLC <sup>3</sup> ID <sup>4</sup> | Location Rating <sup>3</sup> | Additional Information <sup>4</sup> |
|--------------------------------------|-----------|------------|------------|------------------|-------------------------|----------|------------------|----------------------|-----|---------------------|-----------------------------------|----------------------------------|------------------------------|-------------------------------------|
| <b>High Lumen Biax Type A (HLBX)</b> |           |            |            |                  |                         |          |                  |                      |     |                     |                                   |                                  |                              |                                     |
| HLBX                                 | 2G11      | 17         | 39073      | LED172G11/830/10 | 10                      | 22.3     | 2150             | 3000K                | 80  | 40                  | 50,000                            | -                                | Damp                         | Instant or PRS Ballast              |
|                                      | 2G11      | 17         | 39074      | LED172G11/835/10 | 10                      | 22.3     | 2150             | 3500K                | 80  | 40                  | 50,000                            | -                                | Damp                         | Instant or PRS Ballast              |
|                                      | 2G11      | 17         | 39075      | LED172G11/840/10 | 10                      | 22.3     | 2200             | 4000K                | 80  | 40                  | 50,000                            | -                                | Damp                         | Instant or PRS Ballast              |
|                                      | 2G11      | 17         | 39076      | LED172G11/850/10 | 10                      | 22.3     | 2200             | 5000K                | 80  | 40                  | 50,000                            | -                                | Damp                         | Instant or PRS Ballast              |

<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

<sup>2</sup> Minimum order quantity = Carton Qty

<sup>3</sup> UL 1993 Environmental Requirements for LED LAMPS

Damp Location - Exterior or interior location that is normally or periodically subject to condensation of moisture in, on, or adjacent to electrical equipment, including partially protected locations

<sup>4</sup> Not all product variations on this page are DLC qualified. Visit [qpl.designlights.org/solid-state-lighting](http://qpl.designlights.org/solid-state-lighting) to confirm qualification.

<sup>5</sup> Lumen levels correspond with color temperature for selectable lamps

\* Default wattage and color temperature settings noted by "\*" in tables above.

\* Check ballast compatibility at [LED.com/LED4pin-compatibility](http://LED.com/LED4pin-compatibility) for G24q/GX24q lamps. Check ballast compatibility at [LED.com/LED2G11-compatibility](http://LED.com/LED2G11-compatibility) for 2G11 lamps.

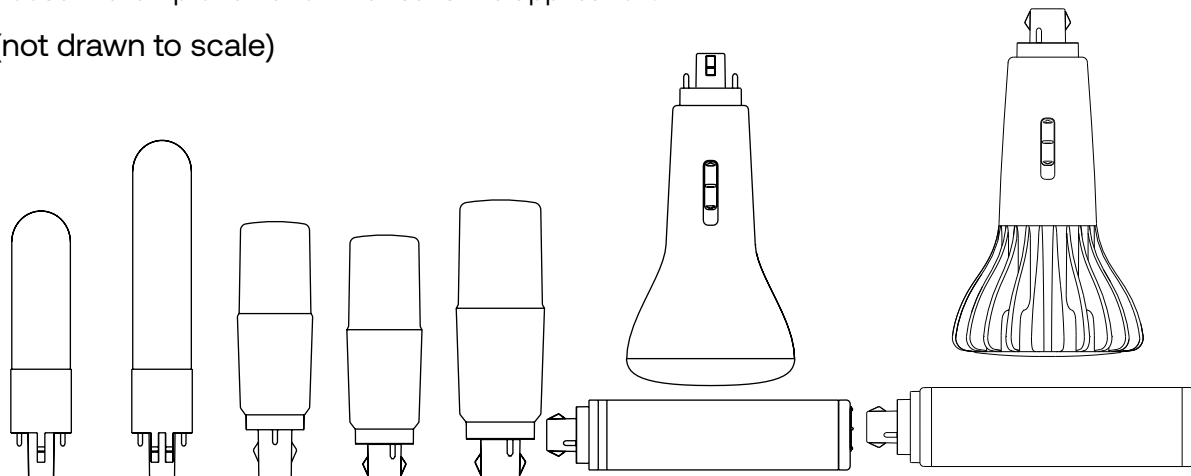
# LED Lamps – Plug-in – Type B



## LED Lamps – Type B Plug-ins

Type B LED plug-in lamps offer the opportunity to replace pin-based compact fluorescent lamps and eliminate costs related to the ballasts. Type B lamps operate from mains voltage. The fixture is re-wired to bypass the ballast. Horizontal and vertical orientation lamps are offered in order to minimize energy consumption and improve fixture efficiency. Choose the lamp orientation that suits the application.

### Lamp Drawings (not drawn to scale)

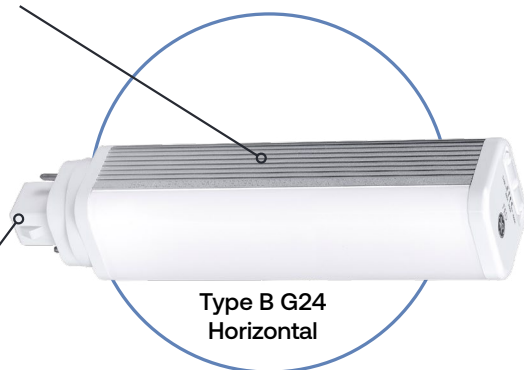


| Base               | G23                              | GX23                                      | GX23-2                           | G24                              | G24                              | G24                                                | G24                                                |
|--------------------|----------------------------------|-------------------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------------------------|----------------------------------------------------|
| Fits In Sockets    | G23                              | GX23                                      | GX23-2                           | G24d<br>G24q<br>GX24q            | G24d<br>G24q<br>GX24q            | G24d<br>G24q<br>GX24q                              | G24d<br>G24q<br>GX24q                              |
| Input Voltage      | 120-277                          | 120-277                                   | 120-277                          | 120-277                          | 120-277                          | 120-347                                            | 120-347                                            |
| Color Temperature  | 2700K<br>3000K<br>3500K<br>4000K | 2700K<br>3000K<br>3500K<br>4000K<br>5000K | 2700K<br>3000K<br>3500K<br>4000K | 2700K<br>3000K<br>3500K<br>4000K | 2700K<br>3000K<br>3500K<br>4000K | SpectraChoice™<br>2700K<br>3000K<br>3500K<br>4000K | SpectraChoice™<br>2700K<br>3000K<br>3500K<br>4000K |
| Rated Life (L70)   | 50,000                           | 50,000                                    | 20,000                           | 20,000                           | 50,000                           | 50,000                                             | 50,000                                             |
| Lumens             | 500                              | 500                                       | 800                              | 850                              | 1200                             | 1100                                               | 1850                                               |
| Light Distribution | Directional                      | Directional                               | Omnidirectional                  | Omnidirectional                  | Omnidirectional                  | Directional                                        | Directional                                        |
| Wattage            | 5W                               | 5W                                        | 7.5W                             | 7.5W                             | 10W                              | 10.5W                                              | 18W                                                |
| CFL Equivalent     | 7/9W                             | 13W                                       | 13W                              | 13W                              | 18W                              | 13/18/26W                                          | 32/42W                                             |

Heat sink for thermal management enables long life

Plastic lens provides excellent diffusion

Horizontal orientation lamps feature a rotatable base



Type B G24 Horizontal



Type B G24 Vertical

G24 Type B plug-in bases can be used in a variety of sockets



# LED Lamps - Plug-in - Type B



## Catalog Logic:

### Bulb Shape:

Bulb shape followed by its size (the maximum diameter of the bulb expressed in eighths of an inch).

### Watts:

Energy Used (as defined by FTC Lamp Label Rules)

### Base Type:

ANSI Base

### Order Code:

Use the order code when ordering to ensure that you receive the exact product you require

### Volts:

Lamp data is based on operation at rated voltage

### Description:

Lamp Model Description

### Carton Quantity:

Number of lamps packed in a carton

### Selectable Color Temp. (K):

A selectable switch to choose "warmth" or "coolness" of the light from the lamp. The higher the value, the whiter or "cooler" the light appears.

### Lumens:

Light output (as defined by FTC Lamp Label Rules)

### MOL (in):

Maximum Overall Length in inches

### Color Rendering Index (CRI or R):

An indication of the ability of the lamp to render object colors in a normal natural way. The higher the number (0-100), the better the color appearance.

### Rated Life L70:

Hours of operation the lamp will provide before reaching 70% of its original lumen output

### DLC:

Indicates whether product is listed on the DesignLights Consortium Qualified Products List

### Location Rating:

Location Rating as defined for LED Lamps by UL 1993

### Additional Information:

Typical application and/or other important information

| Bulb Shape                                                                                            | Base Type | Watts | Order Code | Description | Volts | Carton Qty <sup>2</sup> | MOL (in) | Lumens (Initial) <sup>5</sup> | Selectable Color Temp. (Initial) <sup>*</sup> | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | DLC <sup>4</sup> | Location Rating <sup>3</sup> | Additional Information |
|-------------------------------------------------------------------------------------------------------|-----------|-------|------------|-------------|-------|-------------------------|----------|-------------------------------|-----------------------------------------------|-----|---------------------|-----------------------------------|------------------|------------------------------|------------------------|
| Vertical Type B 2-pin - Fits in G24d and G24q sockets - Selectable Color Temperature - Ballast Bypass |           |       |            |             |       |                         |          |                               |                                               |     |                     |                                   |                  |                              |                        |

### Plug-In

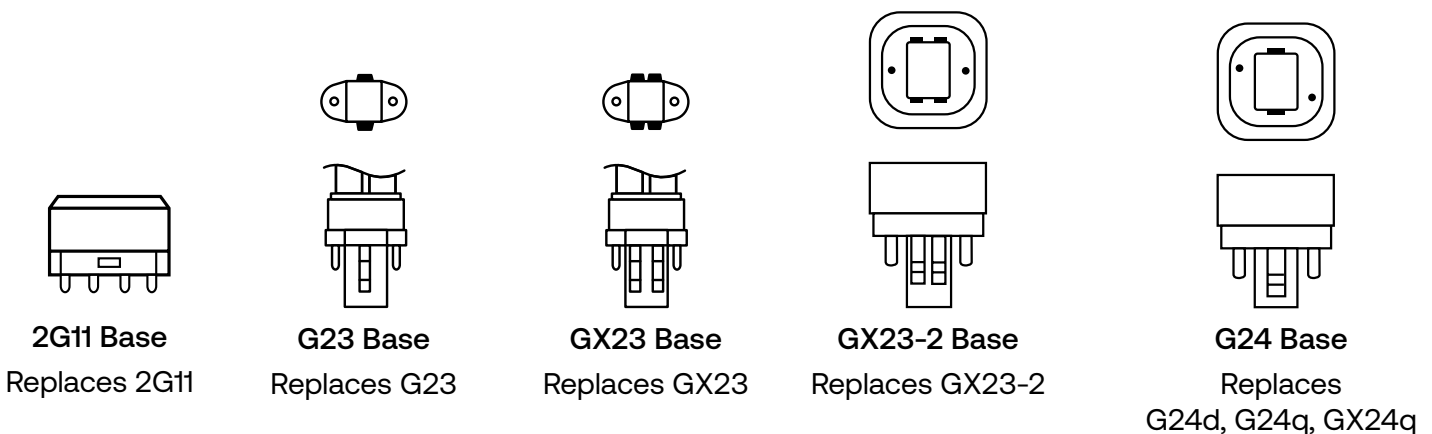


|     |      |          |                             |         |    |     |      |       |    |          |        |   |      |                                                                                                              |  |
|-----|------|----------|-----------------------------|---------|----|-----|------|-------|----|----------|--------|---|------|--------------------------------------------------------------------------------------------------------------|--|
| G24 | 10.5 | 93300088 | LED11BG24-V/8SC/120-347-4PK | 120-347 | 24 | 5.9 | 1000 | 2700K | 80 | 13/18/26 | 50,000 | - | Damp | SpectraChoice™ (4000K Default)<br>Selectable Color Temperature,<br>Ballast Bypass, Fully Enclosed,<br>4 pack |  |
|     |      |          |                             |         |    |     | 1100 | 3000K |    |          |        |   |      |                                                                                                              |  |
|     |      |          |                             |         |    |     | 1100 | 3500K |    |          |        |   |      |                                                                                                              |  |
|     |      |          |                             |         |    |     | 1100 | 4000K |    |          |        |   |      |                                                                                                              |  |

## LED11BG24-H/8SC/120-347-4PK



## Base Identification (not drawn to scale)



# LED Lamps - Plug-in - Type B



## LED Lamps - SpectraChoice™ Type B Plug-ins

SpectraChoice™ Type B Plug-in lamps feature built-in switches to select color temperature. Horizontal and vertical orientation lamps are offered in order to minimize energy consumption and improve fixture efficiency. Choose the lamp orientation that suits the application.



Spectra**Choice**™

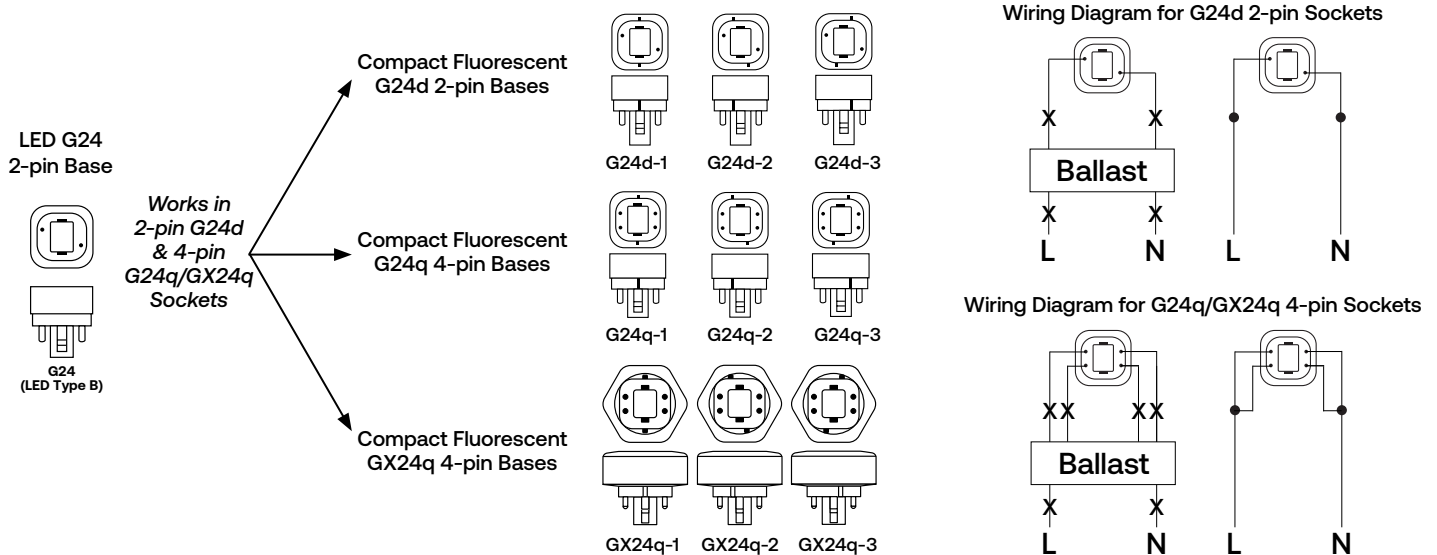




# LED Lamps - Plug-in - Type B



Type B LED plug-in lamps can be used in a variety of compact fluorescent sockets. By re-wiring the socket and eliminating concerns related to ballast compatibility, a single lamp can fit and operate in a wider variety of sockets. Type B LED plug-in lamp bases do not have exclusionary features related to specific wattages like CFL lamps do. A 2-pin G24 lamp can fit in 2-pin G24d or 4-pin G24q/GX24q sockets as shown below.



## Ballast Bypass Selectable SpectraChoice™ G24 Plug-in Lamps - Type B

|                                                                                                         |           |       |            |                             |         |                         |          |          |                   | Selectable Color Temp. (Initial)* | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | DLC <sup>3</sup> ID <sup>4</sup> | Location Rating <sup>3</sup> | Additional Information                                                                              |
|---------------------------------------------------------------------------------------------------------|-----------|-------|------------|-----------------------------|---------|-------------------------|----------|----------|-------------------|-----------------------------------|-----|---------------------|-----------------------------------|----------------------------------|------------------------------|-----------------------------------------------------------------------------------------------------|
| Bulb Shape                                                                                              | Base Type | Watts | Order Code | Description                 | Volts   | Carton Qty <sup>2</sup> | MOL (In) | MOD (In) | Lumens (Initial)* |                                   |     |                     |                                   |                                  |                              |                                                                                                     |
| Vertical Type B 2-pin - Fits in G24d and G24q sockets - Selectable Color Temperature - Ballast Bypass   |           |       |            |                             |         |                         |          |          |                   |                                   |     |                     |                                   |                                  |                              |                                                                                                     |
| Plug-In                                                                                                 |           |       |            |                             |         |                         |          |          |                   |                                   |     |                     |                                   |                                  |                              |                                                                                                     |
|                      | G24       | 10.5  | 93300088   | LED11BG24-V/8SC/120-347-4PK | 120-347 | 24                      | 5.9      | 3.1      | 1000              | 2700K                             | 80  | 13/18/26            | 50,000                            | -                                | Damp                         | SpectraChoice™ Selectable Color Temperature (4000K Default), Ballast Bypass, Fully Enclosed, 4 pack |
|                                                                                                         |           |       |            |                             |         |                         |          |          | 1100              | 3000K                             |     |                     |                                   |                                  |                              |                                                                                                     |
|                                                                                                         |           |       |            |                             |         |                         |          |          | 1100              | 3500K                             |     |                     |                                   |                                  |                              |                                                                                                     |
|                                                                                                         |           |       |            |                             |         |                         |          |          | 1100*             | 4000K*                            |     |                     |                                   |                                  |                              |                                                                                                     |
|                      | G24       | 18    | 93312489   | LED18BG24-V/8SC/120-347     | 120-347 | 12                      | 6.5      | 3.6      | 1850              | 2700K                             | 80  | 32/42               | 50,000                            | -                                | Damp                         | SpectraChoice™ Selectable Color Temperature (4000K Default), Ballast Bypass, Fully Enclosed         |
|                                                                                                         |           |       |            |                             |         |                         |          |          | 1850              | 3000K                             |     |                     |                                   |                                  |                              |                                                                                                     |
|                                                                                                         |           |       |            |                             |         |                         |          |          | 1850              | 3500K                             |     |                     |                                   |                                  |                              |                                                                                                     |
|                                                                                                         |           |       |            |                             |         |                         |          |          | 1850*             | 4000K*                            |     |                     |                                   |                                  |                              |                                                                                                     |
| Horizontal Type B 2-pin - Fits in G24d and G24q sockets - Selectable Color Temperature - Ballast Bypass |           |       |            |                             |         |                         |          |          |                   |                                   |     |                     |                                   |                                  |                              |                                                                                                     |
| Plug-In                                                                                                 |           |       |            |                             |         |                         |          |          |                   |                                   |     |                     |                                   |                                  |                              |                                                                                                     |
|                       | G24       | 10.5  | 93300087   | LED11BG24-H/8SC/120-347-4PK | 120-347 | 24                      | 6.4      | 1.9      | 1000              | 2700K                             | 80  | 13/18/26            | 50,000                            | -                                | Damp                         | SpectraChoice™ Selectable Color Temperature (4000K Default), Ballast Bypass, Fully Enclosed, 4 pack |
|                                                                                                         |           |       |            |                             |         |                         |          |          | 1100              | 3000K                             |     |                     |                                   |                                  |                              |                                                                                                     |
|                                                                                                         |           |       |            |                             |         |                         |          |          | 1100              | 3500K                             |     |                     |                                   |                                  |                              |                                                                                                     |
|                                                                                                         |           |       |            |                             |         |                         |          |          | 1100*             | 4000K*                            |     |                     |                                   |                                  |                              |                                                                                                     |
|                       | G24       | 18    | 93312525   | LED18BG24-H/8SC/120-347     | 120-347 | 12                      | 6.8      | 2.3      | 1850              | 2700K                             | 80  | 32/42               | 50,000                            | -                                | Damp                         | SpectraChoice™ Selectable Color Temperature (4000K Default), Ballast Bypass, Fully Enclosed         |
|                                                                                                         |           |       |            |                             |         |                         |          |          | 1850              | 3000K                             |     |                     |                                   |                                  |                              |                                                                                                     |
|                                                                                                         |           |       |            |                             |         |                         |          |          | 1850              | 3500K                             |     |                     |                                   |                                  |                              |                                                                                                     |
|                                                                                                         |           |       |            |                             |         |                         |          |          | 1850*             | 4000K*                            |     |                     |                                   |                                  |                              |                                                                                                     |

<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

<sup>2</sup> Minimum order quantity = Carton Qty

<sup>3</sup> UL 1993 Environmental Requirements for LED LAMPS

Damp Location - Exterior or interior location that is normally or periodically subject to condensation of moisture in, on, or adjacent to electrical equipment, including partially protected locations

<sup>4</sup> DLC® does not have a category for two-pin plug-in lamps

\* Default wattage and color temperature settings noted by "\*" in tables above.

# LED Lamps - Plug-in - Type B



**G24 Base**  
Replaces G24d & G24q

## Ballast Bypass Omnidirectional G24 Plug-in Lamps - Type B

| Bulb Shape                                                                           | Base Type | Watts | Order Code | Description         | Volts   | Carton Qty <sup>2</sup> | MOL (In) | MOD (In) | Lumens (Initial) | Color Temp. (Initial) | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | DLC <sup>4</sup> ID <sup>4</sup> | Location Rating <sup>3</sup> | Additional Information |
|--------------------------------------------------------------------------------------|-----------|-------|------------|---------------------|---------|-------------------------|----------|----------|------------------|-----------------------|-----|---------------------|-----------------------------------|----------------------------------|------------------------------|------------------------|
| <b>Omnidirectional Type B 2-pin - Fits in G24d and G24q sockets - Ballast Bypass</b> |           |       |            |                     |         |                         |          |          |                  |                       |     |                     |                                   |                                  |                              |                        |
| <b>Plug-In</b>                                                                       | G24       | 7.5   | 93300068   | LED8BG24-O/827-4PK  | 120-277 | 24                      | 4.4      | 1.5      | 800              | 2700K                 | 80  | 13                  | 20,000                            | -                                | Damp                         | Fully Enclosed, 4 pack |
|                                                                                      | G24       | 7.5   | 93300069   | LED8BG24-O/830-4PK  | 120-277 | 24                      | 4.4      | 1.5      | 850              | 3000K                 | 80  | 13                  | 20,000                            | -                                | Damp                         | Fully Enclosed, 4 pack |
|                                                                                      | G24       | 7.5   | 93300080   | LED8BG24-O/835-4PK  | 120-277 | 24                      | 4.4      | 1.5      | 850              | 3500K                 | 80  | 13                  | 20,000                            | -                                | Damp                         | Fully Enclosed, 4 pack |
|                                                                                      | G24       | 7.5   | 93300081   | LED8BG24-O/840-4PK  | 120-277 | 24                      | 4.4      | 1.5      | 850              | 4000K                 | 80  | 13                  | 20,000                            | -                                | Damp                         | Fully Enclosed, 4 pack |
| <b>Omnidirectional Type B 2-pin - Fits in G24d and G24q sockets - Ballast Bypass</b> |           |       |            |                     |         |                         |          |          |                  |                       |     |                     |                                   |                                  |                              |                        |
| <b>Plug-In</b>                                                                       | G24       | 10    | 93300082   | LED10BG24-O/827-4PK | 120-277 | 24                      | 5.4      | 1.8      | 1100             | 2700K                 | 80  | 18                  | 50,000                            | -                                | Damp                         | Fully Enclosed, 4 pack |
|                                                                                      | G24       | 10    | 93300083   | LED10BG24-O/830-4PK | 120-277 | 24                      | 5.4      | 1.8      | 1200             | 3000K                 | 80  | 18                  | 50,000                            | -                                | Damp                         | Fully Enclosed, 4 pack |
|                                                                                      | G24       | 10    | 93300084   | LED10BG24-O/835-4PK | 120-277 | 24                      | 5.4      | 1.8      | 1200             | 3500K                 | 80  | 18                  | 50,000                            | -                                | Damp                         | Fully Enclosed, 4 pack |
|                                                                                      | G24       | 10    | 93300086   | LED10BG24-O/840-4PK | 120-277 | 24                      | 5.4      | 1.8      | 1200             | 4000K                 | 80  | 18                  | 50,000                            | -                                | Damp                         | Fully Enclosed, 4 pack |



**GX23-2 Base**  
Replaces GX23-2

## Ballast Bypass Omnidirectional GX23-2 Plug-in Lamps - Type B

| Bulb Shape                                                    | Base Type | Watts | Order Code | Description       | Volts   | Carton Qty <sup>2</sup> | MOL (In) | MOD (In) | Lumens (Initial) | Color Temp. (Initial) | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | DLC <sup>4</sup> ID <sup>4</sup> | Location Rating <sup>3</sup> | Additional Information         |
|---------------------------------------------------------------|-----------|-------|------------|-------------------|---------|-------------------------|----------|----------|------------------|-----------------------|-----|---------------------|-----------------------------------|----------------------------------|------------------------------|--------------------------------|
| <b>Omnidirectional GX23-2 Plug-in Type B - Ballast Bypass</b> |           |       |            |                   |         |                         |          |          |                  |                       |     |                     |                                   |                                  |                              |                                |
| <b>Plug-In</b>                                                | GX23-2    | 7.5   | 93312531   | LED8BGX23-2-O/827 | 120-277 | 24                      | 4.7      | 1.5      | 800              | 2700K                 | 80  | 13                  | 20,000                            | -                                | Damp                         | Ballast Bypass, Fully Enclosed |
|                                                               | GX23-2    | 7.5   | 93312537   | LED8BGX23-2-O/830 | 120-277 | 24                      | 4.7      | 1.5      | 800              | 3000K                 | 80  | 13                  | 20,000                            | -                                | Damp                         | Ballast Bypass, Fully Enclosed |
|                                                               | GX23-2    | 7.5   | 93312543   | LED8BGX23-2-O/835 | 120-277 | 24                      | 4.7      | 1.5      | 800              | 3500K                 | 80  | 13                  | 20,000                            | -                                | Damp                         | Ballast Bypass, Fully Enclosed |
|                                                               | GX23-2    | 7.5   | 93312549   | LED8BGX23-2-O/840 | 120-277 | 24                      | 4.7      | 1.5      | 800              | 4000K                 | 80  | 13                  | 20,000                            | -                                | Damp                         | Ballast Bypass, Fully Enclosed |

<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

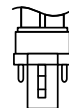
<sup>2</sup> Minimum order quantity = Carton Qty

<sup>3</sup> UL 1993 Environmental Requirements for LED LAMPS

<sup>4</sup> Damp Location - Exterior or interior location that is normally or periodically subject to condensation of moisture in, on, or adjacent to electrical equipment, including partially protected locations

<sup>5</sup> DLC<sup>®</sup> does not have a category for two-pin plug-in lamps

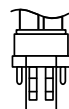
# LED Lamps - Plug-in - Type B



**G23 Base**  
Replaces G23

## Ballast Bypass G23 Plug-in Lamps - Type B

| Bulb Shape                                 | Base Type | Watts | Order Code | Description  | Volts   | Carton Qty <sup>2</sup> | MOL (In) | Lumens (Initial) | Color Temp. (Initial) | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | DLC <sup>3</sup> ID <sup>4</sup> | Location Rating <sup>3</sup> | Additional Information         |
|--------------------------------------------|-----------|-------|------------|--------------|---------|-------------------------|----------|------------------|-----------------------|-----|---------------------|-----------------------------------|----------------------------------|------------------------------|--------------------------------|
| <b>G23 Plug-In Type B - Ballast Bypass</b> |           |       |            |              |         |                         |          |                  |                       |     |                     |                                   |                                  |                              |                                |
| <b>Plug-In</b>                             | G23       | 5     | 93312465   | LED5BG23/827 | 120-277 | 24                      | 5.4      | 500              | 2700K                 | 80  | 7/9                 | 50,000                            | -                                | Damp                         | Ballast Bypass, Fully Enclosed |
|                                            | G23       | 5     | 93312471   | LED5BG23/830 | 120-277 | 24                      | 5.4      | 500              | 3000K                 | 80  | 7/9                 | 50,000                            | -                                | Damp                         | Ballast Bypass, Fully Enclosed |
|                                            | G23       | 5     | 93312477   | LED5BG23/835 | 120-277 | 24                      | 5.4      | 500              | 3500K                 | 80  | 7/9                 | 50,000                            | -                                | Damp                         | Ballast Bypass, Fully Enclosed |
|                                            | G23       | 5     | 93312483   | LED5BG23/840 | 120-277 | 24                      | 5.4      | 500              | 4000K                 | 80  | 7/9                 | 50,000                            | -                                | Damp                         | Ballast Bypass, Fully Enclosed |



**GX23 Base**  
Replaces GX23

## Ballast Bypass GX23 Plug-in Lamps - Type B

| Bulb Shape                                  | Base Type | Watts | Order Code | Description   | Volts   | Carton Qty <sup>2</sup> | MOL (In) | Lumens (Initial) | Color Temp. (Initial) | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | DLC <sup>3</sup> ID <sup>4</sup> | Location Rating <sup>3</sup> | Additional Information         |
|---------------------------------------------|-----------|-------|------------|---------------|---------|-------------------------|----------|------------------|-----------------------|-----|---------------------|-----------------------------------|----------------------------------|------------------------------|--------------------------------|
| <b>GX23 Plug-In Type B - Ballast Bypass</b> |           |       |            |               |         |                         |          |                  |                       |     |                     |                                   |                                  |                              |                                |
| <b>Plug-In</b>                              | GX23      | 5     | 93312495   | LED5BGX23/827 | 120-277 | 24                      | 6.8      | 500              | 2700K                 | 80  | 13                  | 50,000                            | -                                | Damp                         | Ballast Bypass, Fully Enclosed |
|                                             | GX23      | 5     | 93312501   | LED5BGX23/830 | 120-277 | 24                      | 6.8      | 500              | 3000K                 | 80  | 13                  | 50,000                            | -                                | Damp                         | Ballast Bypass, Fully Enclosed |
|                                             | GX23      | 5     | 93312507   | LED5BGX23/835 | 120-277 | 24                      | 6.8      | 500              | 3500K                 | 80  | 13                  | 50,000                            | -                                | Damp                         | Ballast Bypass, Fully Enclosed |
|                                             | GX23      | 5     | 93312513   | LED5BGX23/840 | 120-277 | 24                      | 6.8      | 500              | 4000K                 | 80  | 13                  | 50,000                            | -                                | Damp                         | Ballast Bypass, Fully Enclosed |
|                                             | GX23      | 5     | 93312519   | LED5BGX23/850 | 120-277 | 24                      | 6.8      | 500              | 5000K                 | 80  | 13                  | 50,000                            | -                                | Damp                         | Ballast Bypass, Fully Enclosed |

<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

<sup>2</sup> Minimum order quantity = Carton Qty

<sup>3</sup> UL 1993 Environmental Requirements for LED LAMPS

Damp Location - Exterior or interior location that is normally or periodically subject to condensation of moisture in, on, or adjacent to electrical equipment, including partially protected locations

<sup>4</sup> Not all product variations on this page are DLC qualified. DLC does not have a category for two-pin plug-in lamps. Visit [qpl.designlights.org/solid-state-lighting](http://qpl.designlights.org/solid-state-lighting) to confirm qualification.

# LED Lamps – Plug-in – Type B

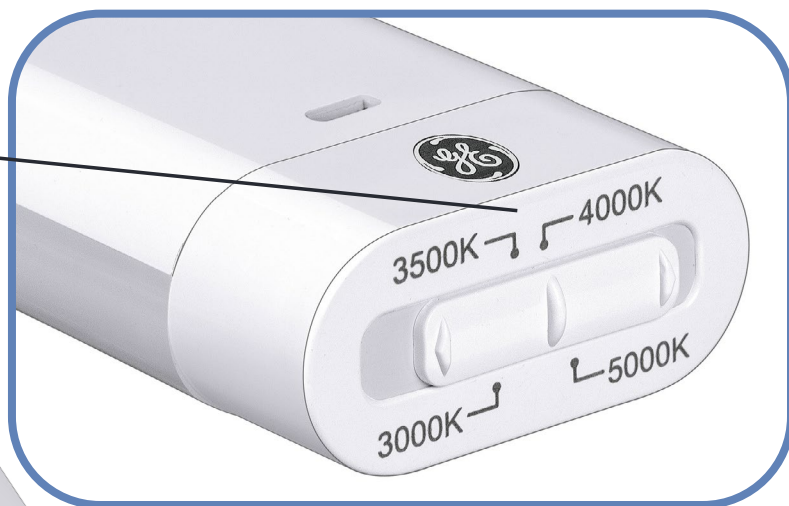


## LED Lamps – SpectraChoice™ Type B Plug-ins

SpectraChoice™ Type B Plug-in lamps feature built-in switches to select color temperature. Horizontal and vertical orientation lamps are offered in order to minimize energy consumption and improve fixture efficiency. Choose the lamp orientation that suits the application.



Spectra**Choice**™





# LED Lamps - Plug-in - Type B



## SpectraChoice™ Ballast Bypass High Lumen Biax® 2G11 Plug-In Lamps - Type B

| Bulb Shape                                      | Base Type | Watts | Order Code | Description    | Volts   | Carton Qty <sup>2</sup> | MOL (In) | Lumens (Initial)* | Selectable Color Temp (Initial)*  | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | DLC <sup>4</sup> | Location Rating <sup>3</sup> | Additional Information |
|-------------------------------------------------|-----------|-------|------------|----------------|---------|-------------------------|----------|-------------------|-----------------------------------|-----|---------------------|-----------------------------------|------------------|------------------------------|------------------------|
| High Lumen Biax® Type B (HLBX) - Ballast Bypass |           |       |            |                |         |                         |          |                   |                                   |     |                     |                                   |                  |                              |                        |
| HLBX                                            | 2G11      | 9     | 93318810   | LED9B2G11/8SC  | 120-277 | 24                      | 9.1      | 1000              | 3000K<br>3500K<br>4000K*<br>5000K | 80  | 18                  | 50,000                            | -                | Damp                         |                        |
|                                                 | 2G11      | 10    | 93318816   | LED10B2G11/8SC | 120-277 | 24                      | 12.8     | 1200              | 3000K<br>3500K<br>4000K*<br>5000K | 80  | 24                  | 50,000                            | -                | Damp                         |                        |
|                                                 | 2G11      | 16    | 93318822   | LED16B2G11/8SC | 120-277 | 24                      | 16.6     | 2000              | 3000K<br>3500K<br>4000K*<br>5000K | 80  | 36                  | 50,000                            | -                | Damp                         |                        |
|                                                 | 2G11      | 17    | 93318828   | LED17B2G11/8SC | 120-277 | 24                      | 22.5     | 2200              | 3000K<br>3500K<br>4000K*<br>5000K | 80  | 40                  | 50,000                            | -                | Damp                         |                        |

## Ballast Bypass High Lumen Biax 2G11 Plug-in Lamps - Type B

| Bulb Shape                                     | Base Type | Watts | Order Code | Description    | Volts   | Carton Qty <sup>2</sup> | MOL (In) | Lumens (Initial) | Color Temp (Initial) | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | DLC <sup>4</sup> | Location Rating <sup>3</sup> | Additional Information |
|------------------------------------------------|-----------|-------|------------|----------------|---------|-------------------------|----------|------------------|----------------------|-----|---------------------|-----------------------------------|------------------|------------------------------|------------------------|
| High Lumen Biax Type B (HLBX) - Ballast Bypass |           |       |            |                |         |                         |          |                  |                      |     |                     |                                   |                  |                              |                        |
| HLBX                                           | 2G11      | 17    | 93136025   | LED17B2G11/830 | 120-277 | 10                      | 22.3     | 2100             | 3000K                | 80  | 40                  | 50,000                            | -                | Damp                         |                        |
|                                                | 2G11      | 17    | 93136086   | LED17B2G11/835 | 120-277 | 10                      | 22.3     | 2100             | 3500K                | 80  | 40                  | 50,000                            | -                | Damp                         |                        |
|                                                | 2G11      | 17    | 93136087   | LED17B2G11/840 | 120-277 | 10                      | 22.3     | 2200             | 4000K                | 80  | 40                  | 50,000                            | -                | Damp                         |                        |

<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

<sup>2</sup> Minimum order quantity = Carton Qty

<sup>3</sup> UL 1993 Environmental Requirements for LED LAMPS

Damp Location - Exterior or interior location that is normally or periodically subject to condensation of moisture in, on, or adjacent to electrical equipment, including partially protected locations

<sup>4</sup> Not all product variations on this page are DLC qualified. Visit [qpl.designlights.org/solid-state-lighting](http://qpl.designlights.org/solid-state-lighting) to confirm qualification.

\* Default wattage and color temperature settings noted by "\*" in tables above.

# LED Lamps – Directional



## LED Lamps – PARs

Current offers LED PAR lamps featuring the exclusive Visual Comfort Lens design. With advanced optics and reduced glare, these lamps offer the light qualities desired by merchants for retail applications.

High output and value lines are also available to serve applications needing higher lumens or when advanced optics are not required.



# LED Lamps - Directional



## Catalog Logic:

### Bulb Shape:

Bulb shape followed by its size (the maximum diameter of the bulb expressed in eighths of an inch).

### Watts:

Energy Used (as defined by FTC Lamp Label Rules)

### Lumens:

Light output (as defined by FTC Lamp Label Rules)

### Color Rendering Index (CRI or R):

An indication of the ability of the lamp to render object colors in a normal natural way. The higher the number (0-100), the better the color appearance.

### Dimmable:

Indicates whether a lamp is dimmable or not

### Base Type:

ANSI Base

### Order Code:

Use the order code when ordering to ensure that you receive the exact product you require

### Description:

Lamp Model Description

### Volts:

Lamp data is based on operation at rated voltage

### MOL (in):

Maximum Overall Length in inches

### Carton Quantity:

Number of lamps packed in a carton

### Color Temperature (K):

A measure of the visual "warmth" or "coolness" of the light from the lamp. The higher the value, the whiter or "cooler" the light appears.

### Wattage Replacement:

Wattage of Traditional Lamp the LED Lamp is meant to replace

### Rated Life L70:

Hours of operation the lamp will provide before reaching 70% of its original lumen output

### Location Rating:

Location Rating as defined for LED Lamps by UL 1993

### Additional Information:

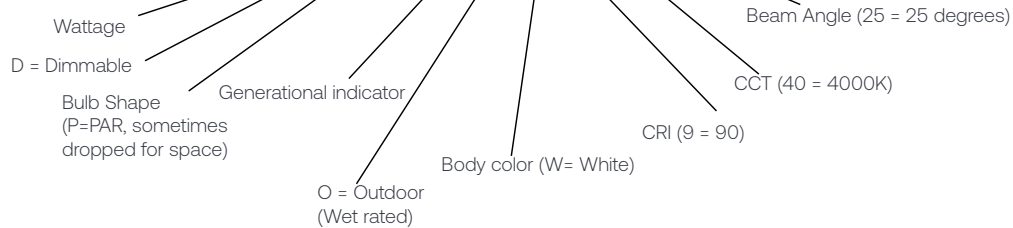
Typical application and/or other important information

**Beam Angle:**  
Degrees

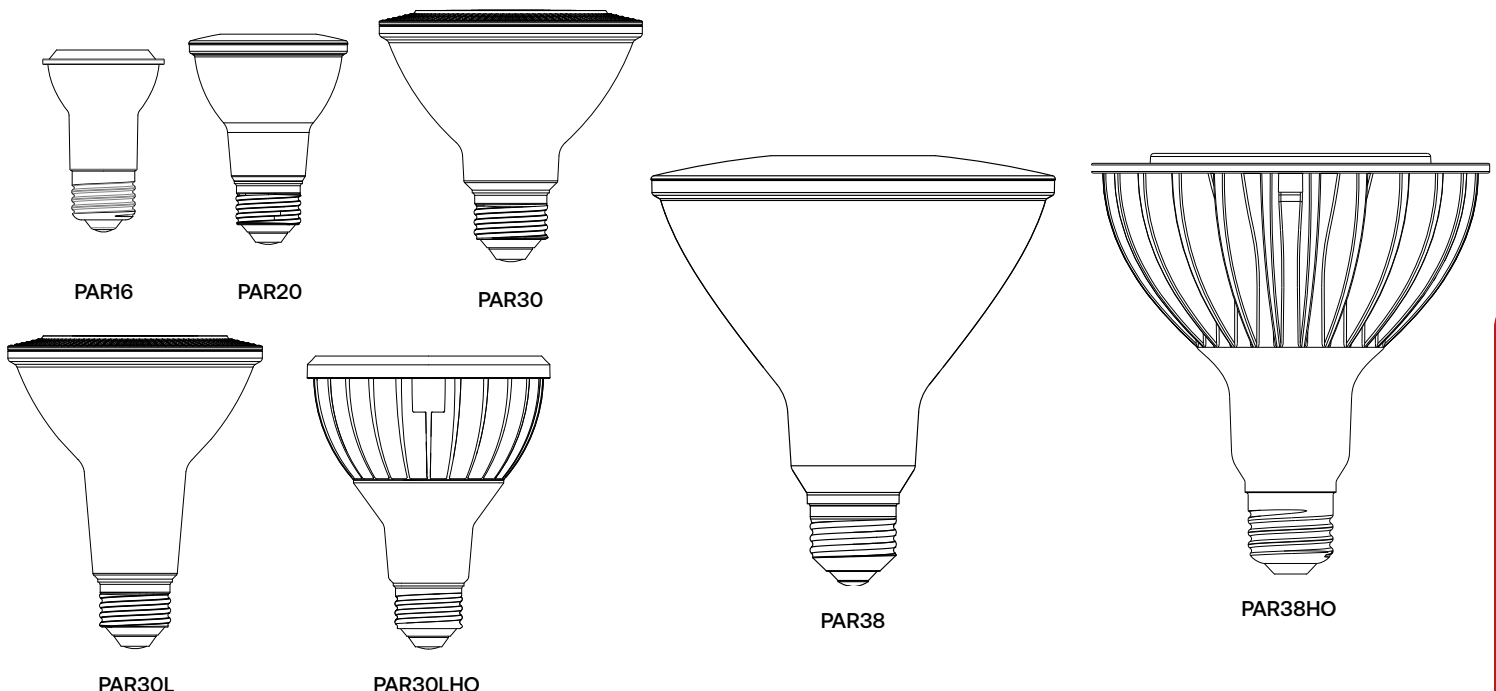
**Housing Color:**  
Color of lamp body

| Bulb Shape | Base Type | Watts | Order Code | Description        | Volts | Carton Qty <sup>2</sup> | MOL (in) | Lumens (Initial) | CBCP | Color Temp. (Initial) | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | Dimmable | Location Rating <sup>3</sup> | Beam Angle | Housing Color | Additional Information |
|------------|-----------|-------|------------|--------------------|-------|-------------------------|----------|------------------|------|-----------------------|-----|---------------------|-----------------------------------|----------|------------------------------|------------|---------------|------------------------|
| PAR38      | E26       | 18    | 93311937   | LED18DP38ROW940/25 | 120   | 6                       | 5.2      | 1700             | 6500 | 4000K                 | 90  | 120                 | 25,000                            | Yes      | Wet                          | 25°        | White         | CEC Title 20           |

## LED18DP38ROW940/25



## Lamp Drawings (not drawn to scale)



# LED Lamps - Directional



## Directional Lamps (PAR16 - PAR20)

| Bulb Shape           | Base Type | Watts | Order Code | Description         | Volts | Carton Qty <sup>2</sup> | MOL (in) | Lumens (Initial) | CBCP | Color Temp. (Initial) | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | Dimmable | Location Rating <sup>3</sup> | Beam Angle | Housing Color | Additional Information |
|----------------------|-----------|-------|------------|---------------------|-------|-------------------------|----------|------------------|------|-----------------------|-----|---------------------|-----------------------------------|----------|------------------------------|------------|---------------|------------------------|
| <b>Compact PAR16</b> |           |       |            |                     |       |                         |          |                  |      |                       |     |                     |                                   |          |                              |            |               |                        |
| PAR16                | E26       | 6     | 93305603   | LED6DP16W830/35-6PK | 120   | 24                      | 3.0      | 550              | 1000 | 3000K                 | 80  | 60                  | 25,000                            | Yes      | Damp                         | 35°        | White         | 6 pack                 |
| <b>Compact PAR20</b> |           |       |            |                     |       |                         |          |                  |      |                       |     |                     |                                   |          |                              |            |               |                        |
| PAR20                | E26       | 7     | 93349      | LED7DP203B827/20    | 120   | 6                       | 3.5      | 500              | 3600 | 2700K                 | 80  | 50                  | 25,000                            | Yes      | Damp                         | 20°        | Black         |                        |
|                      | E26       | 7     | 93360      | LED7DP203W827/20    | 120   | 6                       | 3.5      | 500              | 3600 | 2700K                 | 80  | 50                  | 25,000                            | Yes      | Damp                         | 20°        | White         |                        |
|                      | E26       | 7     | 93311901   | LED7DP200B927/35    | 120   | 6                       | 3.5      | 500              | 966  | 2700K                 | 90  | 50                  | 25,000                            | Yes      | Wet                          | 35°        | Black         | CEC Title 20           |
|                      | E26       | 7     | 93311900   | LED7DP200W927/35    | 120   | 6                       | 3.5      | 500              | 966  | 2700K                 | 90  | 50                  | 25,000                            | Yes      | Wet                          | 35°        | White         | CEC Title 20           |
|                      | E26       | 7     | 93327      | LED7DP203B830/20    | 120   | 6                       | 3.5      | 520              | 3600 | 3000K                 | 80  | 50                  | 25,000                            | Yes      | Damp                         | 20°        | Black         |                        |
|                      | E26       | 7     | 93347      | LED7DP203W830/20    | 120   | 6                       | 3.5      | 520              | 3600 | 3000K                 | 80  | 50                  | 25,000                            | Yes      | Damp                         | 20°        | White         |                        |
|                      | E26       | 7     | 93311903   | LED7DP200B930/35    | 120   | 6                       | 3.5      | 520              | 966  | 3000K                 | 90  | 50                  | 25,000                            | Yes      | Wet                          | 35°        | Black         | CEC Title 20           |
|                      | E26       | 7     | 93311902   | LED7DP200W930/35    | 120   | 6                       | 3.5      | 520              | 966  | 3000K                 | 90  | 50                  | 25,000                            | Yes      | Wet                          | 35°        | White         | CEC Title 20           |

## Directional Lamps (PAR20 - High Output)

| Bulb Shape                  | Base Type | Watts | Order Code | Description      | Volts | Carton Qty <sup>2</sup> | MOL (in) | Lumens (Initial) | CBCP | Color Temp. (Initial) | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | Dimmable | Location Rating <sup>3</sup> | Beam Angle | Housing Color | Additional Information |
|-----------------------------|-----------|-------|------------|------------------|-------|-------------------------|----------|------------------|------|-----------------------|-----|---------------------|-----------------------------------|----------|------------------------------|------------|---------------|------------------------|
| <b>PAR 20 - High Output</b> |           |       |            |                  |       |                         |          |                  |      |                       |     |                     |                                   |          |                              |            |               |                        |
| PAR20                       | E26       | 10    | 93318877   | LED10DP20W930/35 | 120   | 6                       | 3.5      | 900              | 2300 | 3000K                 | 90  | 100                 | 25,000                            | Yes      | Damp                         | 35°        | White         | CEC Title 20           |

## Directional Lamps (PAR30 - Visual Comfort Lens)

| Bulb Shape                                               | Base Type | Watts | Order Code | Description        | Volts | Carton Qty <sup>2</sup> | MOL (in) | Lumens (Initial) | CBCP | Color Temp. (Initial) | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | Dimmable | Location Rating <sup>3</sup> | Beam Angle | Housing Color | Additional Information |
|----------------------------------------------------------|-----------|-------|------------|--------------------|-------|-------------------------|----------|------------------|------|-----------------------|-----|---------------------|-----------------------------------|----------|------------------------------|------------|---------------|------------------------|
| <b>PAR30 - Low Glare - Visual Comfort Lens</b>           |           |       |            |                    |       |                         |          |                  |      |                       |     |                     |                                   |          |                              |            |               |                        |
| PAR30                                                    | E26       | 12    | 93311923   | LED12DP30RW927/25  | 120   | 6                       | 3.6      | 1050             | 3800 | 2700K                 | 90  | 75                  | 25,000                            | Yes      | Damp                         | 25°        | White         | CEC Title 20           |
|                                                          | E26       | 12    | 42133      | LED12DP30RW82725   | 120   | 6                       | 3.74     | 1000             | 4700 | 2700K                 | 80  | 75                  | 25,000                            | Yes      | Damp                         | 25°        | White         |                        |
|                                                          | E26       | 12    | 93311925   | LED12DP30RB927/40  | 120   | 6                       | 3.6      | 1050             | 2200 | 2700K                 | 90  | 75                  | 25,000                            | Yes      | Damp                         | 40°        | Black         | CEC Title 20           |
|                                                          | E26       | 12    | 93311924   | LED12DP30RW927/40  | 120   | 6                       | 3.6      | 1050             | 2200 | 2700K                 | 90  | 75                  | 25,000                            | Yes      | Damp                         | 40°        | White         | CEC Title 20           |
|                                                          | E26       | 12    | 93311926   | LED12DP30RW930/25  | 120   | 6                       | 3.6      | 1050             | 3900 | 3000K                 | 90  | 75                  | 25,000                            | Yes      | Damp                         | 25°        | White         | CEC Title 20           |
|                                                          | E26       | 12    | 93311927   | LED12DP30RW930/40  | 120   | 6                       | 3.6      | 1050             | 2200 | 3000K                 | 90  | 75                  | 25,000                            | Yes      | Damp                         | 40°        | White         | CEC Title 20           |
| <b>PAR30 Long Neck - Low Glare - Visual Comfort Lens</b> |           |       |            |                    |       |                         |          |                  |      |                       |     |                     |                                   |          |                              |            |               |                        |
| PAR30L                                                   | E26       | 12    | 93312005   | LED12DP30LRW927/25 | 120   | 6                       | 4.7      | 1050             | 3800 | 2700K                 | 90  | 75                  | 25,000                            | Yes      | Damp                         | 25°        | White         | CEC Title 20           |
|                                                          | E26       | 12    | 93312006   | LED12DP30LRW927/40 | 120   | 6                       | 4.7      | 1050             | 2200 | 2700K                 | 90  | 75                  | 25,000                            | Yes      | Damp                         | 40°        | White         | CEC Title 20           |
|                                                          | E26       | 12    | 93312007   | LED12DP30LRW930/25 | 120   | 6                       | 4.7      | 1050             | 3900 | 3000K                 | 90  | 75                  | 25,000                            | Yes      | Damp                         | 25°        | White         | CEC Title 20           |
|                                                          | E26       | 12    | 93312008   | LED12DP30LRW930/40 | 120   | 6                       | 4.7      | 1050             | 2200 | 3000K                 | 90  | 75                  | 25,000                            | Yes      | Damp                         | 40°        | White         | CEC Title 20           |
|                                                          | E26       | 12    | 93316394   | LED12DP30LRB930/40 | 120   | 6                       | 4.7      | 1050             | 2200 | 3000K                 | 90  | 75                  | 25,000                            | Yes      | Damp                         | 40°        | Black         | CEC Title 20           |

## Directional Lamps (PAR30 - Value)

| Bulb Shape                        | Base Type | Watts | Order Code | Description              | Volts | Carton Qty <sup>2</sup> | MOL (in) | Lumens (Initial) | CBCP | Color Temp. (Initial) | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | Dimmable | Location Rating <sup>3</sup> | Beam Angle | Housing Color | Additional Information |
|-----------------------------------|-----------|-------|------------|--------------------------|-------|-------------------------|----------|------------------|------|-----------------------|-----|---------------------|-----------------------------------|----------|------------------------------|------------|---------------|------------------------|
| <b>PAR30 - TIR Lens</b>           |           |       |            |                          |       |                         |          |                  |      |                       |     |                     |                                   |          |                              |            |               |                        |
| PAR30                             | E26       | 12    | 93153892   | LED12DP30VOW830/25-4PK   | 120   | 16                      | 3.66     | 850              | 3400 | 3000K                 | 80  | 75                  | 15,000                            | Yes      | Wet                          | 25°        | White         | 4 pack                 |
| <b>PAR30 Long Neck - TIR Lens</b> |           |       |            |                          |       |                         |          |                  |      |                       |     |                     |                                   |          |                              |            |               |                        |
| PAR30L                            | E26       | 12    | 93153891   | LED12DP30LVOW830/ 25-4PK | 120   | 16                      | 4.69     | 850              | 3400 | 3000K                 | 80  | 75                  | 15,000                            | Yes      | Wet                          | 25°        | White         | 4 pack                 |

## Directional Lamps (PAR30 - High Output)

| Bulb Shape                                                                    | Base Type | Watts | Order Code | Description       | Volts   | Carton Qty <sup>2</sup> | MOL (in) | Lumens (Initial) | CBCP  | Color Temp. (Initial) | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | Dimmable | Location Rating <sup>3</sup> | Beam Angle | Housing Color | Additional Information |
|-------------------------------------------------------------------------------|-----------|-------|------------|-------------------|---------|-------------------------|----------|------------------|-------|-----------------------|-----|---------------------|-----------------------------------|----------|------------------------------|------------|---------------|------------------------|
| <b>PAR 30 Long Neck - High Output - Universal 120-277V - Finned Heat Sink</b> |           |       |            |                   |         |                         |          |                  |       |                       |     |                     |                                   |          |                              |            |               |                        |
| PAR30L                                                                        | E26       | 18    | 75089      | LED18P30LW83015   | 120-277 | 6                       | 4.6      | 1800             | 15500 | 3000K                 | 80  | 75                  | 25,000                            | -        | Damp                         | 15°        | White         |                        |
|                                                                               | E26       | 18    | 75091      | LED18P30LW83025   | 120-277 | 6                       | 4.6      | 1800             | 7000  | 3000K                 | 80  | 75                  | 25,000                            | -        | Damp                         | 25°        | White         |                        |
|                                                                               | E26       | 18    | 75065      | LED18P30LW93015   | 120-277 | 6                       | 4.6      | 1400             | 12500 | 3000K                 | 90  | 75                  | 25,000                            | -        | Damp                         | 15°        | White         |                        |
|                                                                               | E26       | 18    | 75078      | LED18P30LW93025   | 120-277 | 6                       | 4.6      | 1400             | 5000  | 3000K                 | 90  | 75                  | 25,000                            | -        | Damp                         | 25°        | White         |                        |
| <b>PAR 30 Long Neck - High Output - Smooth Heat Sink</b>                      |           |       |            |                   |         |                         |          |                  |       |                       |     |                     |                                   |          |                              |            |               |                        |
| PAR30L                                                                        | E26       | 20    | 93318893   | LED20DP30LW930/35 | 120     | 6                       | 4.7      | 2100             | 3750  | 3000K                 | 90  | 150                 | 25,000                            | Yes      | Damp                         | 35°        | White         | CEC Title 20           |

<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

<sup>2</sup> Minimum order quantity = Carton Qty

<sup>3</sup> UL 1993 Environmental Requirements for LED LAMPS

Damp Location - Exterior or interior location that is normally or periodically subject to condensation of moisture in, on, or adjacent to electrical equipment, including partially protected locations  
Wet Location - Location in which water or other liquid can drip, splash, or flow on or against electrical equipment.

When installing outdoors, ensure the socket used is suitably Listed for use in Wet locations and socket gaskets provided by the manufacturer are correctly attached.

^ GE Lighting, a Savant company, lamp, distributed Current Lighting Solutions, LLC.



# LED Lamps - Directional



## Directional Lamps (PAR38 - Visual Comfort Lens)

| Bulb Shape                                     | Base Type | Watts | Order Code | Description          | Volts | Carton Qty <sup>2</sup> | MOL (in) | Lumens (Initial) | CBCP  | Color Temp. (Initial) | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | Dim-able | Location Rating <sup>3</sup> | Beam Angle | Housing Color | Additional Information |
|------------------------------------------------|-----------|-------|------------|----------------------|-------|-------------------------|----------|------------------|-------|-----------------------|-----|---------------------|-----------------------------------|----------|------------------------------|------------|---------------|------------------------|
| <b>PAR38 - Low Glare - Visual Comfort Lens</b> |           |       |            |                      |       |                         |          |                  |       |                       |     |                     |                                   |          |                              |            |               |                        |
| <b>PAR38</b>                                   | E26       | 12    | 93311944   | LED12DP38ROW927/25   | 120   | 6                       | 5.2      | 1050             | 5400  | 2700K                 | 90  | 100                 | 25,000                            | Yes      | Wet                          | 25°        | White         | CEC Title 20           |
|                                                | E26       | 12    | 93311945   | LED12DP38ROW927/40   | 120   | 6                       | 5.2      | 1050             | 2300  | 2700K                 | 90  | 100                 | 25,000                            | Yes      | Wet                          | 40°        | White         | CEC Title 20           |
|                                                | E26       | 12    | 93311946   | LED12DP38ROW930/25   | 120   | 6                       | 5.2      | 1050             | 5400  | 3000K                 | 90  | 100                 | 25,000                            | Yes      | Wet                          | 25°        | White         | CEC Title 20           |
|                                                | E26       | 12    | 93311947   | LED12DP38ROW930/40   | 120   | 6                       | 5.2      | 1050             | 2300  | 3000K                 | 90  | 100                 | 25,000                            | Yes      | Wet                          | 40°        | White         | CEC Title 20           |
|                                                | E26       | 12    | 92973      | LED12DP38OW3830/40   | 120   | 6                       | 5.31     | 1050             | 2300  | 3000K                 | 80  | 100                 | 25,000                            | Yes      | Wet                          | 40°        | White         |                        |
|                                                | E26       | 12    | 93318835   | LED12DPAR38ROW927/25 | 120   | 6                       | 5.2      | 1300             | 5800  | 2700K                 | 90  | 100                 | 25,000                            | Yes      | Wet                          | 25°        | White         | CEC Title 20           |
|                                                | E26       | 12    | 93318841   | LED12DPAR38ROW927/40 | 120   | 6                       | 5.2      | 1300             | 3000  | 2700K                 | 90  | 100                 | 25,000                            | Yes      | Wet                          | 40°        | White         | CEC Title 20           |
|                                                | E26       | 12    | 93318847   | LED12DPAR38ROW930/25 | 120   | 6                       | 5.2      | 1300             | 5800  | 3000K                 | 90  | 100                 | 25,000                            | Yes      | Wet                          | 25°        | White         | CEC Title 20           |
|                                                | E26       | 12    | 93318853   | LED12DPAR38ROW930/40 | 120   | 6                       | 5.2      | 1300             | 3000  | 3000K                 | 90  | 100                 | 25,000                            | Yes      | Wet                          | 40°        | White         | CEC Title 20           |
|                                                | E26       | 16    | 93313077   | LED16DP38ROW930/15   | 120   | 6                       | 5.2      | 1550             | 15000 | 3000K                 | 90  | 120                 | 25,000                            | Yes      | Wet                          | 15°        | White         | CEC Title 20           |
|                                                | E26       | 16    | 93313079   | LED16DP38ROW930/15   | 120   | 6                       | 5.2      | 1800             | 18000 | 3000K                 | 80  | 120                 | 25,000                            | Yes      | Wet                          | 15°        | White         |                        |
|                                                | E26       | 16    | 93313081   | LED16DP38ROW930/15   | 120   | 6                       | 5.2      | 1800             | 18000 | 3000K                 | 80  | 120                 | 25,000                            | Yes      | Wet                          | 15°        | Silver        |                        |
|                                                | E26       | 18    | 92923      | LED18DP38W3927/25    | 120   | 6                       | 5.31     | 1250             | 4900  | 2700K                 | 92  | 100                 | 25,000                            | Yes      | Damp                         | 25°        | White         |                        |
|                                                | E26       | 18    | 93311929   | LED18DP38ROW927/25   | 120   | 6                       | 5.2      | 1550             | 5800  | 2700K                 | 90  | 120                 | 25,000                            | Yes      | Wet                          | 25°        | White         | CEC Title 20           |
|                                                | E26       | 18    | 93311930   | LED18DP38ROW927/40   | 120   | 6                       | 5.2      | 1550             | 3700  | 2700K                 | 90  | 150                 | 25,000                            | Yes      | Wet                          | 40°        | White         | CEC Title 20           |
|                                                | E26       | 18    | 92961      | LED18DP38W3830/15    | 120   | 6                       | 5.31     | 1750             | 20000 | 3000K                 | 81  | 150                 | 25,000                            | Yes      | Damp                         | 15°        | White         |                        |
|                                                | E26       | 18    | 93311932   | LED18DP38ROW930/25   | 120   | 6                       | 5.2      | 1550             | 6000  | 3000K                 | 90  | 120                 | 25,000                            | Yes      | Wet                          | 25°        | Black         | CEC Title 20           |
|                                                | E26       | 18    | 93311931   | LED18DP38ROW930/25   | 120   | 6                       | 5.2      | 1550             | 6000  | 3000K                 | 90  | 120                 | 25,000                            | Yes      | Wet                          | 25°        | White         | CEC Title 20           |
|                                                | E26       | 18    | 93311933   | LED18DP38ROW930/25   | 120   | 6                       | 5.2      | 1550             | 6000  | 3000K                 | 90  | 120                 | 25,000                            | Yes      | Wet                          | 25°        | Silver        | CEC Title 20           |
|                                                | E26       | 18    | 93311934   | LED18DP38ROW930/40   | 120   | 6                       | 5.2      | 1550             | 3800  | 3000K                 | 90  | 150                 | 25,000                            | Yes      | Wet                          | 40°        | White         | CEC Title 20           |
|                                                | E26       | 18    | 93316388   | LED18DP38ROW930/40   | 120   | 6                       | 5.2      | 1550             | 3800  | 3000K                 | 90  | 150                 | 25,000                            | Yes      | Wet                          | 40°        | Black         | CEC Title 20           |
|                                                | E26       | 18    | 93311935   | LED18DP38ROW935/25   | 120   | 6                       | 5.2      | 1700             | 6500  | 3500K                 | 90  | 120                 | 25,000                            | Yes      | Wet                          | 25°        | White         | CEC Title 20           |
|                                                | E26       | 18    | 93311936   | LED18DP38ROW935/40   | 120   | 6                       | 5.2      | 1700             | 4200  | 3500K                 | 90  | 150                 | 25,000                            | Yes      | Wet                          | 40°        | White         | CEC Title 20           |
|                                                | E26       | 18    | 93311937   | LED18DP38ROW940/25   | 120   | 6                       | 5.2      | 1700             | 6500  | 4000K                 | 90  | 120                 | 25,000                            | Yes      | Wet                          | 25°        | White         | CEC Title 20           |
|                                                | E26       | 18    | 93311938   | LED18DP38ROW940/40   | 120   | 6                       | 5.2      | 1700             | 4200  | 4000K                 | 90  | 150                 | 25,000                            | Yes      | Wet                          | 40°        | White         | CEC Title 20           |
|                                                | E26       | 18    | 93311939   | LED18DP38ROW950/25   | 120   | 6                       | 5.2      | 1700             | 6500  | 5000K                 | 90  | 120                 | 25,000                            | Yes      | Wet                          | 25°        | White         | CEC Title 20           |
|                                                | E26       | 18    | 93311940   | LED18DP38ROW950/40   | 120   | 6                       | 5.2      | 1700             | 4200  | 5000K                 | 90  | 150                 | 25,000                            | Yes      | Wet                          | 40°        | White         | CEC Title 20           |

## Directional Lamps (PAR38 - High Output)

| Bulb Shape                                                | Base Type | Watts | Order Code | Description       | Volts   | Carton Qty <sup>2</sup> | MOL (in) | Lumens (Initial) | CBCP  | Color Temp. (Initial) | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | Dim-able | Location Rating <sup>3</sup> | Beam Angle | Housing Color | Additional Information |
|-----------------------------------------------------------|-----------|-------|------------|-------------------|---------|-------------------------|----------|------------------|-------|-----------------------|-----|---------------------|-----------------------------------|----------|------------------------------|------------|---------------|------------------------|
| <b>PAR 38 - High Output - TIR Lens - Smooth Housing</b>   |           |       |            |                   |         |                         |          |                  |       |                       |     |                     |                                   |          |                              |            |               |                        |
| <b>PAR38</b>                                              | E26       | 27    | 93314739   | LED27DP38OW830/15 | 120     | 6                       | 5.3      | 3100             | 20000 | 3000K                 | 80  | 250                 | 25,000                            | Yes      | Wet                          | 15°        | White         |                        |
|                                                           | E26       | 27    | 93314751   | LED27DP38OW830/25 | 120     | 6                       | 5.3      | 3100             | 10000 | 3000K                 | 80  | 250                 | 25,000                            | Yes      | Wet                          | 25°        | White         |                        |
|                                                           | E26       | 27    | 93314753   | LED27DP38OW830/40 | 120     | 6                       | 5.3      | 3100             | 5000  | 3000K                 | 80  | 250                 | 25,000                            | Yes      | Wet                          | 40°        | White         |                        |
|                                                           | E26       | 27    | 93314755   | LED27DP38OW835/15 | 120     | 6                       | 5.3      | 3100             | 20000 | 3500K                 | 80  | 250                 | 25,000                            | Yes      | Wet                          | 15°        | White         |                        |
|                                                           | E26       | 27    | 93314757   | LED27DP38OW835/25 | 120     | 6                       | 5.3      | 3100             | 10000 | 3500K                 | 80  | 250                 | 25,000                            | Yes      | Wet                          | 25°        | White         |                        |
|                                                           | E26       | 27    | 93314759   | LED27DP38OW835/40 | 120     | 6                       | 5.3      | 3100             | 5000  | 3500K                 | 80  | 250                 | 25,000                            | Yes      | Wet                          | 40°        | White         |                        |
| <b>PAR 38 - High Output - TIR Lens - Finned Heat Sink</b> |           |       |            |                   |         |                         |          |                  |       |                       |     |                     |                                   |          |                              |            |               |                        |
| <b>PAR38</b>                                              | E26       | 32    | 88810      | LED32DP38W830/40  | 120     | 6                       | 5.12     | 3000             | 6000  | 3000K                 | 80  | 250                 | 25,000                            | Yes      | Wet                          | 40°        | White         |                        |
|                                                           | E26       | 32    | 30233      | LED32DP38W835/15  | 120     | 6                       | 5.12     | 3100             | 25000 | 3500K                 | 80  | 250                 | 25,000                            | Yes      | Wet                          | 15°        | White         |                        |
|                                                           | E26       | 32    | 30237      | LED32DP38W835/25  | 120     | 6                       | 5.12     | 3100             | 13000 | 3500K                 | 80  | 250                 | 25,000                            | Yes      | Wet                          | 25°        | White         |                        |
|                                                           | E26       | 32    | 30239      | LED32DP38W835/40  | 120     | 6                       | 5.12     | 3100             | 6000  | 3500K                 | 80  | 250                 | 25,000                            | Yes      | Wet                          | 40°        | White         |                        |
|                                                           | E26       | 32    | 20109      | LED32P38W830/15   | 120-277 | 6                       | 5.12     | 3000             | 25000 | 3000K                 | 80  | 250                 | 25,000                            | -        | Wet                          | 15°        | White         |                        |
|                                                           | E26       | 32    | 20130      | LED32P38W830/25   | 120-277 | 6                       | 5.12     | 3000             | 13000 | 3000K                 | 80  | 250                 | 25,000                            | -        | Wet                          | 25°        | White         |                        |
|                                                           | E26       | 32    | 20137      | LED32P38W830/40   | 120-277 | 6                       | 5.12     | 3000             | 6000  | 3000K                 | 80  | 250                 | 25,000                            | -        | Wet                          | 40°        | White         |                        |

## Directional Lamps (PAR38 - Value)

| Bulb Shape              | Base Type | Watts | Order Code | Description            | Volts | Carton Qty <sup>2</sup> | MOL (in) | Lumens (Initial) | CBCP | Color Temp. (Initial) | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | Dim-able | Location Rating <sup>3</sup> | Beam Angle | Housing Color | Additional Information |
|-------------------------|-----------|-------|------------|------------------------|-------|-------------------------|----------|------------------|------|-----------------------|-----|---------------------|-----------------------------------|----------|------------------------------|------------|---------------|------------------------|
| <b>PAR38 - TIR Lens</b> |           |       |            |                        |       |                         |          |                  |      |                       |     |                     |                                   |          |                              |            |               |                        |
|                         | E26       | 15    | 93153880   | LED15DP38VOW830/35-4PK | 120   | 16                      | 5.31     | 1300             | 2300 | 3000K                 | 80  | 90                  | 15,000                            | Yes      | Wet                          | 35°        | White         | 4 pack                 |

<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

<sup>2</sup> Minimum order quantity = Carton Qty

<sup>3</sup> UL 1993 Environmental Requirements for LED LAMPS

Damp Location - Exterior or interior location that is normally or periodically subject to condensation of moisture in, on, or adjacent to electrical equipment, including partially protected locations

Wet Location - Location in which water or other liquid can drip, splash, or flow on or against electrical equipment

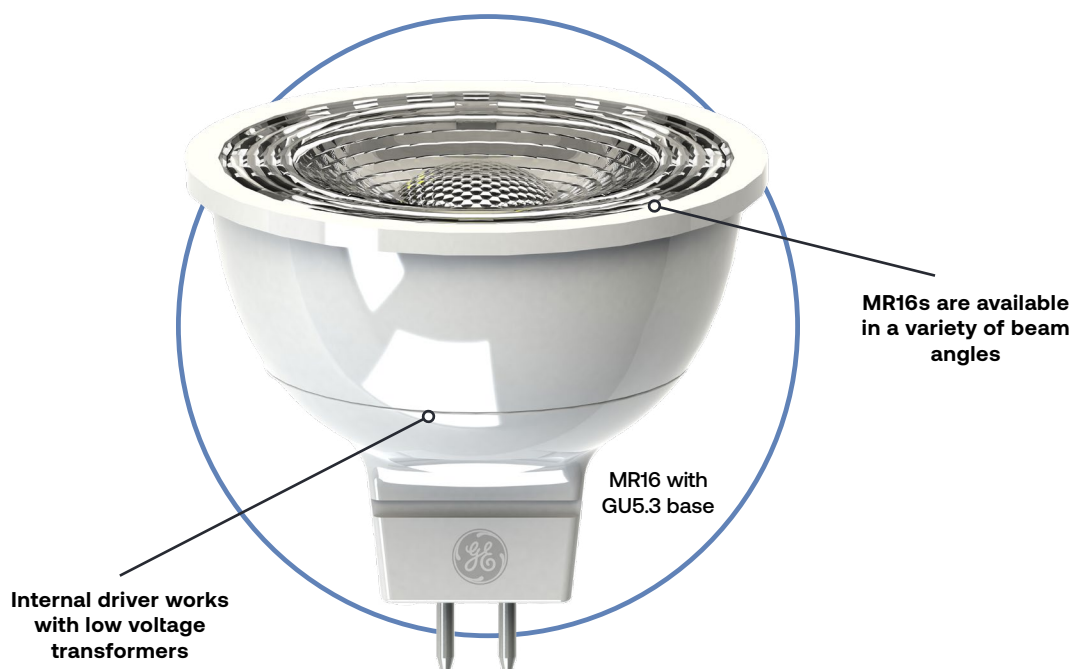
When installing outdoors, ensure the socket used is suitably Listed for use in Wet locations and socket gaskets provided by the manufacturer are correctly attached.

# LED Lamps – Directional

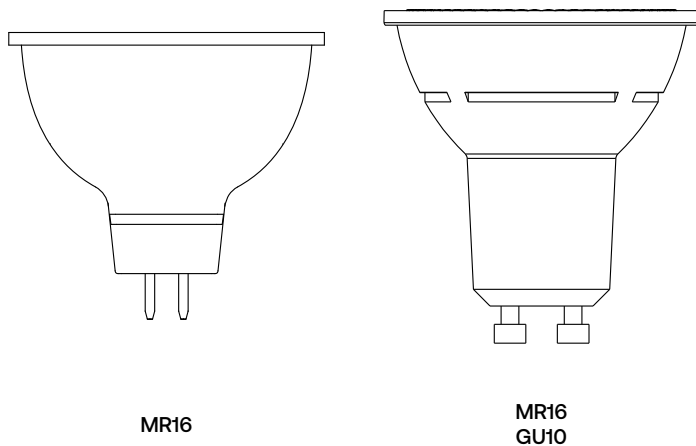


## LED Lamps – MR16s

LED MR16 lamps are the perfect solution for high output in decorative lighting applications. The lamps are dimmable, long-lasting and available in a variety of beam angles and color temperatures.



## Lamp **Drawings** (not drawn to scale)



# LED Lamps - Directional



## Catalog Logic:

### Bulb Shape:

Bulb shape followed by its size (the maximum diameter of the bulb expressed in eighths of an inch).

### Watts:

Energy Used (as defined by FTC Lamp Label Rules)

### Order Code:

Use the order code when ordering to ensure that you receive the exact product you require

### Description:

Lamp Model Description

### Volts:

Lamp data is based on operation at rated voltage

### Carton Quantity:

Number of lamps packed in a carton

### Lumens:

Light output (as defined by FTC Lamp Label Rules)

### MOL (in):

Maximum Overall Length in inches

### CBCP:

Center Beam Candle Power

### Color Temperature (K):

A measure of the visual "warmth" or "coolness" of the light from the lamp. The higher the value, the whiter or "cooler" the light appears.

### Color Rendering Index (CRI or R):

An indication of the ability of the lamp to render object colors in a normal natural way. The higher the number (0-100), the better the color appearance.

### Wattage Replacement:

Wattage of Traditional Lamp the LED Lamp is meant to replace

### Dimmable:

Indicates whether a lamp is dimmable or not

### Rated Life L70:

Hours of operation the lamp will provide before reaching 70% of its original lumen output

### Location Rating:

Location Rating as defined for LED Lamps by UL 1993

### Beam Angle:

Degrees

### Additional Information:

Typical application and/or other important information

### Housing Color:

Color of lamp body

| Bulb Shape         | Base Type | Watts | Order Code        | Description | Volts | Carton Qty <sup>2</sup> | MOL (in) | Lumens (Initial) | CBCP | Color Temp (Initial) | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | Dimmable | Location Rating <sup>3</sup> | Beam Angle | Housing Color | Additional Information <sup>4</sup> |
|--------------------|-----------|-------|-------------------|-------------|-------|-------------------------|----------|------------------|------|----------------------|-----|---------------------|-----------------------------------|----------|------------------------------|------------|---------------|-------------------------------------|
| 12 Volt AC/DC MR16 |           |       |                   |             |       |                         |          |                  |      |                      |     |                     |                                   |          |                              |            |               |                                     |
| GU5.3              | 6.5       | 75155 | LED6.5DMR16W82715 |             | 12    | 6                       | 1.87     | 500              | 4900 | 2700K                | 80  | 50                  | 25,000                            | Yes      | Damp                         | 15°        | White         |                                     |

## LED6.5DMR16W82715

Wattage

D = Dimmable

Bulb Shape

Body color (W= White)

CRI (8 = 80)

CCT (27 = 2700K)

Beam Angle (15 = 15 degrees)

## Directional Lamps (MR16-GU10)

| Bulb Shape               | Base Type | Watts | Order Code | Description           | Volts | Carton Qty <sup>2</sup> | MOL (in) | Lumens (Initial) | CBCP | Color Temp (Initial) | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | Dimmable | Location Rating <sup>3</sup> | Beam Angle | Housing Color | Additional Information <sup>4</sup> |
|--------------------------|-----------|-------|------------|-----------------------|-------|-------------------------|----------|------------------|------|----------------------|-----|---------------------|-----------------------------------|----------|------------------------------|------------|---------------|-------------------------------------|
| 12 Volt AC/DC MR16       |           |       |            |                       |       |                         |          |                  |      |                      |     |                     |                                   |          |                              |            |               |                                     |
|                          | GU5.3     | 6.5   | 75155      | LED6.5DMR16W82715     | 12    | 6                       | 1.87     | 500              | 4900 | 2700K                | 80  | 50                  | 25,000                            | Yes      | Damp                         | 15°        | White         |                                     |
|                          | GU5.3     | 6.5   | 75153      | LED6.5DMR16W83015     | 12    | 6                       | 1.87     | 520              | 4900 | 3000K                | 80  | 50                  | 25,000                            | Yes      | Damp                         | 15°        | White         |                                     |
|                          | GU5.3     | 6.5   | 75158      | LED6.5DMR16W84015     | 12    | 6                       | 1.87     | 550              | 5000 | 4000K                | 80  | 50                  | 25,000                            | Yes      | Damp                         | 15°        | White         |                                     |
|                          | GU5.3     | 6.5   | 93226      | LED6.5DMR16W82725     | 12    | 6                       | 1.79     | 500              | 2350 | 2700K                | 80  | 50                  | 25,000                            | Yes      | Damp                         | 25°        | White         |                                     |
|                          | GU5.3     | 6.5   | 93222      | LED6.5DMR16W83025     | 12    | 6                       | 1.79     | 520              | 2350 | 3000K                | 80  | 50                  | 25,000                            | Yes      | Damp                         | 25°        | White         |                                     |
|                          | GU5.3     | 6.5   | 93228      | LED6.5DMR16W84025     | 12    | 6                       | 1.79     | 550              | 2400 | 4000K                | 80  | 50                  | 25,000                            | Yes      | Damp                         | 25°        | White         |                                     |
|                          | GU5.3     | 6.5   | 93227      | LED6.5DMR16W82735     | 12    | 6                       | 1.79     | 500              | 1350 | 2700K                | 80  | 50                  | 25,000                            | Yes      | Damp                         | 35°        | White         |                                     |
|                          | GU5.3     | 6.5   | 93097010   | LED6.5DMR16B82735     | 12    | 6                       | 1.79     | 500              | 1350 | 2700K                | 80  | 50                  | 25,000                            | Yes      | Damp                         | 35°        | Black         |                                     |
|                          | GU5.3     | 6.5   | 93223      | LED6.5DMR16W83035     | 12    | 6                       | 1.79     | 520              | 1350 | 3000K                | 80  | 50                  | 25,000                            | Yes      | Damp                         | 35°        | White         |                                     |
|                          | GU5.3     | 6.5   | 93229      | LED6.5DMR16W84035     | 12    | 6                       | 1.79     | 550              | 1400 | 4000K                | 80  | 50                  | 25,000                            | Yes      | Damp                         | 35°        | White         |                                     |
| Value 12 Volt AC/DC MR16 |           |       |            |                       |       |                         |          |                  |      |                      |     |                     |                                   |          |                              |            |               |                                     |
|                          | GU5.3     | 4.5   | 34560      | LED4.5MR1682735       | 12    | 6                       | 1.78     | 380              | 1000 | 2700K                | 80  | 35                  | 25,000                            | Yes      | Dry                          | 35°        | White         |                                     |
|                          | GU5.3     | 4.5   | 34561      | LED4.5MR1683035       | 12    | 6                       | 1.78     | 400              | 1000 | 3000K                | 80  | 35                  | 25,000                            | Yes      | Dry                          | 35°        | White         |                                     |
|                          | GU5.3     | 4.5   | 34563      | LED4.5MR1684035       | 12    | 6                       | 1.78     | 400              | 1100 | 4000K                | 80  | 35                  | 25,000                            | Yes      | Dry                          | 35°        | White         |                                     |
|                          | GU5.3     | 6.5   | 34606      | LED6.5MR1682725       | 12    | 6                       | 1.78     | 500              | 2350 | 2700K                | 80  | 50                  | 25,000                            | Yes      | Dry                          | 25°        | White         |                                     |
|                          | GU5.3     | 6.5   | 34607      | LED6.5MR1682735       | 12    | 6                       | 1.78     | 500              | 1350 | 2700K                | 80  | 50                  | 25,000                            | Yes      | Dry                          | 35°        | White         |                                     |
|                          | GU5.3     | 6.5   | 34611      | LED6.5MR1683025       | 12    | 6                       | 1.78     | 530              | 2350 | 3000K                | 80  | 50                  | 25,000                            | Yes      | Dry                          | 25°        | White         |                                     |
|                          | GU5.3     | 6.5   | 34625      | LED6.5MR1683035       | 12    | 6                       | 1.78     | 530              | 1350 | 3000K                | 80  | 50                  | 25,000                            | Yes      | Dry                          | 35°        | White         |                                     |
| 120V GU10                |           |       |            |                       |       |                         |          |                  |      |                      |     |                     |                                   |          |                              |            |               |                                     |
|                          | GU10      | 4     | 93305604   | LED4D/GU10W830/35-6PK | 120   | 24                      | 2.1      | 320              | 370  | 3000K                | 80  | 35                  | 25,000                            | Yes      | Damp                         | 35°        | White         | 6 pack                              |
|                          | GU10      | 5.5   | 93305605   | LED5D/GU10W830/35-6PK | 120   | 24                      | 2.1      | 500              | 595  | 3000K                | 80  | 50                  | 25,000                            | Yes      | Damp                         | 35°        | White         | 6 pack                              |

<sup>4</sup> Check dimmer and transformer compatibility at [LED.com/dimming](http://LED.com/dimming)

<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

<sup>2</sup> Minimum order quantity = Carton Qty

<sup>3</sup> UL 1993 Environmental Requirements for LED LAMPS

Damp Location - Exterior or interior location that is normally or periodically subject to condensation of moisture in, on, or adjacent to electrical equipment, including partially protected locations

Dry Location - Location not normally subject to dampness, but may include a location subject to temporary dampness (i.e., building under construction, provided ventilation is adequate to prevent an accumulation of moisture)

# LED Lamps – Directional



## LED Lamps – RS Cans

RS Cans make downlight retrofits easy, with a medium base pigtail. Use the existing socket for power and provide a finished look to the ceiling without having to replace the existing fixture.



# LED Lamps - Directional



## Catalog Logic:

### Bulb Shape:

Bulb shape followed by its size (the maximum diameter of the bulb expressed in eighths of an inch).

### Watts:

Energy Used (as defined by FTC Lamp Label Rules)

### Lumens:

Light output (as defined by FTC Lamp Label Rules)

### MOL (in):

Maximum Overall Length in inches

### Color Rendering Index (CRI or R):

An indication of the ability of the lamp to render object colors in a normal natural way. The higher the number (0-100), the better the color appearance.

### Wattage Replacement:

Wattage of Traditional Lamp the LED Lamp is meant to replace

### Dimmable:

Indicates whether a lamp is dimmable or not

### Additional Information:

Typical application and/or other important information

**Base Type:**  
ANSI Base

**Order Code:**  
Use the order code when ordering to ensure that you receive the exact product you require

### Volts:

Lamp data is based on operation at rated voltage

**Carton Quantity:**  
Number of lamps packed in a carton

**Description:**  
Lamp Model Description

**Color Temperature (K):**  
A measure of the visual "warmth" or "coolness" of the light from the lamp. The higher the value, the whiter or "cooler" the light appears.

### Rated Life L70:

Hours of operation the lamp will provide before reaching 70% of its original lumen output

**Location Rating:**  
Location Rating as defined for LED Lamps by UL 1993

| Bulb Shape | Base Type | Watts    | Order Code       | Description | Volts | Carton Qty <sup>2</sup> | MOL (in) | Lumens (Initial) | Color Temp (Initial) | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | Dimmable | Location Rating <sup>3</sup> | Additional Information                        |
|------------|-----------|----------|------------------|-------------|-------|-------------------------|----------|------------------|----------------------|---------------------|-----------------------------------|----------|------------------------------|-----------------------------------------------|
| RS Cans    |           |          |                  |             |       |                         |          |                  |                      |                     |                                   |          |                              |                                               |
| E26        | 8         | 93162554 | LED8DRS4/9SC-4PK |             | 120   | 16                      | 2.4      | 700              | 2700/3000/4000/5000K | 90                  | 65                                | 50,000   | Yes                          | Damp<br>4" Can, Pigtail, Title 24-JA8, 4 pack |

## LED8DRS6/9SC-4PK

Wattage

D = Dimmable

RS = RS Can Trim

Diameter (inches)

CRI (9 = 90)

SC = SpectraChoice™ selectable color temperature

4PK = Inner pack of 4 lamps (Smallest unit of sale downstream)

## Selectable SpectraChoice™ RS Cans (Dimmable)

| Bulb Shape                                                                         | Base Type | Watts | Order Code | Description       | Volts | Carton Qty <sup>2</sup> | MOL (in) | Lumens (Initial) | Selectable Color Temperature* | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | Dimmable | Location Rating <sup>3</sup> | Additional Information                        |
|------------------------------------------------------------------------------------|-----------|-------|------------|-------------------|-------|-------------------------|----------|------------------|-------------------------------|---------------------|-----------------------------------|----------|------------------------------|-----------------------------------------------|
| Selectable RS Cans                                                                 |           |       |            |                   |       |                         |          |                  |                               |                     |                                   |          |                              |                                               |
|  | E26       | 8     | 93162554   | LED8DRS4/9SC-4PK  | 120   | 16                      | 2.4      | 700              | 2700/3000/4000/5000K          | 90                  | 65                                | 50,000   | Yes                          | Damp<br>4" Can, Pigtail, Title 24-JA8, 4 pack |
|                                                                                    | E26       | 8     | 93162555   | LED8DRS6/9SC-4PK  | 120   | 16                      | 2.8      | 700              | 2700/3000/4000/5000K          | 90                  | 65                                | 50,000   | Yes                          | Damp<br>6" Can, Pigtail, Title 24-JA8, 4 pack |
|                                                                                    | E26       | 12    | 93162556   | LED12DRS6/9SC-4PK | 120   | 16                      | 2.8      | 1100             | 2700/3000/4000/5000K          | 90                  | 90                                | 50,000   | Yes                          | Damp<br>6" Can, Pigtail, Title 24-JA8, 4 pack |

## RS Cans (Dimmable)

| Bulb Shape                                                                         | Base Type | Watts | Order Code | Description  | Volts | Carton Qty <sup>2</sup> | MOL (in) | Lumens (Initial) | Color Temp (Initial) | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | Dimmable | Location Rating <sup>3</sup> | Additional Information             |
|------------------------------------------------------------------------------------|-----------|-------|------------|--------------|-------|-------------------------|----------|------------------|----------------------|---------------------|-----------------------------------|----------|------------------------------|------------------------------------|
| RS Cans                                                                            |           |       |            |              |       |                         |          |                  |                      |                     |                                   |          |                              |                                    |
|  | E26       | 8     | 19908      | LED8DRS6/830 | 120   | 12                      | 4.96     | 700              | 3000K                | 80                  | 65                                | 50,000   | Yes                          | Damp<br>6" Can, Pigtail Attachment |

<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

<sup>2</sup> Minimum order quantity = Carton Qty

<sup>3</sup> UL 1993 Environmental Requirements for LED LAMPS

Damp Location - Exterior or interior location that is normally or periodically subject to condensation of moisture in, on, or adjacent to electrical equipment, including partially protected locations

\* Default color temperature setting is 3000K.

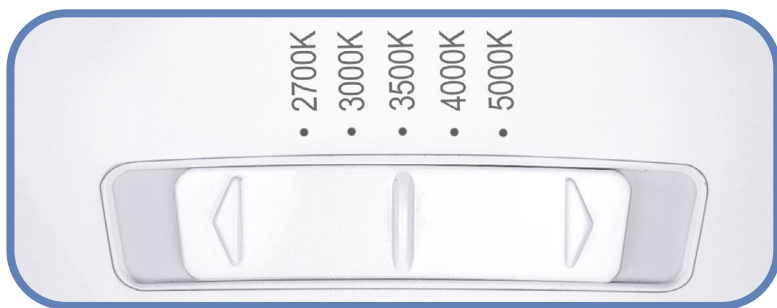


# LED Lamps – Directional



## LED Lamps – SpectraChoice™ Reflector Lamps (Dimmable)

SpectraChoice™ Reflector lamps feature built-in switches to select color temperature. These lamps are offered in R20, BR30 and BR40 shapes. Three lamps can cover the vast majority of Reflector applications, providing a great opportunity to reduce inventory and simplify BOMs.



**SpectraChoice™**



R20



BR30



BR40

## SpectraChoice™ Reflector Lamps (Dimmable)

| Bulb Shape  | Base Type | Watts | Order Code | Description    | Volts | Carton Qty <sup>2</sup> | MOL (In) | Lumens (Initial) | Selectable Color Temp (Initial)*           | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | Dimmable | Location Rating <sup>3</sup> | Additional Information                      |
|-------------|-----------|-------|------------|----------------|-------|-------------------------|----------|------------------|--------------------------------------------|-----|---------------------|-----------------------------------|----------|------------------------------|---------------------------------------------|
| <b>R20</b>  |           |       |            |                |       |                         |          |                  |                                            |     |                     |                                   |          |                              |                                             |
|             | E26       | 5.5   | 93318859   | LED5DR20/9SC   | 120   | 6                       | 4.0      | 500              | 2700K<br>3000K*<br>3500K<br>4000K<br>5000K | 90  | 45                  | 15,000                            | Yes      | Damp                         | CEC Title 20, Enclosed, Frosted, White body |
| <b>BR30</b> |           |       |            |                |       |                         |          |                  |                                            |     |                     |                                   |          |                              |                                             |
|             | E26       | 8     | 93318865   | LED8DBR30/9SC  | 120   | 6                       | 5.4      | 650              | 2700K<br>3000K*<br>3500K<br>4000K<br>5000K | 90  | 65                  | 15,000                            | Yes      | Damp                         | CEC Title 20, Enclosed, Frosted, White body |
| <b>BR40</b> |           |       |            |                |       |                         |          |                  |                                            |     |                     |                                   |          |                              |                                             |
|             | E26       | 12    | 93318871   | LED12DBR40/9SC | 120   | 6                       | 6.4      | 1050             | 2700K<br>3000K*<br>3500K<br>4000K<br>5000K | 90  | 65                  | 15,000                            | Yes      | Damp                         | CEC Title 20, Enclosed, Frosted, White body |

<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

<sup>2</sup> Minimum order quantity = Carton Qty

<sup>3</sup> UL 1993 Environmental Requirements for LED LAMPS

Damp Location – Exterior or interior location that is normally or periodically subject to condensation of moisture in, on, or adjacent to electrical equipment, including partially protected locations

\* Lumen levels correspond with color temperature. Default color temperature setting is 3000K.

# LED Lamps - Directional



## Catalog Logic:

### Bulb Shape:

Bulb shape followed by its size (the maximum diameter of the bulb expressed in eighths of an inch).

### Watts:

Energy Used (as defined by FTC Lamp Label Rules)

### Lumens:

Light output (as defined by FTC Lamp Label Rules)

### Color Temperature (K):

A measure of the visual "warmth" or "coolness" of the light from the lamp. The higher the value, the whiter or "cooler" the light appears.

### Color Rendering Index (CRI or R):

An indication of the ability of the lamp to render object colors in a normal natural way. The higher the number (0-100), the better the color appearance.

### Base Type:

ANSI Base

**Order Code:**  
Use the order code when ordering to ensure that you receive the exact product you require

**Carton Quantity:**  
Number of lamps packed in a carton

**Volts:**  
Lamp data is based on operation at rated voltage

**Description:**  
Lamp Model Description

**MOL (in):**  
Maximum Overall Length in inches

**CBCP:**  
Center Beam Candle Power

**Wattage Replacement:**  
Wattage of Traditional Lamp the LED Lamp is meant to replace

**Dimmable:**  
Indicates whether a lamp is dimmable or not

**Location Rating:**  
Location Rating as defined for LED Lamps by UL 1993

**Rated Life L70:**  
Hours of operation the lamp will provide before reaching 70% of its original lumen output

**Additional Information:**  
Typical application and/or other important information

| Bulb Shape | Base Type | Watts | Order Code | Description       | Volts | Carton Qty <sup>2</sup> | MOL (in) | Lumens (Initial) | Color Temp (Initial) | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | Dimmable | Location Rating <sup>3</sup> | Additional Information           |
|------------|-----------|-------|------------|-------------------|-------|-------------------------|----------|------------------|----------------------|-----|---------------------|-----------------------------------|----------|------------------------------|----------------------------------|
| BR30       | E26       | 8     | 93305510   | LED8DBR30/940-6PK | 120   | 24                      | 5.4      | 650              | 4000K                | 90  | 65                  | 15,000                            | Yes      | Damp                         | White body, 6 pack, CEC Title 20 |

## LED8DBR30/940

Wattage

D = Dimmable

Bulb Shape

CRI (9 = 90)

CCT (40 = 4000K)

## Reflector Lamps (Dimmable)

| Bulb Shape | Base Type | Watts | Order Code | Description       | Volts | Carton Qty <sup>2</sup> | MOL (in) | Lumens (Initial) | Color Temp (Initial) | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | Dimmable | Location Rating <sup>3</sup> | Additional Information            |
|------------|-----------|-------|------------|-------------------|-------|-------------------------|----------|------------------|----------------------|-----|---------------------|-----------------------------------|----------|------------------------------|-----------------------------------|
| BR30       | E26       | 8     | 93305498   | LED8DBR30/927-6PK | 120   | 24                      | 5.4      | 650              | 2700K                | 90  | 65                  | 15,000                            | Yes      | Damp                         | White body, 6 pack, CEC Title 20  |
|            | E26       | 8     | 93305499   | LED8DBR30/930-6PK | 120   | 24                      | 5.4      | 650              | 3000K                | 90  | 65                  | 15,000                            | Yes      | Damp                         | White body, 6 pack, CEC Title 20  |
|            | E26       | 8     | 93305510   | LED8DBR30/940-6PK | 120   | 24                      | 5.4      | 650              | 4000K                | 90  | 65                  | 15,000                            | Yes      | Damp                         | White body, 6 pack, CEC Title 20  |
|            | E26       | 8     | 93305512   | LED8DBR30/950-6PK | 120   | 24                      | 5.4      | 650              | 5000K                | 90  | 65                  | 15,000                            | Yes      | Damp                         | White body, 6 pack, CEC Title 20  |
|            | E26       | 10    | 68160      | LED10DR303/827W   | 120   | 6                       | 5.4      | 700              | 2700K                | 80  | 65                  | 25,000                            | Yes      | Damp                         | Frosted, White body               |
|            | E26       | 10    | 68161      | LED10DR303/830W   | 120   | 6                       | 5.4      | 700              | 3000K                | 80  | 65                  | 25,000                            | Yes      | Damp                         | Frosted, White body               |
|            | E26       | 10    | 69107      | LED10DR303/850W   | 120   | 6                       | 5.4      | 700              | 5000K                | 80  | 65                  | 25,000                            | Yes      | Damp                         | Frosted, White body               |
| BR40       | E26       | 12    | 93311897   | LED12DBR40/927    | 120   | 6                       | 6.4      | 1050             | 2700K                | 90  | 65                  | 15,000                            | Yes      | Damp                         | Frosted, White body, CEC Title 20 |
|            | E26       | 12    | 93311898   | LED12DBR40/930    | 120   | 6                       | 6.4      | 1050             | 3000K                | 90  | 65                  | 15,000                            | Yes      | Damp                         | Frosted, White body, CEC Title 20 |
|            | E26       | 12    | 93311899   | LED12DBR40/950    | 120   | 6                       | 6.4      | 1050             | 5000K                | 90  | 65                  | 15,000                            | Yes      | Damp                         | Frosted, White body, CEC Title 20 |

<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

<sup>2</sup> Minimum order quantity = Carton Qty

<sup>3</sup> UL 1993 Environmental Requirements for LED LAMPS

Damp Location - Exterior or interior location that is normally or periodically subject to condensation of moisture in, on, or adjacent to electrical equipment, including partially protected locations

# LED Lamps - General Purpose



## Catalog Logic:

### Bulb Shape:

Bulb shape followed by its size (the maximum diameter of the bulb expressed in eighths of an inch).

| Bulb Shape |  | Base Type | Watts | Order Code | Description         | Volts | Carton Qty <sup>2</sup> | MOL (in) | Lumens (Initial) | Color Temp. (Initial) | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>3</sup> | Dimmable | Location Rating <sup>3</sup> | Additional Information |
|------------|--|-----------|-------|------------|---------------------|-------|-------------------------|----------|------------------|-----------------------|-----|---------------------|-----------------------------------|----------|------------------------------|------------------------|
| A19        |  | E26       | 10    | 93156450   | LED10DA19/827/E-4PK | 120   | 24                      | 4.3      | 800              | 2700K                 | 80  | 60                  | 15,000                            | Yes      | Damp, Enclosed               | White, 4 pack          |

## LED10DA19/827/E-4PK

Wattage

D = Dimmable

Bulb Shape

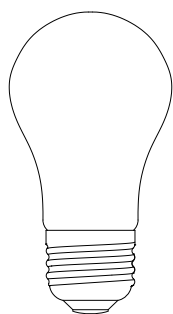
CRI (8 = 80)

CCT (27 = 2700K)

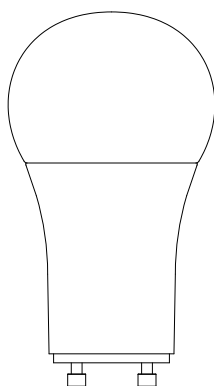
4PK = Inner pack of 4 lamps  
(Smallest unit of sale downstream)

E = Enclosed rated

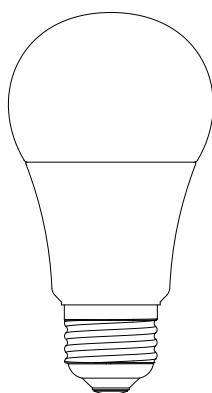
## Lamp Drawings (not drawn to scale)



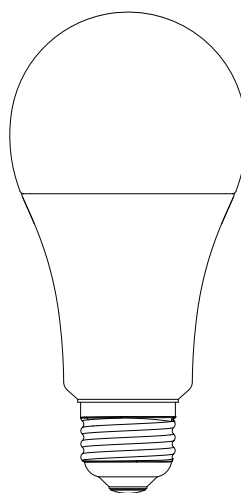
A15



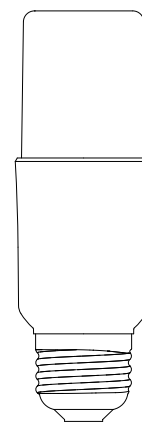
A19  
GU24



A19



A21



Bright Stik™

# LED Lamps – General Purpose



## LED Lamps – SpectraChoice™ A-Line Lamps (Dimmable)

SpectraChoice™ A-line dimmable lamps feature built-in switches to select color temperature. These lamps are offered in 40, 60, 75 & 100W incandescent equivalent lumen levels. Four lamps can cover the vast majority of A-line applications, providing a great opportunity to reduce inventory and simplify BOMs.



SpectraChoice™



## Selectable SpectraChoice™ A-Line Lamps (Dimmable)

| Bulb Shape                                         | Base Type | Watts | Order Code | Description     | Volts | Carton Qty <sup>2</sup> | MOL (In) | Lumens (Initial) <sup>5</sup> | Selectable Color Temp. (Initial)*          | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | Dimmable | Location Rating <sup>3</sup> | Additional Information |
|----------------------------------------------------|-----------|-------|------------|-----------------|-------|-------------------------|----------|-------------------------------|--------------------------------------------|-----|---------------------|-----------------------------------|----------|------------------------------|------------------------|
| A-Line SpectraChoice™ Selectable Color Temperature |           |       |            |                 |       |                         |          |                               |                                            |     |                     |                                   |          |                              |                        |
| A19                                                | E26       | 6     | 93313531   | LED6DA19/9SC/E  | 120   | 24                      | 4.3      | 480                           | 2700K*<br>3000K<br>3500K<br>4000K<br>5000K | 90  | 40                  | 15,000                            | Yes      | Damp, Enclosed               | White, CEC Title 20    |
| A19                                                | E26       | 10    | 93313549   | LED10DA19/9SC/E | 120   | 24                      | 4.3      | 800                           | 2700K*<br>3000K<br>3500K<br>4000K<br>5000K | 90  | 60                  | 15,000                            | Yes      | Damp, Enclosed               | White, CEC Title 20    |
| A19                                                | E26       | 13    | 93313543   | LED13DA19/9SC   | 120   | 24                      | 4.7      | 1100                          | 2700K*<br>3000K<br>3500K<br>4000K<br>5000K | 90  | 75                  | 15,000                            | Yes      | Damp                         | White, CEC Title 20    |
| A19                                                | E26       | 15    | 93313537   | LED15DA19/9SC   | 120   | 24                      | 4.7      | 1600                          | 2700K*<br>3000K<br>3500K<br>4000K<br>5000K | 90  | 100                 | 15,000                            | Yes      | Damp                         | White, CEC Title 20    |

<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

<sup>2</sup> Minimum order quantity = Carton Qty

<sup>3</sup> UL 1993 Environmental Requirements for LED LAMPS

Damp Location – Exterior or interior location that is normally or periodically subject to condensation of moisture in, on, or adjacent to electrical equipment, including partially protected locations

\* Default color temperature setting is 2700K

# LED Lamps - General Purpose



## A-Line Lamps (Dimmable)

| Bulb Shape | Base Type | Watts | Order Code | Description         | Volts | Carton Qty <sup>2</sup> | MOL (in) | Lumens (Initial) | Color Temp. (Initial) | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | Dimmable | Location Rating <sup>3</sup> | Additional Information |
|------------|-----------|-------|------------|---------------------|-------|-------------------------|----------|------------------|-----------------------|-----|---------------------|-----------------------------------|----------|------------------------------|------------------------|
| <b>A19</b> |           |       |            |                     |       |                         |          |                  |                       |     |                     |                                   |          |                              |                        |
| A19        | E26       | 6     | 93156446   | LED6DA19/827/E-4PK  | 120   | 24                      | 4.3      | 480              | 2700K                 | 80  | 40                  | 15,000                            | Yes      | Damp, Enclosed               | White, 4 pack          |
|            | E26       | 6     | 93156447   | LED6DA19/830/E-4PK  | 120   | 24                      | 4.3      | 480              | 3000K                 | 80  | 40                  | 15,000                            | Yes      | Damp, Enclosed               | White, 4 pack          |
|            | E26       | 6     | 93156448   | LED6DA19/840/E-4PK  | 120   | 24                      | 4.3      | 480              | 4000K                 | 80  | 40                  | 15,000                            | Yes      | Damp, Enclosed               | White, 4 pack          |
|            | E26       | 6     | 93156449   | LED6DA19/850/E-4PK  | 120   | 24                      | 4.3      | 480              | 5000K                 | 80  | 40                  | 15,000                            | Yes      | Damp, Enclosed               | White, 4 pack          |
|            | E26       | 10    | 93156450   | LED10DA19/827/E-4PK | 120   | 24                      | 4.3      | 800              | 2700K                 | 80  | 60                  | 15,000                            | Yes      | Damp, Enclosed               | White, 4 pack          |
|            | E26       | 10    | 93156531   | LED10DA19/830/E-4PK | 120   | 24                      | 4.3      | 800              | 3000K                 | 80  | 60                  | 15,000                            | Yes      | Damp, Enclosed               | White, 4 pack          |
|            | E26       | 10    | 93156532   | LED10DA19/840/E-4PK | 120   | 24                      | 4.3      | 800              | 4000K                 | 80  | 60                  | 15,000                            | Yes      | Damp, Enclosed               | White, 4 pack          |
|            | E26       | 10    | 93156533   | LED10DA19/850/E-4PK | 120   | 24                      | 4.3      | 800              | 5000K                 | 80  | 60                  | 15,000                            | Yes      | Damp, Enclosed               | White, 4 pack          |
|            | E26       | 12    | 93156534   | LED12DA19/827/E-4PK | 120   | 24                      | 4.7      | 1100             | 2700K                 | 80  | 75                  | 15,000                            | Yes      | Damp, Enclosed               | White, 4 pack          |
|            | E26       | 12    | 93156535   | LED12DA19/830/E-4PK | 120   | 24                      | 4.7      | 1100             | 3000K                 | 80  | 75                  | 15,000                            | Yes      | Damp, Enclosed               | White, 4 pack          |
|            | E26       | 12    | 93156536   | LED12DA19/840/E-4PK | 120   | 24                      | 4.7      | 1100             | 4000K                 | 80  | 75                  | 15,000                            | Yes      | Damp, Enclosed               | White, 4 pack          |
|            | E26       | 12    | 93156537   | LED12DA19/850/E-4PK | 120   | 24                      | 4.7      | 1100             | 5000K                 | 80  | 75                  | 15,000                            | Yes      | Damp, Enclosed               | White, 4 pack          |
|            | E26       | 15    | 93156538   | LED15DA19/827-4PK   | 120   | 24                      | 4.7      | 1600             | 2700K                 | 80  | 100                 | 15,000                            | Yes      | Damp                         | White, 4 pack          |
|            | E26       | 15    | 93156539   | LED15DA19/830-4PK   | 120   | 24                      | 4.7      | 1600             | 3000K                 | 80  | 100                 | 15,000                            | Yes      | Damp                         | White, 4 pack          |
|            | E26       | 15    | 93156540   | LED15DA19/840-4PK   | 120   | 24                      | 4.7      | 1600             | 4000K                 | 80  | 100                 | 15,000                            | Yes      | Damp                         | White, 4 pack          |
|            | E26       | 15    | 93156541   | LED15DA19/850-4PK   | 120   | 24                      | 4.7      | 1600             | 5000K                 | 80  | 100                 | 15,000                            | Yes      | Damp                         | White, 4 pack          |

## A-Line Lamps 90 CRI (Dimmable - Glass)

| Bulb Shape | Base Type | Watts | Order Code | Description       | Volts | Carton Qty <sup>2</sup> | MOL (in) | Lumens (Initial) | Color Temp. (Initial) | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | Dimmable | Location Rating <sup>3</sup> | Additional Information |
|------------|-----------|-------|------------|-------------------|-------|-------------------------|----------|------------------|-----------------------|-----|---------------------|-----------------------------------|----------|------------------------------|------------------------|
| <b>A15</b> |           |       |            |                   |       |                         |          |                  |                       |     |                     |                                   |          |                              |                        |
| A15        | E26       | 3.5   | 93312022   | LED4DFA15-W/927   | 120   | 12                      | 3.5      | 300              | 2700K                 | 90  | 40                  | 15,000                            | Yes      | Damp                         | White, CEC Title 20    |
|            | E26       | 3.5   | 93142809   | LED4DFA15-C-2PK   | 120   | 12                      | 3.5      | 300              | 2700K                 | 80  | 40                  | 15,000                            | Yes      | Damp                         | Clear, 2 pack          |
|            | E26       | 3.5   | 93142810   | LED4DFA15-W-2PK   | 120   | 12                      | 3.5      | 300              | 2700K                 | 80  | 40                  | 15,000                            | Yes      | Damp                         | White, 2 pack          |
| <b>A19</b> |           |       |            |                   |       |                         |          |                  |                       |     |                     |                                   |          |                              |                        |
| A19        | E26       | 4.5   | 93319141   | LED5DFA19/927/E-W | 120   | 24                      | 4.4      | 450              | 2700K                 | 90  | 40                  | 15,000                            | Yes      | Damp, Enclosed               | White, CEC Title 20    |
|            | E26       | 4.5   | 93319147   | LED5DFA19/927/E-C | 120   | 24                      | 4.4      | 450              | 2700K                 | 90  | 40                  | 15,000                            | Yes      | Damp, Enclosed               | Clear, CEC Title 20    |
|            | E26       | 7     | 93319153   | LED7DFA19/927/E-W | 120   | 24                      | 4.4      | 800              | 2700K                 | 90  | 60                  | 15,000                            | Yes      | Damp, Enclosed               | White, CEC Title 20    |
|            | E26       | 7     | 93319159   | LED7DFA19/927/E-C | 120   | 24                      | 4.4      | 800              | 2700K                 | 90  | 60                  | 15,000                            | Yes      | Damp, Enclosed               | Clear, CEC Title 20    |
|            | E26       | 8     | 93319165   | LED8DFA19/927-W   | 120   | 24                      | 4.4      | 1100             | 2700K                 | 90  | 75                  | 15,000                            | Yes      | Damp                         | White, CEC Title 20    |
|            | E26       | 8     | 93319171   | LED8DFA19/927-C   | 120   | 24                      | 4.4      | 1100             | 2700K                 | 90  | 75                  | 15,000                            | Yes      | Damp                         | Clear, CEC Title 20    |
|            | E26       | 12    | 93319177   | LED12DFA19/927-W  | 120   | 24                      | 4.4      | 1600             | 2700K                 | 90  | 100                 | 15,000                            | Yes      | Damp                         | White, CEC Title 20    |
|            | E26       | 12    | 93319183   | LED12DFA19/927-C  | 120   | 24                      | 4.4      | 1600             | 2700K                 | 90  | 100                 | 15,000                            | Yes      | Damp                         | Clear, CEC Title 20    |

<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

<sup>2</sup> Minimum order quantity = Carton Qty

<sup>3</sup> UL 1993 Environmental Requirements for LED LAMPS

Damp Location - Exterior or interior location that is normally or periodically subject to condensation of moisture in, on, or adjacent to electrical equipment, including partially protected locations

Wet Location - Location in which water or other liquid can drip, splash, or flow on or against electrical equipment.

When installing outdoors, ensure the socket used is suitably Listed for use in Wet locations and socket gaskets provided by the manufacturer are correctly attached.



All Glass  
A19 White



All Glass 40W  
A19 Clear



All Glass 60W  
A19 Clear



All Glass 75W  
A19 Clear



All Glass 100W  
A19 Clear



# LED Lamps – General Purpose



## A-Line Lamps (High Output)

| Bulb Shape | Base Type | Watts | Order Code | Description   | Volts | Carton Qty <sup>2</sup> | MOL (in) | Lumens (Initial) | Color Temp. (Initial) | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | Dimmable | Location Rating <sup>3</sup> | Additional Information |
|------------|-----------|-------|------------|---------------|-------|-------------------------|----------|------------------|-----------------------|-----|---------------------|-----------------------------------|----------|------------------------------|------------------------|
| <b>A21</b> |           |       |            |               |       |                         |          |                  |                       |     |                     |                                   |          |                              |                        |
| A21        | E26       | 22    | 93309224   | LED22DA21/827 | 120   | 4                       | 5.7      | 2610             | 2700K                 | 80  | 150                 | 15,000                            | Yes      | Wet                          | White                  |
|            | E26       | 22    | 93309225   | LED22DA21/850 | 120   | 4                       | 5.7      | 2610             | 5000K                 | 80  | 150                 | 15,000                            | Yes      | Wet                          | White                  |
|            | E26       | 23    | 93309226   | LED23A21/827  | 120   | 4                       | 5.7      | 3010             | 2700K                 | 80  | 200                 | 15,000                            | No       | Wet                          | White                  |
|            | E26       | 23    | 93309227   | LED23A21/850  | 120   | 4                       | 5.7      | 3010             | 5000K                 | 80  | 200                 | 15,000                            | No       | Wet                          | White                  |

## A-Line Lamps (GU24)

| Bulb Shape                                    | Base Type | Watts | Order Code | Description              | Volts | Carton Qty <sup>2</sup> | MOL (in) | Lumens (Initial) | Color Temp. (Initial) | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | Dimmable | Location Rating <sup>3</sup> | Additional Information |
|-----------------------------------------------|-----------|-------|------------|--------------------------|-------|-------------------------|----------|------------------|-----------------------|-----|---------------------|-----------------------------------|----------|------------------------------|------------------------|
| <b>GU24 Base General Purpose A-Line Lamps</b> |           |       |            |                          |       |                         |          |                  |                       |     |                     |                                   |          |                              |                        |
| A19                                           | GU24      | 10    | 93156542   | LED10DA19/GU24/827/E-4PK | 120   | 24                      | 4.2      | 800              | 2700K                 | 80  | 40                  | 15,000                            | Yes      | Damp, Enclosed               | White, 4 pack          |
|                                               | GU24      | 15    | 93156543   | LED15DA19/GU24/827-4PK   | 120   | 24                      | 4.4      | 1600             | 2700K                 | 80  | 100                 | 15,000                            | Yes      | Damp                         | White, 4 pack          |

## A-Line Lamps (3-Way)

| Bulb Shape                                | Base Type | Watts   | Order Code | Description             | Volts | Carton Qty <sup>2</sup> | MOL (in) | Lumens (Initial) | Color Temp. (Initial) | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | Dimmable | Location Rating <sup>3</sup> | Additional Information |
|-------------------------------------------|-----------|---------|------------|-------------------------|-------|-------------------------|----------|------------------|-----------------------|-----|---------------------|-----------------------------------|----------|------------------------------|------------------------|
| <b>3-Way General Purpose A-Line Lamps</b> |           |         |            |                         |       |                         |          |                  |                       |     |                     |                                   |          |                              |                        |
| A19                                       | E26d      | 4/9/13  | 93156602   | LED13A19/30/100/827-4PK | 120   | 24                      | 4.7      | 400/980/1400     | 2700K                 | 80  | 30/70/100           | 15,000                            | -        | Damp                         | White, 4 pack          |
| A21                                       | E26d      | 5/12/17 | 93156603   | LED17A21/50/150/827-4PK | 120   | 24                      | 5.3      | 650/1500/2155    | 2700K                 | 80  | 50/100/150          | 15,000                            | -        | Damp                         | White, 4 pack          |

## A-Line Lamps (Value)

| Bulb Shape | Base Type | Watts | Order Code | Description      | Volts | Carton Qty <sup>2</sup> | MOL (in) | Lumens (Initial) | Color Temp. (Initial) | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | Dimmable | Location Rating <sup>3</sup> | Additional Information |
|------------|-----------|-------|------------|------------------|-------|-------------------------|----------|------------------|-----------------------|-----|---------------------|-----------------------------------|----------|------------------------------|------------------------|
| <b>A19</b> |           |       |            |                  |       |                         |          |                  |                       |     |                     |                                   |          |                              |                        |
| A19        | E26       | 5     | 93142977   | LED5A19/827-4PK  | 120   | 24                      | 4.3      | 450              | 2700K                 | 80  | 40                  | 10,000                            | -        | Damp                         | White, 4 pack          |
|            | E26       | 5     | 93142978   | LED5A19/830-4PK  | 120   | 24                      | 4.3      | 450              | 3000K                 | 80  | 40                  | 10,000                            | -        | Damp                         | White, 4 pack          |
|            | E26       | 5     | 93142979   | LED5A19/840-4PK  | 120   | 24                      | 4.3      | 450              | 4000K                 | 80  | 40                  | 10,000                            | -        | Damp                         | White, 4 pack          |
|            | E26       | 5     | 93142980   | LED5A19/850-4PK  | 120   | 24                      | 4.3      | 450              | 5000K                 | 80  | 40                  | 10,000                            | -        | Damp                         | White, 4 pack          |
|            | E26       | 9     | 93142981   | LED9A19/827-4PK  | 120   | 24                      | 4.3      | 760              | 2700K                 | 80  | 60                  | 10,000                            | -        | Damp                         | White, 4 pack          |
|            | E26       | 9     | 93142982   | LED9A19/830-4PK  | 120   | 24                      | 4.3      | 760              | 3000K                 | 80  | 60                  | 10,000                            | -        | Damp                         | White, 4 pack          |
|            | E26       | 9     | 93142983   | LED9A19/840-4PK  | 120   | 24                      | 4.3      | 760              | 4000K                 | 80  | 60                  | 10,000                            | -        | Damp                         | White, 4 pack          |
|            | E26       | 9     | 93142984   | LED9A19/850-4PK  | 120   | 24                      | 4.3      | 760              | 5000K                 | 80  | 60                  | 10,000                            | -        | Damp                         | White, 4 pack          |
| <b>A21</b> |           |       |            |                  |       |                         |          |                  |                       |     |                     |                                   |          |                              |                        |
| A21        | E26       | 11    | 93142985   | LED11A21/827-4PK | 120   | 24                      | 5.2      | 1050             | 2700K                 | 80  | 75                  | 10,000                            | -        | Damp                         | White, 4 pack          |
|            | E26       | 11    | 93142986   | LED11A21/830-4PK | 120   | 24                      | 5.2      | 1050             | 3000K                 | 80  | 75                  | 10,000                            | -        | Damp                         | White, 4 pack          |
|            | E26       | 11    | 93142987   | LED11A21/840-4PK | 120   | 24                      | 5.2      | 1050             | 4000K                 | 80  | 75                  | 10,000                            | -        | Damp                         | White, 4 pack          |
|            | E26       | 11    | 93142988   | LED11A21/850-4PK | 120   | 24                      | 5.2      | 1050             | 5000K                 | 80  | 75                  | 10,000                            | -        | Damp                         | White, 4 pack          |
|            | E26       | 15    | 93142989   | LED15A21/827-4PK | 120   | 24                      | 5.2      | 1520             | 2700K                 | 80  | 100                 | 10,000                            | -        | Damp                         | White, 4 pack          |
|            | E26       | 15    | 93142990   | LED15A21/830-4PK | 120   | 24                      | 5.2      | 1520             | 3000K                 | 80  | 100                 | 10,000                            | -        | Damp                         | White, 4 pack          |
|            | E26       | 15    | 93142991   | LED15A21/840-4PK | 120   | 24                      | 5.2      | 1520             | 4000K                 | 80  | 100                 | 10,000                            | -        | Damp                         | White, 4 pack          |
|            | E26       | 15    | 93142992   | LED15A21/850-4PK | 120   | 24                      | 5.2      | 1520             | 5000K                 | 80  | 100                 | 10,000                            | -        | Damp                         | White, 4 pack          |

## Bright Stik™

| Bulb Shape          | Base Type | Watts | Order Code | Description   | Volts | Carton Qty <sup>2</sup> | MOL (in) | Lumens (Initial) | Color Temp. (Initial) | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | Dimmable | Location Rating <sup>3</sup> | Additional Information |
|---------------------|-----------|-------|------------|---------------|-------|-------------------------|----------|------------------|-----------------------|-----|---------------------|-----------------------------------|----------|------------------------------|------------------------|
| <b>Bright Stik™</b> |           |       |            |               |       |                         |          |                  |                       |     |                     |                                   |          |                              |                        |
| Bright Stik™        | E26       | 5.5   | 66256      | LED5.5LS3/827 | 120   | 48                      | 4.45     | 450              | 2700K                 | 80  | 40                  | 15,000                            | -        | Damp                         | 3 pack                 |
|                     | E26       | 5.5   | 75177      | LED5.5LS3/850 | 120   | 48                      | 4.45     | 450              | 5000K                 | 80  | 40                  | 15,000                            | -        | Damp                         | 3 pack                 |
|                     | E26       | 9     | 75184      | LED9LS3/827   | 120   | 48                      | 4.45     | 800              | 2700K                 | 80  | 60                  | 15,000                            | -        | Damp                         | 3 pack                 |
|                     | E26       | 9     | 75588      | LED9LS3/850   | 120   | 48                      | 4.45     | 800              | 5000K                 | 80  | 60                  | 15,000                            | -        | Damp                         | 3 pack                 |
|                     | E26       | 12    | 75590      | LED12LS2/827  | 120   | 32                      | 5.24     | 1250             | 2700K                 | 80  | 75                  | 15,000                            | -        | Damp                         | 2 pack                 |
|                     | E26       | 12    | 75591      | LED12LS2/850  | 120   | 32                      | 5.24     | 1250             | 5000K                 | 80  | 75                  | 15,000                            | -        | Damp                         | 2 pack                 |
|                     | E26       | 15    | 75593      | LED15LS2/827  | 120   | 32                      | 5.24     | 1700             | 2700K                 | 80  | 100                 | 15,000                            | -        | Damp                         | 2 pack                 |
|                     | E26       | 15    | 75644      | LED15LS2/850  | 120   | 32                      | 5.24     | 1700             | 5000K                 | 80  | 100                 | 15,000                            | -        | Damp                         | 2 pack                 |

<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

<sup>2</sup> Minimum order quantity = Carton Qty

<sup>3</sup> UL 1993 Environmental Requirements for LED LAMPS

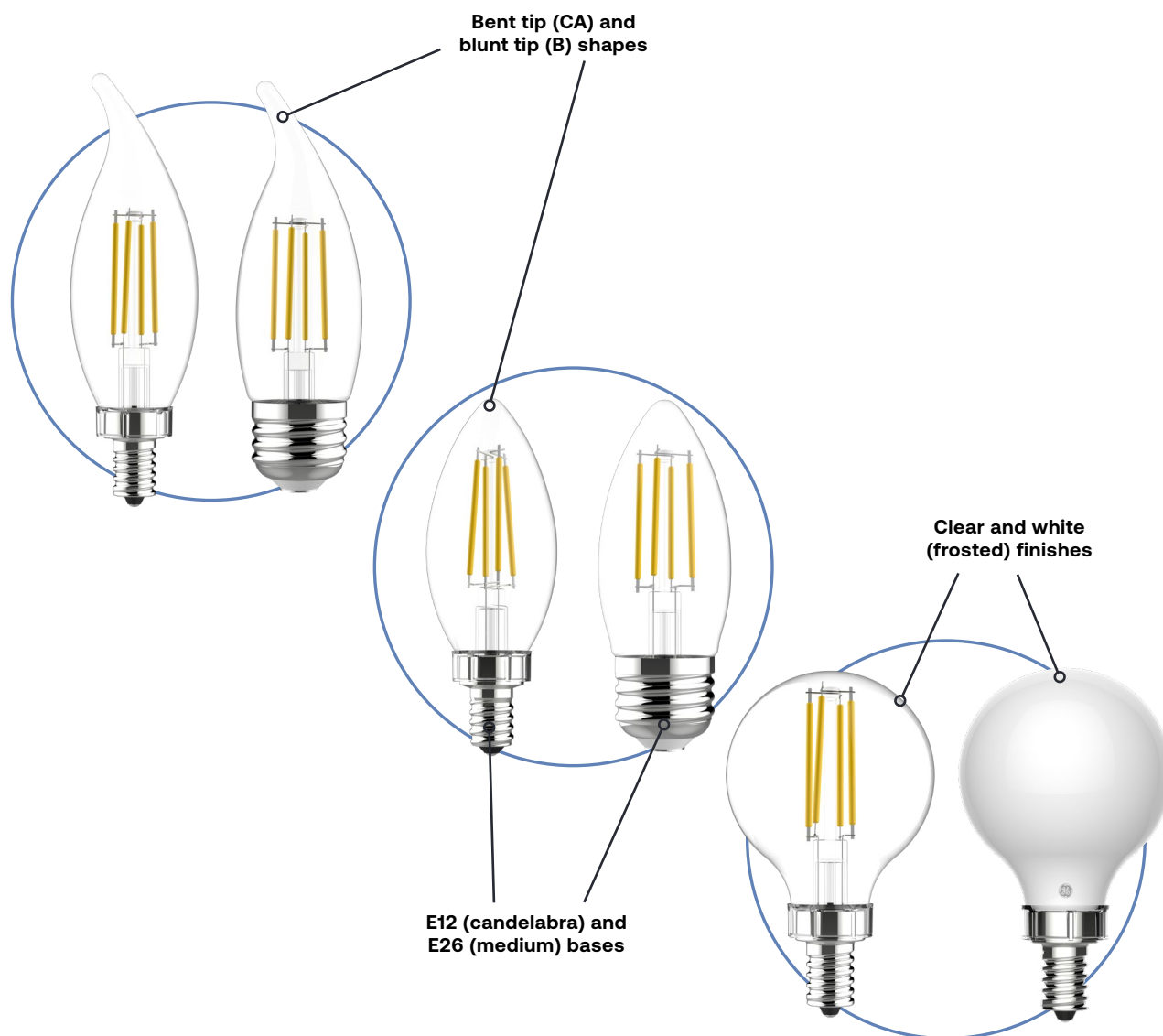
Damp Location – Exterior or interior location that is normally or periodically subject to condensation of moisture in, on, or adjacent to electrical equipment, including partially protected locations

# LED Lamps – General Purpose



## LED Lamps – Decorative

Decorative LED lamps feature LED "filaments" in glass bulbs, mimicking a traditional decorative lamp look. Various shapes, bases and wattages are available in clear and white finishes.



# LED Lamps - General Purpose



## Catalog Logic:

### Bulb Shape:

Bulb shape followed by its size (the maximum diameter of the bulb expressed in eighths of an inch).

### Watts:

Energy Used (as defined by FTC Lamp Label Rules)

### Base Type:

ANSI Base

### Order Code:

Use the order code when ordering to ensure that you receive the exact product you require

### Description:

Lamp Model Description

### Lumens:

Light output (as defined by FTC Lamp Label Rules)

### MOL (in):

Maximum Overall Length in inches

### Carton Quantity:

Number of lamps packed in a carton

### Volts:

Lamp data is based on operation at rated voltage

### Color Rendering Index (CRI or R):

An indication of the ability of the lamp to render object colors in a normal natural way. The higher the number (0-100), the better the color appearance.

### Color Temperature (K):

A measure of the visual "warmth" or "coolness" of the light from the lamp. The higher the value, the whiter or "cooler" the light appears.

### Rated Life L70:

Hours of operation the lamp will provide before reaching 70% of its original lumen output

### Dimmable:

Indicates whether a lamp is dimmable or not

### Location Rating:

Location Rating as defined for LED Lamps by UL 1993

### Additional Information:

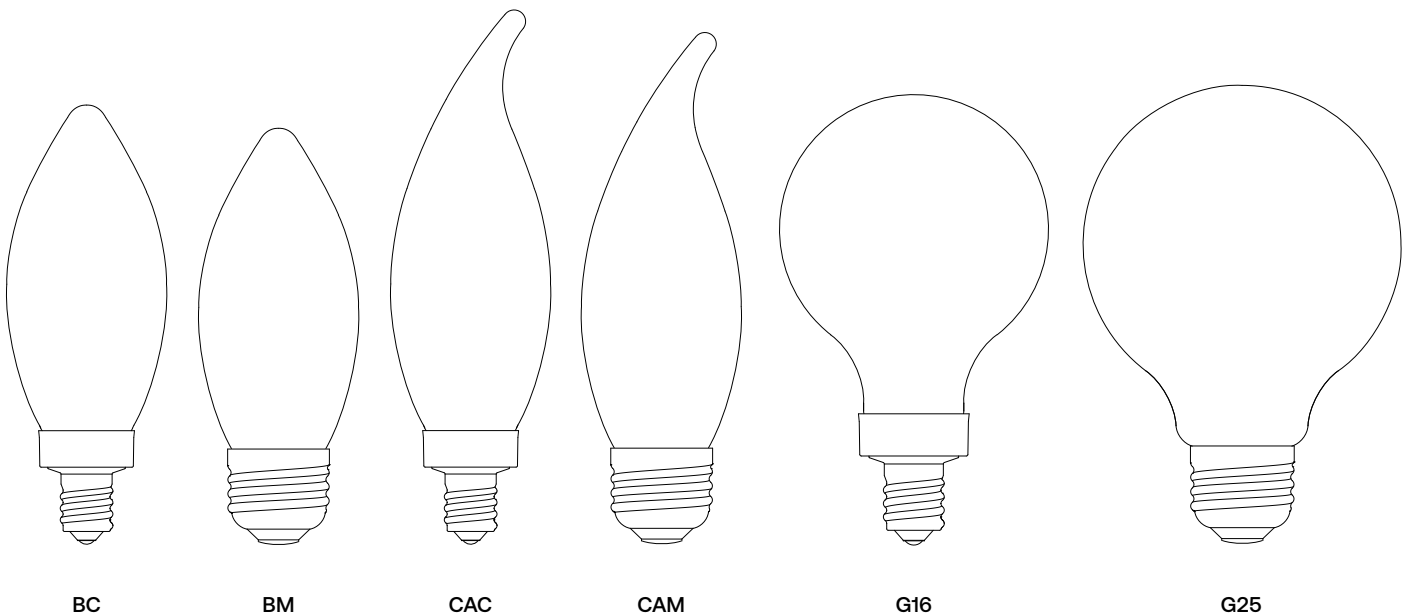
Typical application and/or other important information

| Bulb Shape | Base Type | Watts | Order Code | Description     | Volts | Carton Qty <sup>2</sup> | MOL (in) | Lumens (Initial) | Color Temp. (Initial) | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | Dimmable | Location Rating <sup>3</sup> | Additional Information             |
|------------|-----------|-------|------------|-----------------|-------|-------------------------|----------|------------------|-----------------------|-----|---------------------|-----------------------------------|----------|------------------------------|------------------------------------|
| Candles    |           |       |            |                 |       |                         |          |                  |                       |     |                     |                                   |          |                              |                                    |
| CA         | E12       | 3.5   | 93142795   | LED4DFCAC-C-2PK | 120   | 12                      | 4.6      | 300              | 2700K                 | 80  | 40                  | 15,000                            | Yes      | Damp                         | All Glass, Clear, Bent Tip, 2 pack |

## LED4DFCAC-C-2PK

Wattage  
D = Dimmable  
F = Filament  
Shape (CA = bent tip Candle, B = Blunt tip, G = Globe)  
Base (C = Candelabra [E12], M = Medium [E26])  
Finish (C = Clear, W = White)  
2PK = Inner pack of 2 lamps (Smallest unit of sale downstream)

## Lamp Drawings (not drawn to scale)



# LED Lamps - General Purpose



## Decorative Lamps

| Bulb Shape     | Base Type | Watts | Order Code | Description      | Volts | Carton Qty <sup>2</sup> | MOL (in) | Lumens (Initial) | Color Temp. (Initial) | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | Dimmable | Location Rating <sup>3</sup> | Additional Information                   |
|----------------|-----------|-------|------------|------------------|-------|-------------------------|----------|------------------|-----------------------|-----|---------------------|-----------------------------------|----------|------------------------------|------------------------------------------|
| <b>Candies</b> |           |       |            |                  |       |                         |          |                  |                       |     |                     |                                   |          |                              |                                          |
| CA/B           | E26       | 2.5   | 93142804   | LED3DFCAM-C-2PK  | 120   | 12                      | 4.4      | 200              | 2700K                 | 80  | 25                  | 15,000                            | Yes      | Damp                         | All Glass, Clear, Bent Tip, 2 pack       |
|                | E26       | 2.5   | 93142808   | LED3DFCAM-W-2PK  | 120   | 12                      | 4.4      | 200              | 2700K                 | 80  | 25                  | 15,000                            | Yes      | Damp                         | All Glass, White, Bent Tip, 2 pack       |
|                | E26       | 3.5   | 93142811   | LED4DFBM-C-2PK   | 120   | 12                      | 3.8      | 300              | 2700K                 | 80  | 40                  | 15,000                            | Yes      | Damp                         | All Glass, Clear, 2 pack                 |
|                | E26       | 3.5   | 93142814   | LED4DFBM-W-2PK   | 120   | 12                      | 3.8      | 300              | 2700K                 | 80  | 40                  | 15,000                            | Yes      | Damp                         | All Glass, White, 2 pack                 |
|                | E26       | 3.5   | 93311960   | LED4DFCAM-C/927  | 120   | 12                      | 4.4      | 300              | 2700K                 | 90  | 40                  | 15,000                            | Yes      | Damp                         | All Glass, Clear, Bent Tip, CEC Title 20 |
|                | E26       | 3.5   | 93142812   | LED4DFCAM-C-2PK  | 120   | 12                      | 4.4      | 300              | 2700K                 | 80  | 40                  | 15,000                            | Yes      | Damp                         | All Glass, Clear, Bent Tip, 2 pack       |
|                | E26       | 3.5   | 93142815   | LED4DFCAM-W-2PK  | 120   | 12                      | 4.4      | 300              | 2700K                 | 80  | 40                  | 15,000                            | Yes      | Damp                         | All Glass, White, Bent Tip, 2 pack       |
|                | E26       | 5     | 93142855   | LED5DFBM-C-2PK   | 120   | 12                      | 3.8      | 500              | 2700K                 | 80  | 60                  | 15,000                            | Yes      | Damp                         | All Glass, Clear, 2 pack                 |
|                | E26       | 5     | 93142856   | LED5DFBM-W-2PK   | 120   | 12                      | 3.8      | 500              | 2700K                 | 80  | 60                  | 15,000                            | Yes      | Damp                         | All Glass, White, 2 pack                 |
|                | E26       | 5     | 93142851   | LED5DFCAM-C-2PK  | 120   | 12                      | 4.4      | 500              | 2700K                 | 80  | 60                  | 15,000                            | Yes      | Damp                         | All Glass, Clear, Bent Tip, 2 pack       |
|                | E26       | 5     | 93142852   | LED5DFCAM-W-2PK  | 120   | 12                      | 4.4      | 500              | 2700K                 | 80  | 60                  | 15,000                            | Yes      | Damp                         | All Glass, White, Bent Tip, 2 pack       |
|                | E12       | 2.5   | 93142792   | LED3DFCAC-C-2PK  | 120   | 12                      | 4.6      | 200              | 2700K                 | 80  | 25                  | 15,000                            | Yes      | Damp                         | All Glass, Clear, Bent Tip, 2 pack       |
|                | E12       | 2.5   | 93142793   | LED3DFCAC-W-2PK  | 120   | 12                      | 4.6      | 200              | 2700K                 | 80  | 25                  | 15,000                            | Yes      | Damp                         | All Glass, White, Bent Tip, 2 pack       |
|                | E12       | 3.5   | 93142794   | LED4DFBC-C-2PK   | 120   | 12                      | 3.9      | 300              | 2700K                 | 80  | 40                  | 15,000                            | Yes      | Damp                         | All Glass, Clear, 2 pack                 |
|                | E12       | 3.5   | 93142796   | LED4DFBC-W-2PK   | 120   | 12                      | 3.9      | 300              | 2700K                 | 80  | 40                  | 15,000                            | Yes      | Damp                         | All Glass, White, 2 pack                 |
|                | E12       | 3.5   | 93312028   | LED4DFCAC-C/927  | 120   | 12                      | 4.6      | 300              | 2700K                 | 90  | 40                  | 15,000                            | Yes      | Damp                         | All Glass, Clear, Bent Tip, CEC Title 20 |
|                | E12       | 3.5   | 93142795   | LED4DFCAC-C-2PK  | 120   | 12                      | 4.6      | 300              | 2700K                 | 80  | 40                  | 15,000                            | Yes      | Damp                         | All Glass, Clear, Bent Tip, 2 pack       |
|                | E12       | 3.5   | 93142797   | LED4DFCAC-W-2PK  | 120   | 12                      | 4.6      | 300              | 2700K                 | 80  | 40                  | 15,000                            | Yes      | Damp                         | All Glass, White, Bent Tip, 2 pack       |
|                | E12       | 5     | 93142802   | LED5DFBC-C-2PK   | 120   | 12                      | 3.9      | 500              | 2700K                 | 80  | 60                  | 15,000                            | Yes      | Damp                         | All Glass, Clear, 2 pack                 |
|                | E12       | 5     | 93142803   | LED5DFBC-W-2PK   | 120   | 12                      | 3.9      | 500              | 2700K                 | 80  | 60                  | 15,000                            | Yes      | Damp                         | All Glass, White, 2 pack                 |
|                | E12       | 5     | 93142800   | LED5DFCAC-C-2PK  | 120   | 12                      | 4.6      | 500              | 2700K                 | 80  | 60                  | 15,000                            | Yes      | Damp                         | All Glass, Clear, Bent Tip, 2 pack       |
|                | E12       | 5     | 93142801   | LED5DFCAC-W-2PK  | 120   | 12                      | 4.6      | 500              | 2700K                 | 80  | 60                  | 15,000                            | Yes      | Damp                         | All Glass, White, Bent Tip, 2 pack       |
| <b>Globes</b>  |           |       |            |                  |       |                         |          |                  |                       |     |                     |                                   |          |                              |                                          |
| G25            | E26       | 2.8   | 93142805   | LED3DFG25-C-2PK  | 120   | 12                      | 4.7      | 250              | 2700K                 | 80  | 25                  | 15,000                            | Yes      | Damp                         | All Glass, Clear, 2 pack                 |
|                | E26       | 2.8   | 93142807   | LED3DFG25-W-2PK  | 120   | 12                      | 4.7      | 250              | 2700K                 | 80  | 25                  | 15,000                            | Yes      | Damp                         | All Glass, White, 2 pack                 |
|                | E26       | 4     | 93311963   | LED4DFG25-C/927  | 120   | 12                      | 4.7      | 350              | 2700K                 | 90  | 40                  | 15,000                            | Yes      | Damp                         | All Glass, Clear, CEC Title 20           |
|                | E26       | 4     | 93311966   | LED4DFG25-W/927  | 120   | 12                      | 4.7      | 350              | 2700K                 | 90  | 40                  | 15,000                            | Yes      | Damp                         | All Glass, White, CEC Title 20           |
|                | E26       | 4     | 93142847   | LED4DFG25-C-2PK  | 120   | 12                      | 4.7      | 350              | 2700K                 | 80  | 40                  | 15,000                            | Yes      | Damp                         | All Glass, Clear, 2 pack                 |
|                | E26       | 4     | 93142846   | LED4DFG25-W-2PK  | 120   | 12                      | 4.7      | 350              | 2700K                 | 80  | 40                  | 15,000                            | Yes      | Damp                         | All Glass, White, 2 pack                 |
|                | E26       | 5     | 93142850   | LED5DFG25-C-2PK  | 120   | 12                      | 4.7      | 500              | 2700K                 | 80  | 60                  | 15,000                            | Yes      | Damp                         | All Glass, Clear, 2 pack                 |
|                | E26       | 5     | 93142849   | LED5DFG25-W-2PK  | 120   | 12                      | 4.7      | 500              | 2700K                 | 80  | 60                  | 15,000                            | Yes      | Damp                         | All Glass, White, 2 pack                 |
| G16.5          | E12       | 4     | 93142798   | LED4DFG16C-C-2PK | 120   | 12                      | 3.4      | 350              | 2700K                 | 80  | 40                  | 15,000                            | Yes      | Damp                         | All Glass, Clear, 2 pack                 |
|                | E12       | 4     | 93142799   | LED4DFG16C-W-2PK | 120   | 12                      | 3.4      | 350              | 2700K                 | 80  | 40                  | 15,000                            | Yes      | Damp                         | All Glass, White, 2 pack                 |

## Vintage Style Decorative Lamps

| Bulb Shape     | Base Type | Watts | Order Code | Description      | Volts | Carton Qty <sup>2</sup> | MOL (in) | Lumens (Initial) | Color Temp. (Initial) | CRI | Wattage Replacement | Rated Life L70 (Hrs) <sup>1</sup> | Dimmable | Location Rating <sup>3</sup> | Additional Information                      |
|----------------|-----------|-------|------------|------------------|-------|-------------------------|----------|------------------|-----------------------|-----|---------------------|-----------------------------------|----------|------------------------------|---------------------------------------------|
| <b>Vintage</b> |           |       |            |                  |       |                         |          |                  |                       |     |                     |                                   |          |                              |                                             |
| A15            | E26       | 3     | 93311928   | LED3DFA15-C-VTG  | 120   | 12                      | 3.5      | 150              | 2150K                 | 90  | 25                  | 15,000                            | Yes      | Damp                         | All Glass, Clear Amber, CEC Title 20 Exempt |
| ST19           | E26       | 5.5   | 93311890   | LED5DFST19-C-VTG | 120   | 12                      | 5.3      | 400              | 2150K                 | 90  | 40                  | 15,000                            | Yes      | Damp                         | All Glass, Clear Amber, CEC Title 20 Exempt |

<sup>1</sup> The life rating is based on the hours of operation the lamp will provide before reaching 70% of its original lumen output (L70)

<sup>2</sup> Minimum order quantity = Carton Qty

<sup>3</sup> UL 1993 Environmental Requirements for LED LAMPS

Damp Location - Exterior or interior location that is normally or periodically subject to condensation of moisture in, on, or adjacent to electrical equipment, including partially protected locations

^ GE Lighting, a Savant company, lamp, distributed Current Lighting Solutions, LLC.



# LED Lamps – Packaging Notes

## LED Lamps - Inner Pack Lamp Quantity

Packaging configurations vary across the wide range of LED Lamps offered by Current. LED Tubes are packaged in bulk, with no inner pack inside the outer carton. Many lamps, such LED HID, are packaged in individual packs inside the outer carton. The table below details the materials that are packaged into saleable units of **more than one lamp**. These inner pack sizes are noted throughout the catalog in the "Additional Information" column, but the table below is provided as another reference.

| Lamp Category | Order Code | Description                 | Inner Pack Lamp Qty | Outer Carton Lamp Qty |
|---------------|------------|-----------------------------|---------------------|-----------------------|
| Plug-in       | 93300091   | LED11G24d-V/8SC-4PK         | 4                   | 24                    |
| Plug-in       | 93300090   | LED11G24d-H/8SC-4PK         | 4                   | 24                    |
| Plug-in       | 93300089   | LED9G24q-V/8SC-4PK          | 4                   | 24                    |
| Plug-in       | 93300088   | LED11BG24-V/8SC/120-347-4PK | 4                   | 24                    |
| Plug-in       | 93300087   | LED11BG24-H/8SC/120-347-4PK | 4                   | 24                    |
| Plug-in       | 93300068   | LED8BG24-O/827-4PK          | 4                   | 24                    |
| Plug-in       | 93300069   | LED8BG24-O/830-4PK          | 4                   | 24                    |
| Plug-in       | 93300080   | LED8BG24-O/835-4PK          | 4                   | 24                    |
| Plug-in       | 93300081   | LED8BG24-O/840-4PK          | 4                   | 24                    |
| Plug-in       | 93300082   | LED10BG24-O/827-4PK         | 4                   | 24                    |
| Plug-in       | 93300083   | LED10BG24-O/830-4PK         | 4                   | 24                    |
| Plug-in       | 93300084   | LED10BG24-O/835-4PK         | 4                   | 24                    |
| Plug-in       | 93300086   | LED10BG24-O/840-4PK         | 4                   | 24                    |
| PAR           | 93305603   | LED6DP16W830/35-6PK         | 6                   | 24                    |
| PAR           | 93153892   | LED12DP30VOW830/25-4PK      | 4                   | 16                    |
| PAR           | 93153891   | LED12DP30LWOW830/25-4PK     | 4                   | 16                    |
| PAR           | 93153880   | LED15DP38VOW830/35-4PK      | 4                   | 16                    |
| MR16          | 93305604   | LED4D/GU10W830/35-6PK       | 6                   | 24                    |
| MR16          | 93305605   | LED5D/GU10W830/35-6PK       | 6                   | 24                    |
| RS Can        | 93162554   | LED8DRS4/9SC-4PK            | 4                   | 16                    |
| RS Can        | 93162555   | LED8DRS6/9SC-4PK            | 4                   | 16                    |
| RS Can        | 93162556   | LED12DRS6/9SC-4PK           | 4                   | 16                    |
| Reflector     | 93305498   | LED8DBR30/927-6PK           | 6                   | 24                    |
| Reflector     | 93305499   | LED8DBR30/930-6PK           | 6                   | 24                    |
| Reflector     | 93305510   | LED8DBR30/940-6PK           | 6                   | 24                    |
| Reflector     | 93305512   | LED8DBR30/950-6PK           | 6                   | 24                    |
| A-line        | 93142809   | LED4DFA15-C-2PK             | 2                   | 12                    |
| A-line        | 93142810   | LED4DFA15-W-2PK             | 2                   | 12                    |
| A-line        | 37669      | LED5DAGCSW-2P 120           | 2                   | 12                    |
| A-line        | 93156446   | LED6DA19/827/E-4PK          | 4                   | 24                    |
| A-line        | 93156447   | LED6DA19/830/E-4PK          | 4                   | 24                    |
| A-line        | 93156448   | LED6DA19/840/E-4PK          | 4                   | 24                    |
| A-line        | 93156449   | LED6DA19/850/E-4PK          | 4                   | 24                    |
| A-line        | 93156450   | LED10DA19/827/E-4PK         | 4                   | 24                    |
| A-line        | 93156531   | LED10DA19/830/E-4PK         | 4                   | 24                    |
| A-line        | 93156532   | LED10DA19/840/E-4PK         | 4                   | 24                    |
| A-line        | 93156533   | LED10DA19/850/E-4PK         | 4                   | 24                    |
| A-line        | 93156534   | LED12DA19/827/E-4PK         | 4                   | 24                    |
| A-line        | 93156535   | LED12DA19/830/E-4PK         | 4                   | 24                    |
| A-line        | 93156536   | LED12DA19/840/E-4PK         | 4                   | 24                    |
| A-line        | 93156537   | LED12DA19/850/E-4PK         | 4                   | 24                    |
| A-line        | 93156538   | LED15DA19/827-4PK           | 4                   | 24                    |
| A-line        | 93156539   | LED15DA19/830-4PK           | 4                   | 24                    |
| A-line        | 93156540   | LED15DA19/840-4PK           | 4                   | 24                    |
| A-line        | 93156541   | LED15DA19/850-4PK           | 4                   | 24                    |
| A-line        | 93305532   | LED6DA19/927/E-4PK          | 4                   | 24                    |
| A-line        | 93305533   | LED6DA19/950/E-4PK          | 4                   | 24                    |
| A-line        | 93305534   | LED10DA19/927/E-4PK         | 4                   | 24                    |
| A-line        | 93305535   | LED10DA19/950/E-4PK         | 4                   | 24                    |
| A-line        | 93305536   | LED13DA19/927-4PK           | 4                   | 24                    |
| A-line        | 93305537   | LED13DA19/950-4PK           | 4                   | 24                    |
| A-line        | 93305538   | LED15DA19/927-4PK           | 4                   | 24                    |
| A-line        | 93305539   | LED15DA19/950-4PK           | 4                   | 24                    |
| A-line        | 93156542   | LED10DA19/GU24/827/E-4PK    | 4                   | 24                    |
| A-line        | 93156543   | LED15DA19/GU24/827-4PK      | 4                   | 24                    |
| A-line        | 93156602   | LED13A19/30/100/827-4PK     | 4                   | 24                    |
| A-line        | 93156603   | LED17A21/50/150/827-4PK     | 4                   | 24                    |

| Lamp Category | Order Code | Description      | Inner Pack Lamp Qty | Outer Carton Lamp Qty |
|---------------|------------|------------------|---------------------|-----------------------|
| A-line        | 93142977   | LED5A19/827-4PK  | 4                   | 24                    |
| A-line        | 93142978   | LED5A19/830-4PK  | 4                   | 24                    |
| A-line        | 93142979   | LED5A19/840-4PK  | 4                   | 24                    |
| A-line        | 93142980   | LED5A19/850-4PK  | 4                   | 24                    |
| A-line        | 93142981   | LED9A19/827-4PK  | 4                   | 24                    |
| A-line        | 93142982   | LED9A19/830-4PK  | 4                   | 24                    |
| A-line        | 93142983   | LED9A19/840-4PK  | 4                   | 24                    |
| A-line        | 93142984   | LED9A19/850-4PK  | 4                   | 24                    |
| A-line        | 93142985   | LED11A21/827-4PK | 4                   | 24                    |
| A-line        | 93142986   | LED11A21/830-4PK | 4                   | 24                    |
| A-line        | 93142987   | LED11A21/840-4PK | 4                   | 24                    |
| A-line        | 93142988   | LED11A21/850-4PK | 4                   | 24                    |
| A-line        | 93142989   | LED15A21/827-4PK | 4                   | 24                    |
| A-line        | 93142990   | LED15A21/830-4PK | 4                   | 24                    |
| A-line        | 93142991   | LED15A21/840-4PK | 4                   | 24                    |
| A-line        | 93142992   | LED15A21/850-4PK | 4                   | 24                    |
| Bright Stik™  | 66256      | LED5.5LS3/827    | 3                   | 48                    |
| Bright Stik™  | 75177      | LED5.5LS3/850    | 3                   | 48                    |
| Bright Stik™  | 75184      | LED9LS3/827      | 3                   | 48                    |
| Bright Stik™  | 75588      | LED9LS3/850      | 3                   | 48                    |
| Bright Stik™  | 75590      | LED12LS2/827     | 2                   | 32                    |
| Bright Stik™  | 75591      | LED12LS2/850     | 2                   | 32                    |
| Bright Stik™  | 75593      | LED15LS2/827     | 2                   | 32                    |
| Bright Stik™  | 75644      | LED15LS2/850     | 2                   | 32                    |
| Decorative    | 93142804   | LED3DFCAM-C-2PK  | 2                   | 12                    |
| Decorative    | 93142808   | LED3DFCAM-W-2PK  | 2                   | 12                    |
| Decorative    | 93142811   | LED4DFBM-C-2PK   | 2                   | 12                    |
| Decorative    | 93142814   | LED4DFBM-W-2PK   | 2                   | 12                    |
| Decorative    | 93142812   | LED4DFCAM-C-2PK  | 2                   | 12                    |
| Decorative    | 93142815   | LED4DFCAM-W-2PK  | 2                   | 12                    |
| Decorative    | 93142855   | LED5DFBM-C-2PK   | 2                   | 12                    |
| Decorative    | 93142856   | LED5DFBM-W-2PK   | 2                   | 12                    |
| Decorative    | 93142851   | LED5DFCAM-C-2PK  | 2                   | 12                    |
| Decorative    | 93142852   | LED5DFCAM-W-2PK  | 2                   | 12                    |
| Decorative    | 93142792   | LED3DFCAC-C-2PK  | 2                   | 12                    |
| Decorative    | 93142793   | LED3DFCAC-W-2PK  | 2                   | 12                    |
| Decorative    | 93142794   | LED4DFBC-C-2PK   | 2                   | 12                    |
| Decorative    | 93142796   | LED4DFBC-W-2PK   | 2                   | 12                    |
| Decorative    | 93142795   | LED4DFCAC-C-2PK  | 2                   | 12                    |
| Decorative    | 93142797   | LED4DFCAC-W-2PK  | 2                   | 12                    |
| Decorative    | 93142802   | LED5DFBC-C-2PK   | 2                   | 12                    |
| Decorative    | 93142803   | LED5DFBC-W-2PK   | 2                   | 12                    |
| Decorative    | 93142800   | LED5DFCAC-C-2PK  | 2                   | 12                    |
| Decorative    | 93142801   | LED5DFCAC-W-2PK  | 2                   | 12                    |
| Decorative    | 93142805   | LED3DFG25-C-2PK  | 2                   | 12                    |
| Decorative    | 93142807   | LED3DFG25-W-2PK  | 2                   | 12                    |
| Decorative    | 93142847   | LED4DFG25-C-2PK  | 2                   | 12                    |
| Decorative    | 93142846   | LED4DFG25-W-2PK  | 2                   | 12                    |
| Decorative    | 93142850   | LED5DFG25-C-2PK  | 2                   | 12                    |
| Decorative    | 93142849   | LED5DFG25-W-2PK  | 2                   | 12                    |
| Decorative    | 93142798   | LED4DFG16C-C-2PK | 2                   | 12                    |
| Decorative    | 93142799   | LED4DFG16C-W-2PK | 2                   | 12                    |





# TRADITIONAL LAMPS & BALLASTS

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Current carries a full family of Traditional lamps that feature plug-and-play simplicity. Our engineering leadership over the years in Traditional lighting has resulted in products that provide the exceptional light quality that you know and love.





# Traditional Lamps

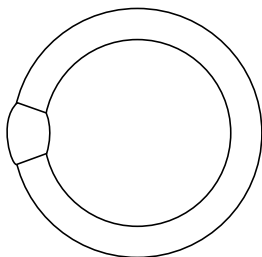


# Linear Fluorescent Lamps

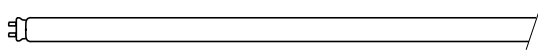


**Linear** Fluorescent lighting, first introduced by GE in 1939, continues to offer low operating costs and long life.

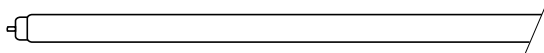
## Lamp Drawings (not drawn to scale)



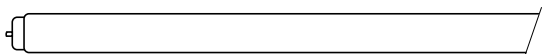
T9 Circline (1-1/8" diameter) 4-Pin Base (G10q)



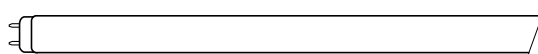
T5 (5/8" diameter) Miniature Bi-Pin Base (G5)



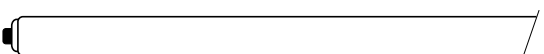
T6 (3/4" diameter) Single Pin Base (Fa8)



T8 (1" diameter) Single Pin Base (Fa8)



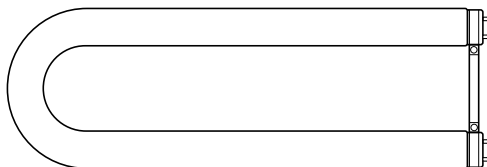
T8 (1" diameter) Medium Bi-Base (G13)



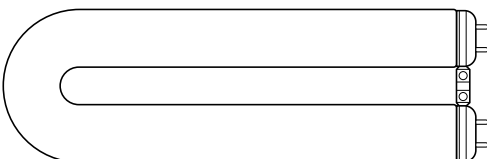
T8 (1" diameter) Recessed Double Contact Base (R17d)



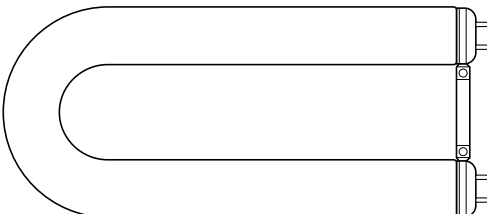
T10 (11/4" diameter) Recessed Double Contact Base (R17d)



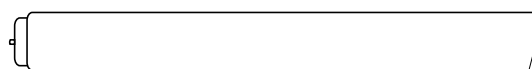
Mod-U-Line® T8/U6 (1" diameter) Medium Bi-Pin Base (G13)



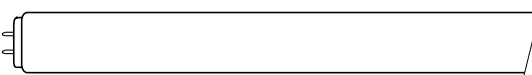
Mod-U-Line® T12/U3 (1 1/2" diameter) Medium Bi-Pin Base (G13)



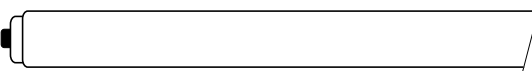
Mod-U-Line® T12/U6 (1-1/2" diameter) Medium Bi-Pin Base (G13)



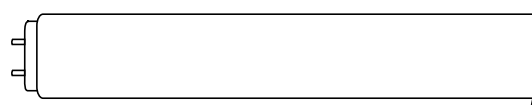
T12 (1-1/2" Diameter) Single Pin Base (Fa8)



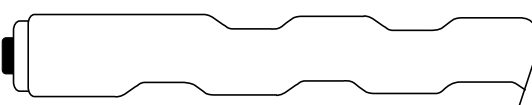
T12 (1-1/2" Diameter) Medium Bi-Pin Base (G13)



T12 (1-1/2" Diameter) Recessed Double Contact Base (R17d)



T17 (2-1/8" diameter) Mogul Bi-Pin (G20)



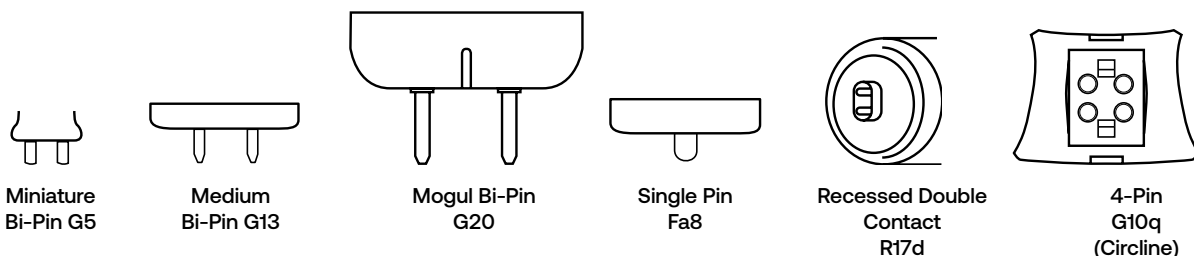
Power Groove® (2-1/8" diameter)  
Recessed Double Contact Base (R17d)



# Linear Fluorescent Lamps



## Base Identification (not drawn to scale)



## Catalog Logic:

The following terms and descriptions can help you when checking fluorescent lamp specifications and when ordering products. Within each product line, lamps are divided into families and listed by bulb, base and then wattage.

|                                                                                                                                                            |  |  |  |  |  |  |  |  |  |  |  |  |                                                                                                                  |  |  |  |  |  |  |  |  |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |  |  |  |  |  |  |  |  |  |  |  |
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| <b>Bulb Shape:</b><br>followed by its size (the maximum diameter of the bulb expressed in eighths of an inch).                                             |  |  |  |  |  |  |  |  |  |  |  |  | <b>Order Code:</b><br>Use the order code when ordering to ensure that you receive the exact product you require. |  |  |  |  |  |  |  |  |  |  |  |  | <b>Color Rendering Index (CRI or R):</b><br>An indication of the ability of the lamp to render object colors in a normal natural way. The higher the number (0-100), the better the color appearance                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Watts:</b><br>Energy used (as defined by FTC Lamp Label Rules). To estimate energy consumption (kWh), multiply watts x hours of use and divide by 1000. |  |  |  |  |  |  |  |  |  |  |  |  | <b>Nominal Length (in):</b><br>Lamp length including base and/or pins.                                           |  |  |  |  |  |  |  |  |  |  |  |  | <b>Color Temperature – Kelvins (K):</b><br>A measure of the visual "warmth" or "coolness" of the light from the lamp. The higher the value, the whiter or "cooler" the light appears.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Base:</b><br>The type of base                                                                                                                           |  |  |  |  |  |  |  |  |  |  |  |  | <b>Carton Quantity:</b><br>Number of lamps packed in a carton                                                    |  |  |  |  |  |  |  |  |  |  |  |  | <b>Means Lumens:</b><br>Lamp light output at 40% of rated lamp life or 8K hours for lamps exceeding 20K hours life.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Description:</b><br>Lamp Model Description                                                                                                              |  |  |  |  |  |  |  |  |  |  |  |  | <b>Initial Lumens:</b><br>Lamp light output after the initial 100 hours of operation.                            |  |  |  |  |  |  |  |  |  |  |  |  | <b>LED Replacement:</b><br>Current offers a wide range of LED replacement lamps. The LED lamp models are provided as general guidance. Often, there will be more than one LED Lamp that may be used to replace a Traditional lamp. For Traditional lamps that operated off a ballast, the ballast bypass (UL Type B) LED option is given unless otherwise noted. The application should be considered when selecting an LED replacement lamp. Sometimes, Traditional lamps do not have a suitable LED replacement due to special application considerations, such as very high heat. Contact Current for additional guidance if the appropriate LED solution is unclear. |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Rated Life (hours):</b><br>Life (as defined by FTC Lamp Label Rules) is rated life in hours.                                                            |  |  |  |  |  |  |  |  |  |  |  |  |                                                                                                                  |  |  |  |  |  |  |  |  |  |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |  |  |  |  |  |  |  |  |  |  |  |
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## F14W/T5/830/ECO

Identifies as Fluorescent lamp

Identifies either the lamp's wattage or its length in inches

Identifies the lamp shape and the bulb diameter in eighths of an inch

Identifies the lamp finish or color

Identifies TCLP compliance



Lamp Contains Mercury.  
Manage in Accord with Disposal Laws.  
See [www.lamprecycle.org](http://www.lamprecycle.org) or 1-800-327-0097

# Linear Fluorescent Lamps



**\*\*Fluorescent Phase-Out Regulations\*\*:** Several US states have enacted legislation that prohibit/will prohibit the sale of Linear and Compact Fluorescent Lamps within their state. For more information including effective dates, please visit [www.LED.com/lamplaw](http://www.LED.com/lamplaw)

## T5 Starcoat Ecolux® Lamps

| Bulb Shape         | Base Type | Nominal Watts | Nominal Length (in.) | Order Code      | Description     | Carton Qty¹ | Rated Life (3hr/Start) | Rated Life (12hr/Start) | Initial Lumens | Mean Lumens | Color Temp. | CRI | Notes    | Order Code       | Description              |
|--------------------|-----------|---------------|----------------------|-----------------|-----------------|-------------|------------------------|-------------------------|----------------|-------------|-------------|-----|----------|------------------|--------------------------|
| T5 High Efficiency |           |               |                      |                 |                 |             |                        |                         |                |             |             |     |          |                  |                          |
| T5                 | G5        | 14            | 21.6                 | 31590           | F14W/T5/830/ECO | 40          | 30,000                 | 36,000                  | 1,350          | 1,240       | 3000K       | 85  |          | 93128494         | LED9BDT5G2/830HE         |
|                    | G5        | 14            | 21.6                 | 46671           | F14W/T5/835/ECO | 40          | 30,000                 | 36,000                  | 1,350          | 1,240       | 3500K       | 85  |          | 93128495         | LED9BDT5G2/835HE         |
|                    | G5        | 14            | 21.6                 | 46673           | F14W/T5/841/ECO | 40          | 30,000                 | 36,000                  | 1,350          | 1,240       | 4100K       | 85  |          | 93319133         | LEDLCBDT5/G2/8SC/120-347 |
|                    | G5        | 21            | 33.4                 | 46677           | F21W/T5/830/ECO | 40          | 30,000                 | 36,000                  | 2,100          | 1,930       | 3000K       | 85  |          | 93128488         | LED11BDT5G3/830HE        |
|                    | G5        | 21            | 33.4                 | 46684           | F21W/T5/835/ECO | 40          | 30,000                 | 36,000                  | 2,100          | 1,930       | 3500K       | 85  |          | 93319131         | LEDLCBDT5/G3/8SC/120-347 |
|                    | G5        | 21            | 33.4                 | 46687           | F21W/T5/841/ECO | 40          | 30,000                 | 36,000                  | 2,100          | 1,930       | 4100K       | 85  |          | 93319131         | LEDLCBDT5/G3/8SC/120-347 |
|                    | G5        | 28            | 45.2                 | 46704           | F28W/T5/830/ECO | 40          | 30,000                 | 36,000                  | 2,900          | 2,660       | 3000K       | 85  |          | 93128354         | LED14BDT5G4/830HE        |
|                    | G5        | 28            | 45.2                 | 46705           | F28W/T5/835/ECO | 40          | 30,000                 | 36,000                  | 2,900          | 2,660       | 3500K       | 85  |          | 93319129         | LEDLCBDT5/G4/8SC/120-347 |
|                    | G5        | 28            | 45.2                 | 46706           | F28W/T5/841/ECO | 40          | 30,000                 | 36,000                  | 2,900          | 2,660       | 4100K       | 85  |          | 93128486         | LED14BDT5G4/840HE        |
| T5 High Output     |           |               |                      |                 |                 |             |                        |                         |                |             |             |     |          |                  |                          |
| T5                 | G5        | 24            | 21.6                 | 46699           | F24W/T5/830/ECO | 40          | 30,000                 | 36,000                  | 2,000          | 1,840       | 3000K       | 85  |          | 93319133         | LEDLCBDT5/G2/8SC/120-347 |
|                    | G5        | 24            | 21.6                 | 46700           | F24W/T5/835/ECO | 40          | 30,000                 | 36,000                  | 2,000          | 1,840       | 3500K       | 85  |          | 93114322         | LED11BDT5/G2/835         |
|                    | G5        | 24            | 21.6                 | 46701           | F24W/T5/841/ECO | 40          | 30,000                 | 36,000                  | 2,000          | 1,840       | 4100K       | 85  |          | 93319133         | LEDLCBDT5/G2/8SC/120-347 |
|                    | G5        | 39            | 33.4                 | 46744           | F39W/T5/830/ECO | 40          | 30,000                 | 36,000                  | 3,500          | 3,220       | 3000K       | 85  |          | 93319131         | LEDLCBDT5/G3/8SC/120-347 |
|                    | G5        | 39            | 33.4                 | 46745           | F39W/T5/835/ECO | 40          | 30,000                 | 36,000                  | 3,500          | 3,220       | 3500K       | 85  |          | 93114626         | LED17BDT5/G3/835         |
|                    | G5        | 54            | 45.2                 | 46759           | F54W/T5/830/ECO | 40          | 30,000                 | 36,000                  | 5,000          | 4,600       | 3000K       | 85  |          | 93319129         | LEDLCBDT5/G4/8SC/120-347 |
|                    | G5        | 54            | 45.2                 | 46760           | F54W/T5/835/ECO | 40          | 30,000                 | 36,000                  | 5,000          | 4,600       | 3500K       | 85  |          | 93100293         | LED25BDT5/G4/835         |
|                    | G5        | 54            | 45.2                 | 46761           | F54W/T5/841/ECO | 40          | 30,000                 | 36,000                  | 5,000          | 4,600       | 4100K       | 85  |          | 93100294         | LED25BDT5/G4/840         |
|                    | G5        | 54            | 45.2                 | 46762           | F54W/T5/850/ECO | 40          | 30,000                 | 36,000                  | 4,800          | 4,410       | 5000K       | 85  |          | 93100295         | LED25BDT5/G4/850         |
| G5                 | 54        | 45.2          | 46763                | F54W/T5/865/ECO | 40              | 30,000      | 36,000                 | 4,750                   | 4,370          | 6500K       | 85          |     | 93100295 | LED25BDT5/G4/850 |                          |

## T5 Preheat Lamps

|                             |           |               |                      |            |             |                         |                        |                |             |             |     |       | Type B LED Replacement |             |
|-----------------------------|-----------|---------------|----------------------|------------|-------------|-------------------------|------------------------|----------------|-------------|-------------|-----|-------|------------------------|-------------|
| Bulb Shape                  | Base Type | Nominal Watts | Nominal Length (in.) | Order Code | Description | Carton Qty <sup>1</sup> | Rated Life (3hr/Start) | Initial Lumens | Mean Lumens | Color Temp. | CRI | Notes | Order Code             | Description |
| <b>12" and 21" Short T5</b> |           |               |                      |            |             |                         |                        |                |             |             |     |       |                        |             |
| T5                          | G5        | 8             | 12.0                 | 10059      | F8T5/CW     | 24                      | 5,000                  | 400            | 320         | 4100K       | 60  |       |                        |             |
|                             | G5        | 13            | 21.0                 | 10086      | F13T5/CW    | 24                      | 5,000                  | 850            | 705         | 4100K       | 60  |       |                        |             |

## T8 Starcoat® Lamps

| Bulb Shape    | Base Type | Watts | Nominal Length (in.) | Order Code | Description      | Carton Qty¹ | Rated Life (3hr/Start) | Rated Life (12hr/Start) | Initial Lumens | Mean Lumens | Color Temp. | CRI | Notes | Order Code | Description              |
|---------------|-----------|-------|----------------------|------------|------------------|-------------|------------------------|-------------------------|----------------|-------------|-------------|-----|-------|------------|--------------------------|
| 2' T8 Ecolux® |           |       |                      |            |                  |             |                        |                         |                |             |             |     |       |            |                          |
| T8            | G13       | 17    | 24.0                 | 45741      | F17T8/SP30/ECO   | 24          | 30,000                 | 36,000                  | 1,325          | 1,260       | 3000K       | 78  |       | 93313567   | LEDLCBDT8/G2/8SC/120-347 |
|               | G13       | 17    | 24.0                 | 45743      | F17T8/SP35/ECO   | 24          | 30,000                 | 36,000                  | 1,325          | 1,260       | 3500K       | 78  |       | 39560      | LED9BDT8/G2/835          |
|               | G13       | 17    | 24.0                 | 45748      | F17T8/SP41/ECO   | 24          | 30,000                 | 36,000                  | 1,325          | 1,260       | 4100K       | 78  |       | 39561      | LED9BDT8/G2/840          |
| 3' T8 Ecolux® |           |       |                      |            |                  |             |                        |                         |                |             |             |     |       |            |                          |
| T8            | G13       | 25    | 36.0                 | 45754      | F25T8/SP35/ECO   | 24          | 30,000                 | 36,000                  | 2,080          | 1,970       | 3500K       | 78  |       | 39547      | LED12BDT8/G3/835         |
|               | G13       | 25    | 36.0                 | 45756      | F25T8/SP41/ECO   | 24          | 30,000                 | 36,000                  | 2,080          | 1,970       | 4100K       | 78  |       | 39554      | LED12BDT8/G3/840         |
| 4' T8 Ecolux® |           |       |                      |            |                  |             |                        |                         |                |             |             |     |       |            |                          |
| T8            | G13       | 32    | 48.0                 | 68850      | F32T8/SPX30/ECO2 | 36          | 30,000                 | 36,000                  | 2,925          | 2,770       | 3000K       | 85  | Δ     | 39493      | LED14BDT8/G4/830         |
|               | G13       | 32    | 48.0                 | 68851      | F32T8/SPX35/ECO2 | 36          | 30,000                 | 36,000                  | 2,925          | 2,770       | 3500K       | 85  | Δ     | 39494      | LED14BDT8/G4/835         |
|               | G13       | 32    | 48.0                 | 68852      | F32T8/SPX41/ECO2 | 36          | 30,000                 | 36,000                  | 2,925          | 2,770       | 4100K       | 85  | Δ     | 39498      | LED14BDT8/G4/840         |
|               | G13       | 32    | 48.0                 | 68853      | F32T8/SPX50/ECO2 | 36          | 30,000                 | 36,000                  | 2,900          | 2,755       | 5000K       | 82  | Δ     | 39519      | LED14BDT8/G4/850         |
|               | G13       | 32    | 48.0                 | 66342      | F32T8/SPX65/ECO2 | 36          | 30,000                 | 36,000                  | 2,900          | 2,755       | 6500K       | 78  | Δ     | 39519      | LED14BDT8/G4/850         |

<sup>1</sup> Minimum order quantity = Carton Qty

Δ Impacted by 4' fluorescent state legislation, SKU not for sale in Vermont after 1/1/2024 due to state legislation; for more information please visit [www.LED.com/lamplaw](http://www.LED.com/lamplaw)



# Linear Fluorescent Lamps



**\*\*Fluorescent Phase-Out Regulations\*\*:** Several US states have enacted legislation that prohibit/will prohibit the sale of Linear and Compact Fluorescent Lamps within their state. For more information including effective dates, please visit [www.LED.com/lamplegislation](http://www.LED.com/lamplegislation)

## Ultra Energy Saving T8 Lamps

|                                   |           |       |                      |            |                       |                         |                        |                         |                |             |             |     |       | Type B LED Replacement |                  |
|-----------------------------------|-----------|-------|----------------------|------------|-----------------------|-------------------------|------------------------|-------------------------|----------------|-------------|-------------|-----|-------|------------------------|------------------|
| Bulb Shape                        | Base Type | Watts | Nominal Length (in.) | Order Code | Description           | Carton Qty <sup>1</sup> | Rated Life (3hr/Start) | Rated Life (12hr/Start) | Initial Lumens | Mean Lumens | Color Temp. | CRI | Notes | Order Code             | Description      |
| <b>4' T8 Ecolux® 25 Watt Lamp</b> |           |       |                      |            |                       |                         |                        |                         |                |             |             |     |       |                        |                  |
| T8                                | G13       | 25    | 48.0                 | 72129      | F32T8/25W/SPX35/ECO   | 36                      | 50,000                 | 55,000                  | 2,500          | 2,350       | 3500K       | 85  | Δ     | 9317213                | LED11BDT8/G4/835 |
|                                   | G13       | 25    | 48.0                 | 72130      | F32T8/25W/SPX41/ECO   | 36                      | 50,000                 | 55,000                  | 2,500          | 2,350       | 4100K       | 85  | Δ     | 9317214                | LED11BDT8/G4/840 |
|                                   | G13       | 25    | 48.0                 | 72131      | F32T8/25W/SPX50/ECO   | 36                      | 50,000                 | 55,000                  | 2,500          | 2,350       | 5000K       | 80  | Δ     | 9317215                | LED11BDT8/G4/850 |
| <b>4' T8 Ecolux® 28 Watt Lamp</b> |           |       |                      |            |                       |                         |                        |                         |                |             |             |     |       |                        |                  |
| T8                                | G13       | 28    | 48.0                 | 72864      | F28T8/XL/SPX35/ECO    | 36                      | 45,000                 | 50,000                  | 2,675          | 2,515       | 3500K       | 85  | Δ     | 9317213                | LED11BDT8/G4/835 |
|                                   | G13       | 28    | 48.0                 | 72866      | F28T8/XL/SPX41/ECO    | 36                      | 45,000                 | 50,000                  | 2,675          | 2,515       | 4100K       | 82  | Δ     | 9317214                | LED11BDT8/G4/840 |
|                                   | G13       | 28    | 48.0                 | 72867      | F28T8/XL/SPX50/ECO    | 36                      | 45,000                 | 50,000                  | 2,675          | 2,515       | 5000K       | 80  | Δ     | 9317215                | LED11BDT8/G4/850 |
| <b>4' T8 Ecolux® High Lumen</b>   |           |       |                      |            |                       |                         |                        |                         |                |             |             |     |       |                        |                  |
| T8                                | G13       | 32    | 48.0                 | 10326      | F32T8/XL/SPX35/HL/ECO | 36                      | 40,000                 | 45,000                  | 3,100          | 2,915       | 3500K       | 85  | Δ     | 39494                  | LED14BDT8/G4/835 |
|                                   | G13       | 32    | 48.0                 | 10322      | F32T8/XL/SPX41/HL/ECO | 36                      | 40,000                 | 45,000                  | 3,100          | 2,915       | 4100K       | 82  | Δ     | 39498                  | LED14BDT8/G4/840 |
|                                   | G13       | 32    | 48.0                 | 42556      | F32T8/XL/SPX50/HL/ECO | 36                      | 40,000                 | 45,000                  | 3,000          | 2,820       | 5000K       | 80  | Δ     | 39519                  | LED14BDT8/G4/850 |

## 8' T8 Lamps

|                            |           |       |                      |            |                  |                         |                        |                         |                |             |             |     |       | Type B LED Replacement |                              |
|----------------------------|-----------|-------|----------------------|------------|------------------|-------------------------|------------------------|-------------------------|----------------|-------------|-------------|-----|-------|------------------------|------------------------------|
| Bulb Shape                 | Base Type | Watts | Nominal Length (in.) | Order Code | Description      | Carton Qty <sup>1</sup> | Rated Life (3hr/Start) | Rated Life (12hr/Start) | Initial Lumens | Mean Lumens | Color Temp. | CRI | Notes | Order Code             | Description                  |
| <b>8' T8 XL Extra-Life</b> |           |       |                      |            |                  |                         |                        |                         |                |             |             |     |       |                        |                              |
| T8                         | Fa8       | 59    | 96.0                 | 68869      | F96T8/XL/SPX35/2 | 24                      | 24,000                 | 30,000                  | 5,950          | 5,650       | 3500K       | 85  |       | 93122171               | LED34BDT8/G/8/835            |
|                            | Fa8       | 59    | 96.0                 | 68870      | F96T8/XL/SPX41/2 | 24                      | 24,000                 | 30,000                  | 5,400          | 4,860       | 4100K       | 85  |       | 93319020               | LED42BDT8/G8/Fa8/8SC/120-347 |
|                            | Fa8       | 59    | 96.0                 | 68871      | F96T8/XL/SPX50/2 | 24                      | 24,000                 | 30,000                  | 5,950          | 5,650       | 5000K       | 82  |       | 93319020               | LED42BDT8/G8/Fa8/8SC/120-347 |

## 8' T8 High Output Lamps

| Bulb Shape                                  | Base Type | Watts | Nominal Length (in.) | Order Code | Description    | Carton Qty¹ | Rated Life (3hr/Start) | Initial Lumens | Mean Lumens | Color Temp. | CRI | Notes | Order Code | Description                   |
|---------------------------------------------|-----------|-------|----------------------|------------|----------------|-------------|------------------------|----------------|-------------|-------------|-----|-------|------------|-------------------------------|
| 8' T8 High Output – Recessed Double Contact |           |       |                      |            |                |             |                        |                |             |             |     |       |            |                               |
| T8                                          | R17D      | 86    | 96.0                 | 12533      | F96T8/SPX35/HO | 24          | 18,000                 | 8,200          | 7,800       | 3500K       | 85  |       | 93132591   | LED43BDT8/G8/835              |
|                                             | R17D      | 86    | 96.0                 | 12534      | F96T8/SPX41/HO | 24          | 18,000                 | 8,200          | 7,800       | 4100K       | 85  |       | 93319022   | LED42BDT8/G8/R17d/8SC/120-347 |
|                                             | R17D      | 86    | 96.0                 | 12535      | F96T8/SPX50/HO | 24          | 18,000                 | 8,200          | 7,800       | 5000K       | 82  |       | 93319022   | LED42BDT8/G8/R17d/8SC/120-347 |

## T8 Mod-U-Line® Lamps

| Bulb Shape                | Base Type | Nominal |              | Order Code | Description        | Carton Qty¹ | Rated Life (3hr/Start) | Initial Lumens | Mean Lumens | Color Temp. | CRI | Notes | Order Code | Description      |
|---------------------------|-----------|---------|--------------|------------|--------------------|-------------|------------------------|----------------|-------------|-------------|-----|-------|------------|------------------|
|                           |           | Watts   | Length (in.) |            |                    |             |                        |                |             |             |     |       |            |                  |
| T8 1-5/8" Spacing Ecolux® |           |         |              |            |                    |             |                        |                |             |             |     |       |            |                  |
| T8                        | G13       | 31      | 22.5         | 72118      | F31T8/SPX35/U/ECO  | 15          | 24,000                 | 2,775          | 2,440       | 3500K       | 82  |       | 93107352   | LED13BDT8/U/835  |
|                           | G13       | 31      | 22.5         | 72119      | F31T8/SPX41/U/ECO  | 15          | 24,000                 | 2,775          | 2,440       | 4100K       | 82  |       | 93107388   | LED13BDT8/U/840  |
| T8 6" Spacing Ecolux®     |           |         |              |            |                    |             |                        |                |             |             |     |       |            |                  |
| T8                        | G13       | 32      | 22.5         | 28145      | F32T8/SP30/U6/ECO  | 12          | 20,000                 | 2,700          | 2,375       | 3000K       | 78  |       | 93133049   | LED13BDT8/U6/830 |
|                           | G13       | 32      | 22.5         | 28149      | F32T8/SP35/U6/ECO  | 12          | 20,000                 | 2,700          | 2,375       | 3500K       | 78  |       | 93133050   | LED13BDT8/U6/835 |
|                           | G13       | 32      | 22.5         | 28152      | F32T8/SP41/U6/ECO  | 12          | 20,000                 | 2,700          | 2,375       | 4100K       | 78  |       | 93133051   | LED13BDT8/U6/840 |
|                           | G13       | 32      | 22.5         | 72112      | F32T8/SPX35/U6/ECO | 12          | 20,000                 | 2,800          | 2,465       | 3500K       | 82  |       | 93133050   | LED13BDT8/U6/835 |
|                           | G13       | 32      | 22.5         | 72113      | F32T8/SPX41/U6/ECO | 12          | 20,000                 | 2,800          | 2,465       | 4100K       | 82  |       | 93133051   | LED13BDT8/U6/840 |

## Special Application Lamps

|                                          |           |       |                      |            |                      |                         |                        |                         |                |             |             |     |              | Type B LED Replacement |                        |
|------------------------------------------|-----------|-------|----------------------|------------|----------------------|-------------------------|------------------------|-------------------------|----------------|-------------|-------------|-----|--------------|------------------------|------------------------|
| Bulb Shape                               | Base Type | Watts | Nominal Length (in.) | Order Code | Description          | Carton Qty <sup>1</sup> | Rated Life (3hr/Start) | Rated Life (12hr/Start) | Initial Lumens | Mean Lumens | Color Temp. | CRI | Notes        | Order Code             | Description            |
| <b>covRguard® Shatter Resistant</b>      |           |       |                      |            |                      |                         |                        |                         |                |             |             |     |              |                        |                        |
| <b>(T5 High Efficiency)</b>              |           |       |                      |            |                      |                         |                        |                         |                |             |             |     |              |                        |                        |
| T5                                       | G5        | 28    | 45.2                 | 81547      | F28W/T5/835/ECO/CVG  | 40                      | 30,000                 | 36,000                  | 2,813          | 2,672       | 3500K       | 85  | Blocks UV    |                        |                        |
| <b>(T5 High Output)</b>                  |           |       |                      |            |                      |                         |                        |                         |                |             |             |     |              |                        |                        |
| T5                                       | G5        | 54    | 45.2                 | 48458      | F54T5/841/HO/ECO/CVG | 40                      | 30,000                 | 36,000                  | 4,850          | 4,560       | 4100K       | 85  |              | 93155904               | LED25BDT5/G4/840/CVG   |
|                                          | G5        | 54    | 45.2                 | 80311      | F54T5/850/HO/ECO/CVG | 40                      | 30,000                 | 36,000                  | 4,650          | 4,370       | 5000K       | 85  |              | 93155905               | LED25BDT5/G4/850/CVG   |
| <b>T8 Ecolux® w/ Starcoat®</b>           |           |       |                      |            |                      |                         |                        |                         |                |             |             |     |              |                        |                        |
| <b>(4' T8 (48") Ecolux® w/Starcoat®)</b> |           |       |                      |            |                      |                         |                        |                         |                |             |             |     |              |                        |                        |
| T8                                       | G13       | 32    | 48.0                 | 41126      | F32T8SPX35ECOCVG     | 36                      | 30,000                 | 36,000                  | 2,860          | 2,715       | 3500K       | 85  | Blocks UV, Δ | 93154588               | LED16BDT8/G4/835XL/CVG |
|                                          | G13       | 32    | 48.0                 | 41127      | F32T8SPX41ECOCVG     | 36                      | 30,000                 | 36,000                  | 2,860          | 2,715       | 4100K       | 85  | Blocks UV, Δ | 93154589               | LED16BDT8/G4/840XL/CVG |
|                                          | G13       | 32    | 48.0                 | 15971      | F32T8SPX50ECOCVG     | 36                      | 30,000                 | 36,000                  | 2,715          | 2,580       | 5000K       | 82  | Blocks UV, Δ | 93154586               | LED16BDT8/G4/850XL/CVG |

<sup>1</sup> Minimum order quantity = Carton Qty

Δ Impacted by 4' fluorescent state legislation, SKU not for sale in Vermont after 1/1/2024 due to state legislation; for more information please visit [www.LED.com/lamplegislation](http://www.LED.com/lamplegislation)

# Linear Fluorescent Lamps



**\*\*Fluorescent Phase-Out Regulations\*\*:** Several US states have enacted legislation that prohibit/will prohibit the sale of Linear and Compact Fluorescent Lamps within their state. For more information including effective dates, please visit [www.LED.com/lamplegislation](http://www.LED.com/lamplegislation)

## T12 Lamps

|                                                                    |           |       |                      |            |                   |                         |                        |                |             |             |     |       | Type B LED Replacement |                               |
|--------------------------------------------------------------------|-----------|-------|----------------------|------------|-------------------|-------------------------|------------------------|----------------|-------------|-------------|-----|-------|------------------------|-------------------------------|
| Bulb Shape                                                         | Base Type | Watts | Nominal Length (in.) | Order Code | Description       | Carton Qty <sup>1</sup> | Rated Life (3hr/Start) | Initial Lumens | Mean Lumens | Color Temp. | CRI | Notes | Order Code             | Description                   |
| <b>2' T12 - Preheat (TCLP Compliant)</b>                           |           |       |                      |            |                   |                         |                        |                |             |             |     |       |                        |                               |
| T12                                                                | G13       | 20    | 24.0                 | 80045      | F20T12/CW/ECO     | 24                      | 9,000                  | 1,200          | 1,150       | 4100K       | 60  |       | 39561                  | LED9BDT8/G2/840               |
|                                                                    | G13       | 20    | 24.0                 | 80047      | F20T12/D/ECO      | 24                      | 9,000                  | 1,025          | 945         | 6500K       | 75  |       | 39563                  | LED9BDT8/G2/850               |
| <b>4' T12 - Rapid Start (TCLP Compliant)</b>                       |           |       |                      |            |                   |                         |                        |                |             |             |     |       |                        |                               |
| <b>(34W Watt-Miser® Ecolux®)</b>                                   |           |       |                      |            |                   |                         |                        |                |             |             |     |       |                        |                               |
| T12                                                                | G13       | 34    | 48.0                 | 66474      | F34CX41/WM/ECO    | 30                      | 20,000                 | 2,500          | 2,200       | 4100K       | 87  | Δ     | 93117214               | LED11BDT8/G4/840              |
| <b>(40W Ecolux®)</b>                                               |           |       |                      |            |                   |                         |                        |                |             |             |     |       |                        |                               |
| T12                                                                | G13       | 40    | 48.0                 | 80096      | F40C50/ECO        | 30                      | 20,000                 | 2,250          | 1,870       | 5000K       | 90  | Δ     | 93117215               | LED11BDT8/G4/850              |
|                                                                    | G13       | 40    | 48.0                 | 80097      | F40DX/ECO         | 30                      | 20,000                 | 2,050          | 1,740       | 6500K       | 90  | Δ     | 93117215               | LED11BDT8/G4/850              |
| <b>8' T12 Instant Start</b>                                        |           |       |                      |            |                   |                         |                        |                |             |             |     |       |                        |                               |
| <b>(8' Instant Start Standard)</b>                                 |           |       |                      |            |                   |                         |                        |                |             |             |     |       |                        |                               |
| T12                                                                | Fa8       | 75    | 96.0                 | 14652      | F96T12/DX         | 15                      | 12,000                 | 4,300          | 3,870       | 6500K       | 90  |       | 93319020               | LED42BDT8/G8/Fa8/8SC/120-347  |
| <b>(8' Instant Start Watt-Miser® XL Extra-life)</b>                |           |       |                      |            |                   |                         |                        |                |             |             |     |       |                        |                               |
| T12                                                                | Fa8       | 60    | 96.0                 | 68052      | F96T12/CW/C/WM    | 15                      | 12,000                 | 3,600          | 2,900       | 4100K       | 90  |       | 93319020               | LED42BDT8/G8/Fa8/8SC/120-347  |
|                                                                    | Fa8       | 60    | 96.0                 | 66858      | F96T12XL/HL41/WM  | 15                      | 12,000                 | 5,900          | 5,480       | 4100K       | 80  |       | 93319020               | LED42BDT8/G8/Fa8/8SC/120-347  |
| <b>T12 High Output (800mA) Rapid Start Recessed Double Contact</b> |           |       |                      |            |                   |                         |                        |                |             |             |     |       |                        |                               |
| <b>(4' High Output)</b>                                            |           |       |                      |            |                   |                         |                        |                |             |             |     |       |                        |                               |
| T12                                                                | R17D      | 60    | 48.0                 | 10773      | F48T12/CW/HO      | 24                      | 12,000                 | 3,825          | 3,320       | 4100K       | 60  | Δ     | 93319032               | LED18BDT8/G4/R17d/8SC/120-347 |
|                                                                    | R17D      | 60    | 48.0                 | 10778      | F48T12/D/HO       | 24                      | 12,000                 | 3,400          | 2,960       | 6500K       | 75  | Δ     | 93319032               | LED18BDT8/G4/R17d/8SC/120-347 |
| <b>(5' High Output)</b>                                            |           |       |                      |            |                   |                         |                        |                |             |             |     |       |                        |                               |
| T12                                                                | R17D      | 75    | 60.0                 | 23075      | F60T12/CW/HO 15PK | 15                      | 12,000                 | 5,150          | 4,480       | 4100K       | 60  |       | 93319030               | LED24BDT8/G5/R17d/8SC/120-347 |
|                                                                    | R17D      | 75    | 60.0                 | 23077      | F60T12/D/HO 15PK  | 15                      | 12,000                 | 4,400          | 3,830       | 6500K       | 75  |       | 93319030               | LED24BDT8/G5/R17d/8SC/120-347 |
| <b>(6' High Output)</b>                                            |           |       |                      |            |                   |                         |                        |                |             |             |     |       |                        |                               |
| T12                                                                | R17D      | 85    | 72.0                 | 13697      | F72T12/CW/HO 15PK | 15                      | 12,000                 | 6,350          | 5,520       | 4100K       | 60  |       | 93319026               | LED30BDT8/G6/R17d/8SC/120-347 |
|                                                                    | R17D      | 85    | 72.0                 | 13699      | F72T12/D/HO 15PK  | 15                      | 12,000                 | 5,350          | 4,650       | 6500K       | 75  |       | 93319026               | LED30BDT8/G6/R17d/8SC/120-347 |
| <b>(7' High Output)</b>                                            |           |       |                      |            |                   |                         |                        |                |             |             |     |       |                        |                               |
| T12                                                                | R17D      | 100   | 84.0                 | 13766      | F84T12/CW/HO 15PK | 15                      | 12,000                 | 7,700          | 6,700       | 4100K       | 60  |       | 93319024               | LED35BDT8/G7/R17d/8SC/120-347 |
|                                                                    | R17D      | 100   | 84.0                 | 13767      | F84T12/D/HO 15PK  | 15                      | 12,000                 | 6,500          | 5,660       | 6500K       | 75  |       | 93319024               | LED35BDT8/G7/R17d/8SC/120-347 |
| <b>(8' High Output)</b>                                            |           |       |                      |            |                   |                         |                        |                |             |             |     |       |                        |                               |
| T12                                                                | R17D      | 95    | 96.0                 | 66862      | F96T12/HL41/HO/WM | 15                      | 12,000                 | 8,850          | 7,920       | 4100K       | 77  |       | 93319022               | LED42BDT8/G8/R17d/8SC/120-347 |

## Cold Temperature Lamps

|                                                    |           |       |                      |            |                 |                         |                        |                |             |             |     |       | Type B LED Replacement |                               |
|----------------------------------------------------|-----------|-------|----------------------|------------|-----------------|-------------------------|------------------------|----------------|-------------|-------------|-----|-------|------------------------|-------------------------------|
| Bulb Shape                                         | Base Type | Watts | Nominal Length (in.) | Order Code | Description     | Carton Qty <sup>1</sup> | Rated Life (3hr/Start) | Initial Lumens | Mean Lumens | Color Temp. | CRI | Notes | Order Code             | Description                   |
| <b>High Output (800mA) Recessed Double Contact</b> |           |       |                      |            |                 |                         |                        |                |             |             |     |       |                        |                               |
| T12                                                | R17D      | 110   | 96.0                 | 11918      | F96T12/CW/HO/CT | 15                      | 12,000                 | 8,900          | 7,740       | 4100K       | 60  |       | 93319022               | LED42BDT8/G8/R17d/8SC/120-347 |
|                                                    | R17D      | 110   | 96.0                 | 11919      | F96T12/D/HO/CT  | 15                      | 12,000                 | 7,600          | 6,610       | 6500K       | 75  |       | 93319022               | LED42BDT8/G8/R17d/8SC/120-347 |

## T9 Circline® Lamps

|                           |           |       |                      |            |             |                         |                        |                |             |             |     |       | Type B LED Replacement |             |
|---------------------------|-----------|-------|----------------------|------------|-------------|-------------------------|------------------------|----------------|-------------|-------------|-----|-------|------------------------|-------------|
| Bulb Shape                | Base Type | Watts | Nominal Length (in.) | Order Code | Description | Carton Qty <sup>1</sup> | Rated Life (3hr/Start) | Initial Lumens | Mean Lumens | Color Temp. | CRI | Notes | Order Code             | Description |
| <b>T9 Circline® Lamps</b> |           |       |                      |            |             |                         |                        |                |             |             |     |       |                        |             |
| T9                        | G10q      | 22    | 8.25                 | 33774      | FC8T9/CW    | 12                      | 12,000                 | 1,100          | 825         | 4100K       | 60  |       |                        |             |
|                           | G10q      | 32    | 12.0                 | 33890      | FC12T9/CW   | 12                      | 12,000                 | 1,950          | 1,460       | 4100K       | 60  |       |                        |             |

<sup>1</sup> Minimum order quantity = Carton Qty

Δ Impacted by 4' fluorescent state legislation, SKU not for sale in Vermont after 1/1/2024 due to state legislation; for more information please visit [www.LED.com/lamplegislation](http://www.LED.com/lamplegislation)

## Regulation Readiness: Fluorescent Phase-Out

In an effort to regulate consumer products that contain mercury, state governments within the USA have passed legislation that will prohibit the sale and distribution of Linear and Compact Fluorescent lamps. The effective date of each state regulation is shown in the table below. This table will continue to evolve as new legislation is passed.

### Regulation Effective Date by Product Category

| State            | Product Category          |                        |                                            |                               |                                        |
|------------------|---------------------------|------------------------|--------------------------------------------|-------------------------------|----------------------------------------|
|                  | 4-Foot Linear Fluorescent | All Linear Fluorescent | Screw or Bayonet Based Compact Fluorescent | Pin Based Compact Fluorescent | Mercury Vapor High Intensity Discharge |
| Vermont          | 1/1/2024                  |                        |                                            |                               |                                        |
| California       |                           | 1/1/2025               | 1/1/2024                                   | 1/1/2025                      |                                        |
| Colorado         |                           | 1/1/2025               | 1/1/2024                                   | 1/1/2025                      |                                        |
| Oregon           |                           | 1/1/2025               | 1/1/2024                                   | 1/1/2025                      |                                        |
| Rhode Island     |                           | 1/1/2025               | 1/1/2024                                   | 1/1/2025                      |                                        |
| Hawaii           |                           | 1/1/2026               | 1/1/2025                                   | 1/1/2026                      |                                        |
| Minnesota        |                           | 1/1/2026               | 1/1/2025                                   | 1/1/2026                      | 1/1/2025                               |
| Maine            |                           | 1/1/2026               | 1/1/2026                                   | 1/1/2026                      |                                        |
| Illinois         |                           | 1/1/2027               | 1/1/2026                                   | 1/1/2027                      |                                        |
| Washington State |                           | 1/1/2029               | 1/1/2029                                   | 1/1/2029                      |                                        |

## Mercury in Fluorescent Lighting

Fluorescent technology was developed by General Electric in 1934. While the amount of mercury in each fluorescent lamp has significantly decreased over the past 90 years, a small amount is still required to produce light in all Discharge lamps. When electricity is applied to a fluorescent tube, mercury ions emit energy in the form of ultraviolet (UV) light. UV light is then converted into visible light by interacting with the phosphor coating on the inside of the glass tube. Mercury has electrical characteristics that cannot be matched by other materials and remains a key component of fluorescent lighting.

## Transitioning to LED Lighting

LED (Light Emitting Diode) lamps do not contain mercury, and Current offers a variety of LED lamp options to replace Linear & Compact Fluorescent lamps. The different Types of LED lamps are explained in the following pages. Suggested LED replacements are noted for fluorescent lamps in the tables in this document. These are basic recommendations, but suitability should be evaluated for each specific application where fluorescent lamps were used. For more information about the transition from fluorescent to LED, contact your Current sales representative.

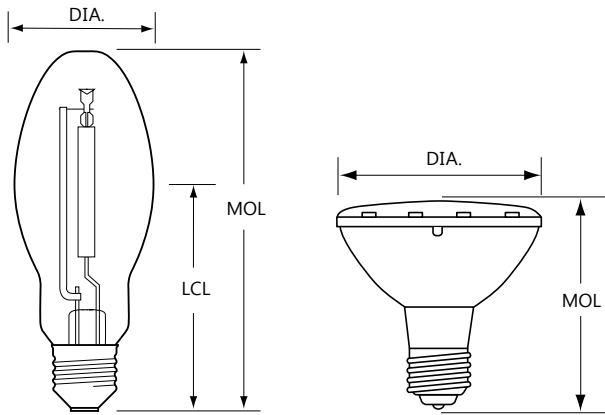
**To learn more about Fluorescent Regulations and LED replacements, please visit [www.LED.com/lamplaw](http://www.LED.com/lamplaw)**

# High Intensity Discharge Lamps



**High Intensity** Discharge lighting provides energy efficiency in a compact size for many commercial and industrial applications.

## Reference Guide | Bulb Identification



**DIA:** Diameter of bulb at widest point.

**MOL:** Maximum Overall Length including base or pins.

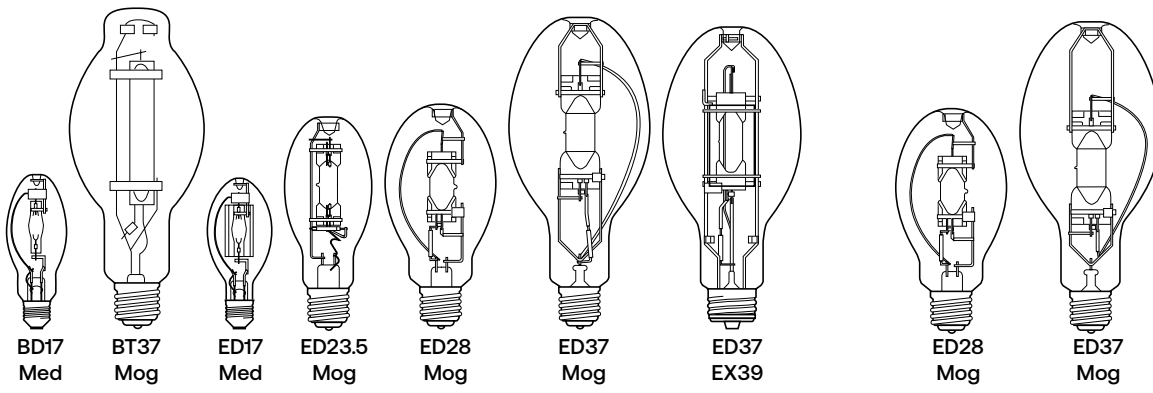
**LCL:** Distance between the center of the arc tube and the Light Center Length reference plane.

**Note:** Lamp drawings are not drawn to scale.

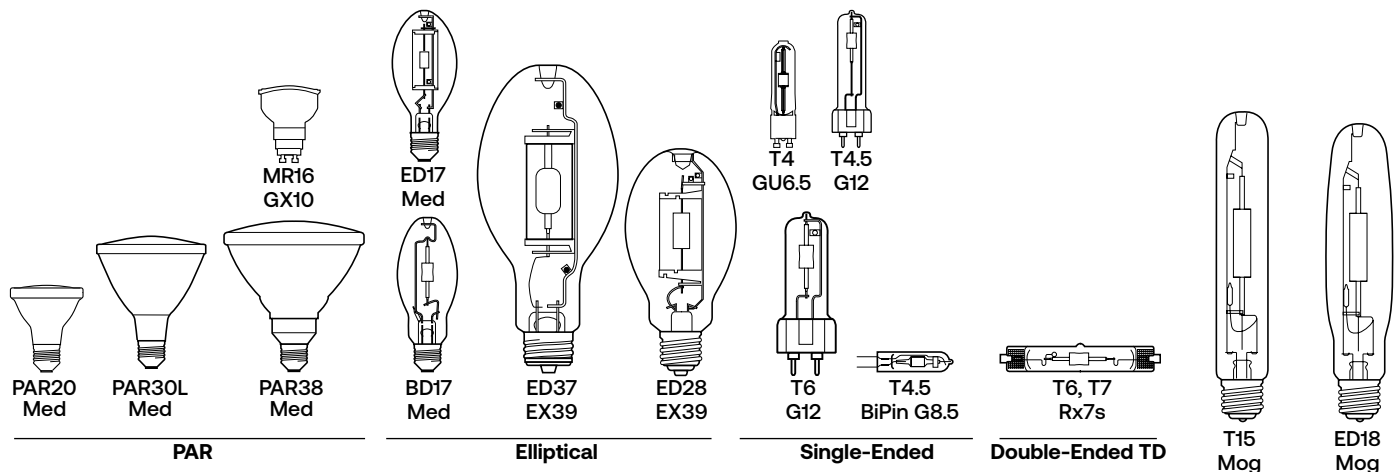
Be sure to check size and dimension information when identifying each lamp.

To convert inches to millimeters, multiply the dimension (in inches) by 25.4 (i.e. 1.5" x 25.4 = 38.1 mm).

## Filament Identification



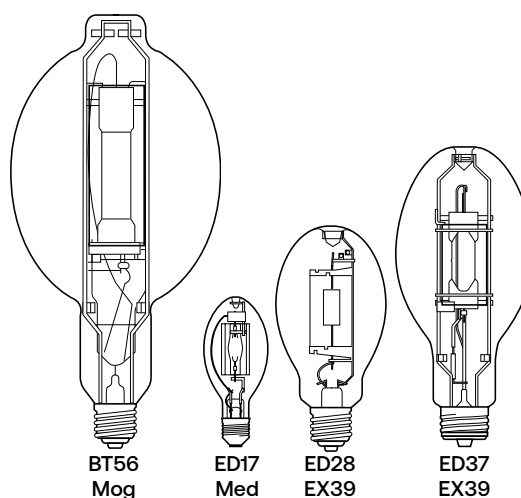
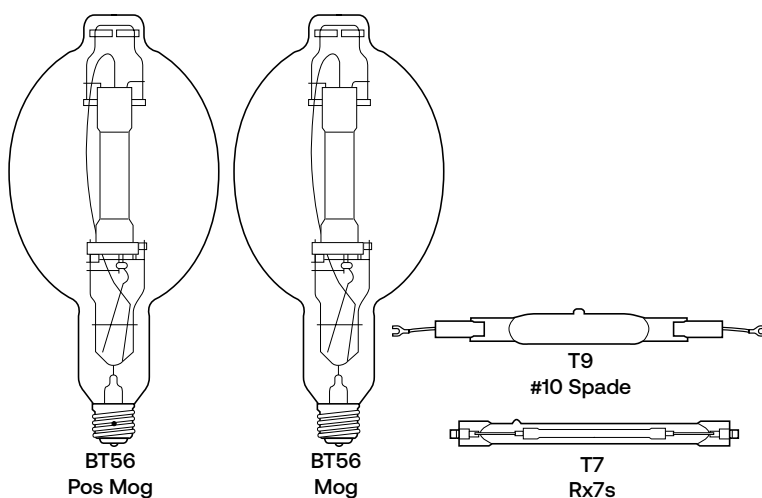
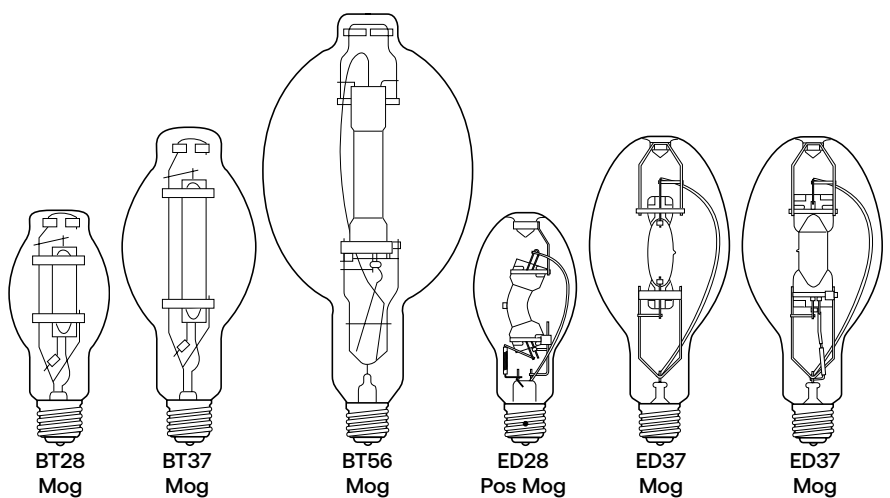
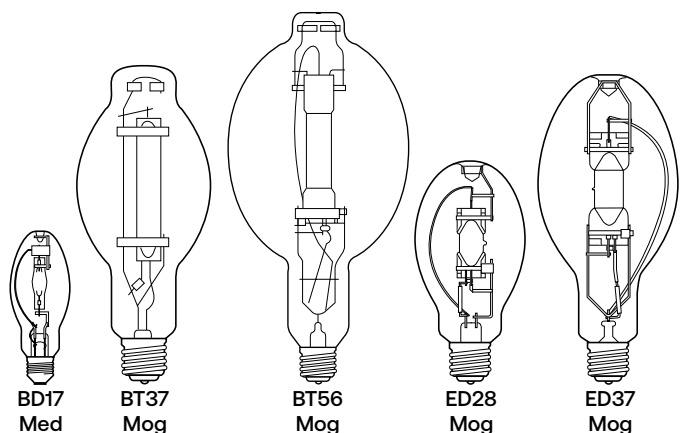
## Base Identification (not drawn to scale)



# High Intensity Discharge Lamps



## Lamp Drawings (not drawn to scale)

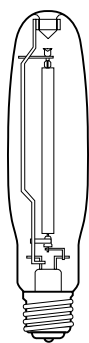




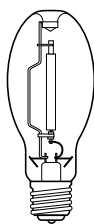
# High Intensity Discharge Lamps



## Lamp Drawings (Conti.) (not drawn to scale)



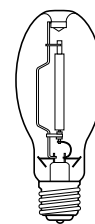
BD18  
Mog



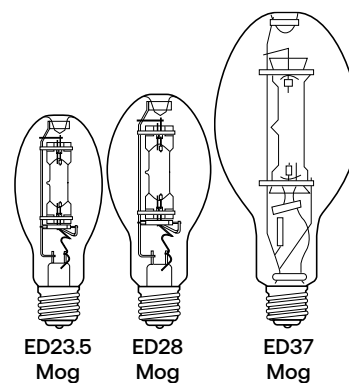
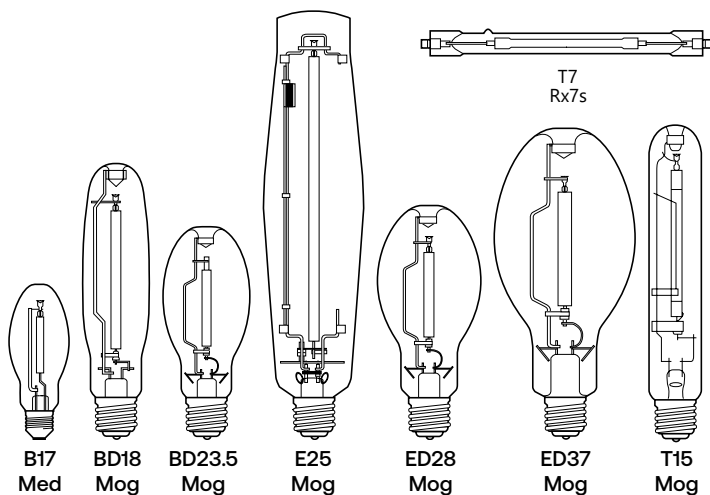
ED23.5  
Mog



ED18  
Mog



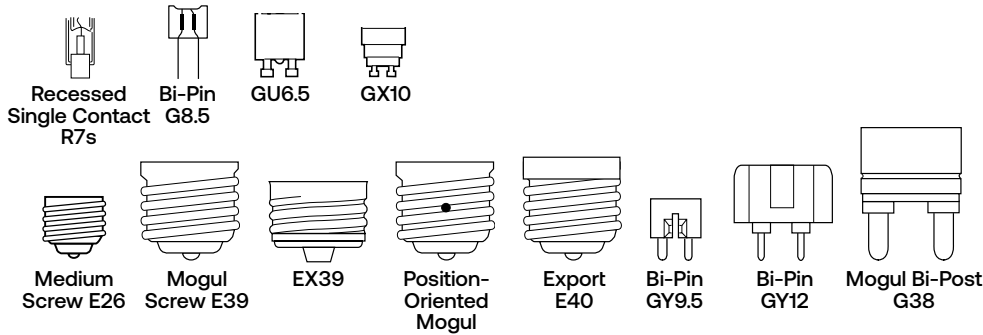
ED23.5  
Mog



# High Intensity Discharge Lamps



## Base Identification (not drawn to scale)



## Catalog Logic:

### Bulb Shape:

followed by its size (the maximum diameter of the bulb expressed in eighths of an inch).

### Watts:

Energy used (as defined by FTC Lamp Label Rules). To estimate energy consumption (kWh), multiply watts x hours of use and divide by 1000.

### Description:

Lamp Model Description

### Color Rendering Index (CRI or R):

An indication of the ability of the lamp to render object colors in a normal natural way. The higher the number (0-100), the better the color appearance

### Warning Notice:

Warning and Caution notices for High Intensity Discharge lamps. See pages 76 – 81

### LED Replacement:

Current offers a wide range of LED replacement lamps. The LED lamp models are provided as general guidance. Often, there will be more than one LED Lamp that may be used to replace a Traditional lamp. For Traditional lamps that operated off a ballast, the ballast bypass (UL Type B) LED option is given unless otherwise noted. The application should be considered when selecting an LED replacement lamp. Sometimes, Traditional lamps do not have a suitable LED replacement due to special application considerations, such as very high heat. Contact Current for additional guidance if the appropriate LED solution is unclear.

**LET (Lamp Enclosure Type):**  
Describes fixture requirements for this lamp

**LCL (in):**  
Distance between the center of the filament and the Light Center Length reference plane, in inches.

**MOL (in):**  
Maximum Overall Length in inches

**Order Code:**  
Use the order code when ordering to ensure that you receive the exact product you require.

**CBP (Center beam Candlepower):**  
For reflector-type lamps, Center Beam Candlepower is the intensity (candelas) at the center of maximum intensity of the beam. Used only for ConstantColor® CMH® Metal Halide Lamps

**Carton Quantity:**  
Number of lamps packed in a carton

**ANSI Ballast Type:**  
Ballast type used to operate lamp

**Rated Life (hours):**  
Life (as defined by FTC Lamp Label Rules) is rated life in hours.

**Initial Lumens:**  
Lamp light output after the initial 100 hours of operation.

| Bulb Shape     | Base Type | LET | OP (Operating Position) | Watts | MOL (in) | LCL (in) | Order Code | Description      | ANSI Ballast Type | Carton Qty | CBP   | Rated Life (hrs*) | Initial Lumens | Mean Lumens | Color Temp. | CRI | Warning Notice | Type B LED Replacement Order Code | Description |
|----------------|-----------|-----|-------------------------|-------|----------|----------|------------|------------------|-------------------|------------|-------|-------------------|----------------|-------------|-------------|-----|----------------|-----------------------------------|-------------|
| CMH® MR16/MR17 |           |     |                         |       |          |          |            |                  |                   |            |       |                   |                |             |             |     |                |                                   |             |
| MR16           | GX10      | O   | U                       | 20    | 2.28     |          | 85101      | CMH20MR16/830/SP | C156/M156         | 12         | 9,000 | 12,000            | 1,000          |             | 3000K       | 81  | 5              |                                   |             |

## CMH20MR16/830/SP

Identifies as CMH® lamp.

Identifies the lamp's wattage

Identifies the bulb shape

Color temp. and CRI

Additional Information



Lamp Contains Mercury.  
Manage in Accord with Disposal Laws.  
See [www.lamprecycle.org](http://www.lamprecycle.org) or 1-800-327-0097

# High Intensity Discharge Lamps



## Multi-Vapor® Metal Halide Lamps



| Bulb Shape                           | Base Type | LET | OP  | Watts | MOL (In) | LCL (In) | Order Code | Description        | ANSI Ballast Type | Car-ton Qty¹ | Rated Life (hrs*) | Initial Lumens    | Mean Lumens       | Color Temp. | CRI | Warning Notice | Order Code | Description     |
|--------------------------------------|-----------|-----|-----|-------|----------|----------|------------|--------------------|-------------------|--------------|-------------------|-------------------|-------------------|-------------|-----|----------------|------------|-----------------|
| 50 Watts - Enclosed Rated            |           |     |     |       |          |          |            |                    |                   |              |                   |                   |                   |             |     |                |            |                 |
| BD17                                 | E26       | E   | U   | 50    | 5.43     | 3.43     | 10361      | MXR50/U/MED        | M110              | 6            | 10,000            | 3,200             | 2,100             | 3700K       | 60  | 1, 3           | 27729      | LED21ED17/740   |
| 70 Watts - Enclosed Rated            |           |     |     |       |          |          |            |                    |                   |              |                   |                   |                   |             |     |                |            |                 |
| BD17                                 | E26       | E   | U   | 70    | 5.43     | 3.43     | 22158      | MXR70/U/MED        | M98               | 6            | 12,000            | 5,500             | 3,500             | 3500K       | 55  | 1, 3           | 27729      | LED21ED17/740   |
| BD17                                 | E26       | E   | U   | 70    | 5.43     | 3.43     | 12590      | MVR70/U/MED        | M98               | 6            | 12000             | 5,500             | 3,000             | 4000K       | 65  | 1, 3           | 27729      | LED21ED17/740   |
| 70 Watts - Open Rated                |           |     |     |       |          |          |            |                    |                   |              |                   |                   |                   |             |     |                |            |                 |
| ED17                                 | E26       | O   | U   | 70    | 5.43     | 3.43     | 12377      | MXR70/U/MED/O      | M98               | 6            | 15,000            | 5,500             | 3,500             | 3200K       | 70  | 3, 4           | 93303384   | LED/LC/ED17/7SC |
| 100 Watts - Enclosed Rated           |           |     |     |       |          |          |            |                    |                   |              |                   |                   |                   |             |     |                |            |                 |
| BD17                                 | E26       | E   | U   | 100   | 5.43     | 3.43     | 18680      | MXR100/U/MED       | M90               | 6            | 15,000            | 9,000             | 6,200             | 3200K       | 65  | 1, 3           | 93112114   | LED35ED17/730   |
| BD17                                 | E26       | E   | U   | 100   | 5.43     | 3.43     | 12652      | MVR100/U/MED       | M90               | 6            | 15,000            | 9,500             | 5,800             | 4000K       | 70  | 1, 3           | 27602      | LED35ED17/740   |
| 100 Watts - Open Rated               |           |     |     |       |          |          |            |                    |                   |              |                   |                   |                   |             |     |                |            |                 |
| ED17                                 | E26       | O   | U   | 100   | 5.43     | 3.43     | 12381      | MXR100/U/MED/O     | M90               | 6            | 15,000            | 9,000             | 6,200             | 3200K       | 70  | 3, 4           | 93112114   | LED35ED17/730   |
| 150 Watts - Enclosed Rated           |           |     |     |       |          |          |            |                    |                   |              |                   |                   |                   |             |     |                |            |                 |
| BD17                                 | E26       | E   | U   | 150   | 5.43     | 3.43     | 12598      | MVR150/U/MED       | M102              | 6            | 15,000            | 14,000            | 10,500            | 4300K       | 65  | 1, 3           | 93303384   | LED/LC/ED17/7SC |
| 150 Watts - Open Rated               |           |     |     |       |          |          |            |                    |                   |              |                   |                   |                   |             |     |                |            |                 |
| ED17                                 | E26       | O   | U   | 150   | 5.43     | 3.43     | 45683      | MXR150/U/MED/O     | M102              | 6            | 15,000            | 12,500            | 8,600             | 3500K       | 70  | 3, 4           | 93303384   | LED/LC/ED17/7SC |
| 175 Watts - Enclosed Rated           |           |     |     |       |          |          |            |                    |                   |              |                   |                   |                   |             |     |                |            |                 |
| BD17                                 | E26       | E   | U   | 175   | 5.75     | 3.43     | 18902      | MVR175/U/MED       | M57               | 6            | 6,000H/10,000V    | 11,700H/14,000V   | 7,400H/8,800V     | 4000K       | 60  | 1, 2           | 93148082   | LED45ED17/740   |
| ED28                                 | E39       | E   | U   | 175   | 8.25     | 5.00     | 47760      | MVR175/U           | M57               | 12           | 6,000H/10,000V    | 11,700H/13,600V   | 7,900H/8,800V     | 4000K       | 55  | 1, 2           | 22679      | LED50ED23.5/740 |
| ED28                                 | E39       | E   | U   | 175   | 8.25     | 5.00     | 47761      | MVR175/C/U         | M57               | 12           | 6,000H/10,000V    | 11,900H/12,900V   | 7,900H/8,400V     | 3900K       | 55  | 1, 2           | 22679      | LED50ED23.5/740 |
| 250 Watts - Enclosed Rated           |           |     |     |       |          |          |            |                    |                   |              |                   |                   |                   |             |     |                |            |                 |
| ED28                                 | E39       | E   | U   | 250   | 8.25     | 5.00     | 42729      | MVR250/U           | M58               | 12           | 6,000H/10,000V    | 19,100H/20,800V   | 12,400H/13,500V   | 4200K       | 60  | 1, 2           | 22635      | LED80ED23.5/740 |
| 250 Watts - Enclosed Rated, PulseArc |           |     |     |       |          |          |            |                    |                   |              |                   |                   |                   |             |     |                |            |                 |
| ED28                                 | E39       | E   | U   | 250   | 8.25     | 5.00     | 78665      | MVR250/U/PA        | M138/M153         | 12           | 12,000H/15,000V   | 18,600H/22,400V   | 12,000H/14,000V   | 3900K       | 60  | 1, 2           | 22635      | LED80ED23.5/740 |
| 320 Watts - Enclosed Rated, PulseArc |           |     |     |       |          |          |            |                    |                   |              |                   |                   |                   |             |     |                |            |                 |
| ED28                                 | E39       | E   | VBU | 320   | 8.25     | 5.00     | 27501      | MVR320/VBU/HO/PA   | M132/M154         | 12           | 20,000            | 31,000            | 18,000            | 4000K       | 60  | 1, 2           | 22622      | LED115ED28/740  |
| 320 Watts - Open Rated               |           |     |     |       |          |          |            |                    |                   |              |                   |                   |                   |             |     |                |            |                 |
| ED37                                 | EX39      | O   | VBU | 320   | 11.50    | 7.00     | 46275      | MPR320/VBU/XHOPA   | M132/M154         | 6            | 20,000            | 32,000            | 22,500            | 4000K       | 65  | 3, 4           | 22622      | LED115ED28/740  |
| ED28                                 | EX39      | O   | VBU | 320   | 8.25     | 5.00     | 19609      | MPR320/C/PA/ED28   | M132/M154         | 12           | 20,000            | 30,600            | 22,500            | 3700K       | 70  | 3, 4           | 22622      | LED115ED28/740  |
| 400 Watts - Enclosed Rated           |           |     |     |       |          |          |            |                    |                   |              |                   |                   |                   |             |     |                |            |                 |
| ED28                                 | E39       | E   | U   | 400   | 8.25     | 5.00     | 18904      | MVR400/U/ED28      | M59               | 12           | 15,000H/20,000V   | 33,100H/38,000V   | 22,100H/23,500V   | 4000K       | 60  | 1, 2           | 22611      | LED150ED28/740  |
| 400 Watts - Enclosed Rated, PulseArc |           |     |     |       |          |          |            |                    |                   |              |                   |                   |                   |             |     |                |            |                 |
| ED37                                 | E39       | E   | U   | 400   | 11.50    | 7.00     | 78666      | MVR400/U/PA        | M135/M155         | 6            | 15,000H/20,000V   | 31,200H/39,400V   | 18,000H/22,000V   | 4000K       | 60  | 1, 2           | 22611      | LED150ED28/740  |
| ED28                                 | E39       | E   | VBU | 400   | 8.25     | 5.00     | 46271      | MVR400/VBUED28PA   | M135/M155         | 12           | 20,000            | 44,000            | 28,500            | 4000K       | 65  | 1, 3           | 22611      | LED150ED28/740  |
| ED28                                 | E39       | E   | HOR | 400   | 8.25     | 5.00     | 72885      | MVR400/HOR/ED28/PA | M135/M155         | 12           | 20,000            | 38,000            | 21,400            | 4100K       | 65  | 1, 3           | 22611      | LED150ED28/740  |
| 400 Watts - Open Rated               |           |     |     |       |          |          |            |                    |                   |              |                   |                   |                   |             |     |                |            |                 |
| ED37                                 | EX39      | O   | VBU | 400   | 11.50    | 7.00     | 46273      | MPR400/VBU/XHOPA   | M135/M155         | 6            | 20,000            | 42,000            | 29,500            | 4000K       | 65  | 3, 4           | 22611      | LED150ED28/740  |
| ED37                                 | EX39      | O   | VBU | 400   | 11.50    | 7.00     | 18708      | MPR400/VBU/HO/O    | M59               | 6            | 20,000            | 40,000            | 36,000            | 3400K       | 65  | 3, 4           | 93311586   | LED/LC/ED37/740 |
| 1000 Watts - Enclosed Rated          |           |     |     |       |          |          |            |                    |                   |              |                   |                   |                   |             |     |                |            |                 |
| BT37                                 | E39       | E   | U   | 1000  | 11.50    | 7.00     | 18205      | MVR1000/U/BT37     | M47               | 6            | 9,000H/12,000V    | 105,000H/115,000V | 82,000H/90,000V   | 3700K       | 65  | 1, 2           | 93311586   | LED/LC/ED37/740 |
| 1000 Watts - Open Rated              |           |     |     |       |          |          |            |                    |                   |              |                   |                   |                   |             |     |                |            |                 |
| BT56                                 | EX39      | O   | VBU | 1000  | 15.37    | 9.50     | 41433      | MPR1000/VBU/HO/O   | M47               | 6            | 12,000            | 110,000           | 88,500            | 3500K       | 65  | 3, 4           | 93096445   | LED450BT56/740  |
| 1500 Watts - Enclosed Rated          |           |     |     |       |          |          |            |                    |                   |              |                   |                   |                   |             |     |                |            |                 |
| BT56                                 | E39       | E   | U   | 1500  | 15.37    | 9.50     | 47326      | MVR1500/U/SPORTS   | M48               | 6            | 3,000             | 162,000H/170,000V | 137,000H/153,000V | 4000K       | 65  | 1, 2           | 93303389   | LED470BT56/740  |

<sup>1</sup> Minimum order quantity = Carton Qty

# High Intensity Discharge Lamps



## Constant Color CMH® Metal Halide Lamps



| Bulb Shape            | Base Type | LET | OP | Watts | MOL (In) | LCL (In) | Order Code | Description      | ANSI Ballast Type | Car-ton Qty¹ | CBCEP  | Rated Life (hrs*) | Initial Lumens | Mean Lumens | Color Temp. | CRI | Warning Notice | Order Code | Description     |
|-----------------------|-----------|-----|----|-------|----------|----------|------------|------------------|-------------------|--------------|--------|-------------------|----------------|-------------|-------------|-----|----------------|------------|-----------------|
| CMH® MR16/MR17        |           |     |    |       |          |          |            |                  |                   |              |        |                   |                |             |             |     |                |            |                 |
| MR16                  | GX10      | O   | U  | 20    | 2.28     |          | 85101      | CMH20MR16/830/SP | C156/M156         | 12           | 9,000  | 12,000            | 1,000          |             | 3000K       | 81  | 5              |            |                 |
|                       | GX10      | O   | U  | 20    | 2.28     |          | 85110      | CMH20MR16/830/FL | C156/M156         | 12           | 2,900  | 12,000            | 1,000          |             | 3000K       | 81  | 5              |            |                 |
|                       | GX10      | O   | U  | 39    | 2.28     |          | 71489      | CMH39MR16/930/FL | C130/M130         | 12           | 5,500  | 10,000            | 2,200          |             | 3000K       | 90  | 5              |            |                 |
| CMH® PAR              |           |     |    |       |          |          |            |                  |                   |              |        |                   |                |             |             |     |                |            |                 |
| PAR30L                | E26       | O   | U  | 39    | 4.75     |          | 42067      | CMH39PAR30L/FL25 | C130/M130         | 6            | 11,000 | 10,000            | 2,400          |             | 3000K       | 81  | 5              | 75091      | LED18P30LW83025 |
| CMH® Single-Ended G12 |           |     |    |       |          |          |            |                  |                   |              |        |                   |                |             |             |     |                |            |                 |
| T6                    | G12       | E   | U  | 39    | 3.56     | 2.18     | 20153      | CMH39TUVU830G12  | C130/M130         | 12           |        | 15,000            | 3,400          | 2,300       | 3000K       | 84  | 5              |            |                 |
|                       | G12       | E   | U  | 70    | 3.56     | 2.18     | 20016      | CMH70TU/830/G12  | C139/M139         | 12           |        | 15,000            | 6,200          | 4,700       | 3000K       | 83  | 5              |            |                 |
| CMH® GU6.5            |           |     |    |       |          |          |            |                  |                   |              |        |                   |                |             |             |     |                |            |                 |
| T4                    | GU6.5     | E   | U  | 20    | 2.05     | 1.18     | 85086      | CMH20T/U830GU6.5 | C156/M156         | 12           |        | 12,000            | 1,615          | 1,066       | 3000K       | 81  | 5              |            |                 |
|                       | GU6.5     | E   | U  | 39    | 2.05     | 1.18     | 71484      | CMH39T/U930GU6.5 | C130/M130         | 12           |        | 10,000            | 3,400          | 2,300       | 3000K       | 88  | 5              |            |                 |
| CMH® Mini's           |           |     |    |       |          |          |            |                  |                   |              |        |                   |                |             |             |     |                |            |                 |
| T4.5                  | G8.5      | E   | U  | 20    | 3.37     | 2.00     | 92696      | CMH20TCU830/G8.5 | C156/M156         | 12           |        | 12,000            | 1,650          | 1,090       | 3000K       | 81  | 5              |            |                 |
|                       | G8.5      | E   | U  | 39    | 3.37     | 2.00     | 90352      | CMH39TCU830/G8.5 | C130/M130         | 12           |        | 16,500            | 3,400          | 2,300       | 3000K       | 84  | 5              |            |                 |
|                       | G8.5      | E   | U  | 70    | 3.37     | 2.00     | 92585      | CMH70TCU830G8.5  | C139/M139         | 12           |        | 15,000            | 6,200          | 4,400       | 3000K       | 83  | 5              |            |                 |

## High Pressure Sodium Lamps

| Bulb Shape    | Base Type | LET | OP | Watts | MOL (In) | LCL (In) | Order Code | Description    | ANSI Ballast Type | Car-ton Qty¹ | Rated Life (hrs*) | Initial Lumens | Mean Lumens | Color Temp. | CRI | Warning Notice | Order Code | Description       |
|---------------|-----------|-----|----|-------|----------|----------|------------|----------------|-------------------|--------------|-------------------|----------------|-------------|-------------|-----|----------------|------------|-------------------|
| 70-1000 Watts |           |     |    |       |          |          |            |                |                   |              |                   |                |             |             |     |                |            |                   |
| B17           | E26       | O   | U  | 70    | 5.43     | 3.43     | 11339      | LU70/MED/ECO   | S62               | 6            | 24,000+           | 6,400          | 5,450       | 1900K       | 22  | 6              | 93112114   | LED35ED17/730     |
| ED23.5        | E39       | O   | U  | 70    | 7.75     | 5.00     | 85368      | LU70/H/ECO     | S62               | 12           | 24,000+           | 6,400          | 5,450       | 1900K       | 22  | 6              | 93303384   | LED/LC/ED17/7SC   |
| B17           | E26       | O   | U  | 100   | 5.50     | 3.43     | 13250      | LU100/MED/ECO  | S54               | 6            | 24,000+           | 9,500          | 8,550       | 2000K       | 22  | 6              | 93303384   | LED/LC/ED17/7SC   |
| ED23.5        | E39       | O   | U  | 100   | 7.75     | 5.00     | 85369      | LU100/H/ECO    | S54               | 12           | 24,000+           | 9,500          | 8,550       | 2000K       | 22  | 6              | 93312106   | LED/LC/ED23.5/7SC |
| B17           | E26       | O   | U  | 150   | 5.75     | 3.50     | 13252      | LU150/MED/ECO  | S55               | 6            | 24,000+           | 16,000         | 14,400      | 2000K       | 22  | 6              | 93303384   | LED/LC/ED17/7SC   |
| ED23.5        | E39       | O   | U  | 150   | 7.75     | 5.00     | 85371      | LU150/55/H/ECO | S55               | 12           | 24,000+           | 16,000         | 14,400      | 2000K       | 22  | 6              | 93312106   | LED/LC/ED23.5/7SC |
| ED18          | E39       | O   | U  | 200   | 9.75     | 5.75     | 85372      | LU200/H/ECO    | S66               | 12           | 24,000+           | 22,000         | 19,800      | 2100K       | 22  | 6              | 93312096   | LED180ED18/730    |
|               | E39       | O   | U  | 250   | 9.75     | 5.75     | 85377      | LU250/H/ECO    | S50               | 12           | 24,000+           | 28,000         | 25,200      | 2100K       | 22  | 6              | 93312096   | LED180ED18/730    |
| E25           | E39       | O   | U  | 400   | 9.75     | 5.75     | 85379      | LU400/H/ECO    | S51               | 12           | 24,000+           | 51,000         | 45,000      | 2100K       | 22  | 6              | 93312096   | LED180ED18/730    |
|               | E39       | O   | U  | 1000  | 15.06    | 8.75     | 44058      | LU1000/ECO     | S52               | 6            | 24000+            | 130,000        | 117,000     | 2100K       | 22  | 7              |            |                   |

¹ Minimum order quantity = Carton Qty

## 1 WARNING NOTICE NO. 1:

### WARNING

#### Risk of electric shock

- Turn power off before inspection, installation, or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

#### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

#### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

#### Unexpected lamp rupture may cause injury, fire, or property damage

- Turn lamp off at least once for 15 minutes per week. **FAILURE TO COMPLY INCREASES THE RISK OF RUPTURE.**
- Do not use beyond rated life. Beyond rated life, light output diminishes while energy consumption and risk of lamp rupture increases.
- Do not use lamp if outer glass is scratched or broken
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Lamps with E-rated ANSI codes must be operated in enclosed fixtures -- See Instructions
- Do not store flammable materials near/below S-rated lamp in open fixture
- Use only properly rated ballast
- Do not exceed rated voltage
- Do not turn on lamp until fully installed
- Operate lamp only in specified position
- If used on a dimming system, see instructions.

### CAUTION

#### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

#### Lamp may shatter and cause injury if broken

- Wear safety glasses and gloves when handling lamp
- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp
- **CAUTION:** Do not stare at light source. May be harmful to the eyes. Not applicable to diffuse coated bulbs.

### INSTRUCTIONS

#### LAMP OPERATING CHARACTERISTICS

This is a discharge lamp and requires some time to restart and come to full brightness after a power interruption.

#### RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE.

Beyond rated life, light output diminishes while energy consumption and risk of lamp rupture increases.

#### SPECIFIED OPERATING POSITIONS

VBU - Base up  $\pm 15^\circ$       VBD - Base down  $\pm 15^\circ$   
 HOR - Horizontal  $\pm 15^\circ$       HOR/PA - Horizontal  $\pm 75^\circ$   
 U - Universal

All lamps are rated for enclosed fixtures, except lamps with S-rated ANSI codes operated in vertical position only (Base Up or Base Down),  $\pm 15$  degrees, can be used in an open fixture.

Match ANSI code of lamp to code on ballast or luminaire.

Use in luminaire which comply with UL1598 or IEC 60598. When used, fixture lens/diffuser material must be able to contain fragments of hot quartz or glass (up to  $1100^\circ\text{C}$ ).

Electrically insulate any metal to bulb support in luminaire to avoid decomposition of glass.

For total load, add auxiliary watts to lamp watts.

Not for use with lampholders that have stainless steel center contacts to avoid lamp or lampholder damage due to arcing. (360-1000W only)

#### FOR USE ON DIMMING SYSTEMS

Contact your local Current sales representative

### LAMP CONTAINS MERCURY

Manage in Accord with Disposal Laws.  
 See [www.lamprecycle.org](http://www.lamprecycle.org) or 1-800-327-0097

**R WARNING:** This lamp can cause serious skin burn and eye inflammation from shortwave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Lamps that will automatically extinguish when the outer envelope is broken or punctured are commercially available. This lamp certified to comply with FDA radiation performance standards, 21 CFR Subchapter J. USA: 21 CFR 1040.30 Canada: C.R.C., c. 1370



- 2** WARNING NOTICE NO. 2: Lamp contains Radioactive Material Thorium
- 3** WARNING NOTICE NO. 3: Lamp contains Radioactive Materials Thorium and Kr-85
- 4** WARNING NOTICE NO. 4:

## WARNING

### Risk of electric shock

- Turn power off before inspection, installation, or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not use beyond rated life. Beyond rated life, light output diminishes while energy consumption increases.
- Do not use lamp if outer glass is scratched or broken
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Turn lamp off at least once for 15 minutes per week
- Do not store flammable materials near/below lamp
- Use only properly rated ballast
- Do not exceed rated voltage
- Do not turn on lamp until fully installed
- Operate lamp only in specified position
- If used on a dimming system, see instructions.

## CAUTION

### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

### Lamp may shatter and cause injury if broken

- Wear safety glasses and gloves when handling lamp
- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp
- **CAUTION:** Do not stare at light source. May be harmful to the eyes. Not applicable to diffuse coated bulbs.

## INSTRUCTIONS

### LAMP OPERATING CHARACTERISTICS

This is a discharge lamp and requires some time to restart and come to full brightness after a power interruption.

Relamp fixtures at or before the end of rated life.

Beyond rated life, light output diminishes while energy consumption increases.

### SPECIFIED OPERATING POSITIONS

VBU - Base up  $\pm 15^\circ$

VBD - Base down  $\pm 15^\circ$

U - Universal

Match ANSI code of lamp to code on ballast or luminaire.

Use in luminaire which comply with UL1598 or IEC 60598.

Lamps are suitable for open or enclosed fixtures.

Electrically insulate any metal to bulb support in luminaire to avoid decomposition of glass.

For total load, add auxiliary watts to lamp watts.

### FOR USE ON DIMMING SYSTEMS

Most vertical operating lamps are suitable for dimming. Contact your local Current sales representative



## LAMP CONTAINS MERCURY



Manage in Accord with Disposal Laws.

See [www.lamprecycle.org](http://www.lamprecycle.org) or 1-800-327-0097

**R WARNING:** This lamp can cause serious skin burn and eye inflammation from shortwave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Lamps that will automatically extinguish when the outer envelope is broken or punctured are commercially available. This lamp certified to comply with FDA radiation performance standards, 21 CFR Subchapter J. USA: 21 CFR 1040.30 Canada: C.R.C., c. 1370

## 5 WARNING NOTICE NO. 5:

### WARNING

#### Risk of electric shock

- Turn power off before inspection, installation, or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

#### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product
- Use fused or thermally protected ballast - see instructions

#### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Do not store flammable materials near/below lamp
- Do not use beyond rated life
- Do not turn on lamp until fully installed

### CAUTION

#### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

#### Lamp may shatter and cause injury if broken

- Wear safety glasses and gloves when handling lamp
- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp

### INSTRUCTIONS

#### LAMP OPERATING CHARACTERISTICS

This is a discharge lamp and requires some time to restart and come to full brightness after a power interruption.

For total load, add auxiliary watts to lamp watts

Relamp fixtures at or before the end of rated life. Beyond rated life, light output diminishes while energy consumption increases.

If power supply dips or is interrupted, lamps may extinguish and not restart. Turn off power supply for 10-15 minutes and allow lamp to fully cool. Lamps will restart when power is restored

Use on ballasts or systems that are either resistant to or will shut off in event of rectification

Lamp may be operated in any position.

UV Control is a quartz material that effectively cuts UVB and UVC radiation.

All MR16 and 20W PAR use only on electronic ballast.

Lamps designated as CMH70/PAR30 do not require thermally protected ballasts



### LAMP CONTAINS MERCURY



Manage in Accord with Disposal Laws.  
See [www.lamprecycle.org](http://www.lamprecycle.org) or 1-800-327-0097

This product is in conformity with performance standards for high intensity mercury vapor lamps products under 21 CFR 1040, except with respect to those characteristics authorized by Variance Number FDA-2021-V-0995 effective September 27, 2021.

Arc tube fill gas contains Radioactive Material Kr-85

## 6 WARNING NOTICE NO. 6:

### WARNING

#### **Risk of electric shock**

- Turn power off before inspection, installation, or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

#### **Risk of fire**

- Keep combustible materials away from lamp
- Use in fixture rated for this product

#### **Contains sodium – chemical burn risk**

- Avoid skin contact with broken pieces

#### **Unexpected lamp rupture may cause injury, fire, or property damage**

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Do not store flammable materials near/below lamp
- Do not turn on lamp until fully installed

### CAUTION

#### **Risk of burn**

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

#### **Lamp may shatter and cause injury if broken**

- Wear safety glasses and gloves when handling lamp
- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp

### INSTRUCTIONS

#### **LAMP OPERATING CHARACTERISTICS**

This is a discharge lamp and requires some time to restart and come to full brightness after a power interruption.

HPS lamps may be operated in any burn position.

Match ANSI code of lamp to code on ballast or luminaire.

Use in luminaire which comply with UL1598 or IEC 60598.

Electrically insulate any metal to bulb support in luminaire to avoid decomposition of glass.

For total load, add auxiliary watts to lamp watts.

Not for use with lampholders that have stainless steel center contacts to avoid lamp or lampholder damage due to arcing. (400W only)

#### **FOR USE ON DIMMING SYSTEMS**

Contact your local Current sales representative



### LAMP CONTAINS MERCURY



Manage in Accord with Disposal Laws.  
See [www.lamprecycle.org](http://www.lamprecycle.org) or 1-800-327-0097

## 7 WARNING NOTICE NO. 7:

### WARNING

#### Risk of electric shock

- Turn power off before inspection, installation, or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

#### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product - see instructions

#### Contains sodium – chemical burn risk

- Avoid skin contact with broken pieces

#### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Do not store flammable materials near/below lamp
- Do not turn on lamp until fully installed

### CAUTION

#### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

#### Lamp may shatter and cause injury if broken

- Wear safety glasses and gloves when handling lamp
- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp

### INSTRUCTIONS

#### LAMP OPERATING CHARACTERISTICS

This is a discharge lamp and requires some time to restart and come to full brightness after a power interruption.

Match ANSI code of lamp to code on ballast or luminaire. Or use suitable ballast and ignitor that complies with IEC 60923 and IEC 60927.

Use in luminaire which comply with UL1598 or IEC 60598.

Fixtures must have a specially designed mogul base lamp holder and must support the end of the lamp.

In vertical base up applications with no vibration and/or shock, a tempered glass enclosed fixture may be used in place of the lamp end support.

Electrically insulate any metal to bulb support in luminaire to avoid decomposition of glass.

For total load, add auxiliary watts to lamp watts.

Not for use with lampholders that have stainless steel center contacts to avoid lamp or lampholder damage due to arcing.

#### FOR USE ON DIMMING SYSTEMS

Contact your local Current sales representative



### LAMP CONTAINS MERCURY



Manage in Accord with Disposal Laws.  
See [www.lamprecycle.org](http://www.lamprecycle.org) or 1-800-327-0097

## 8 WARNING NOTICE NO. 8:

### WARNING

#### Risk of electric shock

- Turn power off before inspection, installation, or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

#### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

#### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

#### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Do not store flammable materials near/below lamp
- Do not use beyond rated life
- Do not turn on lamp until fully installed

### CAUTION

#### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

#### Lamp may shatter and cause injury if broken

- Wear safety glasses and gloves when handling lamp
- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp

### INSTRUCTIONS

#### LAMP OPERATING CHARACTERISTICS

This is a discharge lamp and requires some time to restart and come to full brightness after a power interruption.

Lamp may be operated in any position.

#### For Consumer Packaging - /CP

Do not use in standard incandescent light bulb sockets. See instructions inside this carton

For total load, add auxiliary watts to lamp watts

Relamp fixtures at or before the end of rated life.

Beyond rated life, light output diminishes while energy consumption increases.

**SYSTEM CHARACTERISTICS** -- Use Current Approved Ballast/Control Gear. For further information contact your local Current sales representative



#### LAMP CONTAINS MERCURY



Manage in Accord with Disposal Laws.  
See [www.lamprecycle.org](http://www.lamprecycle.org) or 1-800-327-0097

**R WARNING:** This lamp can cause serious skin burn and eye inflammation from shortwave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Lamps that will automatically extinguish when the outer envelope is broken or punctured are commercially available. This lamp certified to comply with FDA radiation performance standards, 21 CFR Subchapter J. USA: 21 CFR 1040.30 Canada: C.R.C., c. 1370

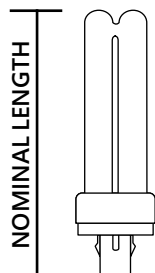


# Compact Fluorescent Lamps



**Compact Fluorescent lighting** offers high light output and long life for all your commercial plug-in applications.

## Reference Guide | Bulb Identification



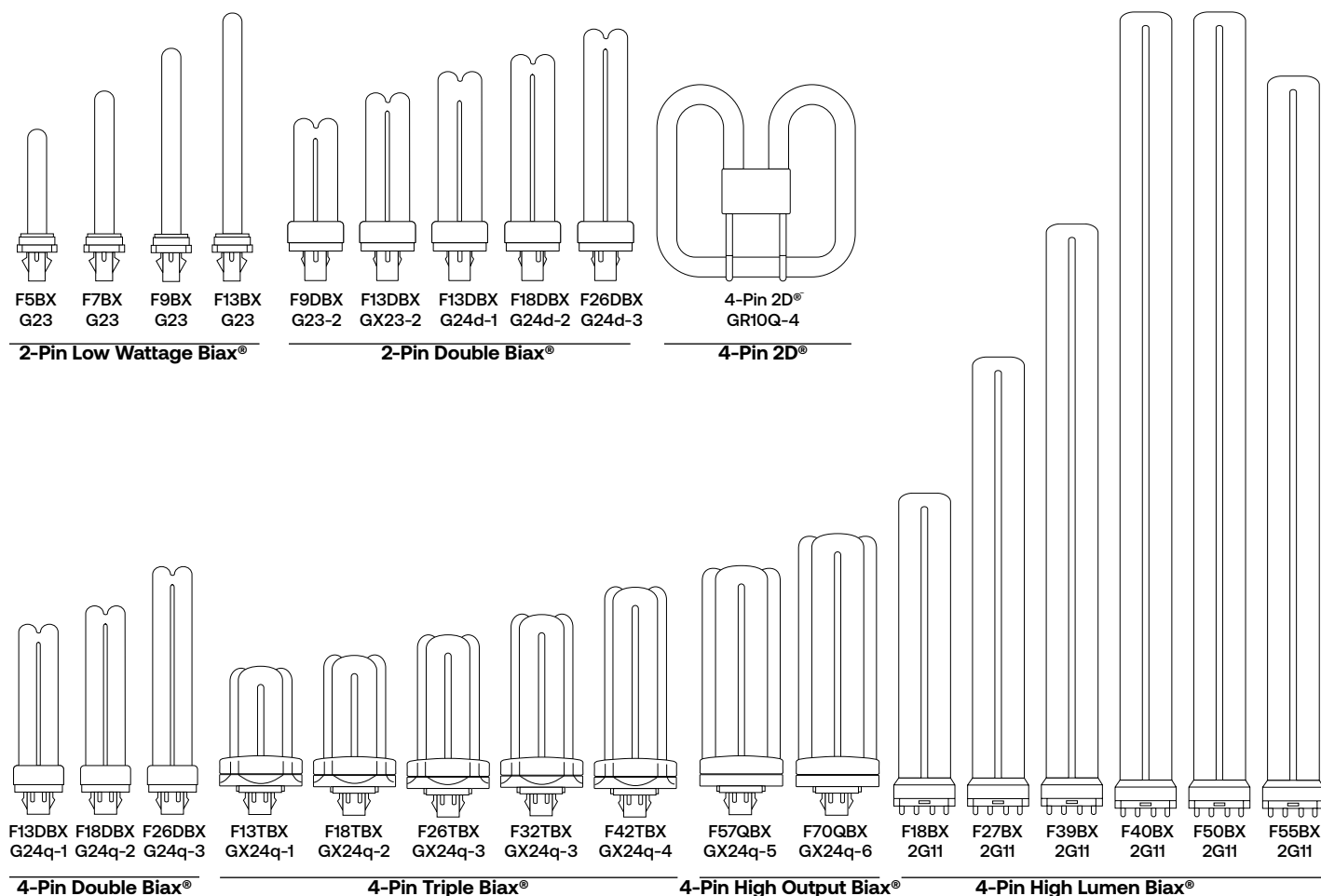
### NOMINAL LENGTH:

Overall length including base or pins.

**Note:** Lamp drawings are not drawn to scale. Be sure to check size and dimension information when identifying each lamp.

To convert inches to millimeters, multiply the dimension (in inches) by 25.4 (i.e. 1.5" x 25.4 = 38.1 mm).

## Lamp Drawings (not drawn to scale)

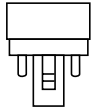


## Plug-in Lamps

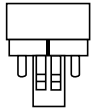
# Compact Fluorescent Lamps



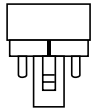
## Base Identification (not drawn to scale)



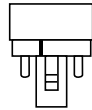
G23-2  
(DBX2P)



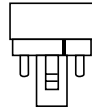
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(DBX2P)



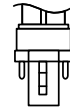
G23d-1  
(DBX2P)



G24d-2  
(DBX2P)



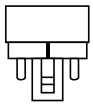
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(DBX2P)



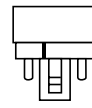
G23  
(LWBX)



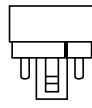
GX23  
(LWBX)



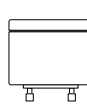
G24q-1  
(DBX4P)



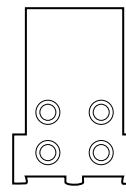
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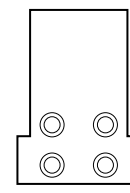
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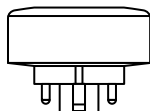
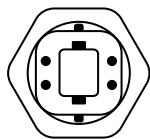
GU 24



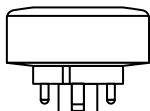
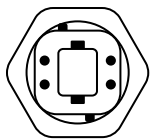
GRY10q-3  
(2D4P)



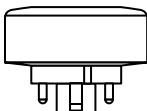
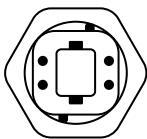
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(2D4P)



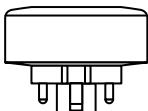
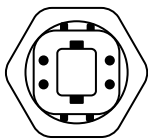
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(TBX4P)



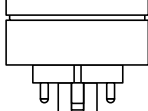
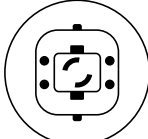
GX24q-2  
(TBX4P)



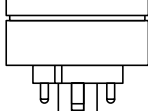
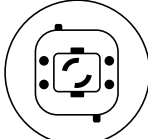
GX24q-3  
(TBX4P)



GX24q-4  
(TBX4P)



GX24q-5  
(QBX4P)



GX24q-6  
(QBX4P)



2G11-4  
(HLBX)

# Compact Fluorescent Lamps

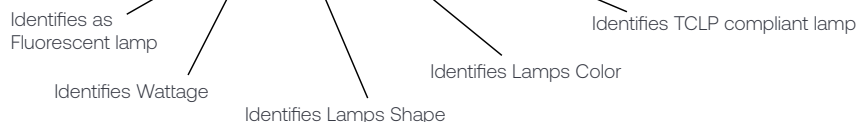


## Catalog Logic:

The following terms and descriptions can help you when checking Compact Fluorescent lamp specifications and when ordering products. Within each product line, lamps are divided into families and listed by base and wattage.

|                                                                        |  |                                                                                                                  |  |                                               |  |                                                               |  |                                                                                                 |  |                                                                                       |  |                                                                                                                    |  |                                                                                                                                                                                       |  |                                                                                                                                                                                                      |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
|------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------|--|---------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>Nominal Length (in):</b><br>Lamp length including base and/or pins. |  | <b>Order Code:</b><br>Use the order code when ordering to ensure that you receive the exact product you require. |  | <b>Description:</b><br>Lamp Model Description |  | <b>Carton Quantity:</b><br>Number of lamps packed in a carton |  | <b>Rated Life (hours):</b><br>Life (as defined by FTC Lamp Label Rules) is rated life in hours. |  | <b>Initial Lumens:</b><br>Lamp light output after the initial 100 hours of operation. |  | <b>Mean Lumens:</b><br>Lamp light output at 40% of rated lamp life or 8K hours for lamps exceeding 20K hours life. |  | <b>Color Temperature – Kelvins (K):</b><br>A measure of the visual "warmth" or "coolness" of the light from the lamp. The higher the value, the whiter or "cooler" the light appears. |  | <b>Color Rendering Index (CRI or R):</b><br>An indication of the ability of the lamp to render object colors in a normal natural way. The higher the number (0-100), the better the color appearance |  | <b>LED Replacement:</b><br>Current offers a wide range of LED replacement lamps. The LED lamp models are provided as general guidance. Often, there will be more than one LED Lamp that may be used to replace a Traditional lamp. For Traditional lamps that operated off a ballast, the ballast bypass (UL Type B) LED option is given unless otherwise noted. The application should be considered when selecting an LED replacement lamp. Sometimes, Traditional lamps do not have a suitable LED replacement due to special application considerations, such as very high heat. Contact Current for additional guidance if the appropriate LED solution is unclear. |  |
| <b>Base:</b><br>The type of base                                       |  |                                                                                                                  |  |                                               |  |                                                               |  |                                                                                                 |  |                                                                                       |  |                                                                                                                    |  |                                                                                                                                                                                       |  |                                                                                                                                                                                                      |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
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|                                                                        |  |                                                                                                                  |  |                                               |  |                                                               |  |                                                                                                 |  |                                                                                       |  |                                                                                                                    |  |                                                                                                                                                                                       |  |                                                                                                                                                                                                      |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
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|                                                                        |  |                                                                                                                  |  |                                               |  |                                                               |  |                                                                                                 |  |                                                                                       |  |                                                                                                                    |  |                                                                                                                                                                                       |  |                                                                                                                                                                                                      |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
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|                                                                        |  |                                                                                                                  |  |                                               |  |                                                               |  |                                                                                                 |  |                                                                                       |  |                                                                                                                    |  |                                                                                                                                                                                       |  |                                                                                                                                                                                                      |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
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|                                                                        |  |                                                                                                                  |  |                                               |  |                                                               |  |                                                                                                 |  |                                                                                       |  |                                                                                                                    |  |                                                                                                                                                                                       |  |                                                                                                                                                                                                      |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
|                                                                        |  |                                                                                                                  |  |                                               |  |                                                               |  |                                                                                                 |  |                                                                                       |  |                                                                                                                    |  |                                                                                                                                                                                       |  |                                                                                                                                                                                                      |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
|                                                                        |  |                                                                                                                  |  |                                               |  |                                                               |  |                                                                                                 |  |                                                                                       |  |                                                                                                                    |  |                                                                                                                                                                                       |  |                                                                                                                                                                                                      |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
|                                                                        |  |                                                                                                                  |  |                                               |  |                                                               |  |                                                                                                 |  |                                                                                       |  |                                                                                                                    |  |                                                                                                                                                                                       |  |                                                                                                                                                                                                      |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
|                                                                        |  |                                                                                                                  |  |                                               |  |                                                               |  |                                                                                                 |  |                                                                                       |  |                                                                                                                    |  |                                                                                                                                                                                       |  |                                                                                                                                                                                                      |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
|                                                                        |  |                                                                                                                  |  |                                               |  |                                                               |  |                                                                                                 |  |                                                                                       |  |                                                                                                                    |  |                                                                                                                                                                                       |  |                                                                                                                                                                                                      |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
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|                                                                        |  |                                                                                                                  |  |                                               |  |                                                               |  |                                                                                                 |  |                                                                                       |  |                                                                                                                    |  |                                                                                                                                                                                       |  |                                                                                                                                                                                                      |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
|                                                                        |  |                                                                                                                  |  |                                               |  |                                                               |  |                                                                                                 |  |                                                                                       |  |                                                                                                                    |  |                                                                                                                                                                                       |  |                                                                                                                                                                                                      |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |

## F13BX/827/ECO



Lamp Contains Mercury.  
Manage in Accord with Disposal Laws.  
See [www.lamprecycle.org](http://www.lamprecycle.org) or 1-800-327-0097

# Compact Fluorescent Lamps



**\*\*Fluorescent Phase-Out Regulations\*\*:** Several US states have enacted legislation that prohibit/will prohibit the sale of Linear and Compact Fluorescent Lamps within their state. For more information including effective dates, please visit [www.LED.com/lamplegislation](http://www.LED.com/lamplegislation)

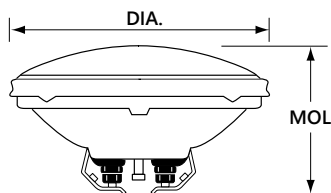
## Plug-In Lamps

|                                           |       |                      |            |                   |                          |                   |                |             |             |     | Type B LED Replacement                     |                                                            |
|-------------------------------------------|-------|----------------------|------------|-------------------|--------------------------|-------------------|----------------|-------------|-------------|-----|--------------------------------------------|------------------------------------------------------------|
| Base Type                                 | Watts | Nominal Length (in.) | Order Code | Description       | Car-ton Qty <sup>1</sup> | Rated Life (hrs.) | Initial Lumens | Mean Lumens | Color Temp. | CRI | Order Code                                 | Description                                                |
| <b>2-Pin Low Wattage Biax<sup>*</sup></b> |       |                      |            |                   |                          |                   |                |             |             |     |                                            |                                                            |
| GX23                                      | 13    | 7.0                  | 97573      | F13BX/827/ECO     | 10                       | 10,000            | 825            | 710         | 2700K       | 82  | 93312495                                   | LED5BGX23/827                                              |
| GX23                                      | 13    | 7.0                  | 97569      | F13BX/835/ECO     | 10                       | 10,000            | 825            | 710         | 3500K       | 82  | 93312507                                   | LED5BGX23/835                                              |
| GX23                                      | 13    | 7.0                  | 97571      | F13BX/841/ECO     | 10                       | 10,000            | 825            | 710         | 4100K       | 82  | 93312513                                   | LED5BGX23/840                                              |
| <b>4-Pin High Lumen Biax<sup>*</sup></b>  |       |                      |            |                   |                          |                   |                |             |             |     |                                            |                                                            |
| 2G11                                      | 18    | 9.0                  | 16053      | F18BX/SPX35 10PK  | 10                       | 10,000            | 1,200          | 1,080       | 3500K       | 82  | 93318810                                   | LED9B2G11/8SC                                              |
| 2G11                                      | 18    | 9.0                  | 16940      | F18BX/SPX41 10PK  | 10                       | 10,000            | 1,200          | 1,080       | 4100K       | 82  | 93318810                                   | LED9B2G11/8SC                                              |
| 2G11                                      | 39    | 16.5                 | 28393      | F39BXSPX35RS10PK  | 10                       | 12,000            | 2,850          | 2,565       | 3500K       | 82  | 93318822                                   | LED16B2G11/8SC                                             |
| 2G11                                      | 39    | 16.5                 | 28458      | F39BXSPX41RS10PK  | 10                       | 12,000            | 2,850          | 2,565       | 4100K       | 82  | 93318822                                   | LED16B2G11/8SC                                             |
| 2G11                                      | 40    | 22.5                 | 16953      | F4030BXSPX30 10P  | 10                       | 20,000            | 3,150          | 2,840       | 3000K       | 82  | 93136025                                   | LED17B2G11/830                                             |
| 2G11                                      | 40    | 22.5                 | 16648      | F40/30BX/SPX35    | 10                       | 20,000            | 3,150          | 2,840       | 3500K       | 82  | 93136086                                   | LED17B2G11/835                                             |
| 2G11                                      | 40    | 22.5                 | 16954      | F40/30BX/SPX41    | 10                       | 20,000            | 3,150          | 2,840       | 4100K       | 82  | 93136087                                   | LED17B2G11/840                                             |
| 2G11                                      | 25    | 21.5                 | 75400      | F40/25BX835/IS/WM | 10                       | 20,000            | 2,600          | 2,400       | 3500K       | 82  | 93136086                                   | LED17B2G11/835                                             |
| 2G11                                      | 55    | 20.7                 | 31952      | F55BX/835         | 25                       | 20,000            | 4,800          | 4,080       | 3500K       | 82  |                                            |                                                            |
| 2G11                                      | 55    | 20.7                 | 31953      | F55BX/840         | 25                       | 20,000            | 4,800          | 4,080       | 4100K       | 82  |                                            |                                                            |
| <b>2-Pin Double Biax<sup>*</sup></b>      |       |                      |            |                   |                          |                   |                |             |             |     |                                            |                                                            |
| GX23-2                                    | 13    | 4.7                  | 97586      | F13DBX23/827/ECO  | 10                       | 12,000            | 810            | 685         | 2700K       | 82  | 93312531                                   | LED8BGX23-2-O/827                                          |
| GX23-2                                    | 13    | 4.7                  | 97588      | F13DBX23/835/ECO  | 10                       | 12,000            | 810            | 685         | 3500K       | 82  | 93312543                                   | LED8BGX23-2-O/835                                          |
| GX23-2                                    | 13    | 4.7                  | 97589      | F13DBX23/841/ECO  | 10                       | 12,000            | 810            | 685         | 4100K       | 82  | 93312549                                   | LED8BGX23-2-O/840                                          |
| G24d-2                                    | 18    | 6.1                  | 97577      | F18DBX/827/ECO    | 10                       | 12,000            | 1,250          | 980         | 2700K       | 82  | Vertical: 93300088<br>Horizontal: 93300087 | LED11BG24-V/8SC/120-347-4PK<br>LED11BG24-H/8SC/120-347-4PK |
| G24d-2                                    | 18    | 6.1                  | 97579      | F18DBX/835/ECO    | 10                       | 12,000            | 1,250          | 980         | 3500K       | 82  | Vertical: 93300088<br>Horizontal: 93300087 | LED11BG24-V/8SC/120-347-4PK<br>LED11BG24-H/8SC/120-347-4PK |
| G24d-2                                    | 18    | 6.1                  | 97580      | F18DBX/841/ECO    | 10                       | 12,000            | 1,250          | 980         | 4100K       | 82  | Vertical: 93300088<br>Horizontal: 93300087 | LED11BG24-V/8SC/120-347-4PK<br>LED11BG24-H/8SC/120-347-4PK |
| G24d-3                                    | 26    | 6.7                  | 97606      | F26DBX/827/ECO    | 10                       | 12,000            | 1,710          | 1,460       | 2700K       | 82  | Vertical: 93300088<br>Horizontal: 93300087 | LED11BG24-V/8SC/120-347-4PK<br>LED11BG24-H/8SC/120-347-4PK |
| G24d-3                                    | 26    | 6.7                  | 97608      | F26DBX/835/ECO    | 10                       | 12,000            | 1,710          | 1,460       | 3500K       | 82  | Vertical: 93300088<br>Horizontal: 93300087 | LED11BG24-V/8SC/120-347-4PK<br>LED11BG24-H/8SC/120-347-4PK |
| G24d-3                                    | 26    | 6.7                  | 97609      | F26DBX/841/ECO    | 10                       | 12,000            | 1,710          | 1,460       | 4100K       | 82  | Vertical: 93300088<br>Horizontal: 93300087 | LED11BG24-V/8SC/120-347-4PK<br>LED11BG24-H/8SC/120-347-4PK |
| <b>4-Pin Double Biax<sup>*</sup></b>      |       |                      |            |                   |                          |                   |                |             |             |     |                                            |                                                            |
| G24q-1                                    | 13    | 5.0                  | 97594      | F13DBX/827/ECO4P  | 10                       | 17,000            | 900            | 755         | 2700K       | 82  | 93300068                                   | LED8BG24-O/827-4PK                                         |
| G24q-1                                    | 13    | 5.0                  | 97595      | F13DBX/830/ECO4P  | 10                       | 17,000            | 900            | 755         | 3000K       | 82  | 93300069                                   | LED8BG24-O/830-4PK                                         |
| G24q-1                                    | 13    | 5.0                  | 97596      | F13DBX/835/ECO4P  | 10                       | 17,000            | 900            | 755         | 3500K       | 82  | 93300080                                   | LED8BG24-O/835-4PK                                         |
| G24q-1                                    | 13    | 5.0                  | 97597      | F13DBX/841/ECO4P  | 10                       | 17,000            | 900            | 755         | 4100K       | 82  | 93300081                                   | LED8BG24-O/840-4PK                                         |
| G24q-2                                    | 18    | 5.8                  | 97598      | F18DBX/827/ECO4P  | 10                       | 17,000            | 1,250          | 970         | 2700K       | 82  | 93300082                                   | LED10BG24-O/827-4PK                                        |
| G24q-2                                    | 18    | 5.8                  | 97599      | F18DBX/830/ECO4P  | 10                       | 17,000            | 1,250          | 970         | 3000K       | 82  | 93300083                                   | LED10BG24-O/830-4PK                                        |
| G24q-2                                    | 18    | 5.8                  | 97600      | F18DBX/835/ECO4P  | 10                       | 17,000            | 1,250          | 970         | 3500K       | 82  | 93300084                                   | LED10BG24-O/835-4PK                                        |
| G24q-2                                    | 18    | 5.8                  | 97601      | F18DBX/841/ECO4P  | 10                       | 17,000            | 1,250          | 970         | 4100K       | 82  | 93300086                                   | LED10BG24-O/840-4PK                                        |
| G24q-3                                    | 26    | 6.4                  | 97610      | F26DBX/827/ECO4P  | 10                       | 17,000            | 1,800          | 1,530       | 2700K       | 82  | Vertical: 93300088<br>Horizontal: 93300087 | LED11BG24-V/8SC/120-347-4PK<br>LED11BG24-H/8SC/120-347-4PK |
| G24q-3                                    | 26    | 6.4                  | 97611      | F26DBX/830/ECO4P  | 10                       | 17,000            | 1,800          | 1,530       | 3000K       | 82  | Vertical: 93300088<br>Horizontal: 93300087 | LED11BG24-V/8SC/120-347-4PK<br>LED11BG24-H/8SC/120-347-4PK |
| G24q-3                                    | 26    | 6.4                  | 97612      | F26DBX/835/ECO4P  | 10                       | 17,000            | 1,800          | 1,530       | 3500K       | 82  | Vertical: 93300088<br>Horizontal: 93300087 | LED11BG24-V/8SC/120-347-4PK<br>LED11BG24-H/8SC/120-347-4PK |
| G24q-3                                    | 26    | 6.4                  | 97613      | F26DBX/841/ECO4P  | 10                       | 17,000            | 1,800          | 1,530       | 4100K       | 82  | Vertical: 93300088<br>Horizontal: 93300087 | LED11BG24-V/8SC/120-347-4PK<br>LED11BG24-H/8SC/120-347-4PK |
| <b>4-Pin Triple Biax<sup>*</sup></b>      |       |                      |            |                   |                          |                   |                |             |             |     |                                            |                                                            |
| GX24q-3                                   | 26    | 5.2                  | 97614      | F26TBX/827/A/ECO  | 10                       | 17,000            | 1,800          | 1,530       | 2700K       | 82  | Vertical: 93300088<br>Horizontal: 93300087 | LED11BG24-V/8SC/120-347-4PK<br>LED11BG24-H/8SC/120-347-4PK |
| GX24q-3                                   | 26    | 5.2                  | 97615      | F26TBX/830/A/ECO  | 10                       | 17,000            | 1,800          | 1,530       | 3000K       | 82  | Vertical: 93300088<br>Horizontal: 93300087 | LED11BG24-V/8SC/120-347-4PK<br>LED11BG24-H/8SC/120-347-4PK |
| GX24q-3                                   | 26    | 5.2                  | 97616      | F26TBX/835/A/ECO  | 10                       | 17,000            | 1,800          | 1,530       | 3500K       | 82  | Vertical: 93300088<br>Horizontal: 93300087 | LED11BG24-V/8SC/120-347-4PK<br>LED11BG24-H/8SC/120-347-4PK |
| GX24q-3                                   | 26    | 5.2                  | 97617      | F26TBX/841/A/ECO  | 10                       | 17,000            | 1,800          | 1,530       | 4100K       | 82  | Vertical: 93300088<br>Horizontal: 93300087 | LED11BG24-V/8SC/120-347-4PK<br>LED11BG24-H/8SC/120-347-4PK |
| GX24q-3                                   | 32    | 5.5                  | 97629      | F32TBX/827/A/ECO  | 10                       | 17,000            | 2,400          | 2,040       | 2700K       | 82  | Vertical: 93312489<br>Horizontal: 93312525 | LED18BG24-V/8SC/120-347<br>LED18BG24-H/8SC/120-347         |
| GX24q-3                                   | 32    | 5.5                  | 97630      | F32TBX/830/A/ECO  | 10                       | 17,000            | 2,400          | 2,040       | 3000K       | 82  | Vertical: 93312489<br>Horizontal: 93312525 | LED18BG24-V/8SC/120-347<br>LED18BG24-H/8SC/120-347         |
| GX24q-3                                   | 32    | 5.5                  | 97631      | F32TBX/835/A/ECO  | 10                       | 17,000            | 2,400          | 2,040       | 3500K       | 82  | Vertical: 93312489<br>Horizontal: 93312525 | LED18BG24-V/8SC/120-347<br>LED18BG24-H/8SC/120-347         |
| GX24q-3                                   | 32    | 5.5                  | 97632      | F32TBX/841/A/ECO  | 10                       | 17,000            | 2,400          | 2,040       | 4100K       | 82  | Vertical: 93312489<br>Horizontal: 93312525 | LED18BG24-V/8SC/120-347<br>LED18BG24-H/8SC/120-347         |
| GX24q-4                                   | 42    | 6.4                  | 97633      | F42TBX/827/A/ECO  | 10                       | 17,000            | 3,200          | 2,690       | 2700K       | 82  | Vertical: 93312489<br>Horizontal: 93312525 | LED18BG24-V/8SC/120-347<br>LED18BG24-H/8SC/120-347         |
| GX24q-4                                   | 42    | 6.4                  | 97634      | F42TBX/830/A/ECO  | 10                       | 17,000            | 3,200          | 2,690       | 3000K       | 82  | Vertical: 93312489<br>Horizontal: 93312525 | LED18BG24-V/8SC/120-347<br>LED18BG24-H/8SC/120-347         |
| GX24q-4                                   | 42    | 6.4                  | 97635      | F42TBX/835/A/ECO  | 10                       | 17,000            | 3,200          | 2,690       | 3500K       | 82  | Vertical: 93312489<br>Horizontal: 93312525 | LED18BG24-V/8SC/120-347<br>LED18BG24-H/8SC/120-347         |
| GX24q-4                                   | 42    | 6.4                  | 97636      | F42TBX/841/A/ECO  | 10                       | 17,000            | 3,200          | 2,690       | 4100K       | 82  | Vertical: 93312489<br>Horizontal: 93312525 | LED18BG24-V/8SC/120-347<br>LED18BG24-H/8SC/120-347         |

<sup>1</sup> Minimum order quantity = Carton Qty

**Halogen Lighting** offers unmatched quality of white light in compact sizes.

## Reference Guide | Bulb Identification



**DIA. in.:** Diameter of bulb at widest point.

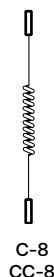
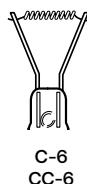
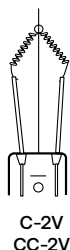
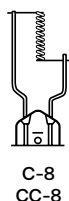
**MOL in.:** Maximum Overall Length including base or pins.

**LCL in.:** Distance between the center of the filament and the Light Center Length reference plane.

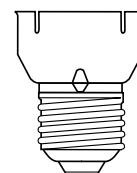
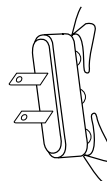
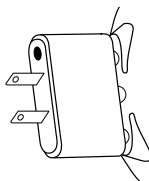
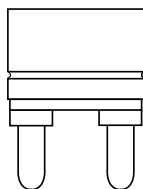
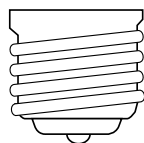
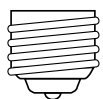
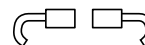
**Note:** Lamp drawings are not drawn to scale. Be sure to check size and dimension information when identifying each lamp.

To convert inches to millimeters, multiply the dimension (in inches) by 25.4 (i.e. 1.5" x 25.4 = 38.1 mm).

## Filament Identification



## Base Identification (not drawn to scale)





# Halogen Lamps



## Catalog Logic:

The following terms and descriptions can help you when checking Halogen lamp specifications and when ordering products. Within each product line, lamps are divided into families and listed by wattage.

### Bulb Shape:

followed by its size (the maximum diameter of the bulb expressed in eighths of an inch).

### Order Code:

Use the order code when ordering to ensure that you receive the exact product you require.

### LCL (in):

Distance between the center of the filament and the Light Center Length reference plane, in inches.

### Color Temperature – Kelvins (K):

A measure of the visual "warmth" or "coolness" of the light from the lamp. The higher the value, the whiter or "cooler" the light appears.

### Watts:

Energy used (as defined by FTC Lamp Label Rules). To estimate energy consumption (kWh), multiply watts x hours of use and divide by 1000.

### Filament Design:

Filaments are designated by a letter combination in which C is coiled wire filament, CC is a coiled wire that is itself wound into a larger coil and SR is straight ribbon filament. Numbers represent the type of filament-support arrangement.

### Rated Life (hours):

Life (as defined by FTC Lamp Label Rules) is rated life in hours.

### CBCP (Center beam Candlepower):

For reflector-type lamps, Center Beam Candlepower is the intensity (candelas) at the center of maximum intensity of the beam. Used only for ConstantColor® CMH® Metal Halide Lamps

### Base:

The type of base

### Description:

Lamp Model Description

### Carton Quantity:

Number of lamps packed in a carton

### MOL (in):

Maximum Overall Length in inches

### Initial Lumens:

Lamp light output after the initial 100 hours of operation.

### Additional Information:

Typical application and/or other important information.

| Bulb Shape | Base Type | Watts | Order Code | Description    | Volts | Carton Qty | Filament Design | MOL (in) | LCL (in) | Rated Life (hrs*) | Lumens Initial | Color Temp. | CBCP | Additional Information |
|------------|-----------|-------|------------|----------------|-------|------------|-----------------|----------|----------|-------------------|----------------|-------------|------|------------------------|
| PAR36      | Scrw Term | 35    | 19877      | 35PAR36/H/FL30 | 12    | 12         | C-6             | 2.75     |          | 4,000             | 250            | 3050K       | 900  | Floodlight             |

## 35PAR36/H/FL30

Identifies as lamp's wattage

Identifies the lamp shape and the bulb diameter in eighths of inches

Identifies the lamp type (Halogen)

Beam Angle (30 = 30 degrees)

Identifies beam angle type (Flood or Spot), code may also include base type or packaging information



## Specialty Lamps

| Bulb Shape                                      | Base Type    | Watts | Order Code | Description      | Volts   | Carton Qty <sup>1</sup> | Filament Design | MOL (In) | LCL (In) | Rated Life (hrs*) | Lumens Initial | Color Temp. | CBCP | Additional Information    |
|-------------------------------------------------|--------------|-------|------------|------------------|---------|-------------------------|-----------------|----------|----------|-------------------|----------------|-------------|------|---------------------------|
| <b>Compact PAR36</b>                            |              |       |            |                  |         |                         |                 |          |          |                   |                |             |      |                           |
| PAR36                                           | Scrw Term    | 35    | 19877      | 35PAR36/H/FL30   | 12      | 12                      | C-6             | 2.75     |          | 4,000             | 250            | 3050K       | 900  | Floodlight                |
| <b>Standard MR11</b>                            |              |       |            |                  |         |                         |                 |          |          |                   |                |             |      |                           |
| MR11                                            | 2-Pin G4     | 20    | 30773      | Q20MR11/NFL30    | 12      | 10                      | C-6             | 1.38     |          | 3,500             |                | 2900K       | 600  | Soft White                |
| <b>Low Voltage</b>                              |              |       |            |                  |         |                         |                 |          |          |                   |                |             |      |                           |
| T3                                              | 2-Pin GY6.35 | 35    | 34708      | Q35T3/12V/CL     | 12      | 100                     | C-6             | 1.75 cm  |          | 2,000             | 550            |             |      | Clear, 12V                |
| <b>Halogen G9</b>                               |              |       |            |                  |         |                         |                 |          |          |                   |                |             |      |                           |
| T4                                              | G9           | 25    | 16754      | Q25G9/CD         | 120     | 5                       | CC-8            | 1.77     | 1.26     | 3,000             | 240            | 6250K       |      | Carded                    |
|                                                 | G9           | 40    | 16755      | Q40G9/CD         | 120     | 5                       | CC-8            | 1.77     | 1.26     | 3,000             | 480            | 2750K       |      | Carded                    |
| <b>Halogen Double Contact Bayonet (BA15d)</b>   |              |       |            |                  |         |                         |                 |          |          |                   |                |             |      |                           |
| T4                                              | BA15d        | 100   | 15508      | Q100CL/DC        | 120     | 6                       | CC-8            | 2.44     | 1.38     | 2,000             | 1,600          | 2950K       |      | Clear                     |
|                                                 | BA15d        | 150   | 43693      | Q150CL/DC        | 120     | 6                       | CC-8            | 2.50     | 1.38     | 2,000             | 2,800          | 2950K       |      | Clear                     |
|                                                 | BA15d        | 250   | 43697      | Q250CL/DC        | 120     | 6                       | CC-8            | 3.00     | 1.63     | 2,000             | 5,000          | 2950K       |      | Clear                     |
| <b>Halogen Recessed Single Contact (R7s)</b>    |              |       |            |                  |         |                         |                 |          |          |                   |                |             |      |                           |
| T3                                              | R7s          | 100   | 22489      | Q100T3/CL/CD 5PK | 210     | 60                      | C-8             | 3.13     | 1.25     | 1,500             | 1,650          | 2950K       |      | Clear, Horizontal, Carded |
|                                                 | R7s          | 150   | 19378      | Q150T3/CL/CD 5PK | 120     | 60                      | C-8             | 3.13     | 1.25     | 1,500             | 2,400          | 2950K       |      | Clear, Horizontal, Carded |
| T2.5                                            | R7s          | 300   | 43703      | Q300T3/CL-6PK    | 120     | 144                     | C-8             | 4.69     | 2.25     | 2,000             | 5,950          | 2950K       |      | Clear, Horizontal         |
|                                                 | R7s          | 500   | 23731      | Q500T3/CL        | 120     | 12                      | C-8             | 4.69     | 2.25     | 2,000             | 11,100         | 3000K       |      | Clear, Horizontal         |
|                                                 | R7s          | 500   | 23733      | Q500T3/CL        | 130/120 | 12                      | C-8             | 4.69     | 2.25     | 2,000             | 10,550         | 3000K       |      | Clear, Horizontal         |
| <b>Halogen Miniature Candelabra Screw (E11)</b> |              |       |            |                  |         |                         |                 |          |          |                   |                |             |      |                           |
| T4                                              | Mini-Cand    | 100   | 15507      | Q100CL/MC        | 120     | 6                       | CC-8            | 2.81     | 1.38     | 2,000             | 1,600          | 2950K       |      | Clear                     |
|                                                 | Mini-Cand    | 150   | 43694      | Q150CL/MC        | 120     | 6                       | CC-8            | 3.00     | 1.38     | 2,000             | 2,800          | 2950K       |      | Clear                     |
|                                                 | Mini-Cand    | 250   | 43699      | Q250CL/MC        | 120     | 6                       | CC-8            | 3.16     | 1.63     | 2,000             | 5,000          | 2950K       |      | Clear                     |
|                                                 | Mini-Cand    | 250   | 43700      | Q250CL/MC        | 130/120 | 6                       | CC-8            | 3.16     | 1.63     | 2,000             | 5,000          | 2950K       |      | Clear                     |

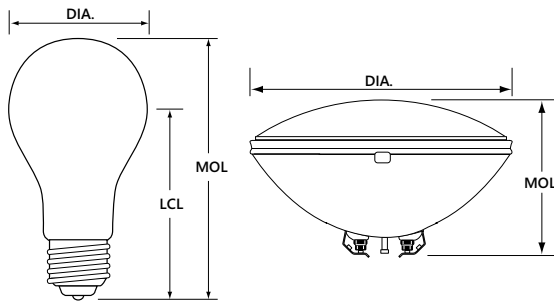
<sup>1</sup> Minimum order quantity = Carton Qty

# Incandescent Lamps



**Incandescent Lighting** is the familiar, dependable light source you've known for decades.

## Reference Guide | Bulb Identification



**DIA:** Diameter of bulb at widest point.

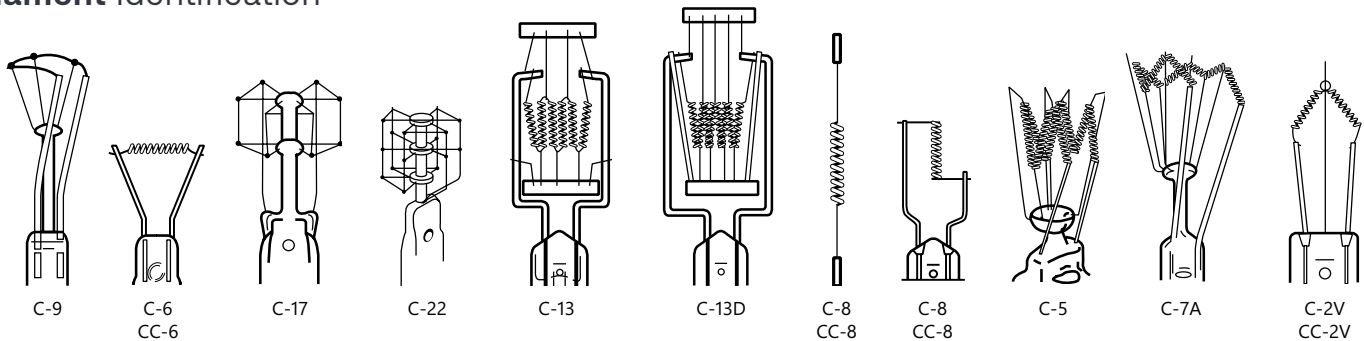
**MOL:** Maximum Overall Length including base or pins.

**LCL:** Distance between the center of the arc tube and the Light Center Length reference plane.

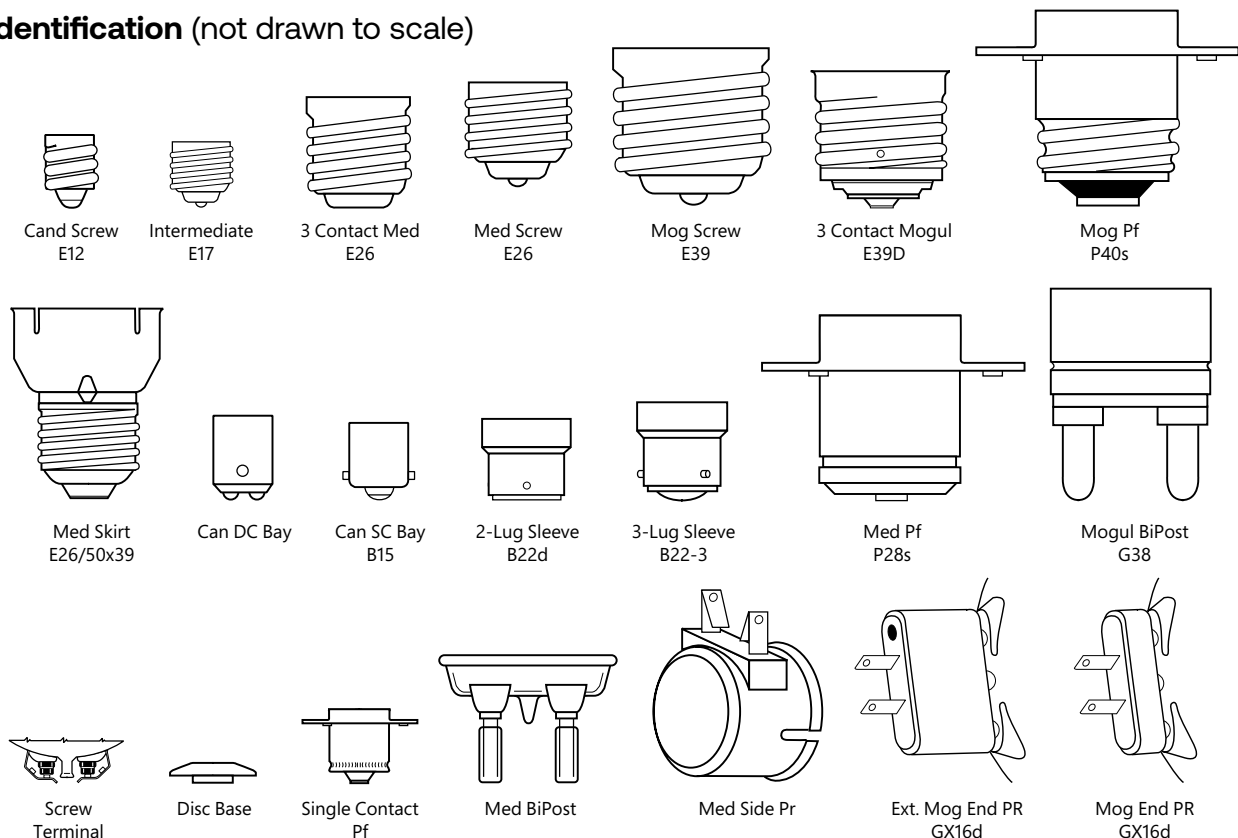
**Note:** Lamp drawings are not drawn to scale. Be sure to check size and dimension information when identifying each lamp.

To convert inches to millimeters, multiply the dimension (in inches) by 25.4 (i.e. 1.5" x 25.4 = 38.1 mm).

## Filament Identification



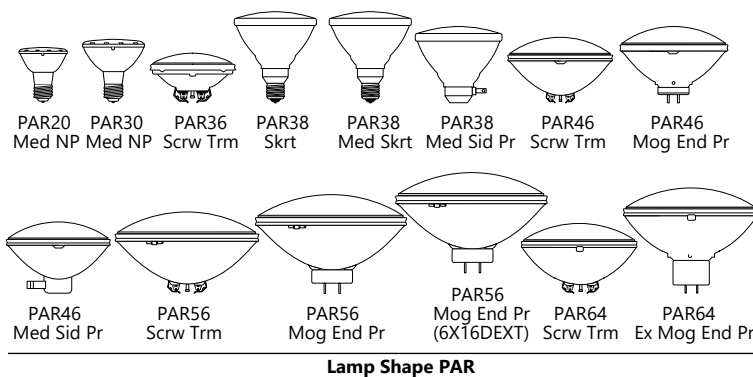
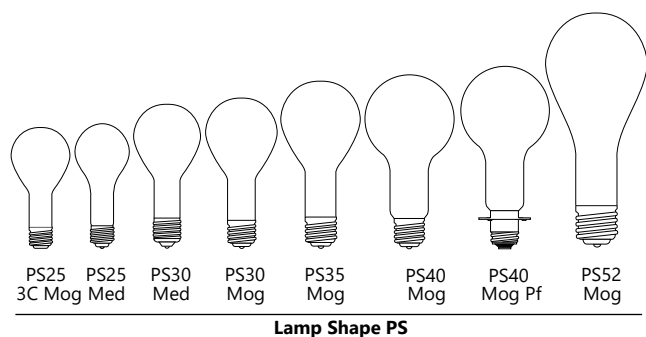
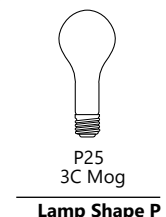
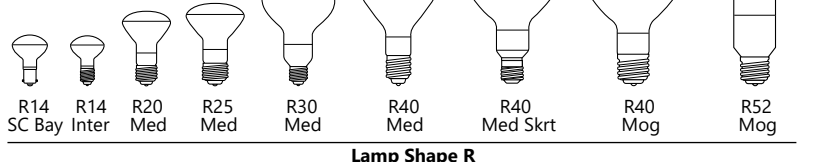
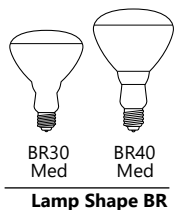
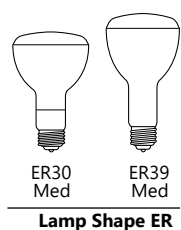
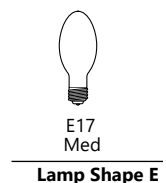
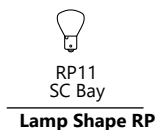
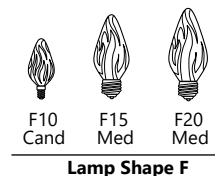
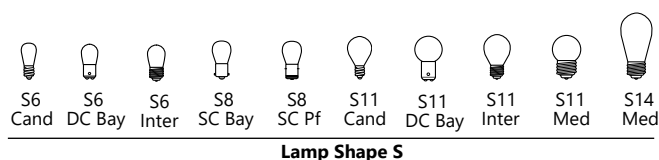
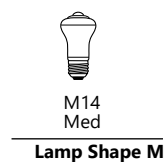
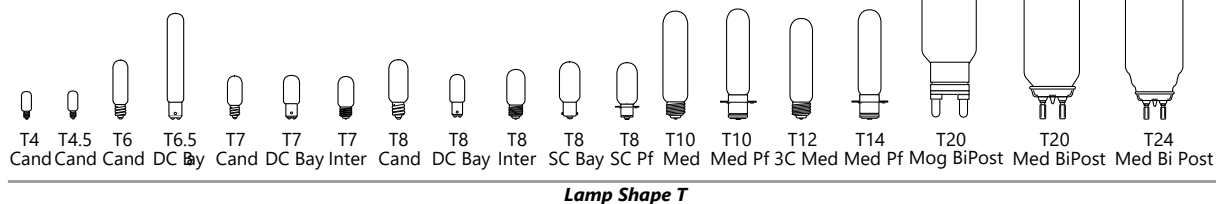
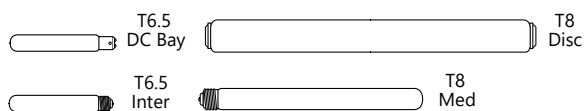
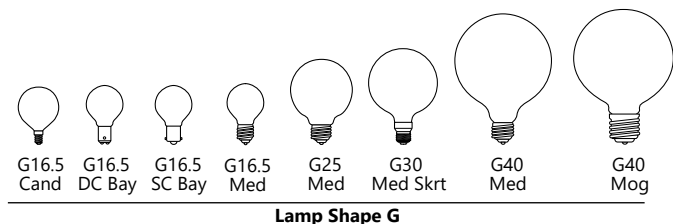
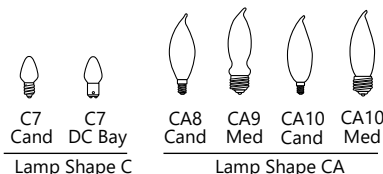
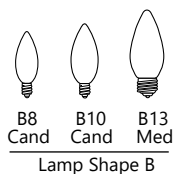
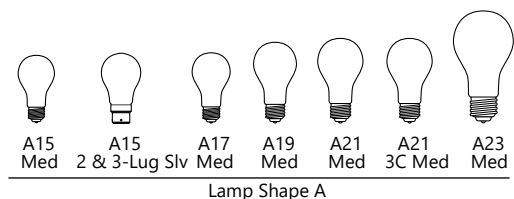
## Base Identification (not drawn to scale)



# Incandescent Lamps



## Lamp Drawings (not drawn to scale)



# Incandescent Lamps



## Catalog Logic:

The following terms and descriptions can help you when checking Incandescent lamp specifications and when ordering products. Within this product line, lamps are listed by wattage.

|                                                                                                                                                            |  |  |                                                                                                                  |  |  |                                                                                                                                                                                                                                                                             |  |  |                                                                                                                                                                                       |  |  |                                                                                                 |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                              |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|------------------------------------------------------------------------------------------------------------------|--|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|-------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>Bulb Shape:</b><br>followed by its size (the maximum diameter of the bulb expressed in eighths of an inch).                                             |  |  | <b>Order Code:</b><br>Use the order code when ordering to ensure that you receive the exact product you require. |  |  | <b>Filament Design:</b><br>Filaments are designated by a letter combination in which C is coiled wire filament, CC is a coiled wire that is itself wound into a larger coil and SR is straight ribbon filament. Numbers represent the type of filament-support arrangement. |  |  | <b>Color Temperature – Kelvins (K):</b><br>A measure of the visual “warmth” or “coolness” of the light from the lamp. The higher the value, the winter or “cooler” the light appears. |  |  | <b>Additional Information:</b><br>Typical application and/or other important information.       |  | <b>LED Replacement:</b><br>Current offers a wide range of LED replacement lamps. The LED lamp models are provided as general guidance. Often, there will be more than one LED Lamp that may be used to replace a Traditional lamp. For Traditional lamps that operated off a ballast, the ballast bypass (UL Type B) LED option is given unless otherwise noted. The application should be considered when selecting an LED replacement lamp. Sometimes, Traditional lamps do not have a suitable LED replacement due to special application considerations, such as very high heat. Contact Current for additional guidance if the appropriate LED solution is unclear. |                                                                                                                                                                                                                              |  |
| <b>Watts:</b><br>Energy used (as defined by FTC Lamp Label Rules). To estimate energy consumption (kWh), multiply watts x hours of use and divide by 1000. |  |  | <b>Description:</b><br>Lamp Model Description                                                                    |  |  | <b>Carton Quantity:</b><br>Number of lamps packed in a carton                                                                                                                                                                                                               |  |  | <b>MOL (in):</b><br>Maximum Overall Length in inches                                                                                                                                  |  |  | <b>Rated Life (hours):</b><br>Life (as defined by FTC Lamp Label Rules) is rated life in hours. |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>CBCP (Center beam Candlepower):</b><br>For reflector-type lamps, Center Beam Candlepower is the intensity (candelas) at the center of maximum intensity of the beam. Used only for ConstantColor® CMH® Metal Halide Lamps |  |
| <b>Base:</b><br>The type of base                                                                                                                           |  |  | <b>Volts:</b><br>Lamp data is based on operation at rated voltage                                                |  |  |                                                                                                                                                                                                                                                                             |  |  | <b>Initial Lumens:</b><br>Lamp light output after the initial 100 hours of operation.                                                                                                 |  |  |                                                                                                 |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                              |  |
|                                                                                                                                                            |  |  |                                                                                                                  |  |  |                                                                                                                                                                                                                                                                             |  |  |                                                                                                                                                                                       |  |  |                                                                                                 |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                              |  |
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## 15A/W-2PK

Identifies as lamp's wattage

Identifies the lamp shape and the bulb diameter in eighths of inches

Finish (CL = Clear, W = White)

2PK = Inner carton of 2 lamps (Smallest unit of sale downstream)



# Incandescent Lamps



## Incandescent Lamps

| Incandescent Lamps |           |         |            |                 |         |                          |                 |          |          |                   |                |            |         | LED Replacement        |            |                 |
|--------------------|-----------|---------|------------|-----------------|---------|--------------------------|-----------------|----------|----------|-------------------|----------------|------------|---------|------------------------|------------|-----------------|
| Bulb Shape         | Base Type | Watts   | Order Code | Description     | Volts   | Car-ton Qty <sup>1</sup> | Filament Design | MOL (In) | LCL (In) | Rated Life (hrs*) | Lumens Initial | Color Temp | CBCP    | Additional Information | Order Code | Description     |
| 3-8 Watts          |           |         |            |                 |         |                          |                 |          |          |                   |                |            |         |                        |            |                 |
| S6                 | Cand      | 3       | 11098      | 3S6/5 24PK      | 130     | 24                       | C-7A            | 1.87     | 1.37     | 3,000             | 11             |            |         | Clear-Indicator        |            |                 |
|                    | Cand      | 6       | 11374      | 6S6 155         | 155     | 240                      | C-7A            | 1.87     | 1.37     | 1,500             | 38             |            |         | Clear-Indicator        |            |                 |
| T4.5               | Cand      | 6       | 11764      | 6T41/2/1        | 130     | 100                      | C-7A            | 1.87     | 1.31     | 1,500             | 42             |            |         | Clear-Indicator        |            |                 |
| 15 Watts           |           |         |            |                 |         |                          |                 |          |          |                   |                |            |         |                        |            |                 |
| A15                | Med       | 15      | 97491      | 15A/W-2PK       | 120     | 24                       | C-9             | 3.50     | 2.37     | 2,500             | 110            |            |         | Soft-White             | 93142810   | LED4DFA15-W-2PK |
| S11                | DC Bay    | 15      | 13188      | 15S11/3DC       | 75      | 120                      | C-9             | 2.37     | 1.25     | 1,000             | 138            |            |         | Clear-Train            |            |                 |
| T6                 | Cand      | 15      | 13402      | 15T6            | 145     | 60                       | C-7A            | 3.06     | 1.56     | 1,500             | 102            |            |         | Clear-Exit             |            |                 |
| T7                 | Cand      | 15      | 13494      | 15T7C           | 120     | 120                      | C-7A            | 2.25     | 1.50     | 3,000             | 108            |            |         | Clear-Appliance        |            |                 |
| 18 Watts           |           |         |            |                 |         |                          |                 |          |          |                   |                |            |         |                        |            |                 |
| S11                | BA15s     | 18      | 13655      | 18S11/ISC       | 10      | 120                      | CC-6            | 2.37     | 1.25     | 2,000             | 200            |            |         | Clear-Railway          |            |                 |
| 20 Watts           |           |         |            |                 |         |                          |                 |          |          |                   |                |            |         |                        |            |                 |
| T6.5               | DC Bay    | 20      | 34241      | 20T61/2DC/F     | 120     | 60                       | C-8             | 5.56     |          | 5,000             | 90             |            |         | Frost-Exit Light       |            |                 |
| T6.5               | Inter     | 20      | 34272      | 20T61/2/F       | 120     | 60                       | C-8             | 5.50     |          | 7,000             | 90             |            |         | Frost-Exit Light       |            |                 |
| 25 Watts           |           |         |            |                 |         |                          |                 |          |          |                   |                |            |         |                        |            |                 |
| T7                 | DC Bay    | 25      | 14741      | 25T7DC          | 120     | 60                       | C-7A            | 2.25     | 1.31     | 1,000             | 195            |            |         | Clear-Appliance        |            |                 |
| T7                 | Inter     | 25      | 14791      | 25T7N           | 120     | 60                       | C-7A            | 2.25     | 1.56     | 1,000             | 195            |            |         | Clear-Appliance        |            |                 |
| T10                | Med       | 25      | 14880      | 25T10 24PK      | 120     | 192                      | C-8             | 5.60     |          | 1,000             | 250            |            |         | Clear-Display Light    |            |                 |
| B10                | Med       | 25      | 22756      | 25BM CD2        | 120     | 60                       | C-7A            | 4.62     |          | 1,500             | 170            | 2500K      |         | Clear, Blunt Tip       | 93142811   | LED4DFBM-C-2PK  |
| CA10               | Cand      | 25      | 40045      | 25CAC/L         | 120     | 120                      | CC-2V           | 4.12     |          | 4,000             | 210            | 2500K      |         | Clear, Bent Tip        | 93142792   | LED3DFCAC-C-2PK |
| 40 Watts           |           |         |            |                 |         |                          |                 |          |          |                   |                |            |         |                        |            |                 |
| A15                | Med       | 40      | 15206      | 40A15 CARD 12PK | 120     | 60                       | C-9             | 3.50     | 2.37     | 1,500             | 415            | 2600K      |         | Clear-Oven Light       | 93142809   | LED4DFA15-C-2PK |
| 50 Watts           |           |         |            |                 |         |                          |                 |          |          |                   |                |            |         |                        |            |                 |
| A19                | Med       | 50      | 16201      | 50A19/RS/SH     | 75      | 120                      | C-9             | 3.87     | 2.50     | 1,000             | 500            |            |         | Train/Rough Service    |            |                 |
| 200 Watts          |           |         |            |                 |         |                          |                 |          |          |                   |                |            |         |                        |            |                 |
| A21                | Med       | 200     | 16069      | 200A/CL-1 12PK  | 120     | 12                       | CC-8            | 5.37     | 4.06     | 750               | 3,780          | 2900K      |         | Crystal                | 93309226   | LED23A21/827    |
| PAR56              | Scrw Term | 200     | 20122      | 200PAR          | 30      | 12                       | CC-8            | 4.50     |          | 350               |                |            | 230,000 | Locomotive             |            |                 |
| 250 Watts          |           |         |            |                 |         |                          |                 |          |          |                   |                |            |         |                        |            |                 |
| R40                | Med       | 250     | 37770      | 250R40/1 6PK    | 120     | 30                       | C-9             | 6.56     |          | 5,000             | 2,200          |            |         | Heat Lamp              |            |                 |
| 300 Watts          |           |         |            |                 |         |                          |                 |          |          |                   |                |            |         |                        |            |                 |
| PS25               | Med       | 300/266 | 73788      | 300M/130V-PK6   | 130/120 | 6                        | CC-8            | 6.93     | 4.92     | 750/1,950         | 6,120/4,650    |            |         | Clear                  | 93303384   | LED/LC/ED17/7SC |
| PS35               | Mog Screw | 300     | 21025      | 300             | 130     | 24                       | C-9             | 9.37     | 7.00     | 1,000             | 5,820          |            |         | Clear                  | 93303384   | LED/LC/ED17/7SC |
|                    | Mog Screw | 300     | 21079      | 300/IF          | 130     | 24                       | C-9             | 9.37     | 7.00     | 1,000             | 5,820          |            |         | Inside Frost           | 93303384   | LED/LC/ED17/7SC |
|                    | Mog Screw | 300     | 20849      | 300PAR56/WFL    | 120     | 12                       | CC-13           | 5        |          | 2,000             | 3,840          | 2750K      | 11,000  | Wide Flood             |            |                 |
| 350 Watts          |           |         |            |                 |         |                          |                 |          |          |                   |                |            |         |                        |            |                 |
| PAR56              | Scrw Term | 350     | 19866      | 350PAR56/SP     | 75      | 12                       | CC-8            | 4.50     |          | 500               | 6,200          |            |         | Locomotive             |            |                 |
| 375 Watts          |           |         |            |                 |         |                          |                 |          |          |                   |                |            |         |                        |            |                 |
| R40                | Med Skirt | 375     | 21334      | 375R40/1        | 115     | 24                       | C-9             | 7.50     |          | 5,000             | 2,700          |            | 1,170   | Infrared Reflector     |            |                 |

<sup>1</sup> Minimum order quantity = Carton Qty



# Ballasts



## Understanding Fluorescent Ballasts

GE introduced the first fluorescent ballast more than 70 years ago. Today, Current is providing high-frequency electronic GE Lamp ballasts for almost every fluorescent application.

**With our UltraMax® and UltraStart® ballasts, we are bringing you the future in ballast performance.**

Current's UltraMax® instant-start and UltraStart® programmed start electronic ballasts transform the power of light into efficiency and savings from store shelves to the installation site. The foundation of the "Ultra" family of ballasts starts with its high efficiency ratings. High efficiency ballasts are a minimum of 90% efficiency with some ballasts nearly 95% efficient which means the ballast only consumes 5-10% of the total system power. These high efficiency ballasts exceed minimum high efficiency standards as established by almost all energy advocate groups, utility rebate programs and the NEMA Premium® ballast program. The ballasts are marked with the Ultra brand as well as the NEMA Premium® ballast mark. These ballasts have multi-voltage control (MVC), which automatically adjusts to handle voltage from 120V through 277V. That cuts the ballast models you need to stock from 40 down to 13, which can dramatically reduce inventory carrying costs. UltraMax® ballasts have ArcGuard Protection, too, with a UL Type CC Anti-Arc Rating. Plus, they're ultra-lamp-friendly, with a low lamp current crest factor of 1.4 for optimal lamp performance. Both UltraMax® and UltraStart® have anti-striation control for better light quality with no lamp striations (spiraling). And the small, low-profile design of these ballasts makes retrofits effortless at the job site. Also unique to our programmed start UltraStart® ballasts is parallel lamp operation which means that if one lamp fails the others remain on and quick starting times of less than 700 milliseconds which is necessary in avoiding delays with automatic sensors.

## Fluorescent Ballast Types

### *Electronic Instant Start*

The most common fluorescent ballast is the instant start and is used typically in long 3 to 10-hour lamp cycle applications. These ballasts are energy efficient and can deliver 20% to 40% energy savings when installed with energy-efficient lamps in building retrofits. These ballasts deliver >550 open circuit volts when starting lamps and operate lamps at high frequencies which offers flicker-free operation and better lamp efficiencies. The ballasts are significantly quieter than conventional magnetic ballasts and are backed by Current Lighting's system 5-year ballast limited warranty and extended lamp warranties.

### **UltraMax® Professional Series**

A family of high-efficiency T8 instant-start electronic linear fluorescent ballasts designed to optimize T8 lamps for optimal system energy savings. UltraMax® ballasts have a low lamp current crest factor and virtually "read" and adapt to incoming voltage from 108V to 305V. Other features include UL Type CC Anti-Arc Rating and anti-striation control to eliminate lamp striations and spiraling. These ballasts are offered in ballast factors: low wattage (.77), normal light (.87), normal-high (N+) (1.0) and high (>1.15).

### **UltraMax® General Series**

Offered in dedicated or multi-volt (120-277V), these high performance T8 instant-start ballasts also meet minimum efficiency requirements as established with the NEMA Premium® ballast program. These ballasts are offered in ballast factors: low wattage (.77), normal light (.87) and high (>1.15).





## Programmed Instant Start

Programmed Start electronic ballasts have a lamp starting method that preheats lamp filaments before applying an open circuit voltage (OCV) to start the lamp. Use Programmed Start ballasts to ensure long lamp life when turning lamps on and off more than five times in a day or in conjunction with any automatic light control or sensor. This type of starting circuit keeps lamp-end blackening to a minimum and improves lamp life performance, especially in applications where the lamps are frequently switched on and off.

### UltraStart®

UltraStart® is a family of high-efficiency Programmed Start electronic linear fluorescent ballasts that also exceed NEMA Premium® ballast efficiency requirements but are designed to optimize T8 lamps in frequently switched applications. Instant start ballasts provide 7,000-13,000 starts before 50% lamp failure. UltraStart® provides greater than 100,000 starts before 50% lamp failure. UltraStart® ballasts provide the same energy savings and convenience of instant start ballasts but with the longer lamp life offered a programmed start ballast. These ballasts are offered in ballast factors: programmed start x-low wattage (XL) (.60), low wattage (.71), normal light (.87) and high (>1.15).



## Ballast Date Codes

### Date Code

Electronic ballast manufacturing date codes are located on the upper right-hand corner of the label. The code lists the month, year and day of manufacture. A typical code is C16-073, where the month is listed as A (January), B (February), C (March) as in this code followed by the year 16 (2016) and the date of manufacture 073 (the 73rd day of 2016).

### Ballast Life

Electronic ballasts are designed and manufactured to an average life expectancy of 60,000 hours of operation at maximum rated case temperatures. As a rule of thumb, ballast life is doubled for every 10C reduction in ballast case temperature. However there are other variables such as transients, voltage sags and swells, ambient temperature, etc., which affect ballast life as well.

### Instant Start vs. Rapid Start Sockets

When using programmed start or dimming ballasts in fixtures, sockets must be 2-pin rapid start type. Fixtures with T8 instant start ballasts must use jumpered rapid start sockets or shunted lamp holders (internal to the lamp holder) that bridge the lamp bi-pins together into one contact on each side of the lamp. If retrofitting from a instant start ballast fixture with shunted sockets to a dimming or programmed start ballast, rapid start type sockets must be used to properly start lamps and maintain rated lamp life.

# Linear Fluorescent Ballasts



## 73190 – GE232MAXP-H/ULTRA

UltraMax® P-Series Instant Start

Multi-Voltage High-Efficiency

2 or 1 – F32T8 120 to 277 "H" 1.18 BF UltraMax® P

- T8 Instant Start Ballasts For F17 (2ft), F25 (3ft), F32 (4ft), F40 (5ft) Lamps
- Energy-saving high-efficiency instant-start electronic ballast (>90%)
- Multi-voltage technology handles voltage from 120 to 277V
- UL Type CC Rating provides protection against arcing in electrical devices
- Anti-striation control for better light quality
- UL 55°C Ambient Temperature rating
- Cold temperature -22°F Minimum Starting Temperature

| General Characteristics      |                                                                                  |
|------------------------------|----------------------------------------------------------------------------------|
| Ballast Type                 | Electronic – High-Efficiency Multivolt Instant Start                             |
| Starting Method              | Instant Start                                                                    |
| Lamp Wiring                  | Parallel                                                                         |
| Line Voltage Regulation(+/-) | 10%                                                                              |
| Ambient Temperature (MAX)    | 55°C (131°F)                                                                     |
| Case Temperature (MAX)       | 90°C (194°F)                                                                     |
| Ballast Factor               | High                                                                             |
| Power Factor Correction      | Active                                                                           |
| Sound Rating                 | A (20-24 decibels)                                                               |
| Enclosure Type               | Metal                                                                            |
| Additional Info              | Anti-striation control, Auto-restart, Inherently Thermally Protected, UL Class P |

| Electrical Characteristics |             |
|----------------------------|-------------|
| Supply Current Frequency   | 50 Hz/60 Hz |

| Dimensions |                  |
|------------|------------------|
| Length (L) | 9.5 in (241 mm)  |
| Width (W)  | 1.3 in (33 mm)   |
| Height (H) | 1.0 in (25.4 mm) |

| Mounting Dimensions                      |                 |
|------------------------------------------|-----------------|
| Mount Length (M)                         | 8.9 in (226 mm) |
| Mount Width (X or F)                     | 0.87 in (22 mm) |
| Mount Slots (MS)                         | 0.3 in (8 mm)   |
| Weight                                   | 0.7 lbs         |
| Exit Type                                | Side            |
| Remote Mounting Distance to Lamp (F32T8) | 18 ft           |
| Remote Mounting Wire Gauge               | 18 AWG          |

| Lead Lengths |                |
|--------------|----------------|
| Black        | 25 in (635 mm) |
| White        | 25 in (635 mm) |
| Blue         | 31 in (787 mm) |
| Red          | 37 in (940 mm) |

| Specifications and lamp wattage |            |                |                  |                       |                       |                         |                     |                   |           |                           |
|---------------------------------|------------|----------------|------------------|-----------------------|-----------------------|-------------------------|---------------------|-------------------|-----------|---------------------------|
| Lamp                            | # of Lamps | Line Volts (V) | System Watts (W) | Nom. Line Current (A) | System Ballast Factor | Ballast Efficacy Factor | Power Factor % (>=) | Crest Factor (<=) | THD% (<=) | Min Starting Temp (°F/°C) |
| F32T8                           | 2          | 120            | 74               | 0.62                  | 1.19                  | 1.61                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 2          | 277            | 73               | 0.26                  | 1.19                  | 1.63                    | 98                  | 1.5               | 10        | -22/-30                   |
|                                 | 1          | 120            | 47               | 0.40                  | 1.38                  | 2.94                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 1          | 277            | 46               | 0.18                  | 1.38                  | 3.00                    | 96                  | 1.5               | 20        | -22/-30                   |
| F32T8/WM                        | 2          | 120            | 70               | 0.59                  | 1.16                  | 1.66                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 2          | 277            | 69               | 0.26                  | 1.16                  | 1.68                    | 98                  | 1.5               | 10        | -22/-30                   |
|                                 | 1          | 120            | 43               | 0.37                  | 1.37                  | 3.19                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 1          | 277            | 43               | 0.17                  | 1.37                  | 3.19                    | 95                  | 1.5               | 15        | -22/-30                   |
| F28T8                           | 2          | 120            | 65               | 0.55                  | 1.14                  | 1.75                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 2          | 277            | 64               | 0.24                  | 1.14                  | 1.78                    | 97                  | 1.5               | 10        | -22/-30                   |
|                                 | 1          | 120            | 40               | 0.34                  | 1.34                  | 3.35                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 1          | 277            | 41               | 0.16                  | 1.34                  | 3.27                    | 94                  | 1.5               | 20        | -22/-30                   |
| F32T8/25W                       | 2          | 120            | 60               | 0.51                  | 1.16                  | 1.93                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 2          | 277            | 60               | 0.22                  | 1.16                  | 1.93                    | 97                  | 1.5               | 15        | -22/-30                   |
|                                 | 1          | 120            | 38               | 0.32                  | 1.37                  | 3.60                    | 99                  | 1.5               | 15        | -22/-30                   |
|                                 | 1          | 277            | 38               | 0.15                  | 1.37                  | 3.60                    | 94                  | 1.5               | 20        | -22/-30                   |
| F25T8                           | 2          | 120            | 62               | 0.52                  | 1.17                  | 1.87                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 2          | 277            | 61               | 0.22                  | 1.17                  | 1.90                    | 97                  | 1.5               | 15        | -22/-30                   |
|                                 | 1          | 120            | 38               | 0.32                  | 1.37                  | 3.61                    | 99                  | 1.5               | 15        | -22/-30                   |
|                                 | 1          | 277            | 38               | 0.15                  | 1.37                  | 3.61                    | 94                  | 1.5               | 20        | -22/-30                   |
| F17T8                           | 2          | 120            | 41               | 0.36                  | 1.02                  | 2.85                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 2          | 277            | 41               | 0.17                  | 1.02                  | 2.85                    | 95                  | 1.5               | 20        | -22/-30                   |
|                                 | 1          | 120            | 26               | 0.23                  | 1.21                  | 5.27                    | 99                  | 1.5               | 15        | -22/-30                   |
|                                 | 1          | 277            | 27               | 0.12                  | 1.21                  | 5.07                    | 90                  | 1.5               | 20        | -22/-30                   |
| FE15T8                          | 2          | 120            | 32               | 0.29                  | 1.02                  | 3.19                    | 99                  | 1.5               | 15        | -22/-30                   |
|                                 | 2          | 277            | 33               | 0.14                  | 1.02                  | 3.09                    | 93                  | 1.5               | 20        | -22/-30                   |
|                                 | 1          | 120            | 23               | 0.19                  | 1.21                  | 5.26                    | 98                  | 1.5               | 15        | -22/-30                   |
|                                 | 1          | 277            | 22               | 0.10                  | 1.21                  | 5.50                    | 87                  | 1.5               | 20        | -22/-30                   |
| F40T8                           | 1          | 120            | 56               | 0.46                  | .66                   | 1.18                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 1          | 277            | 55               | 0.21                  | .66                   | 1.20                    | 94                  | 1.5               | 15        | -22/-30                   |
| F25T12                          | 2          | 120            | 64               | 0.54                  | 1.11                  | 1.73                    | 99                  | 1.5               | 10        | 0/-18                     |
|                                 | 2          | 277            | 63               | 0.24                  | 1.11                  | 1.76                    | 97                  | 1.5               | 10        | 0/-18                     |
|                                 | 1          | 120            | 40               | 0.35                  | 1.36                  | 3.40                    | 99                  | 1.5               | 10        | 0/-18                     |
|                                 | 1          | 277            | 40               | 0.16                  | 1.36                  | 3.40                    | 94                  | 1.5               | 15        | 0/-18                     |

Safety and Performance





# Linear Fluorescent Ballasts



## 72266 – GE232MAXP-N/ULTRA

UltraMax® P-Series Instant Start

Multi-Voltage High-Efficiency

2 or 1 – F32T8 120 to 277 "N" 87 BF UltraMax® P

- T8 Instant Start Ballasts For F17 (2ft), F25 (3ft), F32 (4ft), F40 (5ft) Lamps
- Energy-saving high-efficiency instant-start electronic ballast (>90%)
- Multi-voltage technology handles voltage from 120 to 277V
- UL Type CC Rating provides protection against arcing in electrical devices
- Anti-striation control for better light quality
- UL 55°C Ambient Temperature rating
- Cold temperature -22°F Minimum Starting Temperature

| General Characteristics      |                                                                                  |
|------------------------------|----------------------------------------------------------------------------------|
| Ballast Type                 | Electronic – High-Efficiency Multivolt Instant Start                             |
| Starting Method              | Instant Start                                                                    |
| Lamp Wiring                  | Parallel                                                                         |
| Line Voltage Regulation(+/-) | 10%                                                                              |
| Ambient Temperature (MAX)    | 55°C (131°F)                                                                     |
| Case Temperature (MAX)       | 70°C (158°F)                                                                     |
| Ballast Factor               | Normal                                                                           |
| Power Factor Correction      | Active                                                                           |
| Sound Rating                 | A (20-24 decibels)                                                               |
| Enclosure Type               | Metal                                                                            |
| Additional Info              | Anti-striation control, Auto-restart, Inherently Thermally Protected, UL Class P |

| Electrical Characteristics |             |
|----------------------------|-------------|
| Supply Current Frequency   | 50 Hz/60 Hz |

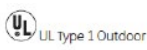
| Dimensions |                  |
|------------|------------------|
| Length (L) | 9.5 in (241 mm)  |
| Width (W)  | 1.3 in (33 mm)   |
| Height (H) | 1.0 in (25.4 mm) |

| Mounting Dimensions                      |                 |
|------------------------------------------|-----------------|
| Mount Length (M)                         | 8.9 in (226 mm) |
| Mount Width (X or F)                     | 0.87 in (22 mm) |
| Mount Slots (MS)                         | 0.3 in (8 mm)   |
| Weight                                   | 0.7 lbs         |
| Exit Type                                | Side            |
| Remote Mounting Distance to Lamp (F32T8) | 18 ft           |
| Remote Mounting Wire Gauge               | 18 AWG          |

| Lead Lengths |                |
|--------------|----------------|
| Black        | 25 in (635 mm) |
| White        | 25 in (635 mm) |
| Blue         | 31 in (787 mm) |
| Red          | 37 in (940 mm) |

| Specifications and lamp wattage |            |                |                  |                       |                       |                         |                     |                   |           |                           |
|---------------------------------|------------|----------------|------------------|-----------------------|-----------------------|-------------------------|---------------------|-------------------|-----------|---------------------------|
| Lamp                            | # of Lamps | Line Volts (V) | System Watts (W) | Nom. Line Current (A) | System Ballast Factor | Ballast Efficacy Factor | Power Factor % (>=) | Crest Factor (<=) | THD% (<=) | Min Starting Temp (°F/°C) |
| F32T8                           | 2          | 120            | 54               | 0.47                  | .88                   | 1.63                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 2          | 277            | 53               | 0.20                  | .88                   | 1.66                    | 98                  | 1.5               | 10        | -22/-30                   |
|                                 | 1          | 120            | 31               | 0.26                  | 1.08                  | 3.48                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 1          | 277            | 31               | 0.12                  | 1.08                  | 3.48                    | 96                  | 1.5               | 10        | -22/-30                   |
| F32T8/WM                        | 2          | 120            | 52               | 0.44                  | .87                   | 1.67                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 2          | 277            | 51               | 0.19                  | .87                   | 1.71                    | 98                  | 1.5               | 10        | -22/-30                   |
|                                 | 1          | 120            | 29               | 0.25                  | 1.07                  | 3.69                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 1          | 277            | 29               | 0.12                  | 1.07                  | 3.69                    | 96                  | 1.5               | 10        | -22/-30                   |
| F28T8                           | 2          | 120            | 48               | 0.40                  | .85                   | 1.77                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 2          | 277            | 47               | 0.17                  | .85                   | 1.81                    | 98                  | 1.5               | 10        | -22/-30                   |
|                                 | 1          | 120            | 27               | 0.24                  | 1.05                  | 3.89                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 1          | 277            | 27               | 0.11                  | 1.05                  | 3.89                    | 95                  | 1.5               | 10        | -22/-30                   |
| F32T8/25W                       | 2          | 120            | 44               | 0.37                  | .87                   | 1.98                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 2          | 277            | 43               | 0.16                  | .87                   | 2.02                    | 98                  | 1.5               | 10        | -22/-30                   |
|                                 | 1          | 120            | 25               | 0.23                  | .87                   | 3.48                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 1          | 277            | 25               | 0.10                  | .87                   | 3.48                    | 94                  | 1.5               | 10        | -22/-30                   |
| F25T8                           | 2          | 120            | 44               | 0.38                  | .87                   | 1.98                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 2          | 277            | 44               | 0.16                  | .87                   | 1.98                    | 98                  | 1.5               | 10        | -22/-30                   |
|                                 | 1          | 120            | 26               | 0.23                  | 1.09                  | 4.19                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 1          | 277            | 26               | 0.11                  | 1.09                  | 4.19                    | 94                  | 1.5               | 10        | -22/-30                   |
| F17T8                           | 2          | 120            | 31               | 0.27                  | .88                   | 2.84                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 2          | 277            | 31               | 0.12                  | .88                   | 2.84                    | 96                  | 1.5               | 10        | -22/-30                   |
|                                 | 1          | 120            | 19               | 0.17                  | 1.09                  | 5.74                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 1          | 277            | 19               | 0.08                  | 1.09                  | 5.74                    | 90                  | 1.5               | 20        | -22/-30                   |
| FE15T8                          | 2          | 120            | 25               | 0.21                  | .91                   | 3.64                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 2          | 277            | 25               | 0.10                  | .91                   | 3.64                    | 93                  | 1.5               | 15        | -22/-30                   |
|                                 | 1          | 120            | 16               | 0.14                  | .91                   | 5.69                    | 98                  | 1.5               | 10        | -22/-30                   |
|                                 | 1          | 277            | 16               | 0.07                  | .91                   | 5.69                    | 88                  | 1.5               | 15        | -22/-30                   |
| F25T12                          | 2          | 120            | 46               | 0.39                  | .93                   | 2.02                    | 99                  | 1.5               | 10        | 0/-18                     |
|                                 | 2          | 277            | 46               | 0.17                  | .93                   | 2.02                    | 98                  | 1.5               | 10        | 0/-18                     |
|                                 | 1          | 120            | 27               | 0.24                  | .93                   | 3.44                    | 99                  | 1.5               | 10        | 0/-18                     |
|                                 | 1          | 277            | 27               | 0.11                  | .93                   | 3.44                    | 95                  | 1.5               | 10        | 0/-18                     |

Safety and Performance



FCC – CLASS A Non-Consumer

# Linear Fluorescent Ballasts



## 72262 – GE232MAXP-L/ULTRA

UltraMax® P-Series Instant Start

Multi-Voltage High-Efficiency

2 or 1 – F32T8 120 to 277 "L" .77 BF UltraMax® P

- T8 Instant Start Ballasts For F17 (2ft), F25 (3ft), F32 (4ft), F40 (5ft) Lamps
- Energy-saving high-efficiency instant-start electronic ballast (>90%)
- Multi-voltage technology handles voltage from 120 to 277V
- UL Type CC Rating provides protection against arcing in electrical devices
- Anti-striation control for better light quality
- UL 55°C Ambient Temperature rating
- Cold temperature -22°F Minimum Starting Temperature

| General Characteristics      |                                                                                  |
|------------------------------|----------------------------------------------------------------------------------|
| Ballast Type                 | Electronic – High-Efficiency Multivolt Instant Start                             |
| Starting Method              | Instant Start                                                                    |
| Lamp Wiring                  | Parallel                                                                         |
| Line Voltage Regulation(+/-) | 10%                                                                              |
| Ambient Temperature (MAX)    | 55°C (131°F)                                                                     |
| Case Temperature (MAX)       | 70°C (158°F)                                                                     |
| Ballast Factor               | Low                                                                              |
| Power Factor Correction      | Active                                                                           |
| Sound Rating                 | A (20-24 decibels)                                                               |
| Enclosure Type               | Metal                                                                            |
| Additional Info              | Anti-striation control, Auto-restart, Inherently Thermally Protected, UL Class P |

| Electrical Characteristics |             |
|----------------------------|-------------|
| Supply Current Frequency   | 50 Hz/60 Hz |

| Dimensions |                  |
|------------|------------------|
| Length (L) | 9.5 in (241 mm)  |
| Width (W)  | 1.3 in (33 mm)   |
| Height (H) | 1.0 in (25.4 mm) |

| Mounting Dimensions                      |                 |
|------------------------------------------|-----------------|
| Mount Length (M)                         | 8.9 in (226 mm) |
| Mount Width (X or F)                     | 0.87 in (22 mm) |
| Mount Slots (MS)                         | 0.3 in (8 mm)   |
| Weight                                   | 0.7 lbs         |
| Exit Type                                | Side            |
| Remote Mounting Distance to Lamp (F32T8) | 18 ft           |
| Remote Mounting Wire Gauge               | 18 AWG          |

| Lead Lengths |                |
|--------------|----------------|
| Black        | 25 in (635 mm) |
| White        | 25 in (635 mm) |
| Blue         | 31 in (787 mm) |
| Red          | 37 in (940 mm) |

| Specifications and lamp wattage |            |                |                  |                       |                       |                         |                     |                   |           |                           |
|---------------------------------|------------|----------------|------------------|-----------------------|-----------------------|-------------------------|---------------------|-------------------|-----------|---------------------------|
| Lamp                            | # of Lamps | Line Volts (V) | System Watts (W) | Nom. Line Current (A) | System Ballast Factor | Ballast Efficacy Factor | Power Factor % (>=) | Crest Factor (<=) | THD% (<=) | Min Starting Temp (°F/°C) |
| F32T8                           | 2          | 120            | 48               | 0.42                  | .78                   | 1.63                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 2          | 277            | 48               | 0.19                  | .78                   | 1.63                    | 98                  | 1.5               | 10        | -22/-30                   |
|                                 | 1          | 120            | 30               | 0.24                  | .96                   | 3.20                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 1          | 277            | 30               | 0.11                  | .96                   | 3.20                    | 95                  | 1.5               | 10        | -22/-30                   |
| F32T8/WM                        | 2          | 120            | 46               | 0.39                  | .77                   | 1.67                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 2          | 277            | 46               | 0.17                  | .77                   | 1.67                    | 98                  | 1.5               | 10        | -22/-30                   |
|                                 | 1          | 120            | 28               | 0.22                  | .77                   | 2.75                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 1          | 277            | 28               | 0.11                  | .77                   | 2.75                    | 94                  | 1.5               | 10        | -22/-30                   |
| F28T8                           | 2          | 120            | 43               | 0.36                  | .77                   | 1.79                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 2          | 277            | 42               | 0.16                  | .77                   | 1.83                    | 97                  | 1.5               | 10        | -22/-30                   |
|                                 | 1          | 120            | 26               | 0.21                  | .77                   | 2.96                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 1          | 277            | 26               | 0.10                  | .77                   | 2.96                    | 94                  | 1.5               | 10        | -22/-30                   |
| F32T8/25W                       | 2          | 120            | 39               | 0.33                  | .78                   | 2.00                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 2          | 277            | 39               | 0.15                  | .78                   | 2.00                    | 96                  | 1.5               | 10        | -22/-30                   |
|                                 | 1          | 120            | 22               | 0.18                  | .78                   | 3.55                    | 98                  | 1.5               | 10        | -22/-30                   |
|                                 | 1          | 277            | 22               | 0.09                  | .78                   | 3.55                    | 93                  | 1.5               | 10        | -22/-30                   |
| F25T8                           | 2          | 120            | 40               | 0.34                  | .78                   | 1.95                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 2          | 277            | 40               | 0.15                  | .78                   | 1.95                    | 96                  | 1.5               | 10        | -22/-30                   |
|                                 | 1          | 120            | 23               | 0.21                  | .96                   | 4.17                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 1          | 277            | 24               | 0.10                  | .96                   | 4.00                    | 93                  | 1.5               | 15        | -22/-30                   |
| F17T8                           | 2          | 120            | 28               | 0.24                  | .79                   | 2.82                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 2          | 277            | 29               | 0.11                  | .79                   | 2.72                    | 94                  | 1.5               | 10        | -22/-30                   |
|                                 | 1          | 120            | 17               | 0.18                  | .98                   | 5.76                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 1          | 277            | 18               | 0.08                  | .98                   | 5.44                    | 90                  | 1.5               | 10        | -22/-30                   |
| FE15T8                          | 2          | 120            | 23               | 0.20                  | .78                   | 3.39                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 2          | 277            | 23               | 0.10                  | .78                   | 3.39                    | 91                  | 1.5               | 15        | -22/-30                   |
|                                 | 1          | 120            | 14               | 0.13                  | .78                   | 5.57                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 1          | 277            | 15               | 0.07                  | .78                   | 5.20                    | 87                  | 1.5               | 10        | -22/-30                   |
| F25T12                          | 2          | 120            | 42               | 0.35                  | .80                   | 1.90                    | 99                  | 1.5               | 10        | 0/-18                     |
|                                 | 2          | 277            | 41               | 0.15                  | .80                   | 1.95                    | 97                  | 1.5               | 10        | 0/-18                     |
|                                 | 1          | 120            | 24               | 0.21                  | .80                   | 3.33                    | 99                  | 1.5               | 10        | 0/-18                     |
|                                 | 1          | 277            | 24               | 0.10                  | .80                   | 3.33                    | 95                  | 1.5               | 10        | 0/-18                     |

Safety and Performance



UL Class P



UL Type 1 Outdoor



UL Type CC



UL Type HL

FCC – CLASS A Non-Consumer



## 71723 – GE432MAXP-H/ULTRA

UltraMax® P-Series Instant Start

Multi-Voltage High-Efficiency

4 or 3 – F32T8 120 to 277 "H" 1.18 BF UltraMax® P

- T8 Instant Start Ballasts For F17 (2ft), F25 (3ft), F32 (4ft), F40 (5ft) Lamps
- Energy-saving high-efficiency instant-start electronic ballast (>90%)
- Multi-voltage technology handles voltage from 120 to 277V
- UL Type CC Rating provides protection against arcing in electrical devices
- Anti-striation control for better light quality
- UL 55°C Ambient Temperature rating
- Cold temperature -22°F Minimum Starting Temperature

| General Characteristics      |                                                                                  |
|------------------------------|----------------------------------------------------------------------------------|
| Ballast Type                 | Electronic – High-Efficiency Multivolt Instant Start                             |
| Starting Method              | Instant Start                                                                    |
| Lamp Wiring                  | Parallel                                                                         |
| Line Voltage Regulation(+/-) | 10%                                                                              |
| Ambient Temperature (MAX)    | 55°C (131°F)                                                                     |
| Case Temperature (MAX)       | 90°C (194°F)                                                                     |
| Ballast Factor               | High                                                                             |
| Power Factor Correction      | Active                                                                           |
| Sound Rating                 | A (20-24 decibels)                                                               |
| Enclosure Type               | Metal                                                                            |
| Additional Info              | Anti-striation control, Auto-restart, Inherently Thermally Protected, UL Class P |

| Electrical Characteristics |             |
|----------------------------|-------------|
| Supply Current Frequency   | 50 Hz/60 Hz |

| Dimensions |                 |
|------------|-----------------|
| Length (L) | 9.5 in (241 mm) |
| Width (W)  | 1.7 in (43 mm)  |
| Height (H) | 1.18 in (30 mm) |

| Mounting Dimensions                      |                 |
|------------------------------------------|-----------------|
| Mount Length (M)                         | 8.9 in (226 mm) |
| Mount Width (X or F)                     | 1.05 in (27 mm) |
| Mount Slots (MS)                         | 0.3 in (8 mm)   |
| Weight                                   | 1.4 lbs         |
| Exit Type                                | Side            |
| Remote Mounting Distance to Lamp (F32T8) | 18 ft           |
| Remote Mounting Wire Gauge               | 18 AWG          |

| Lead Lengths |                |
|--------------|----------------|
| Black        | 25 in (635 mm) |
| White        | 25 in (635 mm) |
| Blue         | 31 in (787 mm) |
| Red          | 39 in (991 mm) |

| Specifications and lamp wattage |            |                |                  |                       |                       |                         |                     |                   |           |                           |
|---------------------------------|------------|----------------|------------------|-----------------------|-----------------------|-------------------------|---------------------|-------------------|-----------|---------------------------|
| Lamp                            | # of Lamps | Line Volts (V) | System Watts (W) | Nom. Line Current (A) | System Ballast Factor | Ballast Efficacy Factor | Power Factor % (>=) | Crest Factor (<=) | THD% (<=) | Min Starting Temp (°F/°C) |
| F32T8                           | 4          | 120            | 148              | 1.30                  | 1.18                  | .80                     | 99                  | 1.4               | 10        | -22/-30                   |
|                                 | 4          | 277            | 146              | 0.55                  | 1.18                  | .81                     | 98                  | 1.4               | 10        | -22/-30                   |
|                                 | 3          | 120            | 119              | 1.07                  | 1.28                  | 1.08                    | 99                  | 1.4               | 10        | -22/-30                   |
|                                 | 3          | 277            | 117              | 0.46                  | 1.28                  | 1.09                    | 97                  | 1.4               | 15        | -22/-30                   |
| F32T8/WM                        | 4          | 120            | 139              | 1.21                  | 1.18                  | .85                     | 99                  | 1.4               | 10        | 50/10                     |
|                                 | 4          | 277            | 136              | 0.51                  | 1.18                  | .87                     | 97                  | 1.4               | 10        | 50/10                     |
|                                 | 3          | 120            | 113              | 0.99                  | 1.25                  | 1.11                    | 99                  | 1.4               | 10        | 50/10                     |
|                                 | 3          | 277            | 112              | 0.41                  | 1.25                  | 1.12                    | 97                  | 1.4               | 16        | 50/10                     |
| F28T8                           | 4          | 120            | 127              | 1.10                  | 1.18                  | .93                     | 99                  | 1.4               | 10        | 50/10                     |
|                                 | 4          | 277            | 125              | 0.48                  | 1.18                  | .94                     | 98                  | 1.4               | 10        | 50/10                     |
|                                 | 3          | 120            | 105              | 0.91                  | 1.24                  | 1.18                    | 99                  | 1.4               | 10        | 50/10                     |
|                                 | 3          | 277            | 102              | 0.40                  | 1.24                  | 1.22                    | 97                  | 1.4               | 16        | 50/10                     |
| F32T8/25W                       | 4          | 120            | 120              | 1.06                  | 1.18                  | .98                     | 99                  | 1.4               | 10        | 60/16                     |
|                                 | 4          | 277            | 116              | 0.45                  | 1.18                  | 1.02                    | 98                  | 1.4               | 10        | 60/16                     |
|                                 | 3          | 120            | 99               | 0.88                  | 1.24                  | 1.25                    | 99                  | 1.4               | 10        | 60/16                     |
|                                 | 3          | 277            | 95               | 0.38                  | 1.24                  | 1.31                    | 97                  | 1.4               | 10        | 60/16                     |
| F25T8                           | 4          | 120            | 119              | 0.45                  | 1.16                  | .97                     | 97                  | 1.4               | 10        | -22/-30                   |
|                                 | 4          | 277            | 121              | 1.06                  | 1.16                  | .96                     | 99                  | 1.4               | 10        | -22/-30                   |
|                                 | 3          | 120            | 101              | 0.87                  | 1.27                  | 1.26                    | 99                  | 1.4               | 10        | -22/-30                   |
|                                 | 3          | 277            | 100              | 0.38                  | 1.27                  | 1.27                    | 96                  | 1.4               | 17        | -22/-30                   |
| F17T8                           | 4          | 120            | 79               | 0.62                  | 1.16                  | 1.47                    | 99                  | 1.4               | 10        | -22/-30                   |
|                                 | 4          | 277            | 78               | 0.31                  | 1.16                  | 1.49                    | 96                  | 1.4               | 10        | -22/-30                   |
|                                 | 3          | 120            | 62               | 0.57                  | 1.25                  | 2.02                    | 99                  | 1.4               | 10        | -22/-30                   |
|                                 | 3          | 277            | 62               | 0.27                  | 1.25                  | 2.02                    | 95                  | 1.4               | 21        | -22/-30                   |
| FE15T8                          | 4          | 120            | 62               | 0.54                  | 1.03                  | 1.66                    | 99                  | 1.4               | 10        | 0/-18                     |
|                                 | 4          | 277            | 62               | 0.26                  | 1.03                  | 1.66                    | 95                  | 1.4               | 20        | 0/-18                     |
|                                 | 3          | 120            | 51               | 0.45                  | 1.12                  | 2.20                    | 99                  | 1.4               | 10        | 0/-18                     |
|                                 | 3          | 277            | 52               | 0.22                  | 1.12                  | 2.15                    | 92                  | 1.4               | 20        | 0/-18                     |
| F40T8                           | 3          | 120            | 146              | 1.27                  | 1.22                  | .84                     | 99                  | 1.4               | 10        | -22/-30                   |
|                                 | 3          | 277            | 142              | 0.54                  | 1.22                  | .86                     | 97                  | 1.4               | 14        | -22/-30                   |
| F25T12                          | 4          | 120            | 125              | 1.10                  | 1.11                  | .89                     | 99                  | 1.4               | 10        | 0/-18                     |
|                                 | 4          | 277            | 122              | 0.47                  | 1.11                  | .91                     | 97                  | 1.4               | 14        | 0/-18                     |
|                                 | 3          | 120            | 101              | 0.90                  | 1.22                  | 1.21                    | 99                  | 1.4               | 10        | 0/-18                     |
|                                 | 3          | 277            | 100              | 0.39                  | 1.22                  | 1.22                    | 97                  | 1.4               | 17        | 0/-18                     |

Safety and Performance



# Linear Fluorescent Ballasts



## 78627 – GE432MAXP-N/ULTRA

UltraMax® P-Series Instant Start

Multi-Voltage High-Efficiency

4 or 3 – F32T8 120 to 277 "N" .87 BF UltraMax® P

- T8 Instant Start Ballasts For F17 (2ft), F25 (3ft), F32 (4ft), F40 (5ft) Lamps
- Energy-saving high-efficiency instant-start electronic ballast (>90%)
- Multi-voltage technology handles voltage from 120 to 277V
- UL Type CC Rating provides protection against arcing in electrical devices
- Anti-striation control for better light quality
- UL 55°C Ambient Temperature rating
- Cold temperature -22°F Minimum Starting Temperature

| General Characteristics      |                                                                                  |
|------------------------------|----------------------------------------------------------------------------------|
| Ballast Type                 | Electronic – High-Efficiency Multivolt Instant Start                             |
| Starting Method              | Instant Start                                                                    |
| Lamp Wiring                  | Parallel                                                                         |
| Line Voltage Regulation(+/-) | 10%                                                                              |
| Ambient Temperature (MAX)    | 55°C (131°F)                                                                     |
| Case Temperature (MAX)       | 70°C (158°F)                                                                     |
| Ballast Factor               | Normal                                                                           |
| Power Factor Correction      | Active                                                                           |
| Sound Rating                 | A (20-24 decibels)                                                               |
| Enclosure Type               | Metal                                                                            |
| Additional Info              | Anti-striation control, Auto-restart, Inherently Thermally Protected, UL Class P |

| Electrical Characteristics |             |
|----------------------------|-------------|
| Supply Current Frequency   | 50 Hz/60 Hz |

| Dimensions |                  |
|------------|------------------|
| Length (L) | 9.5 in (241 mm)  |
| Width (W)  | 1.3 in (33 mm)   |
| Height (H) | 1.0 in (25.4 mm) |

| Mounting Dimensions                      |                 |
|------------------------------------------|-----------------|
| Mount Length (M)                         | 8.9 in (226 mm) |
| Mount Width (X or F)                     | 0.87 in (22 mm) |
| Mount Slots (MS)                         | 0.3 in (8 mm)   |
| Weight                                   | 0.9 lbs         |
| Exit Type                                | Side            |
| Remote Mounting Distance to Lamp (F32T8) | 18 ft           |
| Remote Mounting Wire Gauge               | 18 AWG          |

| Lead Lengths |                |
|--------------|----------------|
| Black        | 25 in (635 mm) |
| White        | 25 in (635 mm) |
| Red & Blue   | 31 in (787 mm) |
| Yellow       | 39 in (991 mm) |

| Specifications and lamp wattage |            |                |                  |                       |                       |                         |                     |                   |           |                           |
|---------------------------------|------------|----------------|------------------|-----------------------|-----------------------|-------------------------|---------------------|-------------------|-----------|---------------------------|
| Lamp                            | # of Lamps | Line Volts (V) | System Watts (W) | Nom. Line Current (A) | System Ballast Factor | Ballast Efficacy Factor | Power Factor % (>=) | Crest Factor (<=) | THD% (<=) | Min Starting Temp (°F/°C) |
| F32T8                           | 4          | 120            | 110              | 0.93                  | .88                   | .80                     | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 4          | 277            | 108              | 0.4                   | .88                   | .81                     | 98                  | 1.5               | 10        | -22/-30                   |
|                                 | 3          | 120            | 92               | 0.78                  | .96                   | 1.04                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 3          | 277            | 91               | 0.34                  | .96                   | 1.05                    | 98                  | 1.5               | 10        | -22/-30                   |
| F32T8/WM                        | 4          | 120            | 103              | 0.87                  | .88                   | .85                     | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 4          | 277            | 101              | 0.37                  | .88                   | .87                     | 98                  | 1.5               | 10        | -22/-30                   |
|                                 | 3          | 120            | 85               | 0.73                  | .97                   | 1.14                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 3          | 277            | 84               | 0.31                  | .97                   | 1.15                    | 98                  | 1.5               | 10        | -22/-30                   |
| F28T8                           | 4          | 120            | 94               | 0.80                  | .84                   | .89                     | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 4          | 277            | 92               | 0.34                  | .84                   | .91                     | 98                  | 1.5               | 10        | -22/-30                   |
|                                 | 3          | 120            | 77               | 0.66                  | .93                   | 1.21                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 3          | 277            | 76               | 0.29                  | .93                   | 1.22                    | 98                  | 1.5               | 10        | -22/-30                   |
| F32T8/25W                       | 4          | 120            | 87               | 0.73                  | .87                   | 1.00                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 4          | 277            | 87               | 0.32                  | .87                   | 1.00                    | 98                  | 1.5               | 10        | -22/-30                   |
|                                 | 3          | 120            | 72               | 0.60                  | .89                   | 1.24                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 3          | 277            | 71               | 0.26                  | .89                   | 1.25                    | 97                  | 1.5               | 10        | -22/-30                   |
| F25T8                           | 4          | 120            | 89               | 0.74                  | .86                   | .97                     | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 4          | 277            | 88               | 0.32                  | .86                   | .98                     | 98                  | 1.5               | 10        | -22/-30                   |
|                                 | 3          | 120            | 74               | 0.62                  | .97                   | 1.31                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 3          | 277            | 73               | 0.27                  | .97                   | 1.33                    | 97                  | 1.5               | 10        | -22/-30                   |
| F17T8                           | 4          | 120            | 61               | 0.53                  | .89                   | 1.46                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 4          | 277            | 61               | 0.23                  | .89                   | 1.46                    | 97                  | 1.5               | 10        | -22/-30                   |
|                                 | 3          | 120            | 51               | 0.44                  | .99                   | 1.94                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 3          | 277            | 51               | 0.20                  | .99                   | 1.94                    | 96                  | 1.5               | 10        | -22/-30                   |
| FE15T8                          | 4          | 120            | 48               | 0.42                  | .77                   | 1.60                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 4          | 277            | 48               | 0.19                  | .77                   | 1.60                    | 96                  | 1.5               | 10        | -22/-30                   |
|                                 | 3          | 120            | 41               | 0.35                  | .85                   | 2.07                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 3          | 277            | 40               | 0.17                  | .85                   | 2.13                    | 94                  | 1.5               | 10        | -22/-30                   |
| F25T12                          | 4          | 120            | 91               | 0.78                  | .79                   | .87                     | 99                  | 1.5               | 10        | 0/-18                     |
|                                 | 4          | 277            | 90               | 0.33                  | .79                   | .88                     | 98                  | 1.5               | 10        | 0/-18                     |
|                                 | 3          | 120            | 76               | 0.65                  | .87                   | 1.14                    | 99                  | 1.5               | 10        | 0/-18                     |
|                                 | 3          | 277            | 75               | 0.28                  | .87                   | 1.16                    | 98                  | 1.5               | 10        | 0/-18                     |

Safety and Performance



# Linear Fluorescent Ballasts



## 78625 – GE432MAXP-L/ULTRA

UltraMax® P-Series Instant Start

Multi-Voltage High-Efficiency

4 or 3 – F32T8 120 to 277 "L" .77 BF UltraMax® P

- T8 Instant Start Ballasts For F17 (2ft), F25 (3ft), F32 (4ft), F40 (5ft) Lamps
- Energy-saving high-efficiency instant-start electronic ballast (>90%)
- Multi-voltage technology handles voltage from 120 to 277V
- UL Type CC Rating provides protection against arcing in electrical devices
- Anti-striation control for better light quality
- UL 55°C Ambient Temperature rating
- Cold temperature -22°F Minimum Starting Temperature

| General Characteristics      |                                                                                  |
|------------------------------|----------------------------------------------------------------------------------|
| Ballast Type                 | Electronic – High-Efficiency Multivolt Instant Start                             |
| Starting Method              | Instant Start                                                                    |
| Lamp Wiring                  | Parallel                                                                         |
| Line Voltage Regulation(+/-) | 10%                                                                              |
| Ambient Temperature (MAX)    | 55°C (131°F)                                                                     |
| Case Temperature (MAX)       | 70°C (158°F)                                                                     |
| Ballast Factor               | Low                                                                              |
| Power Factor Correction      | Active                                                                           |
| Sound Rating                 | A (20-24 decibels)                                                               |
| Enclosure Type               | Metal                                                                            |
| Additional Info              | Anti-striation control, Auto-restart, Inherently Thermally Protected, UL Class P |

| Electrical Characteristics |             |
|----------------------------|-------------|
| Supply Current Frequency   | 50 Hz/60 Hz |

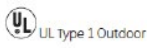
| Dimensions |                  |
|------------|------------------|
| Length (L) | 9.5 in (241 mm)  |
| Width (W)  | 1.3 in (33 mm)   |
| Height (H) | 1.0 in (25.4 mm) |

| Mounting Dimensions                      |                 |
|------------------------------------------|-----------------|
| Mount Length (M)                         | 8.9 in (226 mm) |
| Mount Width (X or F)                     | 0.87 in (22 mm) |
| Mount Slots (MS)                         | 0.3 in (8 mm)   |
| Weight                                   | 0.9 lbs         |
| Exit Type                                | Side            |
| Remote Mounting Distance to Lamp (F32T8) | 18 ft           |
| Remote Mounting Wire Gauge               | 18 AWG          |

| Lead Lengths |                |
|--------------|----------------|
| Black        | 25 in (635 mm) |
| White        | 25 in (635 mm) |
| Red & Blue   | 31 in (787 mm) |
| Yellow       | 39 in (991 mm) |

| Specifications and lamp wattage |            |                |                  |                       |                       |                         |                     |                   |           |                           |
|---------------------------------|------------|----------------|------------------|-----------------------|-----------------------|-------------------------|---------------------|-------------------|-----------|---------------------------|
| Lamp                            | # of Lamps | Line Volts (V) | System Watts (W) | Nom. Line Current (A) | System Ballast Factor | Ballast Efficacy Factor | Power Factor % (>=) | Crest Factor (<=) | THD% (<=) | Min Starting Temp (°F/°C) |
| F32T8                           | 4          | 120            | 98               | 0.82                  | .78                   | .80                     | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 4          | 277            | 96               | 0.35                  | .78                   | .81                     | 98                  | 1.5               | 10        | -22/-30                   |
|                                 | 3          | 120            | 84               | 0.72                  | .88                   | 1.05                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 3          | 277            | 83               | 0.31                  | .88                   | 1.06                    | 98                  | 1.5               | 10        | -22/-30                   |
| F32T8/WM                        | 4          | 120            | 92               | 0.79                  | .76                   | .83                     | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 4          | 277            | 91               | 0.34                  | .76                   | .84                     | 98                  | 1.5               | 10        | -22/-30                   |
|                                 | 3          | 120            | 77               | 0.66                  | .83                   | 1.08                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 3          | 277            | 76               | 0.28                  | .83                   | 1.09                    | 97                  | 1.5               | 10        | -22/-30                   |
| F28T8                           | 4          | 120            | 85               | 0.72                  | .75                   | .88                     | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 4          | 277            | 84               | 0.31                  | .75                   | .89                     | 98                  | 1.5               | 10        | -22/-30                   |
|                                 | 3          | 120            | 68               | 0.59                  | .81                   | 1.19                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 3          | 277            | 67               | 0.26                  | .81                   | 1.21                    | 97                  | 1.5               | 10        | -22/-30                   |
| F32T8/25W                       | 4          | 120            | 78               | 0.66                  | .77                   | .99                     | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 4          | 277            | 77               | 0.29                  | .77                   | 1.00                    | 98                  | 1.5               | 10        | -22/-30                   |
|                                 | 3          | 120            | 62               | 0.52                  | .81                   | 1.31                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 3          | 277            | 61               | 0.22                  | .81                   | 1.33                    | 97                  | 1.5               | 10        | -22/-30                   |
| F25T8                           | 4          | 120            | 80               | 0.67                  | .76                   | .95                     | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 4          | 277            | 79               | 0.29                  | .76                   | .96                     | 98                  | 1.5               | 10        | -22/-30                   |
|                                 | 3          | 120            | 66               | 0.55                  | .84                   | 1.27                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 3          | 277            | 65               | 0.25                  | .84                   | 1.29                    | 97                  | 1.5               | 15        | -22/-30                   |
| F17T8                           | 4          | 120            | 56               | 0.47                  | .79                   | 1.41                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 4          | 277            | 56               | 0.21                  | .79                   | 1.41                    | 96                  | 1.5               | 10        | -22/-30                   |
|                                 | 3          | 120            | 47               | 0.40                  | .86                   | 1.83                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 3          | 277            | 47               | 0.18                  | .86                   | 1.83                    | 95                  | 1.5               | 15        | -22/-30                   |
| FE15T8                          | 4          | 120            | 44               | 0.38                  | .76                   | 1.73                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 4          | 277            | 44               | 0.18                  | .76                   | 1.73                    | 95                  | 1.5               | 10        | -22/-30                   |
|                                 | 3          | 120            | 36               | 0.32                  | .76                   | 2.11                    | 99                  | 1.5               | 10        | -22/-30                   |
|                                 | 3          | 277            | 37               | 0.15                  | .76                   | 2.05                    | 93                  | 1.5               | 15        | -22/-30                   |
| F25T12                          | 4          | 120            | 81               | 0.69                  | .76                   | .94                     | 99                  | 1.5               | 10        | 0/-18                     |
|                                 | 4          | 277            | 81               | 0.30                  | .76                   | .94                     | 98                  | 1.5               | 10        | 0/-18                     |
|                                 | 3          | 120            | 68               | 0.58                  | .76                   | 1.12                    | 99                  | 1.5               | 10        | 0/-18                     |
|                                 | 3          | 277            | 67               | 0.25                  | .76                   | 1.13                    | 97                  | 1.5               | 10        | 0/-18                     |

Safety and Performance



FCC – CLASS A Non-Consumer





## 49767 – GE259MAXP-N/ULTRA

UltraMax® P-Series Instant Start

Multi-Voltage High-Efficiency

2 or 1 – F96T8 120 to 277 "N" .87 BF UltraMax® P

- T8 Instant Start Ballasts For 46-59W 4ft-8ft Slimline Lamps
- Energy-saving high-efficiency instant-start electronic ballast (>90%)
- Multi-voltage technology handles voltage from 120 to 277V
- Anti-striation control for better light quality
- Cold temperature 0°F Minimum Starting Temperature

| General Characteristics      |                                                                                  |
|------------------------------|----------------------------------------------------------------------------------|
| Ballast Type                 | Electronic – High-Efficiency Multivolt Instant Start                             |
| Starting Method              | Instant Start                                                                    |
| Lamp Wiring                  | Parallel                                                                         |
| Line Voltage Regulation(+/-) | 10%                                                                              |
| Ambient Temperature (MAX)    | 40°C (104°F)                                                                     |
| Case Temperature (MAX)       | 70°C (158°F)                                                                     |
| Ballast Factor               | Normal                                                                           |
| Power Factor Correction      | Active                                                                           |
| Sound Rating                 | A (20-24 decibels)                                                               |
| Enclosure Type               | Metal                                                                            |
| Additional Info              | Anti-striation control, Auto-restart, Inherently Thermally Protected, UL Class P |

| Electrical Characteristics |             |
|----------------------------|-------------|
| Supply Current Frequency   | 50 Hz/60 Hz |

| Dimensions |                 |
|------------|-----------------|
| Length (L) | 9.5 in (241 mm) |
| Width (W)  | 1.3 in (33 mm)  |
| Height (H) | 1.18 in (30 mm) |

| Mounting Dimensions                      |                 |
|------------------------------------------|-----------------|
| Mount Length (M)                         | 8.9 in (226 mm) |
| Mount Width (X or F)                     | 0.87 in (22 mm) |
| Mount Slots (MS)                         | 0.3 in (8 mm)   |
| Weight                                   | 1.4 lbs         |
| Exit Type                                | Side            |
| Remote Mounting Distance to Lamp (F32T8) | 18 ft           |
| Remote Mounting Wire Gauge               | 18 AWG          |

| Lead Lengths |                 |
|--------------|-----------------|
| Black        | 22 in (559 mm)  |
| White        | 22 in (559 mm)  |
| Blue         | 46 in (1168 mm) |
| Red          | 78 in (1981 mm) |

| Specifications and lamp wattage |            |                |                  |                       |                       |                         |                     |                   |           |                           |
|---------------------------------|------------|----------------|------------------|-----------------------|-----------------------|-------------------------|---------------------|-------------------|-----------|---------------------------|
| Lamp                            | # of Lamps | Line Volts (V) | System Watts (W) | Nom. Line Current (A) | System Ballast Factor | Ballast Efficacy Factor | Power Factor % (>=) | Crest Factor (<=) | THD% (<=) | Min Starting Temp (°F/°C) |
| F96T8                           | 2          | 120            | 107              | 0.91                  | .87                   | .81                     | 99                  | 1.7               | 10        | 0/-18                     |
|                                 | 2          | 277            | 105              | 0.4                   | .87                   | .83                     | 98                  | 1.7               | 15        | 0/-18                     |
|                                 | 1          | 120            | 62               | 0.53                  | .87                   | 1.40                    | 99                  | 1.7               | 10        | 0/-18                     |
|                                 | 1          | 277            | 62               | 0.24                  | .87                   | 1.40                    | 97                  | 1.7               | 20        | 0/-18                     |
| F96T8/WM                        | 2          | 120            | 102              | 0.87                  | .87                   | .85                     | 99                  | 1.7               | 10        | 50/10                     |
|                                 | 2          | 277            | 100              | 0.38                  | .87                   | .87                     | 98                  | 1.7               | 15        | 50/10                     |
|                                 | 1          | 120            | 59               | 0.5                   | .87                   | 1.47                    | 99                  | 1.7               | 10        | 50/10                     |
|                                 | 1          | 277            | 59               | 0.23                  | .87                   | 1.47                    | 97                  | 1.7               | 20        | 50/10                     |
| F96T8/WMP                       | 2          | 120            | 85               | 0.78                  | .89                   | 1.05                    | 99                  | 1.7               | 10        | 50/10                     |
|                                 | 2          | 277            | 84               | 0.32                  | .89                   | 1.06                    | 98                  | 1.7               | 15        | 50/10                     |
|                                 | 1          | 120            | 59               | 0.5                   | .87                   | 1.47                    | 99                  | 1.7               | 10        | 50/10                     |
|                                 | 1          | 277            | 59               | 0.23                  | .87                   | 1.47                    | 97                  | 1.7               | 20        | 50/10                     |
| F72T8                           | 2          | 120            | 79               | 0.72                  | .89                   | 1.13                    | 99                  | 1.7               | 10        | 0/-18                     |
|                                 | 2          | 277            | 78               | 0.29                  | .89                   | 1.14                    | 98                  | 1.7               | 13        | 0/-18                     |
|                                 | 1          | 120            | 44               | 0.39                  | .87                   | 1.98                    | 99                  | 1.7               | 10        | 0/-18                     |
|                                 | 1          | 277            | 44               | 0.17                  | .87                   | 1.98                    | 96                  | 1.7               | 20        | 0/-18                     |

## Safety and Performance



UL Class P



UL Type 1 Outdoor



UL Type HL

FCC – CLASS A Non-Consumer

# Linear Fluorescent Ballasts



## 63888 – GE286MAXP-HO-N

UltraMax® P-Series

Multivolt High Output 120V-277V

2 or 1 – F96T8HO IS 120 to 277 "N" .87 BF

- T8 Instant Start Ballasts For 44-86W 4ft-8ft HO Lamps
- High-performance electronic ballast for all general fluorescent applications
- Instant start electronic ballast for long lamp starting cycles and low initial cost
- Multi-voltage technology handles voltage from 120 to 277V
- Parallel lamp operation means system maintenance is easier to manage
- Anti-striation control for better light quality
- Cold temperature -22°F Minimum Starting Temperature

| General Characteristics      |                                                          |
|------------------------------|----------------------------------------------------------|
| Ballast Type                 | Electronic – Multivolt Instant Start                     |
| Starting Method              | Instant Start                                            |
| Lamp Wiring                  | Parallel                                                 |
| Line Voltage Regulation(+/-) | 10%                                                      |
| Ambient Temperature (MAX)    | 40°C (104°F)                                             |
| Case Temperature (MAX)       | 70°C (158°F)                                             |
| Ballast Factor               | Normal                                                   |
| Power Factor Correction      | Active                                                   |
| Sound Rating                 | A (20-24 decibels)                                       |
| Enclosure Type               | Metal                                                    |
| Additional Info              | Auto-restart, Inherently Thermally Protected, UL Class P |

| Electrical Characteristics |             |
|----------------------------|-------------|
| Supply Current Frequency   | 50 Hz/60 Hz |

| Dimensions                               |                 |
|------------------------------------------|-----------------|
| Length (L)                               | 9.5 in (241 mm) |
| Width (W)                                | 1.7 in (43 mm)  |
| Height (H)                               | 1.18 in (30 mm) |
| Mounting Dimensions                      |                 |
| Mount Length (M)                         | 8.9 in (226 mm) |
| Mount Width (X or F)                     | 1.05 in (27 mm) |
| Mount Slots (MS)                         | 0.3 in (8 mm)   |
| Weight                                   | 1.40 lbs        |
| Exit Type                                | Side            |
| Remote Mounting Distance to Lamp (F32T8) | 18 ft           |
| Remote Mounting Wire Gauge               | 18 AWG          |
| Lead Lengths                             |                 |
| Black                                    | 22 in (559 mm)  |
| White                                    | 22 in (559 mm)  |
| Blue                                     | 46 in (1168 mm) |
| Red                                      | 78 in (1981 mm) |

| Specifications and lamp wattage |            |                |                  |                       |                       |                         |                     |                   |           |                           |  |
|---------------------------------|------------|----------------|------------------|-----------------------|-----------------------|-------------------------|---------------------|-------------------|-----------|---------------------------|--|
| Lamp                            | # of Lamps | Line Volts (V) | System Watts (W) | Nom. Line Current (A) | System Ballast Factor | Ballast Efficacy Factor | Power Factor % (>=) | Crest Factor (<=) | THD% (<=) | Min Starting Temp (°F/°C) |  |
| F96T849W                        | 2          | 120            | 111              | 0.95                  | 1.37                  | 1.23                    | 99                  | 1.7               | 10        | -22/-30                   |  |
|                                 | 2          | 277            | 110              | 0.41                  | 1.37                  | 1.25                    | 97                  | 1.7               | 10        | -22/-30                   |  |
|                                 | 1          | 120            | 70               | 0.58                  | 1.63                  | 2.33                    | 99                  | 1.7               | 10        | -22/-30                   |  |
|                                 | 1          | 277            | 70               | 0.26                  | 1.63                  | 2.33                    | 95                  | 1.7               | 10        | -22/-30                   |  |
| F96T8WMP                        | 2          | 120            | 124              | 1.10                  | 1.37                  | 1.10                    | 99                  | 1.7               | 10        | -22/-30                   |  |
|                                 | 2          | 277            | 122              | 0.46                  | 1.37                  | 1.12                    | 98                  | 1.7               | 10        | -22/-30                   |  |
|                                 | 1          | 120            | 77               | 0.68                  | 1.63                  | 2.11                    | 99                  | 1.7               | 10        | -22/-30                   |  |
|                                 | 1          | 277            | 77               | 0.30                  | 1.63                  | 2.11                    | 96                  | 1.7               | 10        | -22/-30                   |  |
| F96T8WM                         | 2          | 120            | 135              | 1.18                  | 1.14                  | .85                     | 99                  | 1.7               | 10        | -22/-30                   |  |
|                                 | 2          | 277            | 133              | 0.50                  | 1.15                  | .86                     | 98                  | 1.7               | 10        | -22/-30                   |  |
|                                 | 1          | 120            | 84               | 0.73                  | 1.35                  | 1.61                    | 99                  | 1.7               | 10        | -22/-30                   |  |
|                                 | 1          | 277            | 84               | 0.32                  | 1.35                  | 1.61                    | 96                  | 1.7               | 10        | -22/-30                   |  |
| F96T8HO                         | 2          | 120            | 145              | 1.25                  | .78                   | .54                     | 99                  | 1.7               | 10        | -22/-30                   |  |
|                                 | 2          | 277            | 142              | 0.54                  | .78                   | .55                     | 98                  | 1.7               | 10        | -22/-30                   |  |
|                                 | 1          | 120            | 91               | 0.78                  | .91                   | 1.01                    | 99                  | 1.7               | 10        | -22/-30                   |  |
|                                 | 1          | 277            | 90               | 0.35                  | .92                   | 1.02                    | 97                  | 1.7               | 10        | -22/-30                   |  |
| F96T8                           | 2          | 120            | 142              | 1.24                  | 1.15                  | .81                     | 99                  | 1.7               | 10        | -22/-30                   |  |
|                                 | 2          | 277            | 140              | 0.52                  | 1.15                  | .82                     | 98                  | 1.7               | 10        | -22/-30                   |  |
|                                 | 1          | 120            | 88               | 0.76                  | 1.35                  | 1.54                    | 99                  | 1.7               | 10        | -22/-30                   |  |
|                                 | 1          | 277            | 87               | 0.34                  | 1.36                  | 1.56                    | 97                  | 1.7               | 10        | -22/-30                   |  |
| F72T8HO                         | 2          | 120            | 115              | 1.02                  | .82                   | .71                     | 99                  | 1.7               | 10        | -22/-30                   |  |
|                                 | 2          | 277            | 114              | 0.43                  | .82                   | .72                     | 97                  | 1.7               | 16        | -22/-30                   |  |
|                                 | 1          | 120            | 73               | 0.64                  | .95                   | 1.30                    | 99                  | 1.7               | 10        | -22/-30                   |  |
|                                 | 1          | 277            | 72               | 0.28                  | .95                   | 1.31                    | 95                  | 1.7               | 22        | -22/-30                   |  |
| F60T8HO                         | 2          | 120            | 95               | 0.84                  | .81                   | .86                     | 99                  | 1.7               | 10        | -22/-30                   |  |
|                                 | 2          | 277            | 92               | 0.35                  | .81                   | .88                     | 97                  | 1.7               | 18        | -22/-30                   |  |
|                                 | 1          | 120            | 60               | 0.53                  | .95                   | 1.58                    | 99                  | 1.7               | 11        | -22/-30                   |  |
|                                 | 1          | 277            | 62               | 0.24                  | .95                   | 1.53                    | 94                  | 1.7               | 23        | -22/-30                   |  |
| F58T8                           | 2          | 120            | 78               | 0.68                  | .79                   | 1.01                    | 99                  | 1.7               | 10        | -22/-30                   |  |
|                                 | 2          | 277            | 78               | 0.30                  | .79                   | 1.01                    | 96                  | 1.7               | 10        | -22/-30                   |  |
|                                 | 1          | 120            | 49               | 0.43                  | .93                   | 1.91                    | 99                  | 1.7               | 10        | -22/-30                   |  |
|                                 | 1          | 277            | 50               | 0.20                  | .93                   | 1.87                    | 93                  | 1.7               | 10        | -22/-30                   |  |
| F48T8HO                         | 2          | 120            | 78               | 0.70                  | .82                   | 1.05                    | 99                  | 1.7               | 10        | -22/-30                   |  |
|                                 | 2          | 277            | 77               | 0.30                  | .82                   | 1.06                    | 96                  | 1.7               | 21        | -22/-30                   |  |
|                                 | 1          | 120            | 51               | 0.45                  | .95                   | 1.87                    | 99                  | 1.7               | 13        | -22/-30                   |  |
|                                 | 1          | 277            | 51               | 0.20                  | .95                   | 1.87                    | 93                  | 1.7               | 26        | -22/-30                   |  |
| F40T8                           | 2          | 120            | 97               | 0.85                  | 1.20                  | 1.24                    | 99                  | 1.7               | 10        | -22/-30                   |  |
|                                 | 2          | 277            | 96               | 0.37                  | 1.20                  | 1.25                    | 97                  | 1.7               | 10        | -22/-30                   |  |
|                                 | 1          | 120            | 62               | 0.52                  | 1.39                  | 2.24                    | 99                  | 1.7               | 10        | -22/-30                   |  |
|                                 | 1          | 277            | 62               | 0.24                  | 1.37                  | 2.21                    | 95                  | 1.7               | 10        | -22/-30                   |  |

Safety and Performance



UL Class P



UL Type 1 Outdoor



UL Type HL

FCC – CLASS A Non-Consumer

## 74109 – GE232MAXP347-H

UltraMax® P-Series

347V High-Efficiency

2 or 1 – F32T8 347V "H" 1.18 BF UltraMax® P

- T8 Instant Start Ballasts
- Energy-saving high-efficiency instant-start electronic ballast (>90%)
- Instant start ballast for long lamp starting cycles and low initial cost
- Anti-striation control for better light quality
- Cold temperature -22°F Minimum Starting Temperature
- Parallel lamp operation means system maintenance is easier to manage

| General Characteristics      |                                                                                  |
|------------------------------|----------------------------------------------------------------------------------|
| Ballast Type                 | Electronic – High-Efficiency Instant Start                                       |
| Starting Method              | Instant Start                                                                    |
| Lamp Wiring                  | Parallel                                                                         |
| Line Voltage Regulation(+/-) | 10%                                                                              |
| Ambient Temperature (MAX)    | 40°C (104°F)                                                                     |
| Case Temperature (MAX)       | 70°C (158°F)                                                                     |
| Ballast Factor               | High                                                                             |
| Power Factor Correction      | Active                                                                           |
| Sound Rating                 | A (20-24 decibels)                                                               |
| Enclosure Type               | Metal                                                                            |
| Additional Info              | Anti-striation control, Auto-restart, Inherently Thermally Protected, UL Class P |
| Electrical Characteristics   |                                                                                  |
| Supply Current Frequency     | 60 Hz                                                                            |

| Dimensions                               |                 |
|------------------------------------------|-----------------|
| Length (L)                               | 9.5 in (241 mm) |
| Width (W)                                | 1.3 in (33 mm)  |
| Height (H)                               | 1.18 in (30 mm) |
| Mounting Dimensions                      |                 |
| Mount Length (M)                         | 8.9 in (226 mm) |
| Mount Width (X or F)                     | 0.87 in (22 mm) |
| Mount Slots (MS)                         | 0.3 in (8 mm)   |
| Weight                                   | 1.04 lbs        |
| Exit Type                                | Side            |
| Remote Mounting Distance to Lamp (F32T8) | 18 ft           |
| Remote Mounting Wire Gauge               | 18 AWG          |
| Lead Lengths                             |                 |
| Black                                    | 25 in (635 mm)  |
| White                                    | 25 in (635 mm)  |
| Blue                                     | 31 in (787 mm)  |
| Red                                      | 45 in (1143 mm) |

| Specifications and lamp wattage |            |                |                  |                       |                       |                         |                     |                   |           |                           |
|---------------------------------|------------|----------------|------------------|-----------------------|-----------------------|-------------------------|---------------------|-------------------|-----------|---------------------------|
| Lamp                            | # of Lamps | Line Volts (V) | System Watts (W) | Nom. Line Current (A) | System Ballast Factor | Ballast Efficacy Factor | Power Factor % (>=) | Crest Factor (<=) | THD% (<=) | Min Starting Temp (°F/°C) |
| F32T8                           | 2          | 347            | 70               | 0.20                  | 1.18                  | 1.69                    | 99                  | 1.7               | 10        | -22/-30                   |
|                                 | 1          | 347            | 44               | 0.13                  | 1.32                  | 3.00                    | 99                  | 1.7               | 10        | -22/-30                   |
| F32T8/WM                        | 2          | 347            | 67               | 0.19                  | 1.15                  | 1.72                    | 99                  | 1.7               | 10        | 60/16                     |
|                                 | 1          | 347            | 42               | 0.12                  | 1.29                  | 3.07                    | 99                  | 1.7               | 10        | 60/16                     |
| F28T8                           | 2          | 347            | 63               | 0.12                  | 1.30                  | 2.06                    | 99                  | 1.7               | 17        | 60/16                     |
|                                 | 1          | 347            | 39               | 0.18                  | 1.30                  | 3.33                    | 99                  | 1.7               | 17        | 60/16                     |
| F32T8/25W                       | 2          | 347            | 56               | 0.16                  | 1.12                  | 2.00                    | 99                  | 1.7               | 10        | 60/16                     |
| F25T8                           | 2          | 347            | 55               | 0.16                  | 1.16                  | 2.11                    | 99                  | 1.7               | 10        | -22/-30                   |
|                                 | 1          | 347            | 36               | 0.11                  | 1.32                  | 3.67                    | 99                  | 1.7               | 30        | -22/-30                   |
| F25T8/WM                        | 2          | 347            | 47               | 0.14                  | 1.16                  | 2.47                    | 98                  | 1.7               | 10        | 60/16                     |
| F17TB                           | 2          | 347            | 37               | 0.11                  | 1.10                  | 2.97                    | 97                  | 1.7               | 12        | -22/-30                   |
|                                 | 1          | 347            | 23               | 0.08                  | 1.25                  | 5.43                    | 87                  | 1.7               | 52        | -22/-30                   |
| F17T8/WM                        | 2          | 347            | 31               | 0.10                  | 1.10                  | 3.55                    | 97                  | 1.7               | 12        | 60/16                     |
| FE15T8                          | 2          | 347            | 30               | 0.09                  | 1.00                  | 3.33                    | 94                  | 1.7               | 30        | -22/-30                   |
|                                 | 1          | 347            | 19               | 0.07                  | 1.15                  | 6.05                    | 82                  | 1.7               | 55        | -22/-30                   |
| F17T8/WM                        | 2          | 347            | 53               | 0.16                  | 1.24                  | 2.34                    | 99                  | 1.7               | 10        | -22/-30                   |
| FE15T8                          | 2          | 347            | 61               | 0.18                  | 1.23                  | 2.02                    | 99                  | 1.7               | 10        | -22/-30                   |
|                                 | 1          | 347            | 39               | 0.12                  | 1.45                  | 3.72                    | 95                  | 1.7               | 20        | -22/-30                   |

## Safety and Performance



UL Class P



UL Type 1 Outdoor



UL Type HL

ICES-005 for EMI and RFI FCC – CLASS A Non-Consumer

ANSI - C82.11 - Cons 2002, ANSI - C62.41 - 1991



## 74093 – GE232MAXP347-N

UltraMax® P-Series

347V High-Efficiency

2 or 1 – F32T8 347V "N" .87 BF UltraMax® P

- T8 Instant Start Ballasts For 46-59W 4ft-8ft Slimline Lamps
- Energy-saving high-efficiency instant-start electronic ballast (>90%)
- Instant start ballast for long lamp starting cycles and low initial cost
- Anti-striation control for better light quality
- Cold temperature 0°F Minimum Starting Temperature
- Parallel lamp operation means system maintenance is easier to manage

| General Characteristics      |                                                                                  |
|------------------------------|----------------------------------------------------------------------------------|
| Ballast Type                 | Electronic – High-Efficiency Instant Start                                       |
| Starting Method              | Instant Start                                                                    |
| Lamp Wiring                  | Parallel                                                                         |
| Line Voltage Regulation(+/-) | 10%                                                                              |
| Ambient Temperature (MAX)    | 40°C (104°F)                                                                     |
| Case Temperature (MAX)       | 70°C (158°F)                                                                     |
| Ballast Factor               | Normal                                                                           |
| Power Factor Correction      | Active                                                                           |
| Sound Rating                 | A (20-24 decibels)                                                               |
| Enclosure Type               | Metal                                                                            |
| Additional Info              | Anti-striation control, Auto-restart, Inherently Thermally Protected, UL Class P |
| Electrical Characteristics   |                                                                                  |
| Supply Current Frequency     | 60 Hz                                                                            |

| Dimensions                               |                 |
|------------------------------------------|-----------------|
| Length (L)                               | 9.5 in (241 mm) |
| Width (W)                                | 1.3 in (33 mm)  |
| Height (H)                               | 1.18 in (30 mm) |
| Mounting Dimensions                      |                 |
| Mount Length (M)                         | 8.9 in (226 mm) |
| Mount Width (X or F)                     | 0.87 in (22 mm) |
| Mount Slots (MS)                         | 0.3 in (8 mm)   |
| Weight                                   | 1.04 lbs        |
| Exit Type                                | Side            |
| Remote Mounting Distance to Lamp (F32T8) | 18 ft           |
| Remote Mounting Wire Gauge               | 18 AWG          |
| Lead Lengths                             |                 |
| Black                                    | 25 in (635 mm)  |
| White                                    | 25 in (635 mm)  |
| Blue                                     | 31 in (787 mm)  |
| Red                                      | 45 in (1143 mm) |

| Specifications and lamp wattage |            |                |                  |                       |                       |                         |                     |                   |           |                           |
|---------------------------------|------------|----------------|------------------|-----------------------|-----------------------|-------------------------|---------------------|-------------------|-----------|---------------------------|
| Lamp                            | # of Lamps | Line Volts (V) | System Watts (W) | Nom. Line Current (A) | System Ballast Factor | Ballast Efficacy Factor | Power Factor % (>=) | Crest Factor (<=) | THD% (<=) | Min Starting Temp (°F/°C) |
| F32T8                           | 2          | 347            | 53               | 0.15                  | 0.87                  | 1.65                    | 99                  | 1.7               | 10        | -22/-30                   |
|                                 | 1          | 347            | 34               | 0.10                  | 1.02                  | 3.03                    | 97                  | 1.7               | 10        | -22/-30                   |
| F32T8/WM                        | 2          | 347            | 50               | 0.15                  | 0.86                  | 1.72                    | 99                  | 1.7               | 10        | 60/16                     |
|                                 | 1          | 347            | 32               | 0.09                  | 1.02                  | 3.20                    | 97                  | 1.7               | 10        | 60/16                     |
| F28T8                           | 2          | 347            | 46               | 0.14                  | 0.84                  | 1.81                    | 99                  | 1.7               | 10        | 60/16                     |
|                                 | 1          | 347            | 30               | 0.09                  | 1.01                  | 3.38                    | 97                  | 1.7               | 10        | 60/16                     |
| F32T8/25W                       | 2          | 347            | 42               | 0.12                  | 0.84                  | 2.00                    | 99                  | 1.7               | 10        | 60/16                     |
| F25T8                           | 2          | 347            | 41               | 0.12                  | 0.88                  | 2.12                    | 98                  | 1.7               | 10        | -22/-30                   |
|                                 | 1          | 347            | 26               | 0.08                  | 1.03                  | 3.89                    | 90                  | 1.7               | 25        | -22/-30                   |
| F25T8/WM                        | 2          | 347            | 35               | 0.11                  | 0.88                  | 2.51                    | 98                  | 1.7               | 10        | 60/16                     |
| F17TB                           | 2          | 347            | 30               | 0.09                  | 0.83                  | 2.78                    | 96                  | 1.7               | 10        | -22/-30                   |
|                                 | 1          | 347            | 20               | 0.07                  | 0.98                  | 5.00                    | 80                  | 1.7               | 50        | -22/-30                   |
| F17T8/WM                        | 2          | 347            | 25               | 0.08                  | 0.83                  | 3.32                    | 97                  | 1.7               | 10        | 60/16                     |
| FE15T8                          | 2          | 347            | 24               | 0.08                  | 0.76                  | 3.19                    | 88                  | 1.7               | 32        | -22/-30                   |
|                                 | 1          | 347            | 16               | 0.06                  | 0.88                  | 5.52                    | 77                  | 1.7               | 69        | -22/-30                   |
| F25T12                          | 2          | 347            | 44               | 0.13                  | 0.89                  | 2.03                    | 98                  | 1.7               | 10        | -22/-30                   |
|                                 | 1          | 347            | 29               | 0.09                  | 1.08                  | 3.76                    | 96                  | 1.7               | 10        | -22/-30                   |

## Safety and Performance



UL Class P



UL Type 1 Outdoor



UL Type HL

ICES-005 for EMI and RFI FCC – CLASS A Non-Consumer

ANSI – C82.11 – Cons 2002, ANSI – C62.41 – 1991



## 74096 – GE232MAXP347-L

UltraMax® P-Series

347V High-Efficiency

2 or 1 – F32T8 347V "L" .87 BF UltraMax® P

- T8 Instant Start Ballasts
- Energy-saving high-efficiency instant-start electronic ballast (>90%)
- Instant start ballast for long lamp starting cycles and low initial cost
- Anti-striation control for better light quality
- Cold temperature -22°F Minimum Starting Temperature
- Parallel lamp operation means system maintenance is easier to manage

| General Characteristics      |                                                                                  |
|------------------------------|----------------------------------------------------------------------------------|
| Ballast Type                 | Electronic – High-Efficiency Instant Start                                       |
| Starting Method              | Instant Start                                                                    |
| Lamp Wiring                  | Parallel                                                                         |
| Line Voltage Regulation(+/-) | 10%                                                                              |
| Ambient Temperature (MAX)    | 40°C (104°F)                                                                     |
| Case Temperature (MAX)       | 70°C (158°F)                                                                     |
| Ballast Factor               | Low                                                                              |
| Power Factor Correction      | Active                                                                           |
| Sound Rating                 | A (20-24 decibels)                                                               |
| Enclosure Type               | Metal                                                                            |
| Additional Info              | Anti-striation control, Auto-restart, Inherently Thermally Protected, UL Class P |
| Electrical Characteristics   |                                                                                  |
| Supply Current Frequency     | 60 Hz                                                                            |

| Dimensions                               |                 |
|------------------------------------------|-----------------|
| Length (L)                               | 9.5 in (241 mm) |
| Width (W)                                | 1.3 in (33 mm)  |
| Height (H)                               | 1.18 in (30 mm) |
| Mounting Dimensions                      |                 |
| Mount Length (M)                         | 8.9 in (226 mm) |
| Mount Width (X or F)                     | 0.87 in (22 mm) |
| Mount Slots (MS)                         | 0.3 in (8 mm)   |
| Weight                                   | 1.04 lbs        |
| Exit Type                                | Side            |
| Remote Mounting Distance to Lamp (F32T8) | 18 ft           |
| Remote Mounting Wire Gauge               | 18 AWG          |
| Lead Lengths                             |                 |
| Black                                    | 25 in (635 mm)  |
| White                                    | 25 in (635 mm)  |
| Blue                                     | 31 in (787 mm)  |
| Red                                      | 45 in (1143 mm) |

| Specifications and lamp wattage |            |                |                  |                       |                       |                         |                     |                   |           |                           |
|---------------------------------|------------|----------------|------------------|-----------------------|-----------------------|-------------------------|---------------------|-------------------|-----------|---------------------------|
| Lamp                            | # of Lamps | Line Volts (V) | System Watts (W) | Nom. Line Current (A) | System Ballast Factor | Ballast Efficacy Factor | Power Factor % (>=) | Crest Factor (<=) | THD% (<=) | Min Starting Temp (°F/°C) |
| F32T8                           | 2          | 347            | 48               | 0.14                  | 0.77                  | 1.60                    | 99                  | 1.7               | 10        | -22/-30                   |
|                                 | 1          | 347            | 30               | 0.10                  | 0.90                  | 3.00                    | 87                  | 1.7               | 37        | -22/-30                   |
| F32T8/WM                        | 2          | 347            | 45               | 0.13                  | 0.77                  | 1.71                    | 99                  | 1.7               | 10        | 60/16                     |
|                                 | 1          | 347            | 29               | 0.10                  | 0.89                  | 3.07                    | 86                  | 1.7               | 40        | 60/16                     |
| F28T8                           | 2          | 347            | 42               | 0.12                  | 0.74                  | 1.76                    | 99                  | 1.7               | 10        | 60/16                     |
|                                 | 1          | 347            | 27               | 0.09                  | 0.87                  | 3.22                    | 83                  | 1.7               | 41        | 60/16                     |
| F32T8/25W                       | 2          | 347            | 37               | 0.12                  | 0.74                  | 2.00                    | 98                  | 1.7               | 10        | 60/16                     |
| F25T8                           | 2          | 347            | 37               | 0.11                  | 0.78                  | 2.11                    | 97                  | 1.7               | 15        | -22/-30                   |
|                                 | 1          | 347            | 24               | 0.09                  | 0.91                  | 3.79                    | 77                  | 1.7               | 50        | -22/-30                   |
| F25T8/WM                        | 2          | 347            | 31               | 0.10                  | 0.78                  | 2.52                    | 97                  | 1.7               | 15        | 60/16                     |
| F17TB                           | 2          | 347            | 27               | 0.09                  | 0.70                  | 2.59                    | 84                  | 1.7               | 50        | -22/-30                   |
|                                 | 1          | 347            | 18               | 0.08                  | 0.86                  | 4.78                    | 68                  | 1.7               | 53        | -22/-30                   |
| F17T8/WM                        | 2          | 347            | 23               | 0.08                  | 0.74                  | 3.22                    | 84                  | 1.7               | 50        | 60/16                     |
| FE15T8                          | 2          | 347            | 22               | 0.08                  | 0.67                  | 3.05                    | 79                  | 1.7               | 54        | -22/-30                   |
|                                 | 1          | 347            | 15               | 0.06                  | 0.77                  | 5.13                    | 66                  | 1.7               | 56        | -22/-30                   |
| F25T12                          | 2          | 347            | 39               | 0.11                  | 0.77                  | 1.97                    | 98                  | 1.7               | 10        | -22/-30                   |
|                                 | 1          | 347            | 25               | 0.09                  | 0.91                  | 3.64                    | 80                  | 1.7               | 42        | -22/-30                   |

## Safety and Performance



UL Class P



UL Type 1 Outdoor



UL Type HL

ICES-005 for EMI and RFI FCC – CLASS A Non-Consumer

ANSI - C82.11 - Cons 2002, ANSI - C62.41 - 1991



# Linear Fluorescent Ballasts



## 72275 – GE232MAX-G-N (Replaces GE-232-MV-N)

UltraMax® G-Series Instant Start

Multivolt 120V-277V

2 or 1 – F32T8 120 to 277 "N" .87 BF Multivolt UltraMax® G

- For F17 (2ft), F25 (3ft), F32 (4ft), F40 (5ft) Lamps
- High-performance electronic ballast for all general fluorescent applications
- Instant start electronic ballast for long lamp starting cycles and low initial cost
- Multi-voltage technology handles voltage from 120 to 277V
- Parallel lamp operation means system maintenance is easier to manage
- Anti-striation control for better light quality
- Cold temperature -22°F Minimum Starting Temperature

| General Characteristics      |                                                                                  |
|------------------------------|----------------------------------------------------------------------------------|
| Ballast Type                 | Electronic – Multivolt Instant Start                                             |
| Starting Method              | Instant Start                                                                    |
| Lamp Wiring                  | Parallel                                                                         |
| Line Voltage Regulation(+/-) | 10%                                                                              |
| Ambient Temperature (MAX)    | 40°C (104°F)                                                                     |
| Case Temperature (MAX)       | 70°C (158°F)                                                                     |
| Ballast Factor               | Normal                                                                           |
| Power Factor Correction      | Active                                                                           |
| Sound Rating                 | A (20-24 decibels)                                                               |
| Enclosure Type               | Metal                                                                            |
| Additional Info              | Anti-striation control, Auto-restart, Inherently Thermally Protected, UL Class P |

| Electrical Characteristics |             |
|----------------------------|-------------|
| Supply Current Frequency   | 50 Hz/60 Hz |

| Dimensions |                 |
|------------|-----------------|
| Length (L) | 9.5 in (241 mm) |
| Width (W)  | 1.3 in (33 mm)  |
| Height (H) | 1.18 in (30 mm) |

| Mounting Dimensions                      |                 |
|------------------------------------------|-----------------|
| Mount Length (M)                         | 8.9 in (226 mm) |
| Mount Width (X or F)                     | 0.87 in (22 mm) |
| Mount Slots (MS)                         | 0.3 in (8 mm)   |
| Weight                                   | 1.06 lbs        |
| Exit Type                                | Side            |
| Remote Mounting Distance to Lamp (F32T8) | 18 ft           |
| Remote Mounting Wire Gauge               | 18 AWG          |

| Lead Lengths |                 |
|--------------|-----------------|
| Black        | 25 in (635 mm)  |
| White        | 25 in (635 mm)  |
| Blue         | 31 in (787 mm)  |
| Red          | 45 in (1143 mm) |

| Specifications and lamp wattage |            |                |                  |                       |                       |                         |                     |                   |           |                           |
|---------------------------------|------------|----------------|------------------|-----------------------|-----------------------|-------------------------|---------------------|-------------------|-----------|---------------------------|
| Lamp                            | # of Lamps | Line Volts (V) | System Watts (W) | Nom. Line Current (A) | System Ballast Factor | Ballast Efficacy Factor | Power Factor % (>=) | Crest Factor (<=) | THD% (<=) | Min Starting Temp (°F/°C) |
| F32T8                           | 2          | 120            | 57               | 0.48                  | .88                   | 1.54                    | 99                  | 1.7               | 10        | -22/-30                   |
|                                 | 2          | 277            | 55               | 0.2                   | .88                   | 1.60                    | 98                  | 1.7               | 10        | -22/-30                   |
|                                 | 1          | 120            | 35               | 0.3                   | 1.08                  | 3.09                    | 99                  | 1.7               | 10        | -22/-30                   |
|                                 | 1          | 277            | 35               | 0.13                  | 1.08                  | 3.09                    | 97                  | 1.7               | 10        | -22/-30                   |
| F32T8/WM                        | 2          | 120            | 53               | 0.44                  | .86                   | 1.62                    | 99                  | 1.7               | 10        | 60/16                     |
|                                 | 2          | 277            | 51               | 0.19                  | .87                   | 1.71                    | 97                  | 1.7               | 10        | 60/16                     |
|                                 | 1          | 120            | 33               | 0.28                  | 1.05                  | 3.18                    | 99                  | 1.7               | 10        | 60/16                     |
|                                 | 1          | 277            | 33               | 0.12                  | 1.05                  | 3.18                    | 96                  | 1.7               | 10        | 60/16                     |
| F28T8                           | 2          | 120            | 47               | 0.39                  | .83                   | 1.77                    | 99                  | 1.7               | 10        | 60/16                     |
|                                 | 2          | 277            | 47               | 0.17                  | .83                   | 1.77                    | 97                  | 1.7               | 10        | 60/16                     |
|                                 | 1          | 120            | 31               | 0.26                  | 1.02                  | 3.29                    | 99                  | 1.7               | 10        | 60/16                     |
|                                 | 1          | 277            | 31               | 0.11                  | .02                   | .06                     | 95                  | 1.7               | 10        | 60/16                     |
| F32T8/25W                       | 2          | 120            | 43               | 0.36                  | .83                   | 1.93                    | 99                  | 1.7               | 10        | 60/16                     |
|                                 | 2          | 277            | 43               | 0.16                  | .83                   | 1.93                    | 97                  | 1.7               | 10        | 60/16                     |
|                                 | 1          | 120            | 28               | 0.24                  | 1.02                  | 3.64                    | 99                  | 1.7               | 10        | 60/16                     |
|                                 | 1          | 277            | 28               | 0.10                  | 1.02                  | 3.64                    | 98                  | 1.7               | 10        | 60/16                     |
| F25T8                           | 2          | 120            | 44               | 0.37                  | .90                   | 2.05                    | 99                  | 1.7               | 10        | -22/-30                   |
|                                 | 2          | 277            | 44               | 0.16                  | .91                   | 2.07                    | 97                  | 1.7               | 10        | -22/-30                   |
|                                 | 1          | 120            | 28               | 0.23                  | 1.08                  | 3.86                    | 99                  | 1.7               | 10        | -22/-30                   |
|                                 | 1          | 277            | 28               | 0.11                  | 1.08                  | 3.86                    | 95                  | 1.7               | 10        | -22/-30                   |
| F17T8                           | 2          | 120            | 31               | 0.26                  | .88                   | 2.84                    | 99                  | 1.7               | 10        | -22/-30                   |
|                                 | 2          | 277            | 31               | 0.12                  | .88                   | 2.84                    | 95                  | 1.7               | 10        | -22/-30                   |
|                                 | 1          | 120            | 20               | 0.17                  | 1.05                  | 5.25                    | 99                  | 1.7               | 10        | -22/-30                   |
|                                 | 1          | 277            | 21               | 0.08                  | 1.05                  | 5.00                    | 92                  | 1.7               | 14        | -22/-30                   |
| F40T8                           | 1          | 120            | 44               | 0.37                  | 1.08                  | 2.45                    | 99                  | 1.7               | 10        | 0/-18                     |
|                                 | 1          | 277            | 43               | 0.16                  | 1.08                  | 2.51                    | 96                  | 1.7               | 10        | 0/-18                     |

## Safety and Performance



UL Class P



UL Type 1 Outdoor



UL Type HL

FCC – CLASS A Non-Consumer

# Linear Fluorescent Ballasts



## 74463 – GE432MAX-G-N (Replaces GE432MV-N)

### UltraMax® G-Series T8

### Multivolt 120V-277V

4 or 3 – F32T8 120 to 277 "N" .87 BF Multivolt UltraMax® G

- For F17 (2ft), F25 (3ft), F32 (4ft), F40 (5ft) Lamps
- High-performance electronic ballast for all general fluorescent applications
- Instant start electronic ballast for long lamp starting cycles and low initial cost
- Multi-voltage technology handles voltage from 120 to 277V
- Parallel lamp operation means system maintenance is easier to manage
- Anti-striation control for better light quality
- Cold temperature -22°F Minimum Starting Temperature

| General Characteristics      |                                                                                  |
|------------------------------|----------------------------------------------------------------------------------|
| Ballast Type                 | Electronic – Multivolt Instant Start                                             |
| Starting Method              | Instant Start                                                                    |
| Lamp Wiring                  | Parallel                                                                         |
| Line Voltage Regulation(+/-) | 10%                                                                              |
| Ambient Temperature (MAX)    | 40°C (104°F)                                                                     |
| Case Temperature (MAX)       | 70°C (158°F)                                                                     |
| Ballast Factor               | Normal                                                                           |
| Power Factor Correction      | Active                                                                           |
| Sound Rating                 | A (20-24 decibels)                                                               |
| Enclosure Type               | Metal                                                                            |
| Additional Info              | Anti-striation control, Auto-restart, Inherently Thermally Protected, UL Class P |

| Electrical Characteristics |             |
|----------------------------|-------------|
| Supply Current Frequency   | 50 Hz/60 Hz |

| Dimensions |                 |
|------------|-----------------|
| Length (L) | 9.5 in (241 mm) |
| Width (W)  | 1.3 in (33 mm)  |
| Height (H) | 1.18 in (30 mm) |

| Mounting Dimensions                      |                 |
|------------------------------------------|-----------------|
| Mount Length (M)                         | 8.9 in (226 mm) |
| Mount Width (X or F)                     | 0.87 in (22 mm) |
| Mount Slots (MS)                         | 0.3 in (8 mm)   |
| Weight                                   | 1.40 lbs        |
| Exit Type                                | Side            |
| Remote Mounting Distance to Lamp (F32T8) | 18 ft           |
| Remote Mounting Wire Gauge               | 18 AWG          |

| Lead Lengths |                 |
|--------------|-----------------|
| Black        | 25 in (635 mm)  |
| White        | 25 in (635 mm)  |
| Red & Blue   | 31 in (787 mm)  |
| Yellow       | 47 in (1194 mm) |

| Specifications and lamp wattage |            |                |                  |                       |                       |                         |                     |                   |           |                           |
|---------------------------------|------------|----------------|------------------|-----------------------|-----------------------|-------------------------|---------------------|-------------------|-----------|---------------------------|
| Lamp                            | # of Lamps | Line Volts (V) | System Watts (W) | Nom. Line Current (A) | System Ballast Factor | Ballast Efficacy Factor | Power Factor % (>=) | Crest Factor (<=) | THD% (<=) | Min Starting Temp (°F/°C) |
| F32T8                           | 4          | 120            | 113              | 0.99                  | .88                   | .78                     | 99                  | 1.7               | 10        | -22/-30                   |
|                                 | 4          | 277            | 110              | 0.43                  | .88                   | .80                     | 98                  | 1.7               | 10        | -22/-30                   |
|                                 | 3          | 120            | 93               | 0.83                  | .93                   | 1.00                    | 99                  | 1.7               | 10        | -22/-30                   |
|                                 | 3          | 277            | 92               | 0.36                  | .93                   | 1.01                    | 98                  | 1.7               | 10        | -22/-30                   |
| F32T8/WM                        | 4          | 120            | 103              | 0.90                  | .83                   | .81                     | 99                  | 1.7               | 10        | 60/16                     |
|                                 | 4          | 277            | 103              | 0.40                  | .83                   | .81                     | 98                  | 1.7               | 10        | 60/16                     |
|                                 | 3          | 120            | 87               | 0.77                  | .91                   | 1.05                    | 99                  | 1.7               | 10        | 60/16                     |
|                                 | 3          | 277            | 86               | 0.33                  | .91                   | 1.06                    | 98                  | 1.7               | 10        | 60/16                     |
| F28T8                           | 4          | 120            | 93               | 0.83                  | .82                   | .88                     | 99                  | 1.7               | 10        | 60/16                     |
|                                 | 4          | 277            | 92               | 0.36                  | .82                   | .89                     | 98                  | 1.7               | 10        | 60/16                     |
|                                 | 3          | 120            | 77               | 0.68                  | .85                   | 1.10                    | 99                  | 1.7               | 10        | 60/16                     |
|                                 | 3          | 277            | 77               | 0.30                  | .85                   | 1.10                    | 98                  | 1.7               | 10        | 60/16                     |
| F32T8/25W                       | 4          | 120            | 88               | 0.74                  | .80                   | .91                     | 99                  | 1.7               | 10        | 60/16                     |
|                                 | 4          | 277            | 87               | 0.32                  | .80                   | .92                     | 98                  | 1.7               | 15        | 60/16                     |
|                                 | 3          | 120            | 73               | 0.61                  | .85                   | 1.16                    | 99                  | 1.7               | 10        | 60/16                     |
|                                 | 3          | 277            | 73               | 0.27                  | .85                   | 1.16                    | 97                  | 1.7               | 16        | 60/16                     |
| F25T8                           | 4          | 120            | 88               | 0.77                  | .87                   | .99                     | 99                  | 1.7               | 10        | -22/-30                   |
|                                 | 4          | 277            | 86               | 0.34                  | .87                   | 1.01                    | 98                  | 1.7               | 10        | -22/-30                   |
|                                 | 3          | 120            | 73               | 0.64                  | .93                   | 1.27                    | 99                  | 1.7               | 10        | -22/-30                   |
|                                 | 3          | 277            | 72               | 0.28                  | .93                   | 1.29                    | 98                  | 1.7               | 10        | -22/-30                   |
| F17T8                           | 4          | 120            | 60               | 0.53                  | .87                   | 1.45                    | 99                  | 1.7               | 10        | -22/-30                   |
|                                 | 4          | 277            | 60               | 0.23                  | .87                   | 1.45                    | 97                  | 1.7               | 10        | -22/-30                   |
|                                 | 3          | 120            | 51               | 0.45                  | .91                   | 1.78                    | 99                  | 1.7               | 10        | -22/-30                   |
|                                 | 3          | 277            | 51               | 0.20                  | .91                   | 1.78                    | 97                  | 1.7               | 10        | -22/-30                   |
| F40T8                           | 3          | 120            | 112              | 0.99                  |                       |                         | 99                  | 1.7               | 10        | 0/-18                     |
|                                 | 3          | 277            | 110              | 0.43                  |                       |                         | 98                  | 1.7               | 10        | 0/-18                     |

## Safety and Performance



UL Class P



UL Type 1 Outdoor



UL Type HL

FCC – CLASS A Non-Consumer



## 74103 – GE232MAX-G-347 (Replaces GE232-N-347)

UltraMax® G-Series

347V Instant Start High-Efficiency

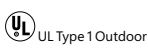
2 or 1 – F32T8 347V "N" .87 BF UltraMax® G

- T8 Instant Start Ballasts
- High-performance electronic ballast for all general fluorescent applications
- Instant start ballast for long lamp starting cycles and low initial cost
- Light-weight, Slim Profile Mini Can Housing
- Parallel lamp operation means system maintenance is easier to manage
- Cold temperature 0°F Minimum Starting Temperature

| General Characteristics      |                                                          | Dimensions                               |                 |
|------------------------------|----------------------------------------------------------|------------------------------------------|-----------------|
| Ballast Type                 | Electronic – High-Efficiency Instant Start               | Length (L)                               | 9.5 in (241 mm) |
| Starting Method              | Instant Start                                            | Width (W)                                | 1.3 in (33 mm)  |
| Lamp Wiring                  | Parallel                                                 | Height (H)                               | 1.18 in (30 mm) |
| Line Voltage Regulation(+/-) | 10%                                                      | Mounting Dimensions                      |                 |
| Ambient Temperature (MAX)    | 40°C (104°F)                                             | Mount Length (M)                         | 8.9 in (226 mm) |
| Case Temperature (MAX)       | 70°C (158°F)                                             | Mount Width (X or F)                     | 0.87 in (22 mm) |
| Ballast Factor               | Normal                                                   | Mount Slots (MS)                         | 0.3 in (8 mm)   |
| Power Factor Correction      | Active                                                   | Weight                                   | 1.15 bs         |
| Sound Rating                 | A (20-24 decibels)                                       | Exit Type                                | Side            |
| Enclosure Type               | Metal                                                    | Remote Mounting Distance to Lamp (F32T8) | 18 ft           |
| Additional Info              | Auto-restart, Inherently Thermally Protected, UL Class P | Remote Mounting Wire Gauge               | 18 AWG          |
| Electrical Characteristics   |                                                          | Lead Lengths                             |                 |
| Supply Current Frequency     | 60 Hz                                                    | Black                                    | 25 in (635 mm)  |
|                              |                                                          | White                                    | 25 in (635 mm)  |
|                              |                                                          | Blue                                     | 31 in (787 mm)  |
|                              |                                                          | Red                                      | 45 in (1143 mm) |

| Specifications and lamp wattage |            |                |                  |                       |                       |                         |                     |                   |           |                           |
|---------------------------------|------------|----------------|------------------|-----------------------|-----------------------|-------------------------|---------------------|-------------------|-----------|---------------------------|
| Lamp                            | # of Lamps | Line Volts (V) | System Watts (W) | Nom. Line Current (A) | System Ballast Factor | Ballast Efficacy Factor | Power Factor % (>=) | Crest Factor (<=) | THD% (<=) | Min Starting Temp (°F/°C) |
| F32T8                           | 2          | 347            | 55               | 0.16                  | 0.87                  | 1.58                    | 99                  | 1.7               | 10        | 0/-18                     |
|                                 | 1          | 347            | 34               | 0.11                  | 1.03                  | 3.03                    | 97                  | 1.7               | 10        | 0/-18                     |
| F32T8/WM                        | 2          | 347            | 52               | 0.15                  | 0.85                  | 1.63                    | 99                  | 1.7               | 10        | 60/16                     |
|                                 | 1          | 347            | 32               | 0.09                  | 1.01                  | 3.16                    | 97                  | 1.7               | 10        | 60/16                     |
| F28T8                           | 2          | 347            | 48               | 0.14                  | 0.84                  | 1.75                    | 99                  | 1.7               | 10        | 60/16                     |
|                                 | 1          | 347            | 30               | 0.09                  | 1.00                  | 3.33                    | 96                  | 1.7               | 10        | 60/16                     |
| F32T8/25W                       | 2          | 347            | 44               | 0.13                  | 0.84                  | 1.91                    | 99                  | 1.7               | 10        | 60/16                     |
|                                 | 2          | 347            | 41               | 0.12                  | 0.88                  | 2.15                    | 98                  | 1.7               | 10        | 0/-18                     |
| F25T8                           | 2          | 347            | 35               | 0.11                  | 0.88                  | 2.51                    | 98                  | 1.7               | 10        | 60/16                     |
|                                 | 1          | 347            | 26               | 0.08                  | 1.04                  | 4.00                    | 95                  | 1.7               | 11        | 0/-18                     |
| F25T8/WM                        | 2          | 347            | 35               | 0.11                  | 0.88                  | 2.51                    | 98                  | 1.7               | 10        | 60/16                     |
|                                 | 2          | 347            | 29               | 0.09                  | 0.83                  | 2.86                    | 96                  | 1.7               | 10        | 0/-18                     |
| F17T8                           | 2          | 347            | 24               | 0.08                  | 0.83                  | 3.46                    | 96                  | 1.7               | 10        | 60/16                     |
|                                 | 1          | 347            | 19               | 0.07                  | 0.99                  | 5.21                    | 84                  | 1.7               | 50        | 0/-18                     |
| F17T8/WM                        | 2          | 347            | 24               | 0.08                  | 0.83                  | 3.46                    | 96                  | 1.7               | 10        | 60/16                     |
|                                 | 2          | 347            | 24               | 0.08                  | 0.76                  | 3.17                    | 90                  | 1.7               | 30        | 0/-18                     |
| FE15T8                          | 2          | 347            | 16               | 0.06                  | 0.89                  | 5.56                    | 78                  | 1.7               | 66        | 0/-18                     |
|                                 | 2          | 347            | 44               | 0.13                  | 0.88                  | 2.00                    | 98                  | 1.7               | 10        | 0/-18                     |
| F25T12                          | 2          | 347            | 44               | 0.13                  | 0.88                  | 2.00                    | 98                  | 1.7               | 10        | 0/-18                     |
|                                 | 1          | 347            | 28               | 0.08                  | 1.07                  | 3.82                    | 96                  | 1.7               | 10        | 0/-18                     |

## Safety and Performance



ICES-005 for EMI and RFI

FCC – CLASS A Non-Consumer

ANSI - C82.11 - Cons 2002, ANSI - C62.41 - 1991

# Linear Fluorescent Ballasts



## 74107 – GE432MAX-G-347 (Replaces GE432-N-347)

UltraMax® G-Series

347V Instant Start High-Efficiency

4 or 3 – F32T8 347V "N" .87 BF UltraMax® G

- T8 Instant Start Ballasts
- High-performance electronic ballast for all general fluorescent applications
- Instant start ballast for long lamp starting cycles and low initial cost
- Light-weight, Slim Profile Mini Can Housing
- Parallel lamp operation means system maintenance is easier to manage
- Cold temperature 0°F Minimum Starting Temperature

| General Characteristics      |                                                          |
|------------------------------|----------------------------------------------------------|
| Ballast Type                 | Electronic – High-Efficiency Instant Start               |
| Starting Method              | Instant Start                                            |
| Lamp Wiring                  | Parallel                                                 |
| Line Voltage Regulation(+/-) | 10%                                                      |
| Ambient Temperature (MAX)    | 40°C (104°F)                                             |
| Case Temperature (MAX)       | 70°C (158°F)                                             |
| Ballast Factor               | Normal                                                   |
| Power Factor Correction      | Active                                                   |
| Sound Rating                 | A (20-24 decibels)                                       |
| Enclosure Type               | Metal                                                    |
| Additional Info              | Auto-restart, Inherently Thermally Protected, UL Class P |

| Electrical Characteristics |       |
|----------------------------|-------|
| Supply Current Frequency   | 60 Hz |

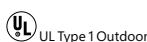
| Dimensions |                 |
|------------|-----------------|
| Length (L) | 9.5 in (241 mm) |
| Width (W)  | 1.3 in (33 mm)  |
| Height (H) | 1.18 in (30 mm) |

| Mounting Dimensions                      |                 |
|------------------------------------------|-----------------|
| Mount Length (M)                         | 8.9 in (226 mm) |
| Mount Width (X or F)                     | 0.87 in (22 mm) |
| Mount Slots (MS)                         | 0.3 in (8 mm)   |
| Weight                                   | 1.15 lbs        |
| Exit Type                                | Side            |
| Remote Mounting Distance to Lamp (F32T8) | 18 ft           |
| Remote Mounting Wire Gauge               | 18 AWG          |

| Lead Lengths |                 |
|--------------|-----------------|
| Black        | 25 in (635 mm)  |
| White        | 25 in (635 mm)  |
| Blue         | 31 in (787 mm)  |
| Red          | 47 in (1194 mm) |

| Specifications and lamp wattage |            |                |                  |                       |                       |                         |                     |                   |           |                           |
|---------------------------------|------------|----------------|------------------|-----------------------|-----------------------|-------------------------|---------------------|-------------------|-----------|---------------------------|
| Lamp                            | # of Lamps | Line Volts (V) | System Watts (W) | Nom. Line Current (A) | System Ballast Factor | Ballast Efficacy Factor | Power Factor % (>=) | Crest Factor (<=) | THD% (<=) | Min Starting Temp (°F/°C) |
| F32T8                           | 4          | 347            | 109              | 0.30                  | 0.88                  | .81                     | 99                  | 1.7               | 10        | 0/-18                     |
|                                 | 3          | 347            | 87               | 0.25                  | 0.95                  | 1.09                    | 99                  | 1.7               | 10        | 0/-18                     |
| F32T8/WM                        | 4          | 347            | 103              | 0.29                  | 0.86                  | .83                     | 99                  | 1.7               | 10        | 60/16                     |
|                                 | 3          | 347            | 83               | 0.24                  | 0.94                  | 1.13                    | 99                  | 1.7               | 10        | 60/16                     |
| F28T8                           | 4          | 347            | 96               | 0.27                  | 0.84                  | .88                     | 99                  | 1.7               | 10        | 60/16                     |
|                                 | 3          | 347            | 76               | 0.22                  | 0.92                  | 1.21                    | 99                  | 1.7               | 10        | 60/16                     |
| F32T8/25W                       | 4          | 347            | 87               | 0.25                  | 0.84                  | .97                     | 99                  | 1.7               | 10        | 60/16                     |
| F25T8                           | 4          | 347            | 83               | 0.24                  | 0.88                  | 1.06                    | 99                  | 1.7               | 10        | 0/-18                     |
|                                 | 3          | 347            | 68               | 0.20                  | 0.96                  | 1.41                    | 99                  | 1.7               | 11        | 0/-18                     |
| F25T8/WM                        | 4          | 347            | 71               | 0.20                  | 0.88                  | 1.24                    | 99                  | 1.7               | 10        | 60/16                     |
| F17T8                           | 4          | 347            | 52               | 0.17                  | 0.84                  | 1.62                    | 99                  | 1.7               | 10        | 0/-18                     |
|                                 | 3          | 347            | 48               | 0.14                  | 0.91                  | 1.90                    | 98                  | 1.7               | 50        | 0/-18                     |
| F17T8/WM                        | 4          | 347            | 44               | 0.13                  | 0.84                  | 1.91                    | 99                  | 1.7               | 10        | 60/16                     |
| FE15T8                          | 4          | 347            | 47               | 0.14                  | 0.76                  | 1.62                    | 98                  | 1.7               | 30        | 0/-18                     |
|                                 | 3          | 347            | 38               | 0.12                  | 0.82                  | 2.16                    | 91                  | 1.7               | 66        | 0/-18                     |
| F25T12                          | 4          | 347            | 87               | 0.25                  | 0.89                  | 1.02                    | 99                  | 1.7               | 10        | 0/-18                     |
|                                 | 3          | 347            | 72               | 0.21                  | 0.97                  | 1.35                    | 99                  | 1.7               | 10        | 0/-18                     |

## Safety and Performance



ICES-005 for EMI and RFI FCC – CLASS A Non-Consumer

ANSI – C82.11 – Cons 2002, ANSI – C62.41 – 1991



## 96714 – GE232-MVPS-N

UltraStart® T8

Programmed Start

2 or 1 – F32T8 120 to 277 Normal Light .88 BF <10% THD UltraStart®

- For F17 (2ft), F25 (3ft), F32 (4ft) Lamps
- < 10% THD, > 99% power factor
- A new generation of ultra-efficient Programmed Start ballasts (> 90% efficiency)
- Anti-striation circuitry reduces striations with energy saving lamps
- Extends lamp life in frequently switched applications (> 100,000 on/off cycles)
- Multi-voltage technology handles voltage from 120 to 277V
- Light-weight, Slim Profile Mini Can Housing

| General Characteristics      |                                                                                       |
|------------------------------|---------------------------------------------------------------------------------------|
| Ballast Type                 | Electronic – Programmed/ Rapid Start                                                  |
| Starting Method              | Programmed Start                                                                      |
| Lamp Wiring                  | Parallel                                                                              |
| Line Voltage Regulation(+/-) | 10%                                                                                   |
| Ambient Temperature (MAX)    | 104°C (40°F)                                                                          |
| Case Temperature (MAX)       | 70°C (158°F)                                                                          |
| Ballast Factor               | Normal                                                                                |
| Power Factor Correction      | Active                                                                                |
| Sound Rating                 | A (20-24 decibels)                                                                    |
| Additional Info              | Anti-striation control, Inherently Thermally Protected, UL Class P, Universal voltage |

| Electrical Characteristics     |                                                       |
|--------------------------------|-------------------------------------------------------|
| Supply Current Frequency       | 50 Hz/Supply Current Frequency (MIN)/ 50 Hz/ 60 (MIN) |
| Supply Current Frequency (MIN) | 50 Hz/60 Hz                                           |

| Dimensions                               |                 |
|------------------------------------------|-----------------|
| Length (L)                               | 9.5 in (241 mm) |
| Width (W)                                | 1.3 in (33 mm)  |
| Height (H)                               | 1.18 in (30 mm) |
| Mounting Dimensions                      |                 |
| Mount Length (M)                         | 8.9 in (226 mm) |
| Mount Width (X or F)                     | 1.18 in (30 mm) |
| Mount Slots (MS)                         | 0.3 in (8 mm)   |
| Weight                                   | 1.65 lbs        |
| Exit Type                                | Side            |
| Remote Mounting Distance to Lamp (F32T8) | 18 ft           |
| Remote Mounting Wire Gauge               | 18 AWG          |
| Lead Lengths                             |                 |
| Lengths (± 1 in)                         |                 |
| Black                                    | 25 in (635 mm)  |
| Blue & Red                               | 33 in (838 mm)  |
| White                                    | 25 in (635 mm)  |
| Yellow                                   | 47 in (1194 mm) |

| Specifications and lamp wattage |            |                |                  |                       |                       |                         |                     |                   |           |                           |
|---------------------------------|------------|----------------|------------------|-----------------------|-----------------------|-------------------------|---------------------|-------------------|-----------|---------------------------|
| Lamp                            | # of Lamps | Line Volts (V) | System Watts (W) | Nom. Line Current (A) | System Ballast Factor | Ballast Efficacy Factor | Power Factor % (>=) | Crest Factor (<=) | THD% (<=) | Min Starting Temp (°F/°C) |
| F96T8                           | 2          | 120            | 59               | 0.48A                 | 0.89                  | 1.50                    | 99                  | 1.7               | 10        | 0/-18                     |
|                                 | 2          | 277            | 58               | 0.21A                 | 0.89                  | 1.53                    | 96                  | 1.7               | 10        | 0/-18                     |
|                                 | 1          | 120            | 37               | 0.30A                 | 1.05                  | 2.83                    | 98                  | 1.7               | 10        | 0/-18                     |
|                                 | 1          | 277            | 37               | 0.14A                 | 1.05                  | 2.83                    | 93                  | 1.7               | 10        | 0/-18                     |
| F96T8/WM                        | 2          | 120            | 55               | 0.45A                 | 0.88                  | 1.60                    | 99                  | 1.7               | 10        | 50/10                     |
|                                 | 2          | 277            | 54               | 0.20A                 | 0.88                  | 1.62                    | 96                  | 1.7               | 10        | 50/10                     |
|                                 | 1          | 120            | 34               | 0.28A                 | 1.02                  | 3.00                    | 98                  | 1.7               | 10        | 50/10                     |
|                                 | 1          | 277            | 34               | 0.13A                 | 1.02                  | 3.00                    | 93                  | 1.7               | 10        | 50/10                     |
| F96T8/WMP                       | 2          | 120            | 51               | 0.42A                 | 0.86                  | 1.68                    | 99                  | 1.7               | 10        | 50/10                     |
|                                 | 2          | 277            | 50               | 0.18A                 | 0.86                  | 1.72                    | 95                  | 1.7               | 10        | 50/10                     |
|                                 | 1          | 120            | 32               | 0.26A                 | 1.00                  | 3.12                    | 98                  | 1.7               | 10        | 50/10                     |
|                                 | 1          | 277            | 32               | 0.12A                 | 1.00                  | 3.12                    | 92                  | 1.7               | 10        | 50/10                     |

### Safety and Performance



UL Listed



UL Class P ANSI – C62.41



UL Type 1 Outdoor



UL Type HL

FCC – CLASS A Non-Consumer



# Linear Fluorescent Ballasts



## 68993 – GE228MVPS-MC (replaces 99655)

### UltraStart® Programmed Start

### T5 High-Efficiency

2 or 1 – F14-F28T5HE, 120 – 277 UltraStart® PRS Normal Light - .95 BF A Can

- For F14 (2ft), F21 (3ft), F28 (4ft), F35 (5ft) HE T5 Lamps\*
- High Efficiency T5 ballast with Continuous Cathode Cutout Technology
- Lower Maintenance Costs with Parallel Lamp Operation
- Fast Starting Time <700ms
- Multi-Voltage technology means a single ballast handles voltage from 108V to 305V
- Auto-Restart withstands temporary losses in power without the need to cycle power

| General Characteristics      |                                                                                                            |
|------------------------------|------------------------------------------------------------------------------------------------------------|
| Ballast Type                 | Electronic – Programmed / Rapid Start                                                                      |
| Starting Method              | Programmed Start                                                                                           |
| Lamp Wiring                  | Parallel                                                                                                   |
| Line Voltage Regulation(+/-) | 10%                                                                                                        |
| Ambient Temperature (MAX)    | 131°F (55°C)                                                                                               |
| Case Temperature (MAX)       | 70°C (158°F)                                                                                               |
| Ballast Factor               | Normal                                                                                                     |
| Power Factor Correction      | Active                                                                                                     |
| Sound Rating                 | A (20-24 decibels)                                                                                         |
| Additional Info              | Auto-restart, End-of-Life Protection (EOL), Thermally protected, Universal voltage, Anti-striation control |

| Dimensions                       |                  |
|----------------------------------|------------------|
| Length (L)                       | 9.5 in (241 mm)  |
| Width (W)                        | 1.3 in (33 mm)   |
| Height (H)                       | 1.0 in (25.4 mm) |
| Mounting Dimensions              |                  |
| Mount Length (M)                 | 8.9 in (226 mm)  |
| Mount Slots (MS)                 | 0.3 in (8 mm)    |
| Weight                           | 1.0 lbs          |
| Exit Type                        | Side             |
| Remote Mounting Distance to Lamp | 8 ft             |
| Remote Mounting Wire Gauge       | 18 AWG           |
| Lead Lengths                     |                  |
|                                  | Length (± 1 in)  |
| White & Black                    | 20 in (508 mm)   |
| Blue & Red                       | 26 in (660 mm)   |
| Yellow                           | 37 in (940 mm)   |

| Electrical Characteristics |             |
|----------------------------|-------------|
| Supply Current Frequency   | 50 Hz/60 Hz |

| Specifications and lamp wattage |            |                |                  |                       |                       |                         |                     |                   |           |                           |
|---------------------------------|------------|----------------|------------------|-----------------------|-----------------------|-------------------------|---------------------|-------------------|-----------|---------------------------|
| Lamp                            | # of Lamps | Line Volts (V) | System Watts (W) | Nom. Line Current (A) | System Ballast Factor | Ballast Efficacy Factor | Power Factor % (>=) | Crest Factor (<=) | THD% (<=) | Min Starting Temp (°F/°C) |
| F28T5HE                         | 2          | 277            | 60               | 0.22                  | .96                   | 1.60                    | 99                  | 1.4               | 6         | 0/-18                     |
|                                 | 1          | 277            | 41               | 0.16                  | 1.21                  | 2.95                    | 97                  | 1.4               | 9         | 0/-18                     |
|                                 | 2          | 120            | 62               | 0.53                  | .96                   | 1.55                    | 99                  | 1.4               | 7         | 0/-18                     |
|                                 | 1          | 120            | 41               | 0.35                  | 1.21                  | 2.95                    | 99                  | 1.4               | 8         | 0/-18                     |
| F28T5HL                         | 2          | 277            | 60               | 0.23                  | .96                   | 1.60                    | 98                  | 1.4               | 6         | 32/0                      |
|                                 | 1          | 277            | 41               | 0.15                  | 1.21                  | 2.95                    | 97                  | 1.4               | 10        | 32/0                      |
|                                 | 2          | 120            | 62               | 0.52                  | .96                   | 1.55                    | 99                  | 1.4               | 7         | 32/0                      |
|                                 | 1          | 120            | 41               | 0.35                  | 1.21                  | 2.95                    | 99                  | 1.4               | 8         | 32/0                      |
| F28T5WM                         | 2          | 277            | 58               | 0.22                  | .98                   | 1.69                    | 98                  | 1.4               | 6         | 32/0                      |
|                                 | 2          | 120            | 59               | 0.50                  | .98                   | 1.66                    | 99                  | 1.4               | 7         | 32/0                      |
| F21T5HE                         | 2          | 277            | 50               | 0.18                  | 1.04                  | 2.08                    | 98                  | 1.4               | 7         | 32/0                      |
|                                 | 2          | 120            | 51               | 0.43                  | 1.04                  | 2.04                    | 99                  | 1.4               | 8         | 32/0                      |
| F14T5HE                         | 2          | 277            | 37               | 0.14                  | 1.10                  | 2.97                    | 97                  | 1.4               | 10        | 32/0                      |
|                                 | 2          | 120            | 37               | 0.32                  | 1.10                  | 2.97                    | 99                  | 1.4               | 9         | 32/0                      |
| F14T5WM                         | 2          | 277            | 36               | 0.13                  | 1.10                  | 3.06                    | 97                  | 1.4               | 11        | 32/0                      |
|                                 | 2          | 120            | 36               | 0.30                  | 1.10                  | 3.06                    | 99                  | 1.4               | 9         | 32/0                      |

## Safety and Performance

UL Type CC
 UL Type 1 Outdoor
 UL Listed
 UL Type HL
 FCC – CLASS A Non-Consumer
 UL Class P
 cUL Listed
 Meets ANSI Standard C62.41-1991

# Linear Fluorescent Ballasts



## 67562 – GE254MVPS90-A

UltraStart® Programmed Start

T5 High Output

2 or 1 – F54T5HO 120 to 277V UltraStart® PRS High Temp A Can

- For T5 HO Lamps\*
- High Efficiency T5 ballast with Continuous Cathode Cutout Technology
- Lower Maintenance Costs with Parallel Lamp Operation
- Fast Starting Time <700ms
- Multi-Voltage technology means a single ballast handles voltage from 108V to 305V
- Auto-Restart withstands temporary losses in power without the need to cycle power

| General Characteristics      |                                                                                                            |
|------------------------------|------------------------------------------------------------------------------------------------------------|
| Ballast Type                 | Electronic – Programmed / Rapid Start                                                                      |
| Starting Method              | Programmed Start                                                                                           |
| Lamp Wiring                  | Parallel                                                                                                   |
| Line Voltage Regulation(+/-) | 10%                                                                                                        |
| Ambient Temperature (MAX)    | 131°F (55°C)                                                                                               |
| Case Temperature (MAX)       | 90°C (194°F)                                                                                               |
| Ballast Factor               | Normal                                                                                                     |
| Power Factor Correction      | Active                                                                                                     |
| Sound Rating                 | A (20-24 decibels)                                                                                         |
| Additional Info              | Auto-restart, End-of-Life Protection (EOL), Thermally protected, Universal voltage, Anti-striation control |

| Electrical Characteristics |             |
|----------------------------|-------------|
| Supply Current Frequency   | 50 Hz/60 Hz |

| Dimensions                       |                  |
|----------------------------------|------------------|
| Length (L)                       | 9.5 in (241 mm)  |
| Width (W)                        | 1.7 in (43.2 mm) |
| Height (H)                       | 1.2 in (30.5 mm) |
| Mounting Dimensions              |                  |
| Mount Length (M)                 | 8.9 in (226 mm)  |
| Mount Slots (MS)                 | 0.25 in (6 mm)   |
| Weight                           | 1.50 lbs         |
| Exit Type                        | Side             |
| Remote Mounting Distance to Lamp | 12 ft            |
| Remote Mounting Wire Gauge       | 18 AWG           |
| Lead Lengths                     |                  |
|                                  | Length (± 1 in)  |
| White & Black                    | 25 in (635 mm)   |
| Blue & Red                       | 34 in (864 mm)   |
| Yellow                           | 45 in (1143 mm)  |

| Specifications and lamp wattage |            |                |                  |                       |                       |                         |                     |                   |           |                           |
|---------------------------------|------------|----------------|------------------|-----------------------|-----------------------|-------------------------|---------------------|-------------------|-----------|---------------------------|
| Lamp                            | # of Lamps | Line Volts (V) | System Watts (W) | Nom. Line Current (A) | System Ballast Factor | Ballast Efficacy Factor | Power Factor % (>=) | Crest Factor (<=) | THD% (<=) | Min Starting Temp (°F/°C) |
| F54T5HO                         | 2          | 120            | 117              | 0.98                  | 1.00                  | .85                     | 1.00                | 1.4               | 4.4       | -20/-29                   |
|                                 | 2          | 277            | 114              | 0.41                  | 1.10                  | .96                     | 99                  | 1.4               | 5.4       | -20/-29                   |
|                                 | 1          | 120            | 63               | 0.53                  | 1.00                  | 1.59                    | 1.00                | 1.4               | 6.4       | -20/-29                   |
|                                 | 1          | 277            | 62               | 0.23                  | 1.10                  | 1.77                    | 97                  | 1.4               | 6.6       | -20/-29                   |
| F54T5WM                         | 2          | 120            | 109              | 0.90                  | 1.00                  | .92                     | 1.00                | 1.4               | 4.6       | 0/-18                     |
|                                 | 2          | 277            | 107              | 0.40                  | 1.12                  | 1.05                    | 99                  | 1.4               | 5.2       | 0/-18                     |
|                                 | 1          | 120            | 61               | 0.51                  | 1.00                  | 1.64                    | 1.00                | 1.4               | 6.7       | 0/-18                     |
|                                 | 1          | 277            | 60               | 0.22                  | 1.12                  | 1.87                    | 97                  | 1.4               | 7.7       | 0/-18                     |
| F54T5/47W                       | 2          | 120            | 105              | 0.88                  | 1.00                  | .95                     | 1.00                | 1.4               | 4.8       | -20/-29                   |
|                                 | 2          | 277            | 104              | 0.40                  | 1.10                  | 1.06                    | 99                  | 1.4               | 5.3       | -20/-29                   |
|                                 | 1          | 120            | 58               | 0.48                  | 1.00                  | 1.72                    | 1.00                | 1.4               | 6.9       | -20/-29                   |
|                                 | 1          | 277            | 57               | 0.22                  | 1.10                  | 1.93                    | 96                  | 1.4               | 8.0       | -20/-29                   |
| F58T8                           | 2          | 120            | 110              | 0.90                  | .95                   | .86                     | 1.00                | 1.4               | 4.7       | -20/-29                   |
|                                 | 2          | 277            | 107              | 0.39                  | .95                   | .89                     | 99                  | 1.4               | 5.4       | -20/-29                   |
|                                 | 1          | 120            | 59               | 0.49                  | 1.08                  | 1.83                    | 1.00                | 1.4               | 6.6       | -20/-29                   |
|                                 | 1          | 277            | 59               | 0.22                  | 1.08                  | 1.83                    | 96                  | 1.4               | 7.3       | -20/-29                   |
| FT55W/4P                        | 2          | 120            | 116              | 0.97                  | .86                   | .74                     | 1.00                | 1.4               | 4.9       | 0/-18                     |
|                                 | 2          | 277            | 112              | 0.41                  | .86                   | .77                     | 99                  | 1.4               | 5.4       | 0/-18                     |
|                                 | 1          | 120            | 61               | 0.51                  | 1.03                  | 1.69                    | 1.00                | 1.4               | 6.8       | 0/-18                     |
|                                 | 1          | 277            | 60               | 0.23                  | 1.03                  | 1.72                    | 97                  | 1.4               | 8.0       | 0/-18                     |
| FT50W/4P                        | 2          | 120            | 118              | 1.00                  | 1.05                  | .89                     | 1.00                | 1.4               | 4.6       | 0/-18                     |
|                                 | 2          | 277            | 116              | 0.43                  | 1.06                  | .91                     | 99                  | 1.4               | 5.2       | 0/-18                     |
|                                 | 1          | 120            | 64               | 0.53                  | 1.18                  | 1.84                    | 1.00                | 1.4               | 6.6       | 0/-18                     |
|                                 | 1          | 277            | 63               | 0.24                  | 1.18                  | 1.87                    | 97                  | 1.4               | 7.4       | 0/-18                     |

## Safety and Performance



UL Type 1 Outdoor  
FCC – CLASS A Non-Consumer



UL Type CC  
High Temperature Rated: Suitable for high temperature applications 80°C max case temp 5 yr warranty.



UL Listed

Meets ANSI Standard C62.41-1991



UL Class P

Meets ANSI Standard C82.11- cons 2002

# Linear Fluorescent Ballasts



## 67566 – GE454MVPS90-F (replaces 77114)

UltraStart® Programmed Start

T5 High Output

4-1 – F54T5HO 120 to 277V UltraStart® PS F Can

- For T5 HO Lamps\*
- High Efficiency T5 ballast with Continuous Cathode Cutout Technology
- Lower Maintenance Costs with Parallel Lamp Operation
- Fast Starting Time <700ms
- Multi-Voltage technology means a single ballast handles voltage from 108V to 305V
- Auto-Restart withstands temporary losses in power without the need to cycle power
- Anti-Striation Control for better light quality, with no striations
- 90°C case rating/UL Approved 55°C Ambient Rating
- Individual lamp End of Lamp Life protection - only one lamp shuts down at end of life
- Cold temperature -20°F Minimum Starting Temperature

| General Characteristics      |                                                                 |
|------------------------------|-----------------------------------------------------------------|
| Ballast Type                 | Electronic – Programmed / Rapid Start                           |
| Starting Method              | Programmed Start                                                |
| Lamp Wiring                  | Parallel                                                        |
| Line Voltage Regulation(+/-) | 10%                                                             |
| Ambient Temperature (MAX)    | 55°C (131°F)                                                    |
| Case Temperature (MAX)       | 90°C (194°F)                                                    |
| Ballast Factor               | Normal                                                          |
| Power Factor Correction      | Active                                                          |
| Sound Rating                 | A (20-24 decibels)                                              |
| Enclosure Type               | Metal                                                           |
| Additional Info              | Auto-restart, End-of-Life Protection (EOL), Thermally protected |
| Electrical Characteristics   |                                                                 |
| Supply Current Frequency     | 50 Hz/60 Hz                                                     |

| Dimensions                       |                   |
|----------------------------------|-------------------|
| Length (L)                       | 11.75 in (298 mm) |
| Width (W)                        | 1.7 in (43.2 mm)  |
| Height (H)                       | 1.2 in (30.5 mm)  |
| Mounting Dimensions              |                   |
| Mount Length (M)                 | 16.7 in (424 mm)  |
| Weight                           | 2.79 lbs          |
| Exit Type                        | Side              |
| Remote Mounting Distance to Lamp | 8 ft              |
| Remote Mounting Wire Gauge       | 18 AWG            |
| Lead Lengths                     |                   |
|                                  | Length (± 1 in)   |
| Black                            | 25 in (635 mm)    |
| White                            | 25 in (635 mm)    |

| Specifications and lamp wattage |            |                |                  |                       |                       |                         |                     |                   |           |                           |
|---------------------------------|------------|----------------|------------------|-----------------------|-----------------------|-------------------------|---------------------|-------------------|-----------|---------------------------|
| Lamp                            | # of Lamps | Line Volts (V) | System Watts (W) | Nom. Line Current (A) | System Ballast Factor | Ballast Efficacy Factor | Power Factor % (>=) | Crest Factor (<=) | THD% (<=) | Min Starting Temp (°F/°C) |
| FT55W/4P                        | 4          | 120            | 206              | 1.73                  | .86                   | .42                     | 99                  | 1.4               | 5         | 0/-18                     |
|                                 | 4          | 277            | 203              | 0.75                  | .86                   | .42                     | 97                  | 1.4               | 8         | 0/-18                     |
|                                 | 3          | 120            | 168              | 1.41                  | .91                   | .54                     | 99                  | 7.0               | 6         | 0/-18                     |
|                                 | 3          | 277            | 168              | 0.63                  | .91                   | .54                     | 97                  | 1.4               | 10        | 0/-18                     |
|                                 | 2          | 120            | 125              | 1.04                  |                       |                         | 99                  | 1.4               | 7         | 0/-18                     |
|                                 | 2          | 277            | 124              | 0.48                  |                       |                         | 94                  | 1.4               | 16        | 0/-18                     |
|                                 | 1          | 120            | 64               | 0.54                  |                       |                         | 99                  | 1.4               | 10        | 0/-18                     |
|                                 | 1          | 277            | 66               | 0.28                  |                       |                         | 84                  | 1.4               | 25        | 0/-18                     |
| FT50W/4P                        | 4          | 120            | 222              | 1.86                  | 1.06                  | .48                     | 99                  | 1.4               | 5         | 0/-18                     |
|                                 | 4          | 277            | 218              | 0.81                  | 1.06                  | .49                     | 98                  | 1.4               | 8         | 0/-18                     |
|                                 | 3          | 120            | 187              | 1.56                  | 1.11                  | .59                     | 99                  | 1.4               | 6         | 0/-18                     |
|                                 | 3          | 277            | 184              | 0.68                  | 1.11                  | .60                     | 97                  | 1.4               | 9         | 0/-18                     |
|                                 | 2          | 120            | 130              | 1.09                  |                       |                         | 99                  | 1.4               | 7         | 0/-18                     |
|                                 | 2          | 277            | 130              | 0.50                  |                       |                         | 95                  | 1.4               | 15        | 0/-18                     |
|                                 | 1          | 120            | 72               | 0.60                  |                       |                         | 99                  | 1.4               | 10        | 0/-18                     |
|                                 | 1          | 277            | 73               | 0.31                  |                       |                         | 85                  | 1.4               | 26        | 0/-18                     |
| F58T8                           | 4          | 120            | 208              | 1.73                  | .95                   | .46                     | 99                  | 1.4               | 5         | -20/-29                   |
|                                 | 4          | 277            | 204              | 0.76                  | .95                   | .47                     | 97                  | 1.4               | 9         | -20/-29                   |
|                                 | 3          | 120            | 176              | 1.47                  | .99                   | .56                     | 99                  | 1.4               | 6         | -20/-29                   |
|                                 | 3          | 277            | 173              | 0.65                  | .99                   | .57                     | 94                  | 1.4               | 10        | -20/-29                   |
|                                 | 2          | 120            | 128              | 1.07                  |                       |                         | 99                  | 1.4               | 7         | -20/-29                   |
|                                 | 2          | 277            | 127              | 0.49                  |                       |                         | 94                  | 1.4               | 16        | -20/-29                   |
|                                 | 1          | 120            | 67               | 0.57                  |                       |                         | 99                  | 1.4               | 10        | -20/-29                   |
|                                 | 1          | 277            | 68               | 0.29                  |                       |                         | 85                  | 1.4               | 25        | -20/-29                   |
| F54T5/WM                        | 4          | 120            | 214              | 1.79                  | 1.00                  | .47                     | 99                  | 1.4               | 5         | 0/-18                     |
|                                 | 4          | 277            | 210              | 0.78                  | 1.00                  | .48                     | 98                  | 1.4               | 8         | 0/-18                     |
|                                 | 3          | 120            | 181              | 1.51                  | 1.01                  | .56                     | 99                  | 1.4               | 6         | 0/-18                     |
|                                 | 3          | 277            | 178              | 0.66                  | 1.01                  | .57                     | 97                  | 1.4               | 9         | 0/-18                     |
|                                 | 2          | 120            | 130              | 1.09                  | .96                   | .74                     | 99                  | 1.4               | 7         | 0/-18                     |
|                                 | 2          | 277            | 135              | 0.51                  | .96                   | .71                     | 95                  | 1.4               | 15        | 0/-18                     |
|                                 | 1          | 120            | 69               | 0.58                  | 1.12                  | 1.62                    | 99                  | 1.4               | 10        | 0/-18                     |
|                                 | 1          | 277            | 70               | 0.30                  | 1.12                  | 1.60                    | 85                  | 1.4               | 26        | 0/-18                     |
| F54T5/HO                        | 4          | 120            | 220              | 1.84                  | 1.00                  | .45                     | 99                  | 1.4               | 5         | -20/-29                   |
|                                 | 4          | 277            | 216              | 0.80                  | 1.00                  | .46                     | 98                  | 1.4               | 8         | -20/-29                   |
|                                 | 3          | 120            | 185              | 1.55                  | 1.01                  | .55                     | 99                  | 1.4               | 6         | -20/-29                   |
|                                 | 3          | 277            | 182              | 0.68                  | 1.01                  | .55                     | 97                  | 1.4               | 9         | -20/-29                   |
|                                 | 2          | 120            | 133              | 0.58                  | .96                   | .72                     | 99                  | 1.4               | 7         | -20/-29                   |
|                                 | 2          | 277            | 132              | 0.50                  | .96                   | .72                     | 95                  | 1.4               | 15        | -20/-29                   |
|                                 | 1          | 120            | 69               | 0.58                  | 1.11                  | 1.61                    | 99                  | 1.4               | 10        | -20/-29                   |
|                                 | 1          | 277            | 70               | 0.30                  | 1.11                  | 1.59                    | 85                  | 1.4               | 26        | -20/-29                   |

## Safety and Performance

UL Type 1 Outdoor
 UL Type HL
 FCC – CLASS A Non-Consumer
 ANSI-C62.41-1991

ANSI-C82.11-Cons 2002
 UL Class P
 UL Type CC
 UL Listed
 CSA
 High Temperature Rated: Suitable for high temperature applications
 70°C max case temp 5 yr warranty or 90°C max case temp 3 yr warranty

# Linear Fluorescent Ballasts



## 62731 – GE454PS347-E

### UltraStart® Programmed Rapid Start Ballast T5 High Output

4-1 - F54T5HO 347V UltraStart® LFL E Can

- T5 Electronic Programmed Start
- High Efficiency T5 ballast with Continuous Cathode Cutout Technology
- Lower Maintenance Costs with Parallel Lamp Operation
- Fast Starting Time <700ms
- Auto-Restart withstands temporary losses in power without the need to cycle power
- Anti-Striation Control for better light quality, with no striations.
- 90°C case rating/UL Approved 55°C Ambient Rating
- Individual lamp End of Lamp Life protection - only one lamp shuts down at end of life
- Cold temperature -20°F Minimum Starting Temperature

| General Characteristics      |                                                                                  |
|------------------------------|----------------------------------------------------------------------------------|
| Ballast Type                 | Electronic – Programmed / Rapid Start                                            |
| Starting Method              | Programmed Rapid Start                                                           |
| Lamp Wiring                  | Parallel                                                                         |
| Line Voltage Regulation(+/-) | 10%                                                                              |
| Ambient Temperature (MAX)    |                                                                                  |
| Case Temperature (MAX)       | 70°C (158°F)                                                                     |
| Ballast Factor               | Normal                                                                           |
| Power Factor Correction      | Active                                                                           |
| Sound Rating                 | A (20-24 decibels)                                                               |
| Enclosure Type               | Metal Can                                                                        |
| Additional Info              | Lamp End-of-Life Safety Shutdown Circuit/Auto-restart/<br>Anti-striation control |
| Electrical Characteristics   |                                                                                  |
| Supply Current Frequency     | 50 Hz/60 Hz                                                                      |

| Dimensions                       |                  |
|----------------------------------|------------------|
| Length (L)                       | 16.7 in (424 mm) |
| Width (W)                        | 1.7 in (43.2 mm) |
| Height (H)                       | 1.2 in (30.5 mm) |
| Mounting Dimensions              |                  |
| Mount Length (M)                 | 16.1 in (409 mm) |
| Weight                           | 2.5 lbs          |
| Exit Type                        | Side             |
| Remote Mounting Distance to Lamp | 12 ft            |
| Remote Mounting Wire Gauge       | 18 AWG           |
| Lead Lengths                     |                  |
|                                  | Length (± 1 in)  |
| Black                            | 25 in (635 mm)   |
| White                            | 25 in (635 mm)   |
| Blue                             | 34 in (864 mm)   |
| Blue/White                       | 34 in (864 mm)   |
| Red                              | 34 in (864 mm)   |
| Red/White                        | 34 in (864 mm)   |
| Yellow                           | 35 in (889 mm)   |

| Specifications and lamp wattage |            |                |                  |                       |                       |                         |                     |                   |           |                           |
|---------------------------------|------------|----------------|------------------|-----------------------|-----------------------|-------------------------|---------------------|-------------------|-----------|---------------------------|
| Lamp                            | # of Lamps | Line Volts (V) | System Watts (W) | Nom. Line Current (A) | System Ballast Factor | Ballast Efficacy Factor | Power Factor % (>=) | Crest Factor (<=) | THD% (<=) | Min Starting Temp (°F/°C) |
| F54T5/HO                        | 4          | 347            | 229              | 0.68                  | 1.00                  | 1.75                    | 99                  | 1.4               | 5         | -22/-30                   |
|                                 | 3          | 347            | 176              | 0.53                  | 1.01                  | 1.70                    | 99                  | 1.4               | 5         | -22/-30                   |
|                                 | 2          | 347            | 125              | 0.37                  | .96                   | 1.60                    | 99                  | 1.4               | 7         | -22/-30                   |
|                                 | 1          | 347            | 68               | 0.21                  | 1.12                  | 1.47                    | 94                  | 1.4               | 16        | -22/-30                   |
| FT50W/4P                        | 4          | 347            | 227              | 0.68                  | 1.06                  | 1.76                    | 99                  | 1.4               | 5         | 0/-18                     |
|                                 | 3          | 347            | 177              | 0.53                  | 1.11                  | 1.69                    | 99                  | 1.4               | 5         | 0/-18                     |
|                                 | 2          | 347            | 126              | 0.37                  |                       | 1.59                    | 99                  | 1.4               | 6         | 0/-18                     |
|                                 | 1          | 347            | 69               | 0.22                  |                       | 1.47                    | 94                  | 1.4               | 16        | 0/-18                     |
| FT55W/4P                        | 4          | 347            | 221              | 0.66                  | .86                   | 1.81                    | 99                  | 1.4               | 5         | 0/-18                     |
|                                 | 3          | 347            | 173              | 0.51                  | .91                   | 1.73                    | 99                  | 1.4               | 5         | 0/-18                     |
|                                 | 2          | 347            | 123              | 0.37                  |                       | 1.63                    | 99                  | 1.4               | 7         | 0/-18                     |
|                                 | 1          | 347            | 68               | 0.22                  |                       | 1.47                    | 92                  | 1.4               | 19        | 0/-18                     |
| F54T5/WM                        | 4          | 347            | 219              | 0.65                  | 1.00                  | 1.83                    | 99                  | 1.4               | 5         | 0/-18                     |
|                                 | 3          | 347            | 171              | 0.51                  | 1.01                  | 1.75                    | 99                  | 1.4               | 5         | 0/-18                     |
|                                 | 2          | 347            | 121              | 0.36                  | .96                   | 1.65                    | 99                  | 1.4               | 6         | 0/-18                     |
|                                 | 1          | 347            | 66               | 0.21                  | 1.12                  | 1.52                    | 94                  | 1.4               | 14        | 0/-18                     |
| F58T8                           | 4          | 347            | 209              | 0.62                  | .95                   | 1.91                    | 99                  | 1.4               | 5         | -22/-30                   |
|                                 | 3          | 347            | 164              | 0.49                  | .99                   | 1.83                    | 99                  | 1.4               | 5         | -22/-30                   |
|                                 | 2          | 347            | 117              | 0.35                  | .96                   | 1.71                    | 99                  | 1.4               | 6         | -22/-30                   |
|                                 | 1          | 347            | 65               | 0.20                  | 1.12                  | 1.54                    | 97                  | 1.4               | 9         | -22/-30                   |
| F54T5/47W                       | 4          | 347            | 206              | 0.63                  | 1.00                  | 1.94                    | 99                  | 1.4               | 5         | 0/-18                     |
|                                 | 3          | 347            | 161              | 0.48                  | 1.04                  | 1.86                    | 99                  | 1.4               | 5         | 0/-18                     |
|                                 | 2          | 347            | 117              | 0.35                  | 1.06                  | 1.71                    | 99                  | 1.4               | 6         | 0/-18                     |
|                                 | 1          | 347            | 65               | 0.20                  | 1.08                  | 1.54                    | 97                  | 1.4               | 10        | 0/-18                     |

## Safety and Performance

UL Type 1 Outdoor 
 UL Type HL 
 FCC – CLASS A Non-Consumer 
 ANSI-C62.41-1991 
 ANSI-C82.11-Cons 2002

ANSI-C62.41-2002 
 UL Class P 
 UL Type CC 
 UL 55C Ambient Approved

High Temperature Rated: Suitable for high temperature applications No PCB's 70C max case temp 5 yr warranty or 90C max case temp 3 yr warranty



## 74119 – GETR480/277-250W

### Step Down Transformers

Non-Isolated Autotransformer 480 to 277V, <250 Watts (VA), A Can

- Precision-wound coils, ensuring even heat dissipation and the highest electrical integrity.
- Non-Isolated Autotransformer designed specifically for lighting applications to step down 480V to 277V
- For use with one or more electronic 277V or universal voltage ballasts within max total system power of autotransformer
- 480Vrms Input, 60Hz Only, 277Vrms Full Load Output or 347Vrms Input
- For loads with total system power <250VA
- Internal Auto Reset Thermal Protector Rated 100C
- For use on single phase or ground referred systems
- Five Year Limited Warranty
- 93% electrical efficiency

| General Characteristics |                        |
|-------------------------|------------------------|
| Ballast Type            | Magnetic - Core & Coil |
| Case Temperature (MAX)  | 100°C (212°F)          |
| Sound Rating            | A (20-24 decibels)     |
| Enclosure Type          | Metal                  |
| Additional Info         | Thermally protected    |

| Electrical Characteristics     |       |
|--------------------------------|-------|
| Supply Current Frequency       | 60 Hz |
| Supply Current Frequency (MIN) | 60 Hz |

| Specifications by lamp and wattage/Line Volts (V) |  |
|---------------------------------------------------|--|
| 480V to 277V                                      |  |
| 347V to 200V                                      |  |

| Dimensions |                  |
|------------|------------------|
| Length (L) | 9.5 in (241 mm)  |
| Width (W)  | 1.7 in (43.2 mm) |
| Height (H) | 1.18 in (30 mm)  |

| Mounting Dimensions        |                 |
|----------------------------|-----------------|
| Mount Length (M)           | 8.9 in (226 mm) |
| Mount Width (X or F)       | 1.18 in (30 mm) |
| Mount Slots (MS)           | 0.3 in (8 mm)   |
| Exit Type                  | Side            |
| Remote Mounting Wire Gauge | 14 AWG          |

| Lead Lengths | Length (± 1 in)  |
|--------------|------------------|
| Black        | 14.0 in (356 mm) |
| Blue         | 14.0 in (356 mm) |
| Red          | 14.0 in (356 mm) |

### Safety and Performance



UL Type 1 Outdoor



UL Listed



UL Listed Autotransformer



cUL US cUL

## 74120 – GETR480/277-375W

### Step Down Transformers

Non-Isolated Autotransformer 480 to 277V, <375 Watts (VA), F Can

- Precision-wound coils, ensuring even heat dissipation and the highest electrical integrity.
- Non-Isolated Autotransformer designed specifically for lighting applications to step down 480V to 277V
- For use with one or more electronic 277V or universal voltage ballasts within max total system power of autotransformer
- 480Vrms Input, 60Hz Only, 277Vrms Full Load Output or 347Vrms Input
- For loads with total system power <375VA
- Internal Auto Reset Thermal Protector Rated 100C
- For use on single phase or ground referred systems
- Five Year Limited Warranty
- 93% electrical efficiency

| General Characteristics |                        |
|-------------------------|------------------------|
| Ballast Type            | Magnetic - Core & Coil |
| Case Temperature (MAX)  | 100°C (212°F)          |
| Sound Rating            | A (20-24 decibels)     |
| Enclosure Type          | Metal                  |
| Additional Info         | Thermally protected    |

| Electrical Characteristics     |       |
|--------------------------------|-------|
| Supply Current Frequency       | 60 Hz |
| Supply Current Frequency (MIN) | 60 Hz |

| Specifications by lamp and wattage/Line Volts (V) |  |
|---------------------------------------------------|--|
| 480V to 277V                                      |  |
| 347V to 200V                                      |  |

| Dimensions |                   |
|------------|-------------------|
| Length (L) | 11.75 in (299 mm) |
| Width (W)  | 1.7 in (43.2 mm)  |
| Height (H) | 1.18 in (30 mm)   |

| Mounting Dimensions        |                  |
|----------------------------|------------------|
| Mount Length (M)           | 11.1 in (283 mm) |
| Mount Slots (MS)           | 0.3 in (8 mm)    |
| Exit Type                  | Side             |
| Remote Mounting Wire Gauge | 14 AWG           |

| Lead Lengths | Length (± 1 in)  |
|--------------|------------------|
| Black        | 14.0 in (356 mm) |
| Blue         | 14.0 in (356 mm) |
| Red          | 14.0 in (356 mm) |

### Safety and Performance



UL Type 1 Outdoor



UL Listed



cUL US cUL



# Linear Fluorescent Ballasts



## 74472 – GE240PS-MV-N (replaces 24107)

ProLine®

T12 Multivolt 120V – 277V

2 or 1 – F40 or F34T12 Rapid Start 120 to 277 "N" BF ProLine® T12

- For F20 (2ft), F30 (3ft), F34/F40 (4ft) T12 Lamps
- High-performance electronic ballast for all general fluorescent applications
- Multi-voltage technology handles voltage from 120 to 277V
- Light weight, low-profile housing
- Parallel lamp operation means system maintenance is easier to manage

| General Characteristics      |                                       |
|------------------------------|---------------------------------------|
| Ballast Type                 | Electronic – Programmed / Rapid Start |
| Starting Method              | Rapid Start                           |
| Lamp Wiring                  | Parallel                              |
| Line Voltage Regulation(+/-) | 10%                                   |
| Ambient Temperature (MAX)    |                                       |
| Case Temperature (MAX)       | 70°C (158°F)                          |
| Ballast Factor               | Normal                                |
| Power Factor Correction      | Active                                |
| Sound Rating                 | A (20-24 decibels)                    |
| Enclosure Type               | Metal                                 |
| Additional Info              | Auto-restart, Thermally protected     |
| Electrical Characteristics   |                                       |
| Supply Current Frequency     | 60 Hz                                 |

| Dimensions                       |                  |
|----------------------------------|------------------|
| Length (L)                       | 9.5 in (241 mm)  |
| Width (W)                        | 1.3 in (33 mm)   |
| Height (H)                       | 1.2 in (30.5 mm) |
| Mounting Dimensions              |                  |
| Mount Length (M)                 | 8.9 in (226 mm)  |
| Mount Width (X or F)             | 1.1 in (28 mm)   |
| Mount Slots (MS)                 | 0.3 in (8 mm)    |
| Weight                           | 1.06 lbs         |
| Exit Type                        | Side             |
| Remote Mounting Distance to Lamp | 18 ft            |
| Remote Mounting Wire Gauge       | 18 AWG           |
| Lead Lengths                     |                  |
|                                  | Length (± 1 in)  |
| Yellow                           | 48 in (1219 mm)  |
| Blue                             | 33 in (838 mm)   |
| Red                              | 33 in (838 mm)   |
| Black                            | 25 in (635 mm)   |
| White                            | 25 in (635 mm)   |

| Specifications and lamp wattage |            |                |                  |                       |                       |                         |                     |                   |           |                           |
|---------------------------------|------------|----------------|------------------|-----------------------|-----------------------|-------------------------|---------------------|-------------------|-----------|---------------------------|
| Lamp                            | # of Lamps | Line Volts (V) | System Watts (W) | Nom. Line Current (A) | System Ballast Factor | Ballast Efficacy Factor | Power Factor % (>=) | Crest Factor (<=) | THD% (<=) | Min Starting Temp (°F/°C) |
| F40T12                          | 2          | 120            | 74               | 0.67                  | .89                   | 1.20                    | 99                  | 1.7               | 6         | 50/10                     |
|                                 | 2          | 277            | 73               | 0.30                  | .89                   | 1.22                    | 97                  | 1.7               | 10        | 50/10                     |
|                                 | 1          | 120            | 48               | 0.41                  |                       |                         | 99                  | 1.7               | 7         | 50/10                     |
|                                 | 1          | 277            | 48               | 0.19                  |                       |                         | 95                  | 1.7               | 10        | 50/10                     |
| F40T10                          | 2          | 120            | 75               | 0.63                  | .88                   | 1.17                    | 99                  | 1.7               | 7         | 50/10                     |
|                                 | 2          | 277            | 72               | 0.27                  | .88                   | 1.22                    | 94                  | 1.7               | 16        | 50/10                     |
|                                 | 1          | 120            | 42               | 0.35                  |                       |                         | 99                  | 1.7               | 10        | 50/10                     |
|                                 | 1          | 277            | 42               | 0.17                  |                       |                         | 88                  | 1.7               | 16        | 50/10                     |
| F34T12                          | 2          | 120            | 63               | 0.56                  | .87                   | 1.38                    | 99                  | 1.7               | 7         | 50/10                     |
|                                 | 2          | 277            | 62               | 0.26                  | .87                   | 1.40                    | 96                  | 1.7               | 10        | 50/10                     |
|                                 | 1          | 120            | 41               | 0.35                  |                       |                         | 99                  | 1.7               | 8         | 50/10                     |
|                                 | 1          | 277            | 41               | 0.17                  |                       |                         | 94                  | 1.7               | 11        | 50/10                     |
| F30T12/WM                       | 2          | 120            | 50               | 0.42                  | .95                   | 1.90                    | 99                  | 1.7               | 9         | 50/10                     |
|                                 | 2          | 277            | 50               | 0.20                  | .95                   | 1.90                    | 91                  | 1.7               | 18        | 50/10                     |
|                                 | 1          | 120            | 30               | 0.26                  |                       |                         | 99                  | 1.7               | 12        | 50/10                     |
|                                 | 1          | 277            | 30               | 0.13                  |                       |                         | 82                  | 1.7               | 27        | 50/10                     |
| F30T12                          | 2          | 120            | 60               | 0.31                  | .95                   | 1.58                    | 99                  | 1.7               | 7         | 50/10                     |
|                                 | 2          | 277            | 58               | 0.22                  | .95                   | 1.64                    | 96                  | 1.7               | 10        | 50/10                     |
|                                 | 1          | 120            | 37               | 0.31                  |                       |                         | 99                  | 1.7               | 8         | 50/10                     |
|                                 | 1          | 277            | 37               | 0.16                  |                       |                         | 94                  | 1.7               | 11        | 50/10                     |
| F20T12                          | 2          | 120            | 46               | 0.39                  | 1.00                  | 2.17                    | 99                  | 1.7               | 8         | 50/10                     |
|                                 | 2          | 277            | 45               | 0.18                  | 1.00                  | 2.22                    | 94                  | 1.7               | 11        | 50/10                     |
|                                 | 1          | 120            | 28               | 0.24                  |                       |                         | 99                  | 1.7               | 9         | 50/10                     |
|                                 | 1          | 277            | 29               | 0.13                  |                       |                         | 92                  | 1.7               | 17        | 50/10                     |

Safety and Performance



UL Type 1 Outdoor



UL Type HL



UL Class P



NRCan

FCC Part 18 Class B at 120 volts

cUL Listed



UL Listed

# Linear Fluorescent Ballasts



## 74474 – GE-260IS-MV-N (replaces 24108)

ProLine®

T12 Multivolt 120V – 277V

2 or 1 – F96T12 Instant Start 120 to 277

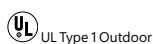
| General Characteristics      |                                      |
|------------------------------|--------------------------------------|
| Ballast Type                 | Electronic – Multivolt Instant Start |
| Starting Method              | Rapid Start                          |
| Lamp Wiring                  | Parallel                             |
| Line Voltage Regulation(+/-) | 10%                                  |
| Ambient Temperature (MAX)    |                                      |
| Case Temperature (MAX)       | 70°C (158°F)                         |
| Ballast Factor               | Normal                               |
| Power Factor Correction      | Active                               |
| Sound Rating                 | A (20-24 decibels)                   |
| Enclosure Type               | Metal                                |
| Additional Info              | Auto-restart, Thermally protected    |
| Electrical Characteristics   |                                      |
| Supply Current Frequency     | 50Hz/60 Hz                           |

- For T12 4ft – 8ft Slimline Lamps
- High-performance electronic ballast for all general fluorescent applications
- Instant start electronic ballast for long lamp starting cycles and low initial cost
- Multi-voltage technology handles voltage from 120 to 277V
- Light weight, low-profile housing
- Parallel lamp operation means system maintenance is easier to manage

| Dimensions                       |                  |
|----------------------------------|------------------|
| Length (L)                       | 9.5 in (241 mm)  |
| Width (W)                        | 1.7 in (43 mm)   |
| Height (H)                       | 1.2 in (30.5 mm) |
| Mounting Dimensions              |                  |
| Mount Length (M)                 | 8.9 in (226 mm)  |
| Mount Width (X or F)             | 1.1 in (28 mm)   |
| Mount Slots (MS)                 | 0.3 in (8 mm)    |
| Weight                           | 2.40 lbs         |
| Exit Type                        | Side             |
| Remote Mounting Distance to Lamp | 18 ft            |
| Remote Mounting Wire Gauge       | 18 AWG           |
| Lead Lengths                     |                  |
|                                  | Length (± 1 in)  |
| Black                            | 25 in (635 mm)   |
| White                            | 25 in (635 mm)   |
| Red                              | 59 in (1499 mm)  |
| Blue                             | 67 in (1702 mm)  |

| Specifications and lamp wattage |            |                |                  |                       |                       |                         |                     |                   |           |                           |
|---------------------------------|------------|----------------|------------------|-----------------------|-----------------------|-------------------------|---------------------|-------------------|-----------|---------------------------|
| Lamp                            | # of Lamps | Line Volts (V) | System Watts (W) | Nom. Line Current (A) | System Ballast Factor | Ballast Efficacy Factor | Power Factor % (>=) | Crest Factor (<=) | THD% (<=) | Min Starting Temp (°F/°C) |
| F96T12/WMP                      | 2          | 120            | 107              | 0.94                  | .88                   | .82                     | 99                  | 1.7               | 8         | 60/16                     |
|                                 | 2          | 277            | 106              | 0.40                  | .88                   | .83                     | 96                  | 1.7               | 10        | 60/16                     |
|                                 | 1          | 120            | 68               | 0.60                  | 1.00                  | 1.47                    | 99                  | 1.7               | 10        | 60/16                     |
|                                 | 1          | 277            | 68               | 0.27                  | 1.00                  | 1.47                    | 95                  | 1.7               | 12        | 60/16                     |
| F96T12/WM                       | 2          | 120            | 112              | 0.98                  | .90                   | .80                     | 99                  | 1.7               | 8         | 60/16                     |
|                                 | 2          | 277            | 110              | 0.42                  | .90                   | .82                     | 97                  | 1.7               | 10        | 60/16                     |
|                                 | 1          | 120            | 72               | 0.63                  | 1.00                  | 1.39                    | 99                  | 1.7               | 10        | 60/16                     |
|                                 | 1          | 277            | 71               | 0.28                  | 1.00                  | 1.41                    | 95                  | 1.7               | 12        | 60/16                     |
| F96T12                          | 2          | 120            | 141              | 1.24                  | .90                   | .64                     | 99                  | 1.7               | 8         | 0/-18                     |
|                                 | 2          | 277            | 138              | 0.53                  | .90                   | .65                     | 98                  | 1.7               | 10        | 0/-18                     |
|                                 | 1          | 120            | 90               | 0.79                  | 1.02                  | 1.13                    | 99                  | 1.7               | 10        | 0/-18                     |
|                                 | 1          | 277            | 89               | 0.34                  | 1.02                  | 1.15                    | 96                  | 1.7               | 12        | 0/-18                     |
| F84T12                          | 2          | 120            | 125              | 1.10                  | .90                   | .72                     | 99                  | 1.7               | 8         | 0/-18                     |
|                                 | 2          | 277            | 123              | 0.47                  | .90                   | .73                     | 97                  | 1.7               | 10        | 0/-18                     |
|                                 | 1          | 120            | 80               | 0.70                  | 1.04                  | 1.30                    | 99                  | 1.7               | 10        | 0/-18                     |
|                                 | 1          | 277            | 79               | 0.30                  | 1.04                  | 1.32                    | 96                  | 1.7               | 12        | 0/-18                     |
| F72T12                          | 2          | 120            | 107              | 0.94                  | .90                   | .84                     | 99                  | 1.7               | 8         | 0/-18                     |
|                                 | 2          | 277            | 106              | 0.40                  | .90                   | .85                     | 97                  | 1.7               | 10        | 0/-18                     |
|                                 | 1          | 120            | 69               | 0.60                  | 1.08                  | 1.51                    | 99                  | 1.7               | 10        | 0/-18                     |
|                                 | 1          | 277            | 69               | 0.27                  | 1.08                  | 1.51                    | 95                  | 1.7               | 12        | 0/-18                     |
| F64T12                          | 2          | 120            | 97               | 0.86                  | .90                   | .93                     | 99                  | 1.7               | 8         | 0/-18                     |
|                                 | 2          | 277            | 96               | 0.37                  | .90                   | .94                     | 97                  | 1.7               | 10        | 0/-18                     |
|                                 | 1          | 120            | 63               | 0.55                  | 1.08                  | 1.71                    | 99                  | 1.7               | 10        | 0/-18                     |
|                                 | 1          | 277            | 63               | 0.25                  | 1.08                  | 1.71                    | 95                  | 1.7               | 12        | 0/-18                     |
| F60T12                          | 2          | 120            | 92               | 0.81                  | .90                   | .98                     | 99                  | 1.7               | 8         | 0/-18                     |
|                                 | 2          | 277            | 91               | 0.35                  | .90                   | .99                     | 96                  | 1.7               | 10        | 0/-18                     |
|                                 | 1          | 120            | 60               | 0.53                  | 1.08                  | 1.80                    | 99                  | 1.7               | 10        | 0/-18                     |
|                                 | 1          | 277            | 60               | 0.28                  | 1.08                  | 1.80                    | 94                  | 1.7               | 12        | 0/-18                     |
| F48T12                          | 2          | 120            | 73               | 0.65                  | .90                   | 1.23                    | 99                  | 1.7               | 8         | 0/-18                     |
|                                 | 2          | 277            | 73               | 0.29                  | .90                   | 1.23                    | 95                  | 1.7               | 10        | 0/-18                     |
|                                 | 1          | 120            | 49               | 0.43                  | 1.10                  | 2.24                    | 99                  | 1.7               | 10        | 0/-18                     |
|                                 | 1          | 277            | 48               | 0.20                  | 1.10                  | 2.29                    | 89                  | 1.7               | 12        | 0/-18                     |

Safety and Performance



FCC – CLASS A Non-Consumer



cUL Listed



UL Listed

# Linear Fluorescent Ballasts



## 35727 – GE296HO-MVPS-N

ProLine® T12 High Output

T12 Multivolt 120V – 277V

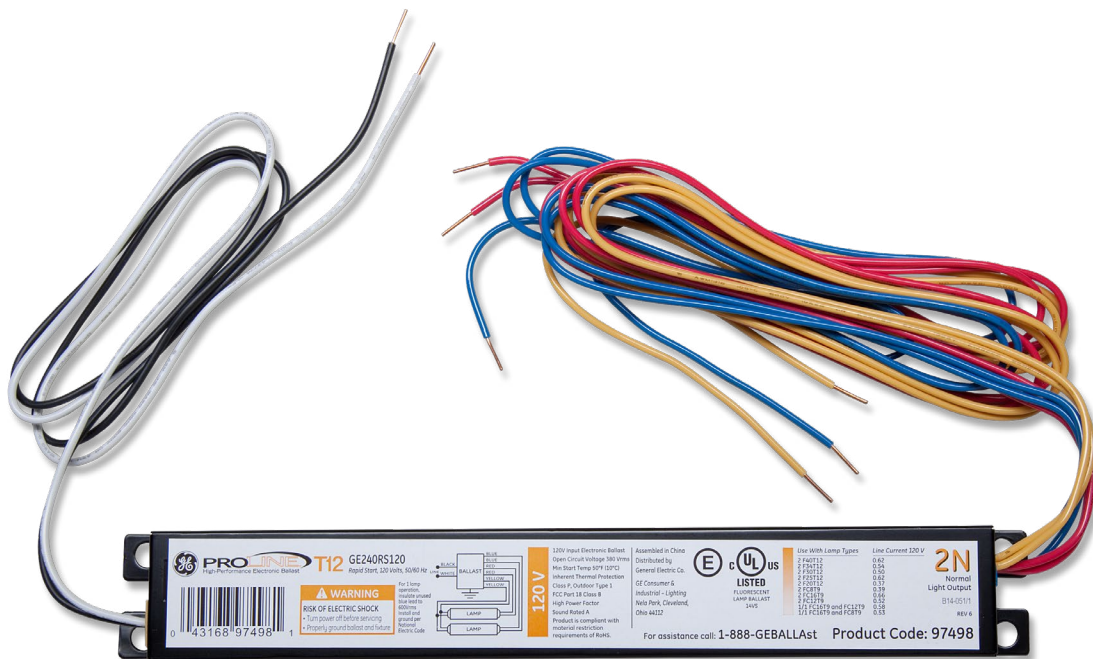
2 or 1 – F96T12 HO RS 120 to 277 Multivolt ProLine®

| General Characteristics      |                                      |
|------------------------------|--------------------------------------|
| Ballast Type                 | Electronic – Programmed/ Rapid Start |
| Starting Method              | Rapid Start                          |
| Lamp Wiring                  | Series                               |
| Line Voltage Regulation(+/-) | 10%                                  |
| Ambient Temperature (MAX)    | 105°F (41°C)                         |
| Case Temperature (MAX)       | 75°C (167°F)                         |
| Ballast Factor               | Normal                               |
| Power Factor Correction      | Active                               |
| Sound Rating                 | A (20-24 decibels)                   |
| Additional Info              | Auto-restart, Thermally protected    |

| Electrical Characteristics |            |
|----------------------------|------------|
| Supply Current Frequency   | 50Hz/60 Hz |

| Dimensions           |                   |
|----------------------|-------------------|
| Length (L)           | 11.75 in (299 mm) |
| Width (W)            | 2.15 in (55 mm)   |
| Height (H)           | 1.61 in (41 mm)   |
| Mounting Dimensions  |                   |
| Mount Length (M)     | 11.0 in (279 mm)  |
| Mount Width (X or F) | 2.15 in (55 mm)   |
| Mount Slots (MS)     |                   |
| Weight               |                   |
| Exit Type            | Side              |

| Specifications by lamp and wattage |            |                |                  |                       |                       |                         |                     |                   |           |                           |
|------------------------------------|------------|----------------|------------------|-----------------------|-----------------------|-------------------------|---------------------|-------------------|-----------|---------------------------|
| Lamp                               | # of Lamps | Line Volts (V) | System Watts (W) | Nom. Line Current (A) | System Ballast Factor | Ballast Efficacy Factor | Power Factor % (>=) | Crest Factor (<=) | THD% (<=) | Min Starting Temp (°F/°C) |
| F96T12/HO/WM                       | 2          | 120            | 164              | 1.38                  | .90                   | .55                     | 99                  | 1.7               | 10        | 60/16                     |
|                                    | 2          | 277            | 164              | 0.62                  | .90                   | .55                     | 99                  | 1.7               | 10        | 60/16                     |
| F96T12/HO                          | 2          | 120            | 196              | 1.65                  | .90                   | .47                     | 99                  | 1.7               | 10        | -20/-29                   |
|                                    | 2          | 277            | 196              | 0.73                  | .90                   | .46                     | 97                  | 1.7               | 10        | -20/-29                   |
|                                    | 1          | 120            | 104              | 0.88                  | .92                   | .88                     | 99                  | 1.7               | 15        | -20/-29                   |
|                                    | 1          | 277            | 104              | 0.42                  | .92                   | .88                     | 95                  | 1.7               | 15        | -20/-29                   |
| F72T12/HO                          | 2          | 120            | 154              | 1.30                  | .90                   | .58                     | 99                  | 1.7               | 10        | -20/-29                   |
|                                    | 2          | 277            | 154              | 0.57                  | .90                   | .58                     | 96                  | 1.7               | 10        | -20/-29                   |
| F70T8                              | 2          | 120            | 120              | 1.17                  | .90                   | .75                     | 99                  | 1.7               | 10        | -20/-29                   |
|                                    | 2          | 277            | 119              | 0.52                  | .90                   | .76                     | 97                  | 1.7               | 10        | -20/-29                   |
| F60T12/HO                          | 2          | 120            | 132              | 0.50                  | .90                   | .68                     | 96                  | 1.7               | 10        | -20/-29                   |
|                                    | 2          | 277            | 132              | 0.50                  | .90                   | .68                     | 96                  | 1.7               | 10        | -20/-29                   |
| F48T12/HO                          | 2          | 120            | 112              | 0.95                  | .90                   | .80                     | 99                  | 1.7               | 15        | -20/-29                   |
|                                    | 2          | 277            | 113              | 0.43                  | .90                   | .80                     | 95                  | 1.7               | 15        | -20/-29                   |



## Safety and Performance

cUL Listed UL Listed FCC Part 18 (Class A) Non Consumer

# Compact Fluorescent Ballasts



## Understanding Compact Fluorescent Ballasts

Compact fluorescent (CFL) ballasts provide energy saving alternatives to halogen, incandescent or HID light sources. Multi volt ProLine® CFL programmed start ballasts combine universal voltage (108-305V) technology with multi-lamp capability, dual entry color-coded connectors and ultra system reliability to create an industry leading CFL solution for commercial and residential applications.

UltraMax® and UltraStart® High Lumen Biax® ballasts with the High Lumen WattMiser® Biax® lamp provides the perfect solution for high efficiency and high lumen output in a small space.

### UltraMax® Instant Start Ballasts:

- For use in long burn cycles (>10 hr cycles) to maintain lamp life
- High efficiency (>90%) design
- Universal voltage (120-277V)
- Striation control circuitry
- Small compact housing

### UltraStart® Programmed Start Ballasts:

- For use in shorter burn cycles (<3 hr cycles) to extend lamp life
- High efficiency (>90%) cathode cutout design
- Universal voltage (120-277V)
- Striation control circuitry
- Small compact housing
- Parallel lamp operation
- <700ms fast starting time
- Ballasts available for both F40/30W and F40/25W lamps

### Multivolt ProLine®

Multivolt ProLine® CFL ballasts are offered in 3W configuration: 3-way mounting kits that allow you to have all three mounting options with one kit.

Multivolt ProLine® CFL ballasts come with a five-year ballast and one-year lamp limited warranty. These ballasts have a Consumer Class B EMI rating for residential applications, as well as a high power factor ballast design.

Use the Multivolt ProLine® CFL Multi-Lamp compatibility chart (page 17-3) to find the right ballast for your need.

### ProLine® CFL Date Code System

Date Code Format: 01 200801 = Week2008 = Year

UltraMax® and UltraStart® Biax® ballasts have the same date code system as all linear fluorescent ballasts.



# Compact Fluorescent Ballasts



## 63089 – GEC213-MVPS-3W

### ProLine® CFL Electronic Ballasts

2 or 1 – CFQ13W/G24q 120-277V ProLine® PS

- For 13 – 18W T4 CFL Lamps
- Multi-voltage technology means a single ballast handles voltage from 108V to 305V
- Programmed starting for extended lamp life
- End-of-Lamp-Life protection
- Color coded poke-in connectors simplifies wiring

| General Characteristics      |                                                                      |
|------------------------------|----------------------------------------------------------------------|
| Ballast Type                 | Electronic – Program/ Rapid Start                                    |
| Starting Method              | Programmed Start                                                     |
| Lamp Wiring                  | Series                                                               |
| Line Voltage Regulation(+/-) | 10%                                                                  |
| Ambient Temperature (MAX)    | 104°F (40°C)                                                         |
| Case Temperature (MAX)       | 70°C (158°F)                                                         |
| Ballast Factor               | Normal                                                               |
| Power Factor Correction      | Active                                                               |
| Sound Rating                 | A (20-24 decibels)                                                   |
| Additional Info              | End-of-Life Protection (EOL), Thermally protected, Universal voltage |
| Electrical Characteristics   |                                                                      |
| Supply Current Frequency     | 50Hz/60 Hz                                                           |

| Dimensions                       |                             |                  |                 |
|----------------------------------|-----------------------------|------------------|-----------------|
| Physical Parameters              | 3W                          | BES              | SE              |
| Length (L)                       | 5.0 in (127 mm)             | 4.26 in (107 mm) | 5.0 in (127 mm) |
| Width (W)                        | 2.4 in (61 mm)              | 2.4 in (61 mm)   | 2.4 in (61 mm)  |
| Height (H)                       | 1.0 in (25 mm)              | 1.0 in (25 mm)   | 1.0 in (25 mm)  |
| Mounting Dimensions              |                             |                  |                 |
| Bracket Length (BL)              |                             |                  |                 |
| Mount Length (M)                 | 4.63 in (118 mm)            |                  |                 |
| Mount Width (X or F)             | 2.4 in (61 mm)              |                  |                 |
| Mount Slots (MS)                 |                             |                  |                 |
| Weight                           | 0.381 lbs                   | 0.423 lbs        | 0.395 lbs       |
| Exit Type                        | Dual Entry (SE/BE, BES, 3W) |                  |                 |
| Remote Mounting Distance to Lamp | 20ft                        |                  |                 |
| Remote Mounting Wire Gauge       | 18 AWG                      |                  |                 |

| Specifications by lamp and wattage |            |                |                  |                       |                       |                         |                     |                   |           |                           |
|------------------------------------|------------|----------------|------------------|-----------------------|-----------------------|-------------------------|---------------------|-------------------|-----------|---------------------------|
| Lamp                               | # of Lamps | Line Volts (V) | System Watts (W) | Nom. Line Current (A) | System Ballast Factor | Ballast Efficacy Factor | Power Factor % (>=) | Crest Factor (<=) | THD% (<=) | Min Starting Temp (°F/°C) |
| CFQ13W/G24q                        | 2          | 120            | 32               | 0.26                  | 1.04                  | 3.30                    | 99                  | 1.7               | 10        | -20/-29                   |
|                                    | 2          | 277            | 32               | 0.12                  | 1.04                  | 3.30                    | 96                  | 1.7               | 10        | -20/-29                   |
|                                    | 1          | 120            | 15               | 0.19                  | 1.09                  | 7.30                    | 99                  | 1.7               | 10        | -20/-29                   |
|                                    | 1          | 277            | 15               | 0.06                  | 1.09                  | 7.30                    | 89                  | 1.7               | 18        | -20/-29                   |
| CFTR13W/GX24q                      | 2          | 120            | 32               | 0.27                  | 1.07                  | 3.30                    | 99                  | 1.7               | 10        | -20/-29                   |
|                                    | 2          | 277            | 32               | 0.12                  | 1.07                  | 3.30                    | 96                  | 1.7               | 10        | -20/-29                   |
|                                    | 1          | 120            | 16               | 0.13                  | 1.10                  | 6.90                    | 99                  | 1.7               | 10        | -20/-29                   |
|                                    | 1          | 277            | 16               | 0.07                  | 1.10                  | 6.90                    | 88                  | 1.7               | 18        | -20/-29                   |
| CFS10W/GR10q                       | 2          | 120            | 26               | 0.22                  | 1.06                  | 4.10                    | 99                  | 1.7               | 10        | -20/-29                   |
|                                    | 2          | 277            | 25               | 0.10                  | 1.06                  | 4.20                    | 94                  | 1.7               | 11        | -20/-29                   |
|                                    | 1          | 120            | 13               | 0.10                  | 1.09                  | 8.40                    | 99                  | 1.7               | 10        | -20/-29                   |
|                                    | 1          | 277            | 13               | 0.07                  | 1.09                  | 8.40                    | 84                  | 1.7               | 21        | -20/-29                   |
| CFQ18W/G24q                        | 1          | 120            | 19               | 0.16                  | .99                   | 5.20                    | 99                  | 1.7               | 10        | -20/-29                   |
|                                    | 1          | 277            | 19               | 0.07                  | .99                   | 5.20                    | 89                  | 1.7               | 16        | -20/-29                   |
| CFTR18W/GX24q                      | 1          | 120            | 19               | 0.16                  | .96                   | 5.10                    | 99                  | 1.7               | 10        | -20/-29                   |
|                                    | 1          | 277            | 19               | 0.08                  | .96                   | 5.10                    | 88                  | 1.7               | 15        | -20/-29                   |
| CFS16W/GR10q                       | 1          | 120            | 17               | 0.14                  | 1.00                  | 5.90                    | 99                  | 1.7               | 10        | -20/-29                   |
|                                    | 1          | 277            | 17               | 0.07                  | 1.00                  | 5.90                    | 90                  | 1.7               | 16        | -20/-29                   |

## Safety and Performance

FCC Part 18 Class B



UL Class P



UL Type 1 Outdoor

No PCB's

ANSI Standard C82.11-Cons 2002

ANSI Standard C62.41-1991



# Compact Fluorescent Ballasts



## 63093 – GEC218-MVPS-3W

### ProLine® CFL Electronic Ballasts

2 or 1 – CFQ18W/G24q 120-277V ProLine® PS

- For 16 – 28W T4 CFL Lamps
- Multi-voltage technology means a single ballast handles voltage from 108V to 305V
- Programmed starting for extended lamp life
- End-of-Lamp-Life protection
- Color coded poke-in connectors simplifies wiring

| General Characteristics      |                                                                      |
|------------------------------|----------------------------------------------------------------------|
| Ballast Type                 | Electronic – Program/ Rapid Start                                    |
| Starting Method              | Programmed Start                                                     |
| Lamp Wiring                  | Series                                                               |
| Line Voltage Regulation(+/-) | 10%                                                                  |
| Ambient Temperature (MAX)    | 104°F (40°C)                                                         |
| Case Temperature (MAX)       | 70°C (158°F)                                                         |
| Ballast Factor               | Normal                                                               |
| Power Factor Correction      | Active                                                               |
| Sound Rating                 | A (20-24 decibels)                                                   |
| Additional Info              | End-of-Life Protection (EOL), Thermally protected, Universal voltage |

| Electrical Characteristics |            |
|----------------------------|------------|
| Supply Current Frequency   | 50Hz/60 Hz |

| Dimensions                       |                             |                  |                 |
|----------------------------------|-----------------------------|------------------|-----------------|
| Physical Parameters              | 3W                          | BES              | SE              |
| Length (L)                       | 5.0 in (127 mm)             | 4.26 in (107 mm) | 5.0 in (127 mm) |
| Width (W)                        | 2.4 in (61 mm)              | 2.4 in (61 mm)   | 2.4 in (61 mm)  |
| Height (H)                       | 1.0 in (25 mm)              | 1.0 in (25 mm)   | 1.0 in (25 mm)  |
| Mounting Dimensions              |                             |                  |                 |
| Bracket Length (BL)              |                             |                  |                 |
| Mount Length (M)                 | 4.63 in (118 mm)            |                  |                 |
| Mount Width (X or F)             | 2.4 in (61 mm)              |                  |                 |
| Mount Slots (MS)                 |                             |                  |                 |
| Weight                           | 0.412 lbs                   | 0.454 lbs        | 0.426 lbs       |
| Exit Type                        | Dual Entry (SE/BE, BES, 3W) |                  |                 |
| Remote Mounting Distance to Lamp | 20 ft                       |                  |                 |
| Remote Mounting Wire Gauge       | 18 AWG                      |                  |                 |

#### Specifications by lamp and wattage

| Lamp          | # of Lamps | Line Volts (V) | System Watts (W) | Nom. Line Current (A) | System Ballast Factor | Ballast Efficacy Factor | Power Factor % (>=) | Crest Factor (<=) | THD% (<=) | Min Starting Temp (°F/°C) |
|---------------|------------|----------------|------------------|-----------------------|-----------------------|-------------------------|---------------------|-------------------|-----------|---------------------------|
| CFQ18W/G24q   | 2          | 120            | 43               | 0.35                  | 1.05                  | 2.40                    | 99                  | 1.7               | 10        | -20/-29                   |
|               | 2          | 277            | 42               | 0.15                  | 1.05                  | 2.50                    | 96                  | 1.7               | 10        | -20/-29                   |
|               | 1          | 120            | 21               | 0.17                  | 1.08                  | 5.10                    | 99                  | 1.7               | 10        | -20/-29                   |
|               | 1          | 277            | 21               | 0.08                  | 1.08                  | 5.10                    | 88                  | 1.7               | 15        | -20/-29                   |
| CFTR18W/GX24q | 2          | 120            | 44               | 0.37                  | 1.04                  | 2.40                    | 99                  | 1.7               | 10        | -20/-29                   |
|               | 2          | 277            | 43               | 0.16                  | 1.04                  | 2.40                    | 96                  | 1.7               | 10        | -20/-29                   |
|               | 1          | 120            | 22               | 0.19                  | 1.07                  | 4.90                    | 99                  | 1.7               | 10        | -20/-29                   |
|               | 1          | 277            | 22               | 0.08                  | 1.07                  | 4.90                    | 87                  | 1.7               | 14        | -20/-29                   |
| CFS21W/GR10q  | 2          | 120            | 45               | 0.38                  | .86                   | 1.90                    | 99                  | 1.7               | 10        | -20/-29                   |
|               | 2          | 277            | 44               | 0.16                  | .86                   | 2.00                    | 96                  | 1.7               | 10        | -20/-29                   |
|               | 1          | 120            | 22               | 0.19                  | .93                   | 4.20                    | 99                  | 1.7               | 10        | -20/-29                   |
|               | 1          | 277            | 22               | 0.09                  | .93                   | 4.20                    | 88                  | 1.7               | 15        | -20/-29                   |
| CFS16W/GR10q  | 2          | 120            | 39               | 0.32                  | 1.00                  | 2.60                    | 99                  | 1.7               | 10        | -20/-29                   |
|               | 2          | 277            | 38               | 0.14                  | 1.00                  | 2.60                    | 95                  | 1.7               | 10        | -20/-29                   |
| CFQ26W/GX24q  | 1          | 120            | 22               | 0.19                  | .91                   | 4.10                    | 99                  | 1.7               | 10        | -20/-29                   |
|               | 1          | 277            | 22               | 0.09                  | .92                   | 4.20                    | 89                  | 1.7               | 14        | -20/-29                   |
| CFTR26W/GX24q | 1          | 120            | 26               | 0.21                  | .85                   | 3.30                    | 99                  | 1.7               | 10        | -20/-29                   |
|               | 1          | 277            | 26               | 0.10                  | .85                   | 3.30                    | 89                  | 1.7               | 14        | -20/-29                   |
| CFS28W/GR10q  | 1          | 120            | 25               | 0.21                  | .87                   | 3.50                    | 99                  | 1.7               | 10        | -20/-29                   |
|               | 1          | 277            | 25               | 0.10                  | .87                   | 3.50                    | 91                  | 1.7               | 13        | -20/-29                   |

## Safety and Performance

FCC Part 18 Class B



UL Class P



UL Type 1 Outdoor

No PCB's

ANSI Standard C82.11-Cons 2002

ANSI Standard C62.41-1991

# Compact Fluorescent Ballasts



## 63097 – GEC226-MVPS-3W

### ProLine® CFL Electronic Ballasts

2 – CFQ26W, FT24 or 1 – 24W CFTR32 120-277V ProLine® PS

- For 16 – 39W T4 CFL Lamps
- Multi-voltage technology means a single ballast handles voltage from 108V to 305V
- Programmed starting for extended lamp life
- End-of-Lamp-Life protection
- Color coded poke-in connectors simplifies wiring

| General Characteristics      |                                                      |
|------------------------------|------------------------------------------------------|
| Ballast Type                 | Electronic – Program/ Rapid Start                    |
| Starting Method              | Programmed Start                                     |
| Lamp Wiring                  | Series                                               |
| Line Voltage Regulation(+/-) | 10%                                                  |
| Ambient Temperature (MAX)    | 104°F (40°C)                                         |
| Case Temperature (MAX)       | 75°C (167°F)                                         |
| Ballast Factor               | Normal                                               |
| Power Factor Correction      | Active                                               |
| Sound Rating                 | A (20-24 decibels)                                   |
| Additional Info              | Auto restart, Thermally protected, Universal voltage |

| Electrical Characteristics |            |
|----------------------------|------------|
| Supply Current Frequency   | 50Hz/60 Hz |

| Dimensions                       |                             |                  |                 |
|----------------------------------|-----------------------------|------------------|-----------------|
| Physical Parameters              | 3W                          | BES              | SE              |
| Length (L)                       | 5.0 in (127 mm)             | 4.26 in (107 mm) | 5.0 in (127 mm) |
| Width (W)                        | 2.4 in (61 mm)              | 2.4 in (61 mm)   | 2.4 in (61 mm)  |
| Height (H)                       | 1.0 in (25 mm)              | 1.0 in (25 mm)   | 1.0 in (25 mm)  |
| Mounting Dimensions              |                             |                  |                 |
| Bracket Length (BL)              |                             |                  |                 |
| Mount Length (M)                 | 4.63 in (118 mm)            |                  |                 |
| Mount Width (X or F)             | 2.4 in (61 mm)              |                  |                 |
| Mount Slots (MS)                 |                             |                  |                 |
| Weight                           | 0.419 lbs                   | 0.461 lbs        | 0.434 lbs       |
| Exit Type                        | Dual Entry (SE/BE, BES, 3W) |                  |                 |
| Remote Mounting Distance to Lamp | 12 ft                       |                  |                 |
| Remote Mounting Wire Gauge       | 18 AWG                      |                  |                 |

| Specifications by lamp and wattage |            |                |                  |                       |                       |                         |                     |                   |           |                           |
|------------------------------------|------------|----------------|------------------|-----------------------|-----------------------|-------------------------|---------------------|-------------------|-----------|---------------------------|
| Lamp                               | # of Lamps | Line Volts (V) | System Watts (W) | Nom. Line Current (A) | System Ballast Factor | Ballast Efficacy Factor | Power Factor % (>=) | Crest Factor (<=) | THD% (<=) | Min Starting Temp (°F/°C) |
| CFQ26W/G24q                        | 2          | 120            | 56               | 0.47                  | 1.02                  | 1.82                    | 99                  | 1.7               | 10        | -20/-29                   |
|                                    | 2          | 277            | 54               | 0.20                  | 1.02                  | 1.89                    | 97                  | 1.7               | 11        | -20/-29                   |
|                                    | 1          | 120            | 30               | 0.25                  | 1.04                  | 3.47                    | 99                  | 1.7               | 10        | -20/-29                   |
|                                    | 1          | 277            | 30               | 0.12                  | 1.04                  | 3.47                    | 93                  | 1.7               | 13        | -20/-29                   |
| CFTR26W/GX24q                      | 2          | 120            | 64               | 0.53                  | .97                   | 1.52                    | 99                  | 1.7               | 10        | -20/-29                   |
|                                    | 2          | 277            | 64               | 0.23                  | .88                   | 1.38                    | 97                  | 1.7               | 12        | -20/-29                   |
|                                    | 1          | 120            | 32               | 0.26                  | 1.01                  | 3.16                    | 99                  | 1.7               | 10        | -20/-29                   |
|                                    | 1          | 277            | 32               | 0.12                  | 1.00                  | 3.16                    | 94                  | 1.7               | 13        | -20/-29                   |
| CFS21W/GR10q                       | 2          | 120            | 56               | 0.47                  | 1.12                  | 2.00                    | 99                  | 1.7               | 10        | -20/-29                   |
|                                    | 2          | 277            | 55               | 0.20                  | 1.11                  | 2.02                    | 96                  | 1.7               | 11        | -20/-29                   |
| CFTR42W/GX24q                      | 1          | 120            | 51               | 0.42                  | .92                   | 1.80                    | 99                  | 1.7               | 10        | -20/-29                   |
|                                    | 1          | 277            | 50               | 0.18                  | .92                   | 1.84                    | 97                  | 1.7               | 12        | -20/-29                   |
| CFTR32W/GX24q                      | 1          | 120            | 39               | 0.33                  | 1.24                  | 3.18                    | 99                  | 1.7               | 10        | -20/-29                   |
|                                    | 1          | 277            | 39               | 0.15                  | 1.23                  | 3.15                    | 95                  | 1.7               | 13        | -20/-29                   |
| FC16T9 40W                         | 1          | 120            | 40               | 0.33                  | .89                   | 2.23                    | 99                  | 1.7               | 10        | -20/-29                   |
|                                    | 1          | 277            | 40               | 0.14                  | .94                   | 2.35                    | 95                  | 1.7               | 13        | -20/-29                   |
| FT24W/2Gt1                         | 1          | 120            | 27               | 0.23                  | 1.04                  | 3.85                    | 99                  | 1.7               | 10        | -20/-29                   |
|                                    | 1          | 277            | 27               | 0.11                  | 1.10                  | 4.07                    | 91                  | 1.7               | 14        | -20/-29                   |
| FT36W/2Gt1                         | 1          | 120            | 35               | 0.29                  | .94                   | 2.69                    | 99                  | 1.7               | 10        | -20/-29                   |
|                                    | 1          | 277            | 35               | 0.13                  | .94                   | 2.69                    | 94                  | 1.7               | 13        | -20/-29                   |
| FT39W/2Gt1                         | 1          | 120            | 33               | 0.27                  | .97                   | 2.94                    | 99                  | 1.7               | 10        | -20/-29                   |
|                                    | 1          | 277            | 33               | 0.12                  | .98                   | 2.97                    | 94                  | 1.7               | 14        | -20/-29                   |

## Safety and Performance

FCC Part 18 Class B UL Class P UL Type 1 Outdoor No PCB's ANSI Standard C82.11-Cons 2002 ANSI Standard C62.41-1991

# Compact Fluorescent Ballasts



## 63100 – GEC242-MVPS-3W

### ProLine® CFL Electronic Ballasts

2 – 42/36/32/28/26/24 watt 120-277V ProLine® PS

- For 24 – 42W T4 CFL Lamps
- Electronic compact fluorescent ballasts for all general fluorescent applications
- Low-profile case

| General Characteristics      |                                                      |
|------------------------------|------------------------------------------------------|
| Ballast Type                 | Electronic – Program/ Rapid Start                    |
| Starting Method              | Programmed Start                                     |
| Lamp Wiring                  | Series                                               |
| Line Voltage Regulation(+/-) | 10%                                                  |
| Ambient Temperature (MAX)    | 122°F (50°C)                                         |
| Case Temperature (MAX)       | 75°C (167°F)                                         |
| Ballast Factor               | Normal                                               |
| Power Factor Correction      | Active                                               |
| Sound Rating                 | A (20-24 decibels)                                   |
| Additional Info              | Auto restart, Thermally protected, Universal voltage |

| Electrical Characteristics |            |
|----------------------------|------------|
| Supply Current Frequency   | 50Hz/60 Hz |

| Dimensions |                 |
|------------|-----------------|
| Length (L) | 5.0 in (127 mm) |
| Width (W)  | 3.0 in (76 mm)  |
| Height (H) | 1.38 in (35 mm) |

| Mounting Dimensions  |                             |
|----------------------|-----------------------------|
| Bracket Length (BL)  | 4.63 in (118 mm)            |
| Mount Length (M)     |                             |
| Mount Width (X or F) |                             |
| Mount Slots (MS)     |                             |
| Weight               | 0.90 lbs                    |
| Exit Type            | Dual Entry (SE/BE, BES, 3W) |

#### Specifications by lamp and wattage

| Lamp                       | # of Lamps | Line Volts (V) | System Watts (W) | Nom. Line Current (A) | System Ballast Factor | Ballast Efficacy Factor | Power Factor % (>=) | Crest Factor (<=) | THD% (<=) | Min Starting Temp (°F/°C) |
|----------------------------|------------|----------------|------------------|-----------------------|-----------------------|-------------------------|---------------------|-------------------|-----------|---------------------------|
| CFTR42W/GX24q              | 2          | 120            | 94               | 0.77                  | 1.00                  | 1.14                    | 99                  | 1.7               | 10        | 0/-18                     |
|                            | 2          | 277            | 93               | 0.38                  | 1.00                  | 1.08                    | 98                  | 1.7               | 10        | 0/-18                     |
|                            | 1          | 120            | 47               | 0.40                  | 1.00                  | 2.13                    | 99                  | 1.7               | 10        | 0/-18                     |
|                            | 1          | 277            | 47               | 0.18                  | 1.00                  | 2.13                    | 96                  | 1.7               | 10        | 0/-18                     |
| CFTR32W/GX24q              | 2          | 120            | 63               | 0.53                  | .95                   | 1.51                    | 99                  | 1.7               | 10        | 0/-18                     |
|                            | 2          | 277            | 63               | 0.23                  | .95                   | 1.51                    | 98                  | 1.7               | 12        | 0/-18                     |
|                            | 1          | 120            | 42               | 0.35                  | .96                   | 2.29                    | 99                  | 1.7               | 10        | 0/-18                     |
|                            | 1          | 277            | 42               | 0.13                  | .96                   | 2.29                    | 96                  | 1.7               | 12        | 0/-18                     |
| CFQ26W/G24q, CFTR26W/GX24q | 2          | 120            | 54               | 0.45                  | .90                   | 1.67                    | 99                  | 1.7               | 10        | 0/-18                     |
|                            | 2          | 277            | 54               | 0.21                  | .90                   | 1.67                    | 97                  | 1.7               | 12        | 0/-18                     |
|                            | 1          | 120            | 32               | 0.27                  | 1.00                  | 3.12                    | 99                  | 1.7               | 10        | 0/-18                     |
|                            | 1          | 277            | 32               | 0.13                  | 1.00                  | 3.12                    | 95                  | 1.7               | 12        | 0/-18                     |
| CFM36W/2G10                | 2          | 120            | 63               | 0.52                  | .78                   | 1.25                    | 99                  | 1.7               | 10        | 0/-18                     |
|                            | 2          | 277            | 62               | 0.23                  | .79                   | 1.27                    | 98                  | 1.7               | 10        | 0/-18                     |
|                            | 1          | 120            | 33               | 0.27                  | .80                   | 2.45                    | 99                  | 1.7               | 10        | 0/-18                     |
|                            | 1          | 277            | 33               | 0.13                  | .80                   | 2.44                    | 94                  | 1.7               | 15        | 0/-18                     |
| FT39W/2G11                 | 2          | 120            | 82               | 0.69                  | .95                   | 1.16                    | 99                  | 1.7               | 10        | 0/-18                     |
|                            | 2          | 277            | 82               | 0.30                  | .95                   | 1.16                    | 98                  | 1.7               | 10        | 0/-18                     |
|                            | 1          | 120            | 45               | 0.37                  | 1.00                  | 2.22                    | 99                  | 1.7               | 10        | 0/-18                     |
|                            | 1          | 277            | 45               | 0.17                  | 1.00                  | 2.22                    | 96                  | 1.7               | 12        | 0/-18                     |
| FC12T5 40W                 | 2          | 120            | 70               | 0.59                  | .80                   | 1.13                    | 99                  | 1.7               | 10        | 0/-18                     |
|                            | 2          | 277            | 70               | 0.26                  | .81                   | 1.15                    | 98                  | 1.7               | 10        | 0/-18                     |
|                            | 1          | 120            | 37               | 0.31                  | .84                   | 2.24                    | 99                  | 1.7               | 10        | 0/-18                     |
|                            | 1          | 277            | 37               | 0.14                  | .84                   | 2.24                    | 95                  | 1.7               | 15        | 0/-18                     |
| FC9T5 22W                  | 2          | 120            | 52               | 0.44                  | 1.10                  | 2.11                    | 99                  | 1.7               | 10        | 0/-18                     |
|                            | 2          | 277            | 52               | 0.19                  | 1.10                  | 2.11                    | 97                  | 1.7               | 12        | 0/-18                     |
|                            | 1          | 120            | 28               | 0.23                  | 1.10                  | 3.97                    | 99                  | 1.7               | 10        | 0/-18                     |
|                            | 1          | 277            | 28               | 0.11                  | 1.11                  | 3.92                    | 93                  | 1.7               | 12        | 0/-18                     |
| CFTR57W/GX24q              | 1          | 120            | 58               | 0.49                  | 1.00                  | 1.72                    | 99                  | 1.7               | 10        | 0/-18                     |
|                            | 1          | 277            | 58               | 0.22                  | 1.00                  | 1.72                    | 97                  | 1.7               | 12        | 0/-18                     |
| CFTR70W/GX24q              | 1          | 120            | 73               | 0.61                  | 1.00                  | 1.37                    | 99                  | 1.7               | 10        | 0/-18                     |
|                            | 1          | 277            | 73               | 0.27                  | 1.00                  | 1.37                    | 97                  | 1.7               | 12        | 0/-18                     |
| FT55W/2G11                 | 1          | 120            | 43               | 0.36                  | .71                   | 1.65                    | 99                  | 1.7               | 10        | 0/-18                     |
|                            | 1          | 277            | 44               | 0.16                  | .72                   | 1.66                    | 96                  | 1.7               | 12        | 0/-18                     |

#### Safety and Performance

FCC Part 18 Class B at 120 volts



UL Class P



UL Listed



cUL



## 63100 – GEC242-MVPS-3W (Cont.)

ProLine® CFL Electronic Ballasts

2 – 42/36/32/28/26/24 watt 120-277V ProLine® PS

| Specifications by lamp and wattage |            |                |                  |                       |                       |                         |                     |                   |           |                           |
|------------------------------------|------------|----------------|------------------|-----------------------|-----------------------|-------------------------|---------------------|-------------------|-----------|---------------------------|
| Lamp                               | # of Lamps | Line Volts (V) | System Watts (W) | Nom. Line Current (A) | System Ballast Factor | Ballast Efficacy Factor | Power Factor % (>=) | Crest Factor (<=) | THD% (<=) | Min Starting Temp (°F/°C) |
| FT40W/2G11                         | 2          | 120            | 82               | 0.69                  | .95                   | 1.16                    | 99                  | 1.7               | 10        | 0/-18                     |
|                                    | 2          | 277            | 82               | 0.30                  | .95                   | 1.16                    | 98                  | 1.7               | 10        | 0/-18                     |
|                                    | 1          | 120            | 45               | 0.37                  | 1.00                  | 2.22                    | 99                  | 1.7               | 10        | 0/-18                     |
|                                    | 1          | 277            | 45               | 0.17                  | 1.00                  | 2.22                    | 96                  | 1.7               | 12        | 0/-18                     |
| FT36W/2G11                         | 2          | 120            | 63               | 0.52                  | .78                   | 1.25                    | 99                  | 1.7               | 10        | 0/-18                     |
|                                    | 2          | 277            | 62               | 0.23                  | .79                   | 1.27                    | 98                  | 1.7               | 10        | 0/-18                     |
|                                    | 1          | 120            | 33               | 0.27                  | .80                   | 2.45                    | 99                  | 1.7               | 10        | 0/-18                     |
|                                    | 1          | 277            | 33               | 0.13                  | .80                   | 2.44                    | 94                  | 1.7               | 15        | 0/-18                     |
| FT24W/2G11                         | 2          | 120            | 54               | 0.45                  | 1.00                  | 1.85                    | 99                  | 1.7               | 10        | 0/-18                     |
|                                    | 2          | 277            | 54               | 0.20                  | 1.00                  | 1.85                    | 97                  | 1.7               | 12        | 0/-18                     |
|                                    | 1          | 120            | 26               | 0.22                  | .92                   | 3.56                    | 99                  | 1.7               | 10        | 0/-18                     |
|                                    | 1          | 277            | 27               | 0.10                  | .92                   | 3.48                    | 92                  | 1.7               | 15        | 0/-18                     |
| CFS28W/GR10q                       | 2          | 120            | 60               | 0.50                  | .95                   | 1.60                    | 99                  | 1.7               | 10        | 0/-18                     |
|                                    | 2          | 277            | 60               | 0.22                  | .97                   | 1.62                    | 98                  | 1.7               | 10        | 0/-18                     |
|                                    | 1          | 120            | 34               | 0.29                  | 1.00                  | 2.94                    | 99                  | 1.7               | 10        | 0/-18                     |
|                                    | 1          | 277            | 34               | 0.14                  | 1.00                  | 2.94                    | 93                  | 1.7               | 15        | 0/-18                     |
| FC9T5+FC12T5                       | 1+1        | 120            | 67               | 0.55                  | .90                   | 1.34                    | 99                  | 1.7               | 10        | 0/-18                     |
|                                    | 1+1        | 277            | 67               | 0.25                  | .90                   | 1.34                    | 98                  | 1.7               | 10        | 0/-18                     |
| CFS55W/GRY10q-3                    | 1          | 120            | 33               | 0.28                  | .49                   | 1.48                    | 99                  | 1.7               | 10        | 0/-18                     |
|                                    | 1          | 277            | 32               | 0.13                  | .49                   | 1.53                    | 94                  | 1.7               | 10        | 0/-18                     |



# Compact Fluorescent Ballasts



## 71435 – GEC240MAX-A

### High-Lumen Biax® UltraMax® Instant Start

2 or 1 – FT40W-25W/2G11 Biax - 120-277V UltraMax® Instant Start

- Electronic compact fluorescent ballasts for all general fluorescent applications
- Low-profile case
- Multi-Voltage technology handles voltage from 120 to 277V
- Energy saving, high efficiency instant start electronic ballast (> 90%)
- Instant start electronic ballast for long lamp starting cycles and low initial cost
- Anti-Striation Control for better light quality, with no striations
- Lamp End-of-Life Safety Shutdown Circuit with Re-Lamping Auto-reset

| General Characteristics      |                                                   |
|------------------------------|---------------------------------------------------|
| Ballast Type                 | Electronic – High Efficiency Instant Start        |
| Starting Method              | Instant Start                                     |
| Lamp Wiring                  | Parallel                                          |
| Line Voltage Regulation(+/-) | 10%                                               |
| Ambient Temperature (MAX)    | 105°F (41°C)                                      |
| Case Temperature (MAX)       | 70°C (158°F)                                      |
| Ballast Factor               | Normal                                            |
| Power Factor Correction      | Active                                            |
| Sound Rating                 | A (20-24 decibels)                                |
| Additional Info              | End-of-Life Protection (EOL), Thermally protected |

| Electrical Characteristics |            |
|----------------------------|------------|
| Supply Current Frequency   | 50Hz/60 Hz |

| Dimensions |                 |
|------------|-----------------|
| Length (L) | 9.5 in (241 mm) |
| Width (W)  | 1.7 in (43 mm)  |
| Height (H) | 1.18 in (30 mm) |

| Mounting Dimensions              |                 |
|----------------------------------|-----------------|
| Mount Length (M)                 | 8.9 in (226 mm) |
| Mount Width (X or F)             | 1.18 in (30 mm) |
| Mount Slots (MS)                 | 0.3 in (8 mm)   |
| Weight                           | 1.40 lbs        |
| Exit Type                        | Side            |
| Remote Mounting Distance to Lamp | 12 ft           |
| Remote Mounting Wire Gauge       | 18 AWG          |

| Lead Lengths | Length (± 1 in) |
|--------------|-----------------|
| Blue         | 31 in (787 mm)  |
| Red          | 31 in (787 mm)  |
| White        | 25 in (635 mm)  |
| Black        | 25 in (635 mm)  |

| Specifications by lamp and wattage |            |                |                  |                       |                       |                     |                   |           |                           |
|------------------------------------|------------|----------------|------------------|-----------------------|-----------------------|---------------------|-------------------|-----------|---------------------------|
| Lamp                               | # of Lamps | Line Volts (V) | System Watts (W) | Nom. Line Current (A) | System Ballast Factor | Power Factor % (>=) | Crest Factor (<=) | THD% (<=) | Min Starting Temp (°F/°C) |
| FT40W/4P                           | 2          | 120            | 69               | 0.58                  | .90                   | 99                  | 1.7               | 10        | 0/-18                     |
|                                    | 2          | 277            | 68               | 0.25                  | .90                   | 95                  | 1.7               | 10        | 0/-18                     |
|                                    | 1          | 120            | 42               | 0.35                  | 1.00                  | 99                  | 1.7               | 10        | 0/-18                     |
|                                    | 1          | 277            | 42               | 0.16                  | 1.00                  | 95                  | 1.7               | 15        | 0/-18                     |
| FT40W/28W/4P                       | 2          | 120            | 63               | 0.54                  | 1.00                  | 99                  | 1.7               | 10        | 0/-18                     |
|                                    | 2          | 277            | 62               | 0.23                  | 1.00                  | 95                  | 1.7               | 10        | 0/-18                     |
|                                    | 1          | 120            | 38               | 0.32                  | 1.11                  | 99                  | 1.7               | 10        | 0/-18                     |
|                                    | 1          | 277            | 38               | 0.14                  | 1.11                  | 95                  | 1.7               | 15        | 0/-18                     |
| FT40W/25W/4P                       | 2          | 120            | 58               | 0.50                  | 1.00                  | 99                  | 1.7               | 10        | 0/-18                     |
|                                    | 2          | 277            | 57               | 0.21                  | 1.00                  | 90                  | 1.7               | 10        | 0/-18                     |
|                                    | 1          | 120            | 35               | 0.29                  | 1.15                  | 99                  | 1.7               | 10        | 0/-18                     |
|                                    | 1          | 277            | 35               | 0.13                  | 1.15                  | 95                  | 1.7               | 15        | 0/-18                     |
| F32T8                              | 2          | 120            | 63               | 0.54                  | .94                   | 99                  | 1.7               | 10        | 0/-18                     |
|                                    | 2          | 277            | 62               | 0.23                  | .94                   | 95                  | 1.7               | 10        | 0/-18                     |
|                                    | 1          | 120            | 38               | 0.32                  | 1.08                  | 99                  | 1.7               | 10        | 0/-18                     |
|                                    | 1          | 277            | 38               | 0.14                  | 1.08                  | 95                  | 1.7               | 15        | 0/-18                     |
| F28T5/HE                           | 2          | 120            | 69               | 0.59                  | 1.10                  | 99                  | 1.7               | 10        | 0/-18                     |
|                                    | 2          | 277            | 68               | 0.25                  | 1.10                  | 95                  | 1.7               | 10        | 0/-18                     |
|                                    | 1          | 120            | 41               | 0.35                  | 1.26                  | 99                  | 1.7               | 10        | 0/-18                     |
|                                    | 1          | 277            | 41               | 0.15                  | 1.26                  | 95                  | 1.7               | 15        | 0/-18                     |

## Safety and Performance



UL Type 1 Outdoor



UL Type HL

FCC – CLASS A Non-Consumer



UL Class P



CSA



UL Listed



# Compact Fluorescent Ballasts



## 71436 – GEC340MAX-A

### High-Lumen Biax® UltraMax® Instant Start

3 – FT40W-25W/2G11 Biax – 120-277V UltraMax® Instant Start

- Electronic compact fluorescent ballasts for all general fluorescent applications
- Low-profile case
- Multi-Voltage technology handles voltage from 120 to 277V
- Energy saving, high efficiency instant start electronic ballast (> 90%)
- Instant start electronic ballast for long lamp starting cycles and low initial cost
- Anti-Striation Control for better light quality, with no striations
- Lamp End-of-Life Safety Shutdown Circuit with Re-Lamping Auto-reset

| General Characteristics      |                                                   |
|------------------------------|---------------------------------------------------|
| Ballast Type                 | Electronic – High Efficiency Instant Start        |
| Starting Method              | Instant Start                                     |
| Lamp Wiring                  | Parallel                                          |
| Line Voltage Regulation(+/-) | 10%                                               |
| Ambient Temperature (MAX)    | 105°F (41°C)                                      |
| Case Temperature (MAX)       | 70°C (158°F)                                      |
| Ballast Factor               | Normal                                            |
| Power Factor Correction      | Active                                            |
| Sound Rating                 | A (20-24 decibels)                                |
| Additional Info              | End-of-Life Protection (EOL), Thermally protected |

| Electrical Characteristics |            |
|----------------------------|------------|
| Supply Current Frequency   | 50Hz/60 Hz |

| Dimensions                       |                 |
|----------------------------------|-----------------|
| Length (L)                       | 9.5 in (241 mm) |
| Width (W)                        | 1.7 in (43 mm)  |
| Height (H)                       | 1.18 in (30 mm) |
| Mounting Dimensions              |                 |
| Mount Length (M)                 | 8.9 in (226 mm) |
| Mount Width (X or F)             | 1.18 in (30 mm) |
| Mount Slots (MS)                 | 0.3 in (8 mm)   |
| Weight                           | 1.40 lbs        |
| Exit Type                        | Side            |
| Remote Mounting Distance to Lamp | 12 ft           |
| Remote Mounting Wire Gauge       | 18 AWG          |
| Lead Lengths                     |                 |
|                                  | Length (± 1 in) |
| Blue                             | 31 in (787 mm)  |
| Red                              | 31 in (787 mm)  |
| White                            | 25 in (635 mm)  |
| Black                            | 25 in (635 mm)  |

#### Specifications by lamp and wattage

| Lamp         | # of Lamps | Line Volts (V) | System Watts (W) | Nom. Line Current (A) | System Ballast Factor | Power Factor % (>=) | Crest Factor (<=) | THD% (<=) | Min Starting Temp (°F/°C) |
|--------------|------------|----------------|------------------|-----------------------|-----------------------|---------------------|-------------------|-----------|---------------------------|
| FT40W/4P     | 3          | 120            | 100              | 0.86                  | .90                   | 99                  | 1.7               | 10        | 0/-18                     |
|              | 3          | 277            | 99               | 0.36                  | .90                   | 99                  | 1.7               | 10        | 0/-18                     |
|              | 2          | 120            | 76               | 0.65                  | .98                   | 99                  | 1.7               | 10        | 0/-18                     |
|              | 2          | 277            | 75               | 0.27                  | .98                   | 95                  | 1.7               | 10        | 0/-18                     |
| FT40W/28W/4P | 3          | 120            | 93               | 0.79                  | 1.00                  | 99                  | 1.7               | 10        | 0/-18                     |
|              | 3          | 277            | 91               | 0.33                  | 1.00                  | 95                  | 1.7               | 10        | 0/-18                     |
|              | 2          | 120            | 70               | 0.59                  | 1.07                  | 99                  | 1.7               | 10        | 0/-18                     |
|              | 2          | 277            | 69               | 0.25                  | 1.07                  | 95                  | 1.7               | 10        | 0/-18                     |
| FT40W/25W/4P | 3          | 120            | 85               | 0.73                  | 1.00                  | 99                  | 1.7               | 10        | 0/-18                     |
|              | 3          | 277            | 84               | 0.31                  | 1.00                  | 95                  | 1.7               | 10        | 0/-18                     |
|              | 2          | 120            | 64               | 0.53                  | 1.11                  | 99                  | 1.7               | 10        | 0/-18                     |
|              | 2          | 277            | 63               | 0.23                  | 1.11                  | 95                  | 1.7               | 10        | 0/-18                     |
| F32T8        | 3          | 120            | 92               | 0.78                  | .94                   | 99                  | 1.7               | 10        | 0/-18                     |
|              | 3          | 277            | 90               | 0.33                  | .94                   | 95                  | 1.7               | 10        | 0/-18                     |
|              | 2          | 120            | 69               | 0.59                  | 1.03                  | 99                  | 1.7               | 10        | 0/-18                     |
|              | 2          | 277            | 68               | 0.25                  | 1.03                  | 95                  | 1.7               | 10        | 0/-18                     |
| F28T5/HE     | 3          | 120            | 102              | 0.87                  | 1.10                  | 99                  | 1.7               | 10        | 0/-18                     |
|              | 3          | 277            | 100              | 0.37                  | 1.10                  | 99                  | 1.7               | 10        | 0/-18                     |
|              | 2          | 120            | 76               | 0.66                  | 1.19                  | 99                  | 1.7               | 10        | 0/-18                     |
|              | 2          | 277            | 75               | 0.28                  | 1.19                  | 95                  | 1.7               | 10        | 0/-18                     |

#### Safety and Performance



UL Type 1 Outdoor



UL Type HL

FCC – CLASS A Non-Consumer



UL Class P



CSA



UL Listed

## Understanding Electromagnetic HID Ballasts

Current offers High Intensity Discharge (HID) ballasts for mercury, probe start metal halide, pulse start metal halide and high pressure sodium lamps. Standard metal halide lamps or probe start metal halide over 150 watts, like fluorescent, are electric discharge lamps and require an open circuit voltage of nearly two times the operating voltage to initiate the arc between the two electrodes in the arc tube. High pressure sodium, pulse start metal halide and probe start metal halide lamps 150 watts or less require an igniter to initiate the high voltage to start the lamps. The ballasts provide the starting voltage with the igniter, where required and provides stability for the lamp. HID lamps have negative impedance characteristics and would draw current until destruction unless a ballast was in place to regulate the current.

HID lamps take several minutes to warm-up and reach full light output. If power is interrupted between the lamp and the ballast, the arc will extinguish and lamp will go out. The lamp must cool down and reduce the vapor pressure before it will re-start. Typical warm-up and restrike times are as follows:

### HID Ballast Types

#### *Core and Coil*

The most common HID ballasts are the core and coil and is used in 90% of the fixture applications. Core and coil ballasts consist of one, two or three copper (or aluminum) coils on a core of electrical-grade steel laminations. HID ballasts are classified by the kind of circuit they use: Reactor (R), High Reactance autotransformer (HX), Constant Wattage Autotransformer (CWA), Regulated lag (Reg Lag) or Electronic. HID ballast are also classified as high power factor (HPF) or normal power factor (NPF).

HID ballast 150 watts or less have High Reactance Autotransformer circuits and high power factor (HX-HPF). HID ballast greater than 150 watts have Constant Wattage Auto transformer circuits and are high power factor (HPF).

CWA ballast is the most common circuit for core and coil ballast. CWA circuits provide for stable light regulation. The CWA circuit consists of a high reactance autotransformer with a capacitor in series with the lamp resulting with high power factor ballast. In most CWA ballast circuits a 10% drop in line voltage will only reduce the light output and wattage by 5%. The CWA circuit ballast requires an igniter for QMH pulse start, ceramic metal halide and HPS lamps. Igniters are also required for QMH lamps 150 watts or less.





## 86675 – GEM100MLTLC3D-5

### Metal Halide

1 – 100W MH M90 or M140 Quad (120/208/240/277V)

- For 100W Metal Halide HID Lamps
- Magnetic ballast construction ideal for a wide variety of lighting applications
- Precision-wound coils, ensuring even heat dissipation and the highest electrical integrity
- Distributor replacement kit contains the appropriate core and coil with color coded leads, a properly rated capacitor and igniter (if required) and all other components required for ballast replacement

| General Characteristics      |                          | Dimensions           |                     |
|------------------------------|--------------------------|----------------------|---------------------|
| Ballast Type                 | Magnetic – Core and Coil | Length (L)           | 5.25 in (133 mm)    |
| ANSI Lamp Codes              | M92, M90, M140           | Width (W)            | 1.25 in (32 mm)     |
| Voltage                      | 120/208/240/277          | Mounting Dimensions  |                     |
| Line Voltage Regulation(+/-) | 5%                       | Mount Length (M)     | 4.6 in (117 mm)     |
| Circuit Type                 | HX-HPF                   | Mount Width (X or F) |                     |
| Insulation Class             | 180° C                   | Mount Slots (MS)     | 0.25 in (6 mm)      |
| Type of Capacitor            | Dry Film                 | A                    | 2.0                 |
| Capacitance                  | 12 Mfd GECAP-12/280V-D   | B                    | 3.0                 |
| Voltage (MIN)                | 280                      | Weight               | 5.0 lbs             |
| Capacitor Temperature Rating | 100°C (212°F)            | Exit Type            | Side                |
| GE Igniter (Discontinued)    | MH350-1A                 | Nominal Length       | 2.7 in (69 mm)      |
| Sound Rating                 |                          | Frame Size (H x L)   | 2.813 in x 3.939 in |
| Additional Info              |                          |                      |                     |
| Electrical Characteristics   |                          |                      |                     |
| Supply Current Frequency     | 60 Hz                    |                      |                     |

| Specifications by lamp and line voltage |                                |         |         |         |                   |                                                                                |                            |         |         |         |         |
|-----------------------------------------|--------------------------------|---------|---------|---------|-------------------|--------------------------------------------------------------------------------|----------------------------|---------|---------|---------|---------|
| Lamp                                    | Specifications by line voltage |         |         |         | Lamp              | Specifications by line voltage                                                 |                            |         |         |         |         |
| M92                                     |                                | 120     | 208     | 240     | 277               | M90, M140<br>100W<br>Ceramic<br>Metal Halide<br>100W<br>Quartz<br>Metal Halide |                            | 120     | 208     | 240     | 277     |
|                                         | System Wattage (W)             | 119     | 119     | 119     | 119               |                                                                                | System Wattage (W)         | 119     | 119     | 119     | 119     |
|                                         | Nominal Current                | 1.10A   | 0.60A   | 0.50A   | 0.50A             |                                                                                | Nominal Current            | 1.10A   | 0.60A   | 0.50A   | 0.50A   |
|                                         | Ballast Factor                 | 1       | 1       | 1       | 1                 |                                                                                | Ballast Factor             | 1       | 1       | 1       | 1       |
|                                         | Ballast Efficiency Factor      |         |         |         |                   |                                                                                | Ballast Efficiency Factor  | 0.84    | 0.84    | 0.84    | 0.84    |
|                                         | Max Input Current              | 2.27A   | 1.30A   | 1.13A   | 0.98A             |                                                                                | Max Input Current          | 2.27A   | 1.30A   | 1.13A   | 0.98A   |
|                                         | Starting Current               | 1.26A   | 0.69A   | 0.60A   | 0.53A             |                                                                                | Starting Current           | 1.26A   | 0.69A   | 0.60A   | 0.53A   |
|                                         | Open Circuit Voltage           | 274V    | 274V    | 274V    | 274V              |                                                                                | Open Circuit Voltage       | 274V    | 274V    | 274V    | 274V    |
|                                         | Drop Out Voltage               | 96V     | 166V    | 192V    | 222V              |                                                                                | Drop Out Voltage           | 96V     | 166V    | 192V    | 222V    |
|                                         | Power Factor (>=) %            | 90      | 90      | 90      | 90                |                                                                                | Power Factor (>=) %        | 90      | 90      | 90      | 90      |
|                                         | Min. Starting Temp (°F/°C)     | -22/-30 | -22/-30 | -22/-30 | -22/-30           |                                                                                | Min. Starting Temp (°F/°C) | -22/-30 | -22/-30 | -22/-30 | -22/-30 |
|                                         | Fuse Rating                    | 5       | 4       | 3       | 3                 |                                                                                | Fuse Rating                | 5       | 4       | 3       | 3       |
| UL Bench Top Rise                       | D                              | D       | D       | D       | UL Bench Top Rise | D                                                                              | D                          | D       | D       |         |         |

# Electromagnetic HID Ballasts



## 86718 – GEM150MLTLC3D-5

### Metal Halide

1 – 150W MH M102 or M142 Quad (120/208/240/277V)

| General Characteristics      |                          |
|------------------------------|--------------------------|
| Ballast Type                 | Magnetic – Core and Coil |
| ANSI Lamp Codes              | M142, M102               |
| Voltage                      | 120/208/240/277          |
| Line Voltage Regulation(+/-) | 5%                       |
| Circuit Type                 | HX-HPF                   |
| Insulation Class             | 180° C                   |
| Type of Capacitor            | Dry Film                 |
| Capacitance                  | 16 Mfd GECAP-16/280V-D   |
| Voltage (MIN)                | 300                      |
| Capacitor Temperature Rating | 100°C (212°F)            |
| GE Igniter (Discontinued)    | MH350-1A                 |

| Electrical Characteristics |       |
|----------------------------|-------|
| Supply Current Frequency   | 60 Hz |

| Specifications by lamp and line voltage                                         |                                |         |         |         |         |
|---------------------------------------------------------------------------------|--------------------------------|---------|---------|---------|---------|
| Lamp                                                                            | Specifications by line voltage |         |         |         |         |
|                                                                                 | 120                            | 208     | 240     | 277     |         |
| M142, M102<br>150W<br>Ceramic<br>Metal Halide<br>150W<br>Quartz<br>Metal Halide | System Wattage (W)             | 186     | 186     | 186     | 186     |
|                                                                                 | Nominal Current                | 1.60A   | 1.00A   | 0.80A   | 0.70A   |
|                                                                                 | Ballast Factor                 | 1       | 1       | 1       | 1       |
|                                                                                 | Ballast Efficiency Factor      | 0.81    | 0.81    | 0.81    | 0.81    |
|                                                                                 | Max Input Current              | 3.37A   | 1.95A   | 1.68A   | 1.39A   |
|                                                                                 | Starting Current               | 1.86A   | 1.03A   | 0.89A   | 0.77A   |
|                                                                                 | Open Circuit Voltage           | 257V    | 257V    | 257V    | 257V    |
|                                                                                 | Drop Out Voltage               | 96V     | 166V    | 192V    | 222V    |
|                                                                                 | Power Factor (>=) %            | 90      | 90      | 90      | 90      |
|                                                                                 | Min. Starting Temp (°F/°C)     | -22/-30 | -22/-30 | -22/-30 | -22/-30 |
|                                                                                 | Fuse Rating                    | 10      | 5       | 5       | 4       |
|                                                                                 | UL Bench Top Rise              | A       | B       | A       | A       |

- For 150W Metal Halide HID Lamps
- Magnetic ballast construction ideal for a wide variety of lighting applications
- Precision-wound coils, ensuring even heat dissipation and the highest electrical integrity
- Distributor replacement kit contains the appropriate core and coil with color coded leads, a properly rated capacitor and ignitor (if required) and all other components required for ballast replacement
- Quad ballast (120, 208, 240, 277)

| Dimensions           |                     |
|----------------------|---------------------|
| Length (L)           | 5.25 in (133 mm)    |
| Width (W)            | 1.25 in (32 mm)     |
| Mounting Dimensions  |                     |
| Mount Length (M)     | 4.6 in (117 mm)     |
| Mount Width (X or F) |                     |
| Mount Slots (MS)     | 0.25 in (6 mm)      |
| A                    | 2.3                 |
| B                    | 4.0                 |
| Weight               | 7.0 lbs             |
| Exit Type            | Side                |
| Nominal Length       | 2.7 in (69 mm)      |
| Frame Size (H x L)   | 2.813 in x 3.939 in |

### Safety and Performance

cUL Listed UL Listed

## 63078 – GEM175ML5AA3-5

### Metal Halide

1 – 175W MH M57 or M109 5-Tap (120/208/240/277/480V)

| General Characteristics      |                          |
|------------------------------|--------------------------|
| Ballast Type                 | Magnetic – Core and Coil |
| ANSI Lamp Codes              | M57, H38, M109           |
| Voltage                      | 120/208/240/277/480      |
| Line Voltage Regulation(+/-) | 10%                      |
| Circuit Type                 | CWA                      |
| Insulation Class             | 180° C                   |
| Type of Capacitor            | Oil filled               |
| Capacitance                  | 10 Mfd                   |
| Voltage (MIN)                | 400                      |
| Capacitor Temperature Rating | 100°C (212°F)            |

| Electrical Characteristics |       |
|----------------------------|-------|
| Supply Current Frequency   | 60 Hz |

| Specifications by lamp and line voltage |                                |         |         |         |         |         |
|-----------------------------------------|--------------------------------|---------|---------|---------|---------|---------|
| Lamp                                    | Specifications by line voltage |         |         |         |         |         |
|                                         | 120                            | 208     | 240     | 277     | 480     |         |
| M57, M109                               | System Wattage (W)             | 202     | 202     | 202     | 202     | 202     |
|                                         | Nominal Current                | 1.70A   | 1.00A   | 0.90A   | 0.80A   | 0.40A   |
|                                         | Ballast Factor                 | 1       | 1       | 1       | 1       | 1       |
|                                         | Ballast Efficiency Factor      | 0.87    | 0.87    | 0.87    | 0.87    | 0.87    |
|                                         | Max Input Current              | 1.70A   | 1.00A   | 0.90A   | 0.80A   | 0.40A   |
|                                         | Starting Current               | 0.60A   | 0.37A   | 0.32A   | 0.28A   | 0.21A   |
|                                         | Open Circuit Voltage           | 307V    | 307V    | 307V    | 307V    | 307V    |
|                                         | Drop Out Voltage               | 96V     | 166V    | 192V    | 222V    | 384V    |
|                                         | Power Factor (>=) %            | 90      | 90      | 90      | 90      | 90      |
|                                         | Min. Starting Temp (°F/°C)     | -22/-30 | -22/-30 | -22/-30 | -22/-30 | -22/-30 |
|                                         | Fuse Rating                    | 5       | 3       | 3       | 2       | 1.5     |
|                                         | UL Bench Top Rise              | D       | C       | C       | C       | C       |

| Dimensions           |                     |
|----------------------|---------------------|
| Length (L)           | 5.3 in (133 mm)     |
| Width (W)            | 1.3 in (33 mm)      |
| Mounting Dimensions  |                     |
| Mount Length (M)     | 4.6 in (117 mm)     |
| Mount Width (X or F) |                     |
| Mount Slots (MS)     | 0.3 in (8 mm)       |
| A                    | 3.0                 |
| B                    | 4.0                 |
| Weight               | 8.0 lbs             |
| Exit Type            | Side                |
| Nominal Length       | 3.2 in (83 mm)      |
| Frame Size (H x L)   | 2.813 in x 3.939 in |

- For 175W Metal Halide HID Lamps
- Magnetic ballast construction ideal for a wide variety of lighting applications
- Precision-wound coils, ensuring even heat dissipation and the highest electrical integrity
- 5-tap ballast (120, 208, 240, 277, or 480 volt) featuring a 480-volt tap

### Safety and Performance

cUL Listed UL Listed

## 87211 – GEM250ML5AC3-5

### Metal Halide

1 – 250W MH M58 5-Tap (120/208/240/277/480V)

- For 250W Metal Halide HID Lamps
- Magnetic ballast construction ideal for a wide variety of lighting applications
- Precision-wound coils, ensuring even heat dissipation and the highest electrical integrity
- Distributor replacement kit contains the appropriate core and coil with color coded leads, a properly rated capacitor and ignitor (if required) and all other components required for ballast replacement
- 5-tap ballast (120, 208, 240, 277, or 480 volt) featuring a 480-volt tap

| General Characteristics      |                          | Dimensions           |                     |
|------------------------------|--------------------------|----------------------|---------------------|
| Ballast Type                 | Magnetic – Core and Coil | Length (L)           | 5.25 in (133 mm)    |
| ANSI Lamp Codes              | M58                      | Width (W)            | 1.25 in (32 mm)     |
| Voltage                      | 120/208/240/277/480      | Mounting Dimensions  |                     |
| Line Voltage Regulation(+/-) | 10%                      | Mount Length (M)     | 4.6 in (117 mm)     |
| Circuit Type                 | CWA                      | Mount Width (X or F) |                     |
| Insulation Class             | 180° C                   | Mount Slots (MS)     | 0.25 in (6 mm)      |
| Type of Capacitor            | Oil Filled               | A                    | 3.0                 |
| Capacitance                  | 15 Mfd GECAP-15/400V-O   | B                    | 4.3                 |
| Voltage (MIN)                | 400                      | Weight               | 9.0 lbs             |
| Capacitor Temperature Rating | 100°C (212°F)            | Exit Type            | Side                |
| GE Igniter (Discontinued)    |                          | Nominal Length       | 3.2 in (83 mm)      |
| Sound Rating                 |                          | Frame Size (H x L)   | 2.813 in x 3.939 in |
| Additional Info              |                          | Lead Lengths         |                     |
| Electrical Characteristics   |                          | Orange               |                     |
| Supply Current Frequency     | 60 Hz                    | Violet & Black       |                     |
|                              |                          | Violet/White         |                     |
|                              |                          | Black/Yellow         |                     |

| Specifications by lamp and line voltage |                                |         |         |         |         |         |
|-----------------------------------------|--------------------------------|---------|---------|---------|---------|---------|
| Lamp                                    | Specifications by line voltage |         |         |         |         |         |
|                                         | 120                            | 208     | 240     | 277     | 480     |         |
| M58<br>250W Quartz<br>Metal Halide      | System Wattage (W)             | 280     | 280     | 280     | 280     | 280     |
|                                         | Nominal Current                | 2.50A   | 1.40A   | 1.25A   | 1.10A   | 0.65A   |
|                                         | Ballast Factor                 | 1       | 1       | 1       | 1       | 1       |
|                                         | Ballast Efficiency Factor      | 0.89    | 0.89    | 0.89    | 0.89    | 0.89    |
|                                         | Max Input Current              | 2.60A   | 1.60A   | 1.30A   | 1.20A   | 0.70A   |
|                                         | Starting Current               | 1.50A   | 1.00A   | 0.80A   | 0.70A   | 0.50A   |
|                                         | Open Circuit Voltage           | 290V    | 290V    | 290V    | 290V    | 290V    |
|                                         | Drop Out Voltage               | 96V     | 166V    | 192V    | 222V    | 384V    |
|                                         | Power Factor (>=) %            | 90      | 90      | 90      | 90      | 90      |
|                                         | Min. Starting Temp (°F/°C)     | -22/-30 | -22/-30 | -22/-30 | -22/-30 | -22/-30 |
|                                         | Fuse Rating                    | 8       | 5       | 4       | 3       | 2       |
|                                         | UL Bench Top Rise              | B       | B       | B       | C       | C       |



## 72300 – GEM400ML5AA4-5/2

### Metal Halide

1 – 400W M59 or H33 5-Tap (120/208/240/277/480V) A1 C&C

- For 400W Metal Halide HID Lamps
- Magnetic ballast construction ideal for a wide variety of lighting applications
- Precision-wound coils, ensuring even heat dissipation and the highest electrical integrity
- Distributor replacement kit contains the appropriate core and coil with color coded leads, a properly rated capacitor and ignitor (if required) and all other components required for ballast replacement
- 5-tap ballast (120, 208, 240, 277, or 480 volt) featuring a 480-volt tap

| General Characteristics      |                                  |
|------------------------------|----------------------------------|
| Ballast Type                 | Magnetic – Core and Coil         |
| ANSI Lamp Codes              | M59                              |
| Voltage                      | 120/208/240/277/480              |
| Line Voltage Regulation(+/-) | 10%                              |
| Circuit Type                 | CWA                              |
| Insulation Class             | Class H, 180°C or Class N, 200°C |
| Type of Capacitor            | Oil Filled                       |
| Capacitance                  | 24 Mfd GECAP-24/400V-O           |
| Voltage (Min)                | 450                              |
| Capacitor Temperature Rating | 105°C (221°F)                    |
| GE Igniter (Discontinued)    |                                  |
| Sound Rating                 |                                  |
| Additional Info              |                                  |

| Electrical Characteristics |       |
|----------------------------|-------|
| Supply Current Frequency   | 60 Hz |

| Dimensions           |                   |
|----------------------|-------------------|
| Length (L)           | 5.25 in (133 mm)  |
| Width (W)            | 1.25 in (32 mm)   |
| Mounting Dimensions  |                   |
| Mount Length (M)     | 4.6 in (117 mm)   |
| Mount Width (X or F) |                   |
| Mount Slots (MS)     | 0.25 in (6 mm)    |
| A                    | 2.17              |
| B                    | 3.90              |
| Weight               | 10.8 lbs          |
| Exit Type            | Side              |
| Nominal Length       | 3.7 in (95 mm)    |
| Frame Size (H x L)   | 4.25 in x 4.75 in |
| Lead Lengths         |                   |
| Orange               |                   |
| Violet & Black       |                   |
| Violet/White         |                   |
| Black/Yellow         |                   |

| Specifications by lamp and line voltage                           |                                |         |         |         |         |         |
|-------------------------------------------------------------------|--------------------------------|---------|---------|---------|---------|---------|
| Lamp                                                              | Specifications by line voltage |         |         |         |         |         |
|                                                                   | 120                            | 208     | 240     | 277     | 480     |         |
| M59<br>400W Quartz<br>Metal Halide<br>360W Quartz<br>Metal Halide | System Wattage (W)             | 461     | 461     | 461     | 461     | 461     |
|                                                                   | Nominal Current                | 4.0A    | 2.3A    | 2.0A    | 1.75A   | 1.00A   |
|                                                                   | Ballast Factor                 | 1       | 1       | 1       | 1       | 1       |
|                                                                   | Ballast Efficiency Factor      | 0.86    | 0.86    | 0.86    | 0.86    | 0.86    |
|                                                                   | Max Input Current              | 4.0A    | 2.3A    | 2.0A    | 1.75A   | 1.00A   |
|                                                                   | Starting Current               | 3.90A   | 3.90A   | 3.90A   | 3.90A   | 3.90A   |
|                                                                   | Open Circuit Voltage           | 300V    | 300V    | 300V    | 300V    | 300V    |
|                                                                   | Drop Out Voltage               | 580V    | 580V    | 580V    | 580V    | 580V    |
|                                                                   | Power Factor (>=) %            | 90      | 90      | 90      | 90      | 90      |
|                                                                   | Min. Starting Temp (°F/°C)     | -22/-30 | -22/-30 | -22/-30 | -22/-30 | -22/-30 |
|                                                                   | Fuse Rating                    | 8       | 5       | 4       | 3       | 2       |
|                                                                   | UL Bench Top Rise              | D or A  | D or A  | D or A  | D or A  | D or A  |

## 87213 – GEM1000ML5AA5-5/2

### Metal Halide

1 – 1000W MH M47 5-Tap (120/208/240/277/480V)

- For 1000W Metal Halide HID Lamps
- Magnetic ballast construction ideal for a wide variety of lighting applications
- Precision-wound coils, ensuring even heat dissipation and the highest electrical integrity
- Distributor replacement kit contains the appropriate core and coil with color coded leads, a properly rated capacitor and ignitor (if required) and all other components required for ballast replacement
- 5-tap ballast (120, 208, 240, 277, or 480 volt) featuring a 480-volt tap

| General Characteristics      |                                  | Dimensions           |                   |
|------------------------------|----------------------------------|----------------------|-------------------|
| Ballast Type                 | Magnetic – Core and Coil         | Length (L)           | 7.75 in (197 mm)  |
| ANSI Lamp Codes              | M47                              | Width (W)            | 2.75 in (70 mm)   |
| Voltage                      | 120/208/240/277/480              | Mounting Dimensions  |                   |
| Line Voltage Regulation(+/-) | 10%                              | Mount Length (M)     | 6.1 in (155 mm)   |
| Circuit Type                 | CWA                              | Mount Width (X or F) |                   |
| Insulation Class             | Class H, 180°C or Class N, 200°C | Mount Slots (MS)     | 0.25 in (6 mm)    |
| Type of Capacitor            | Oil Filled                       | A                    | 3.0               |
| Capacitance                  | 24 Mfd GECAP-24/480V-O           | B                    | 5.0               |
| Voltage (MIN)                | 480                              | Weight               | 21.0 lbs          |
| Capacitor Temperature Rating | 105°C (221°F)                    | Exit Type            | Side              |
| GE Igniter (Discontinued)    |                                  | Nominal Length       | 3.7 in (95 mm)    |
| Sound Rating                 |                                  | Frame Size (H x L)   | 4.25 in x 6.00 in |
| Additional Info              |                                  | Lead Lengths         |                   |
| Electrical Characteristics   |                                  | Orange               |                   |
| Supply Current Frequency     | 60 Hz                            | Violet & Black       |                   |
|                              |                                  | Violet/White         |                   |
|                              |                                  | Black/Yellow         |                   |

| Specifications by lamp and line voltage |                                |         |         |         |         |         |
|-----------------------------------------|--------------------------------|---------|---------|---------|---------|---------|
| Lamp                                    | Specifications by line voltage |         |         |         |         |         |
|                                         | 120                            | 208     | 240     | 277     | 480     |         |
| M47<br>1000W Quartz<br>Metal Halide     | System Wattage (W)             | 1,050   | 1,050   | 1,050   | 1,050   | 1,050   |
|                                         | Nominal Current                | 9.00A   | 5.20A   | 4.50A   | 3.90A   | 2.25A   |
|                                         | Ballast Factor                 | 1       | 1       | 1       | 1       | 1       |
|                                         | Ballast Efficiency Factor      | 0.91    | 0.91    | 0.91    | 0.91    | 0.91    |
|                                         | Max Input Current              | 9.00A   | 5.20A   | 4.50A   | 3.90A   | 2.25A   |
|                                         | Starting Current               | 5.60A   | 5.60A   | 5.60A   | 5.60A   | 5.60A   |
|                                         | Open Circuit Voltage           | 415V    | 415V    | 415V    | 415V    | 415V    |
|                                         | Drop Out Voltage               | 96V     | 166V    | 192V    | 222V    | 384V    |
|                                         | Power Factor (>=) %            | 90      | 90      | 90      | 90      | 90      |
|                                         | Min. Starting Temp (°F/°C)     | -22/-30 | -22/-30 | -22/-30 | -22/-30 | -22/-30 |
|                                         | Fuse Rating                    | 18      | 10      | 9       | 7       | 5       |
|                                         | UL Bench Top Rise              | D or A  | D or A  | D or A  | D or A  | D or A  |

# Electromagnetic HID Ballasts



## 86693 – GEM150048TAC5M5-5

### Metal Halide

1 – 1500W MH M48 480

- For 1500W Metal Halide HID Lamps
- Magnetic ballast construction ideal for a wide variety of lighting applications
- Precision-wound coils, ensuring even heat dissipation and the highest electrical integrity
- Distributor replacement kit contains the appropriate core and coil with color coded leads, a properly rated capacitor and ignitor (if required) and all other components required for ballast replacement

| General Characteristics      |                          |
|------------------------------|--------------------------|
| Ballast Type                 | Magnetic – Core and Coil |
| ANSI Lamp Codes              | M48                      |
| Voltage                      | 480                      |
| Line Voltage Regulation(+/-) | 10%                      |
| Circuit Type                 | CWA                      |
| Insulation Class             | 180°C                    |
| Type of Capacitor            | Oil Filled               |
| Capacitance                  | 32 Mfd GECAP-32/525V-O   |
| Voltage (MIN)                | 525                      |
| Capacitor Temperature Rating | 100°C (212°F)            |
| GE Igniter (Discontinued)    |                          |
| Sound Rating                 |                          |
| Additional Info              |                          |
| Electrical Characteristics   |                          |
| Supply Current Frequency     | 60 Hz                    |

| Dimensions           |                   |
|----------------------|-------------------|
| Length (L)           | 7.75 in (197 mm)  |
| Width (W)            | 2.75 in (70 mm)   |
| Mounting Dimensions  |                   |
| Mount Length (M)     | 6.1 in (155 mm)   |
| Mount Width (X or F) |                   |
| Mount Slots (MS)     | 0.25 in (6 mm)    |
| A                    | 4.0               |
| B                    | 6.0               |
| Weight               | 30.0 lbs          |
| Exit Type            | Side              |
| Nominal Length       | 5.2 in (133 mm)   |
| Frame Size (H x L)   | 4.25 in x 6.00 in |

| Specifications by lamp and line voltage |                                |            |
|-----------------------------------------|--------------------------------|------------|
| Lamp                                    | Specifications by line voltage |            |
|                                         |                                | <b>480</b> |
|                                         | System Wattage (W)             | 1,581      |
|                                         | Nominal Current                | 3.10A      |
|                                         | Ballast Factor                 | 1          |
|                                         | Ballast Efficiency Factor      | 0.95       |
| M48                                     | Max Input Current              | 3.10A      |
| 1500W Quartz                            | Starting Current               | 3.18A      |
| Metal Halide                            | Open Circuit Voltage           | 449V       |
|                                         | Drop Out Voltage               | 384V       |
|                                         | Power Factor (>=) %            | 90         |
|                                         | Min. Starting Temp (°F/°C)     | -22/-30    |
|                                         | Fuse Rating                    | 10         |
|                                         | UL Bench Top Rise              | G          |

## Safety and Performance

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## 86698 – GEM1500MLTAC5-5

### Metal Halide

1 – 1500W MH M48 Quad (120/208/240/277V)

- For 1500W Metal Halide HID Lamps
- Magnetic ballast construction ideal for a wide variety of lighting applications
- Precision-wound coils, ensuring even heat dissipation and the highest electrical integrity
- Distributor replacement kit contains the appropriate core and coil with color coded leads, a properly rated capacitor and ignitor (if required) and all other components required for ballast replacement
- Quad ballast (120, 208, 240, 277)

| General Characteristics      |                          |
|------------------------------|--------------------------|
| Ballast Type                 | Magnetic – Core and Coil |
| ANSI Lamp Codes              | M48                      |
| Voltage                      | 240/277                  |
| Line Voltage Regulation(+/-) | 10%                      |
| Circuit Type                 | CWA                      |
| Insulation Class             | 180°C                    |
| Type of Capacitor            | Oil Filled               |
| Capacitance                  | 32 Mfd GECAP-32/525V-O   |
| Voltage (MIN)                | 525                      |
| Capacitor Temperature Rating | 100°C (212°F)            |
| GE Igniter (Discontinued)    |                          |
| Sound Rating                 |                          |
| Additional Info              |                          |

| Electrical Characteristics |       |
|----------------------------|-------|
| Supply Current Frequency   | 60 Hz |

| Dimensions           |                   |
|----------------------|-------------------|
| Length (L)           | 7.75 in (197 mm)  |
| Width (W)            | 2.75 in (70 mm)   |
| Mounting Dimensions  |                   |
| Mount Length (M)     | 6.1 in (155 mm)   |
| Mount Width (X or F) |                   |
| Mount Slots (MS)     | 0.25 in (6 mm)    |
| A                    | 4.0               |
| B                    | 6.0               |
| Weight               | 30.0 lbs          |
| Exit Type            | Side              |
| Nominal Length       | 5.2 in (133 mm)   |
| Frame Size (H x L)   | 4.25 in x 6.00 in |

| Specifications by lamp and line voltage |                                |         |         |         |         |
|-----------------------------------------|--------------------------------|---------|---------|---------|---------|
| Lamp                                    | Specifications by line voltage | 120     | 208     | 240     | 277     |
| M48<br>1500W Quartz<br>Metal Halide     | System Wattage (W)             | 1,602   | 1,602   | 1,602   | 1,602   |
|                                         | Nominal Current                | 13.70A  | 7.70A   | 6.80A   | 6.00A   |
|                                         | Ballast Factor                 | 1       | 1       | 1       | 1       |
|                                         | Ballast Efficiency Factor      | 0.94    | 0.94    | 0.94    | 0.94    |
|                                         | Max Input Current              | 13.70A  | 7.70A   | 6.80A   | 6.00A   |
|                                         | Starting Current               | 12.95A  | 7.46A   | 6.52A   | 5.75A   |
|                                         | Open Circuit Voltage           | 440V    | 440V    | 440V    | 440V    |
|                                         | Drop Out Voltage               | 96V     | 166V    | 192V    | 222V    |
|                                         | Power Factor (>=) %            | 90      | 90      |         | 90      |
|                                         | Min. Starting Temp (°F/°C)     | -22/-30 | -22/-30 | -22/-30 | -22/-30 |
|                                         | Fuse Rating                    | 40      | 25      | 20      | 20      |
|                                         | UL Bench Top Rise              | A       | A       | A       | A       |

# Electromagnetic HID Ballasts



## 67345 – GEP320MLTAA4-5/2

### Pulse Start

1 – 320W PS M132 or 154 Quad (120/208/240/277V)

- For 320W Pulse Start Metal Halide HID Lamps
- Magnetic ballast construction ideal for a wide variety of lighting applications
- Precision-wound coils, ensuring even heat dissipation and the highest electrical integrity
- Distributor replacement kit contains the appropriate core and coil with color coded leads, a properly rated capacitor and ignitor (if required) and all other components required for ballast replacement
- Quad ballast (120, 208, 240, 277)

| General Characteristics      |                                  |
|------------------------------|----------------------------------|
| Ballast Type                 | Magnetic – Core and Coil         |
| ANSI Lamp Codes              | M154, M132                       |
| Voltage                      | 120/208/240/277                  |
| Line Voltage Regulation(+/-) | 10%                              |
| Circuit Type                 | CWA                              |
| Insulation Class             | Class H, 180°C or Class N, 200°C |
| Type of Capacitor            | Oil Filled                       |
| Capacitance                  | 21 Mfd GECAP-21/345V-O           |
| Voltage (MIN)                | 370                              |
| Capacitor Temperature Rating | 105°C (221°F)                    |
| GE Igniter (Discontinued)    | MH350-1A                         |
| Sound Rating                 |                                  |
| Additional Info              |                                  |

| Electrical Characteristics |       |
|----------------------------|-------|
| Supply Current Frequency   | 60 Hz |

| Dimensions                            |                   |
|---------------------------------------|-------------------|
| Length (L)                            | 5.25 in (133 mm)  |
| Width (W)                             | 1.25 in (32 mm)   |
| Mounting Dimensions                   |                   |
| Mount Length (M)                      | 4.6 in (117 mm)   |
| Mount Slots (MS) Mount Width (X or F) | 0.25 in (6 mm)    |
| A                                     | 1.89              |
| B                                     | 3.60              |
| Weight                                | 9.50 lbs          |
| Exit Type                             | Side              |
| Nominal Length                        | 3.7 in (95 mm)    |
| Frame Size (H x L)                    | 4.25 in x 4.75 in |

| Specifications by lamp and line voltage |                                |         |         |         |         |
|-----------------------------------------|--------------------------------|---------|---------|---------|---------|
| Lamp                                    | Specifications by line voltage | 120     | 208     | 240     | 277     |
| M48<br>1500W Quartz<br>Metal Halide     | System Wattage (W)             | 370     | 370     | 370     | 370     |
|                                         | Nominal Current                | 3.10A   | 1.80A   | 1.55A   | 1.34A   |
|                                         | Ballast Factor                 | 1       | 1       | 1       | 1       |
|                                         | Ballast Efficiency Factor      | 0.86    | 0.86    | 0.86    | 0.86    |
|                                         | Max Input Current              | 3.10A   | 1.80A   | 1.55A   | 1.34A   |
|                                         | Starting Current               | 3.20A   | 3.20A   | 3.20A   | 3.20A   |
|                                         | Open Circuit Voltage           | 270V    | 270V    | 270V    | 270V    |
|                                         | Drop Out Voltage               | 540V    | 540V    | 540V    | 540V    |
|                                         | Power Factor (>=) %            | 90      | 90      | 90      | 90      |
|                                         | Min. Starting Temp (°F/°C)     | -20/-30 | -20/-30 | -20/-30 | -20/-30 |
|                                         | Fuse Rating                    | 7       | 4       | 3       | 3       |
|                                         | UL Bench Top Rise              | A or B  | A or C  | A or C  | A or C  |

### Safety and Performance

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## 67347 – GEP400MLTAA4-5/2

### Pulse Start

1 – 400W PS M135/M155 Quad (120/208/240/277V)

- For 400W Pulse Start Metal Halide HID Lamps
- Magnetic ballast construction ideal for a wide variety of lighting applications
- Precision-wound coils, ensuring even heat dissipation and the highest electrical integrity
- Distributor replacement kit contains the appropriate core and coil with color coded leads, a properly rated capacitor and ignitor (if required) and all other components required for ballast replacement
- Quad ballast (120, 208, 240, 277)

| General Characteristics      |                                  |
|------------------------------|----------------------------------|
| Ballast Type                 | Magnetic – Core and Coil         |
| ANSI Lamp Codes              | M135/M155                        |
| Voltage                      | 120/208/240/277                  |
| Line Voltage Regulation(+/-) | 10%                              |
| Circuit Type                 | CWA                              |
| Insulation Class             | Class H, 180°C or Class N, 200°C |
| Type of Capacitor            | Oil Filled                       |
| Capacitance                  | 24 Mfd GECAP-24/400V-O           |
| Voltage (MIN)                | 450                              |
| Capacitor Temperature Rating | 105°C (221°F)                    |
| GE Igniter (Discontinued)    | MH350-1A                         |
| Sound Rating                 |                                  |
| Additional Info              |                                  |

| Electrical Characteristics |       |
|----------------------------|-------|
| Supply Current Frequency   | 60 Hz |

| Dimensions           |                   |
|----------------------|-------------------|
| Length (L)           | 5.25 in (133 mm)  |
| Width (W)            | 1.25 in (32 mm)   |
| Mounting Dimensions  |                   |
| Mount Length (M)     | 4.6 in (117 mm)   |
| Mount Width (X or F) |                   |
| Mount Slots (MS)     | 0.25 in (6 mm)    |
| A                    | 2.17              |
| B                    | 3.90              |
| Weight               | 10.80 lbs         |
| Exit Type            | Side              |
| Nominal Length       | 4.6 in (119 mm)   |
| Frame Size (H x L)   | 4.25 in x 4.75 in |

| Specifications by lamp and line voltage |                                |         |         |         |         |
|-----------------------------------------|--------------------------------|---------|---------|---------|---------|
| Lamp                                    | Specifications by line voltage |         |         |         |         |
|                                         | 120                            | 208     | 240     | 277     |         |
| M135/M155                               | System Wattage (W)             | 457     | 457     | 457     | 457     |
|                                         | Nominal Current                | 4.00A   | 2.30A   | 2.00A   | 1.75A   |
|                                         | Ballast Factor                 | 1       | 1       | 1       | 1       |
|                                         | Ballast Efficiency Factor      | 0.87    | 0.87    | 0.87    | 0.87    |
|                                         | Max Input Current              | 4.00A   | 2.30A   | 2.00A   | 1.75A   |
|                                         | Starting Current               | 3.80A   | 3.80A   | 3.80A   | 3.80A   |
|                                         | Open Circuit Voltage           | 300V    | 300V    | 300V    | 300V    |
|                                         | Drop Out Voltage               | 580V    | 580V    | 580V    | 580V    |
|                                         | Power Factor (>=) %            | 90      | 90      | 90      | 90      |
|                                         | Min. Starting Temp (°F/°C)     | -20/-30 | -20/-30 | -20/-30 | -20/-30 |
|                                         | Fuse Rating                    | 8       | 5       | 4       | 3       |
|                                         | UL Bench Top Rise              | A or D  | A or D  | A or D  | A or D  |

# Electromagnetic HID Ballasts



## 87214 – GES250ML5AA4-5

### High Pressure Sodium

1 – 250W HPS S50 5-Tap (120/208/240/277/480V)

- For 250W High Pressure Sodium HID Lamps
- Magnetic ballast construction ideal for a wide variety of lighting applications
- Precision-wound coils, ensuring even heat dissipation and the highest electrical integrity
- Distributor replacement kit contains the appropriate core and coil with color coded leads, a properly rated capacitor and ignitor (if required) and all other components required for ballast replacement
- 5-tap ballast (120, 208, 240, 277, or 480 volt) featuring a 480-volt tap

| General Characteristics      |                          |
|------------------------------|--------------------------|
| Ballast Type                 | Magnetic – Core and Coil |
| ANSI Lamp Codes              | S50                      |
| Voltage                      | 120/208/240/277/480      |
| Line Voltage Regulation(+/-) | 10%                      |
| Circuit Type                 | CWA                      |
| Insulation Class             | 180°C                    |
| Type of Capacitor            | Oil Filled               |
| Capacitance                  | 35 Mfd GECAP-35/240V-O   |
| Voltage (MIN)                | 240                      |
| Capacitor Temperature Rating | 100°C (212°F)            |
| GE Igniter (Discontinued)    | HPS400-3A                |
| Sound Rating                 |                          |
| Additional Info              |                          |

| Electrical Characteristics |       |
|----------------------------|-------|
| Supply Current Frequency   | 60 Hz |

| Dimensions           |                   |
|----------------------|-------------------|
| Length (L)           | 5.25 in (133 mm)  |
| Width (W)            | 1.25 in (32 mm)   |
| Mounting Dimensions  |                   |
| Mount Length (M)     | 4.6 in (117 mm)   |
| Mount Width (X or F) |                   |
| Mount Slots (MS)     | 0.25 in (6 mm)    |
| A                    | 2.0               |
| B                    | 4.0               |
| Weight               | 12.0 lbs          |
| Exit Type            | Side              |
| Nominal Length       | 3.7 in (95 mm)    |
| Frame Size (H x L)   | 4.25 in x 4.75 in |
| Lead Lengths         |                   |
| Orange               |                   |
| Violet & Black       |                   |
| Violet/White         |                   |
| Black/Yellow         |                   |

| Specifications by lamp and line voltage |                                |         |         |         |         |         |
|-----------------------------------------|--------------------------------|---------|---------|---------|---------|---------|
| Lamp                                    | Specifications by line voltage |         |         |         |         |         |
|                                         | 120                            | 208     | 240     | 277     | 480     |         |
| S50<br>250W High<br>Pressure<br>Sodium  | System Wattage (W)             | 292     | 292     | 292     | 292     | 292     |
|                                         | Nominal Current                | 2.50A   | 1.50A   | 1.30A   | 1.10A   | 0.60A   |
|                                         | Ballast Factor                 | 1       | 1       | 1       | 1       | 1       |
|                                         | Ballast Efficiency Factor      | 0.86    | 0.86    | 0.86    | 0.86    | 0.86    |
|                                         | Max Input Current              | 2.50A   | 1.50A   | 1.30A   | 1.10A   | 0.60A   |
|                                         | Starting Current               | 1.59A   | 0.93A   | 0.81A   | 0.70A   | 0.40A   |
|                                         | Open Circuit Voltage           | 186V    | 186V    | 186V    | 186V    | 186V    |
|                                         | Drop Out Voltage               | 96V     | 166V    | 192V    | 222V    | 384V    |
|                                         | Power Factor (>=) %            | 90      | 90      | 90      | 90      | 90      |
|                                         | Min. Starting Temp (°F/°C)     | -22/-30 | -22/-30 | -22/-30 | -22/-30 | -22/-30 |
|                                         | Fuse Rating                    | 8       | 5       | 4       | 4       | 4       |
|                                         | UL Bench Top Rise              | C       | C       | B       | B       | B       |

## Safety and Performance

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# Electromagnetic HID Ballasts



## 63066 – GES400ML5AA4-5 (replaces 87215)

### High Pressure Sodium

1 – 400W HPS S51 5-Tap (120/208/240/277/480V)

- For 400W High Pressure Sodium HID Lamps
- Magnetic ballast construction ideal for a wide variety of lighting applications
- Precision-wound coils, ensuring even heat dissipation and the highest electrical integrity
- Distributor replacement kit contains the appropriate core and coil with color coded leads, a properly rated capacitor and ignitor (if required) and all other components required for ballast replacement
- 5-tap ballast (120, 208, 240, 277, or 480 volt) featuring a 480-volt tap

| General Characteristics      |                          | Dimensions           |                   |
|------------------------------|--------------------------|----------------------|-------------------|
| Ballast Type                 | Magnetic – Core and Coil | Length (L)           | 5.25 in (133 mm)  |
| ANSI Lamp Codes              | S51                      | Width (W)            | 1.25 in (32 mm)   |
| Voltage                      | 120/208/240/277/480      | Mounting Dimensions  |                   |
| Line Voltage Regulation(+/-) | 10%                      | Mount Length (M)     | 4.6 in (117 mm)   |
| Circuit Type                 | CWA                      | Mount Width (X or F) |                   |
| Insulation Class             | 180°C                    | Mount Slots (MS)     | 0.25 in (6 mm)    |
| Type of Capacitor            | Oil Filled               | A                    | 2.0               |
| Capacitance                  | 55 Mfd GECAP-55/240V-O   | B                    | 4.0               |
| Voltage (MIN)                | 240                      | Weight               | 15.0 lbs          |
| Capacitor Temperature Rating | 100°C (212°F)            | Exit Type            | Side              |
| GE Igniter (Discontinued)    | HPS400-3A 86641          | Nominal Length       | 4.2 in (108 mm)   |
| Sound Rating                 |                          | Frame Size (H x L)   | 4.25 in x 4.75 in |
| Additional Info              |                          | Lead Lengths         |                   |
| Electrical Characteristics   |                          | Orange               |                   |
| Supply Current Frequency     | 60 Hz                    | Violet & Black       |                   |
|                              |                          | Violet/White         |                   |
|                              |                          | Black/Yellow         |                   |

| Specifications by lamp and line voltage |                                |         |         |         |         |         |
|-----------------------------------------|--------------------------------|---------|---------|---------|---------|---------|
| Lamp                                    | Specifications by line voltage |         |         |         |         |         |
|                                         | 120                            | 208     | 240     | 277     | 480     |         |
| S51<br>400W High<br>Pressure<br>Sodium  | System Wattage (W)             | 472     | 472     | 472     | 472     | 472     |
|                                         | Nominal Current                | 4.00A   | 2.20A   | 2.00A   | 1.70A   | 1.00A   |
|                                         | Ballast Factor                 | 1       | 1       | 1       | 1       | 1       |
|                                         | Ballast Efficiency Factor      | 0.85    | 0.85    | 0.85    | 0.85    | 0.85    |
|                                         | Max Input Current              | 4.00A   | 2.20A   | 2.00A   | 1.70A   | 1.00A   |
|                                         | Starting Current               | 2.87A   | 1.66A   | 1.44A   | 1.25A   | 0.72A   |
|                                         | Open Circuit Voltage           | 191V    | 191V    | 191V    | 191V    | 191V    |
|                                         | Drop Out Voltage               | 96V     | 166V    | 192V    | 222V    | 384V    |
|                                         | Power Factor (>=) %            | 90      | 90      | 90      | 90      | 90      |
|                                         | Min. Starting Temp (°F/°C)     | -22/-30 | -22/-30 | -22/-30 | -22/-30 | -22/-30 |
|                                         | Fuse Rating                    | 15      | 8       | 8       | 5       | 5       |
|                                         | UL Bench Top Rise              | C       | C       | C       | C       | C       |

## Safety and Performance

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# Electromagnetic HID Ballasts



## 87218 – GES1000ML5AA5-5

### High Pressure Sodium

1 – 1000W HPS S52 5-Tap (120/208/240/277/480V)

- For 1000W High Pressure Sodium HID Lamps
- Magnetic ballast construction ideal for a wide variety of lighting applications
- Precision-wound coils, ensuring even heat dissipation and the highest electrical integrity
- Distributor replacement kit contains the appropriate core and coil with color coded leads, a properly rated capacitor and ignitor (if required) and all other components required for ballast replacement
- 5-tap ballast (120, 208, 240, 277, or 480 volt) featuring a 480-volt tap

| General Characteristics      |                          |
|------------------------------|--------------------------|
| Ballast Type                 | Magnetic – Core and Coil |
| ANSI Lamp Codes              | S52                      |
| Voltage                      | 120/208/240/277/480      |
| Line Voltage Regulation(+/-) | 10%                      |
| Circuit Type                 | CWA                      |
| Insulation Class             | 180°C                    |
| Type of Capacitor            | Oil Filled               |
| Capacitance                  | 26 Mfd GECAP-26/525V-O   |
| Voltage (MIN)                | 525                      |
| Capacitor Temperature Rating | 100°C (212°F)            |
| GE Igniter (Discontinued)    | HPS1000-4B               |
| Sound Rating                 |                          |
| Additional Info              |                          |

| Electrical Characteristics |       |
|----------------------------|-------|
| Supply Current Frequency   | 60 Hz |

| Dimensions           |                   |
|----------------------|-------------------|
| Length (L)           | 7.75 in (197 mm)  |
| Width (W)            | 2.75 in (70 mm)   |
| Mounting Dimensions  |                   |
| Mount Length (M)     | 6.1 in (155 mm)   |
| Mount Width (X or F) |                   |
| Mount Slots (MS)     | 0.25 in (6 mm)    |
| A                    | 4.0               |
| B                    | 6.0               |
| Weight               | 28.0 lbs          |
| Exit Type            | Side              |
| Nominal Length       | 4.7 in (121 mm)   |
| Frame Size (H x L)   | 4.25 in x 6.00 in |
| Lead Lengths         |                   |
| Orange               |                   |
| Violet & Black       |                   |
| Violet/White         |                   |
| Black/Yellow         |                   |

| Specifications by lamp and line voltage |                                |         |         |         |         |         |
|-----------------------------------------|--------------------------------|---------|---------|---------|---------|---------|
| Lamp                                    | Specifications by line voltage |         |         |         |         |         |
|                                         | 120                            | 208     | 240     | 277     | 480     |         |
| S52<br>1000W High<br>Pressure<br>Sodium | System Wattage (W)             | 1,102   | 1,102   | 1,102   | 1,102   | 1,102   |
|                                         | Nominal Current                | 9.50A   | 5.50A   | 4.70A   | 4.10A   | 2.40A   |
|                                         | Ballast Factor                 | 1       | 1       | 1       | 1       | 1       |
|                                         | Ballast Efficiency Factor      | 0.91    | 0.91    | 0.91    | 0.91    | 0.91    |
|                                         | Max Input Current              | 9.50A   | 5.50A   | 4.70A   | 4.10A   | 2.40A   |
|                                         | Starting Current               | 5.75A   | 3.40A   | 2.90A   | 2.60A   | 1.80A   |
|                                         | Open Circuit Voltage           | 435V    | 435V    | 435V    | 435V    | 435V    |
|                                         | Drop Out Voltage               | 96V     | 166V    | 192V    | 222V    | 384V    |
|                                         | Power Factor (>=) %            | 90      | 90      | 90      | 90      | 90      |
|                                         | Min. Starting Temp (°F/°C)     | -22/-30 | -22/-30 | -22/-30 | -22/-30 | -22/-30 |
|                                         | Fuse Rating                    | 20      | 15      | 10      | 10      | 8       |
|                                         | UL Bench Top Rise              | D       | D       | D       | D       | D       |

## Safety and Performance

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## Lamp Size/Diameter

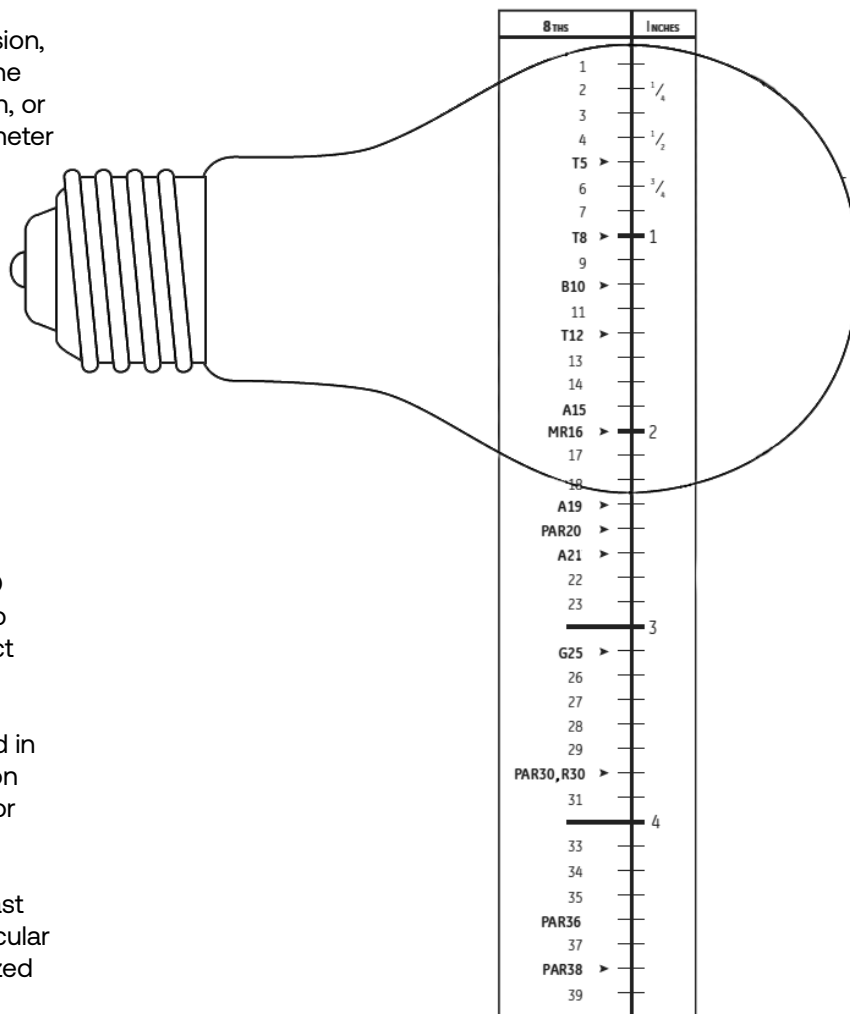
The diameter of a lamp, at its maximum dimension, is expressed in eighths of an inch. Examples: The diameter of an A19 lamp is 19-eighths of an inch, or 2-3/8", at its widest point. A T8 lamp has a diameter of 8-eighths, or one inch.

## Important Notice

This catalog is a compilation of accumulated data. Additional information is constantly being uncovered through research and testing, which may modify the data given herein. This is particularly true of newer lamps and ballasts. Accordingly, SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. For the latest lamp and ballast design data and information, contact your Current representative.

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## Ambient Temperature

Ambient temperature which refers to the temperature inside the fixture in the air surrounding the fluorescent lamp or LED. Fluorescent lamp light output and LED life are affected by the ambient temperature.

## Amperes

("Amps") A measure of electrical current. In incandescent lamps, the current is related to voltage and power as follows: Watts (power) = Volts x Amps (current).

## ANSI (American National Standards Institute)

A consensus-based organization which coordinates voluntary standards for the physical, electrical and performance characteristics of lamps, ballasts, luminaires and other lighting and electrical equipment.

## ANSI Ballast Type

A reference to the ANSI document describing the lamp which also lists the characteristics of the ballast required to operate the lamp. Technically, therefore, it is incorrect to refer to "Ballast Type" with the ANSI code but this misuse is common. The following naming system is used: H – mercury lamps; M – metal halide lamps; S – high pressure sodium lamps; L – low pressure sodium lamps.

## Ballast

An auxiliary piece of equipment required to start and to properly control the flow of current to gas discharge light sources such as fluorescent and high intensity discharge (HID) lamps. Typically, magnetic ballasts (also called electromagnetic ballasts) contain copper windings on an iron core while electronic ballasts are smaller and more efficient and contain electronic components.

## Ballast Efficacy Factor (BEF)

Defined as ballast factor x 100 divided by input watts. The value is used to evaluate various lighting systems based on light output and power input. The BEF can only be used to compare systems operating the same type and quantity of lamps.

## Ballast Factor (BF)

This is the percentage of a lamp's rated lumen output that can be expected when operated on a specific, commercially available ballast. Note that the "rated output" is sometimes measured on a reference ballast unlike ones that actually operate the lamp in the field. For example, a ballast with a ballast factor of 0.93 will result in the lamp's emitting 93% of its rated lumen output. A ballast with a lower BF results in less light output and also generally consumes less power.

## Beam Angle

The angular dimension of the cone of light from reflectorized lamps (such as R and PAR types) encompassing the central part of the beam out to the angle where the intensity is 50% of maximum. The beam angle (sometimes called "beam spread") is often part of the ordering code for reflectorized lamps. Example: The 50PAR30/HIR/NFL25 is a 50 watt PAR30 narrow flood lamp with a beam angle of 25 degrees, i.e. 12.5 degrees on either side of the center (see FIELD ANGLE).

## Bi-Pin

Any base with two metal pins for electrical contact. This is the typical base for a fluorescent tube of 1 to 4 feet in length. It consists of 2 prong contacts that connect into the fixture. Medium bi-pins are used with type T-8 and T-12 tubular fluorescent lamps and miniature bi-pins are used for tubular T-5 fluorescent lamps.

## Candela (cd)

The measure of luminous intensity of a source in a given direction. The term has been retained from the early days of lighting when a standard candle of a fixed size and composition was defined as producing one candela in every direction. A plot of intensity versus direction is called a candela distribution curve and is often provided for reflectorized lamps and for luminaires with a lamp operating in them.

## Candlepower

An obsolete term for luminous intensity; current practice is to refer to this simply as candelas (see CANDELA).

## Center Beam Candlepower (CBCP)

Refers to the luminous intensity at the center of the beam of a blown or pressed reflector lamp (such as a PAR lamp). Measured in candelas (see CANDELA).

## Color Rendering Index (CRI)

A measure of the ability of a light source to render object colors faithfully in comparison with a designated standard light source. Incandescent objects and daylight are both considered "standard" sources. Note that "standard" is defined for convenience in reproducibility rather than being based on user preference.

## Color Temperature (Correlated Color Temperature – CCT)

A number indicating the degree of "yellowness" or "blueness" of a white light source. Measured in Kelvins, CCT represents the temperature an incandescent object (like a filament) must reach to mimic the color of the lamp. Yellowish-white ("warm") sources, like incandescent lamps, have lower color temperatures in the 2700K–3000K range; white and bluish-white ("cool") sources, such as cool white (4100K) and natural daylight (6000K), have higher color temperatures. The higher the color temperature the whiter, or bluer, the light will be.

## Crest Factor (Lamp Current Crest Factor)

Ratio of peak to RMS for any AC waveform. Crest factor can refer to voltage crest factor or current crest factor.

## Current Type (AC/DC)

Whether the operational voltage is based on Alternating Current or Direct Current.

## Efficacy

A measurement of how effective the light source is in converting electrical energy to lumens of visible light. Expressed in lumens-per-watt (LPW), this measure gives more weight to the yellow region of the spectrum and less weight to the blue and red regions where the eye is not as sensitive. The efficiency of a light source is simply the fraction of electrical energy converted to light, i.e. watts of visible light produced for each watt of electrical power with no concern about the wavelength where the energy is being radiated. For example, a 100-watt incandescent lamp converts 7% of the electrical energy into light; discharge lamps convert 25% to 40% into light.

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## Efficiency (Continued)

percentage of the lamp lumens that actually comes out of the fixture (see LUMINAIRE EFFICIENCY).

## Electromagnetic Spectrum

A continuum of electric and magnetic radiation that can be characterized by wavelength or frequency. Visible light encompasses a small part of the electromagnetic spectrum in the region from about 380 nanometers (violet) to 770 nanometers (red) by wavelength.

## Electromagnetic Interference (EMI)

High-frequency electronic ballasts and other electronic devices can produce a small amount of radio waves that can interfere with radio and TV. Federally-mandated requirements must be met for EMI levels before an electronic device is considered FCC compliant (FCC is the Federal Communications Commission).

## Federal Communications Commission (FCC)

The U. S. federal agency that regulates emissions in the radio frequency portion of the electromagnetic spectrum. Part 18 of the FCC rules specifies electromagnetic interference (EMI) from lighting devices at frequencies greater than 450 kilohertz (kHz). A consumer-rated Class B ballast is designed for use in the home near TV and radio receivers. It produces less electrical noise that could interfere with consumer products. A Class A-rated ballast is designed for use in commercial and industrial applications that are not in the vicinity of TV and radio receivers.

## Field Angle

The angular dimension of the cone of light from reflectorized lamps (such as R and PAR types) encompassing the central part of the beam out to the angle where the intensity is 10% of maximum (see BEAM ANGLE).

## Footcandle (fc)

A unit of illuminance or light falling onto a surface. It stands for the light level on a surface one foot from a standard candle. One footcandle is equal to one lumen per square foot (see LUX).

## Frequency

Rate of alternation in an AC current. Expressed in cycles per second or Hertz (Hz).

## Glare

Visual discomfort caused by excessive brightness is called discomfort glare. If task performance is affected it is called disability glare. Glare can be direct glare or indirect (reflected) glare.

## Harmonic

An integral multiple of the fundamental frequency (60 Hz) that becomes a component of the current. Harmonic Distortion (see TOTAL HARMONIC DISTORTION or THD).

## Hertz (Hz)

Unit used to measure frequency of alteration of current or voltage, in cycles per second.

## Ignitor

An electronic device providing a high voltage pulse to initiate an electrical discharge. Typically, the ignitor is paired with or is a part of the ballast.

## Illuminance

The "density" of light (lumens/area) incident on a surface; i.e. the light level on a surface. Illuminance is measured in footcandles or lux.

## Input Voltage

Power supply voltage required for proper operation of fluorescent or HID ballast.



## Input Watts

The total power input to the ballast that includes lamp watts and ballast losses. The total power input to the fixture is the input watts to the ballast or ballasts and is the value to be used when calculating cost of energy and air conditioning loads. More than 90% of the input watts is wattage or power delivered to the lamp load with typical ballast.

## Instant Start

A type of ballast designed to start fluorescent lamps as soon as the power is applied. Most T8 fluorescent lamps are being operated on electronic instant-start ballasts. Slimline fluorescent lamps operate only on instant-start circuits.

**Kelvins** (see COLOR TEMPERATURE).

## L70, L85, etc.

L70 (or L85, etc.): The elapsed operating time over which a population of LED light sources will maintain 70% (or 85%) of its initial light output. This 70% number represents the expected median light output (which is close to the average light output) of the tested LED light source population. The value is often stated using the form L70(10K)= 50,000 Hours; this means that the LED light source's median light output reaches 70% of the initial light output at 50,000 Hours based on 10,000 hours of test data using TM-21 projection methods. When the L70 value is stated as "Reported" it means that tests have gone to at least 1/6th of the reported time as required by IESNA's TM-21 methodology. On the other hand, manufacturers will sometimes state a "Calculated" value of L70 which means they are using mathematical curve fitting and projection methods of TM-21 to project beyond 6 times the available test hours.

## Lamp Watts

Power dissipated in the lamp—some of which is converted to light, some to heat and some to ultraviolet.

## LED

Light Emitting Diode used as the primary light source in a wide array of LED lighting products. Also referred to as SSL (Solid State Lighting).

## LED Tube Beam Angle

The angle between the two opposite directions in which the average intensity is 50% of the center beam intensity as measured in the azimuthal plane perpendicular to and at the center of the linear replacement lamp axis.

**Life** (see RATED LAMP LIFE).

## Light Center Length (L.C.L.)

The distance between the center of the filament, or arc tube and a reference plane—usually the bottom of the lamp base.

## Light Emitting Diode (LED)

A solid that directly converts electrical impulses into light.

## LM79

Test procedures specified by the Illuminating Engineering Society for measurements on LED products (complete assembled systems) of lumens, watts and color in actual operating environments.

## LM80

Test procedures specified by the Illuminating Engineering Society for measuring lumen depreciation of LED sources, arrays and modules—not luminaires.

## Lumen

A measure of luminous flux or quantity of light emitted by a source.

## Lumen Depreciation, Lumen Maintenance

A measure of how well a lamp maintains its light output over time. It may be expressed numerically or as a graph of light output vs. time. The "mean lumens" of a lamp is the lumens at 40% of rated life (50% for HPS lamp).

## Lumens Per Watt (LPW)

A ratio expressing the luminous efficacy of a light source.

## Luminance

A photometric measure of "brightness" of a surface as seen by the observer, measured in candelas per square meter.

## Luminous Efficacy

The light output (lumens) of a light source divided by the total power input (watts) to that source. It is expressed in lumens per watt (see LUMENS PER WATT).

## Lux (lx)

A unit of illuminance or light falling onto a surface. Lux stands for the light level on a surface one meter from a standard candle. One lux is equal to one lumen per square meter. Ten lux approximately equals one footcandle (see FOOTCANDLE).

## Maximum Overall Length (M.O.L.)

The end-to-end measurement of a lamp, expressed in inches or millimeters.

## Mean Lumens

The average light output of a lamp over its rated life. Based on the shape of the lumen depreciation curve, for fluorescent and metal halide lamps, mean lumens are measured at 40% of rated lamp life. For mercury, high-pressure sodium and incandescent lamps, mean lumen ratings refer to lumens at 50% of rated lamp life (see LUMEN MAINTENANCE).

## Medium Base

Usually refers to the screw base typically used in household incandescent lamps. There is also the medium bi-pin base commonly used in T12 and T8 fluorescent lamps.

## Mogul Base

A screw base used on larger lamps, e.g. many HID lamps.

## PAR Lamp

PAR is an acronym for parabolic aluminized reflector. A PAR lamp, which may utilize either an incandescent filament, a halogen filament tube or an HID arc tube, is a precision pressed-glass reflector lamp. PAR lamps rely on both the internal reflector and prisms in the lens for the control of the light beam. Today it is common to refer to LED replacement products for PAR lamps as "LED PAR Lamps" even though there may be no parabolic reflector in the package.

## Parallel Lamp Operation/Parallel Wiring

Refers to ballasts that employ multiple output current paths from a single ballast to allow lamps to operate independent of one another, allowing other lamps operated by the ballast to remain lit should companion lamp(s) fail (see SERIES LAMP OPERATION).

## PCB (Polychlorinated Biphenyls)

Chemical pollutant formerly used in ballast capacitors that were part of ballasts. It is now illegal to use PCBs and most such ballasts have been replaced over time.

**Photopic** (see SCOTOPIC/PHOTOPIC).

## Power Factor (PF)

A measure of the phase difference between voltage and current drawn by an electrical device, such as a ballast or motor. Power factors can range from 0 to 1.0 with 1.0 being ideal. Power factor is sometimes expressed as a percent. Incandescent lamps have power factors close to 1.0 because they are simple "resistive" loads. The power factor of a fluorescent and HID lamp system is determined by the ballast used. "High" power factor usually means a rating of 0.9 or greater. Power companies may penalize users for using low-power-factor devices.

## Preheat Circuit

A type of fluorescent lamp-ballast circuit used with the first commercial fluorescent lamp products. A push button or automatic switch is used to preheat the lamp cathodes. Starting the lamp can then be accomplished using simple "choke" or reactor ballasts. A preheat fluorescent lamp is one in which the filament must be heated by use of a starter before the arc is created. These lamps are typically operated with electromagnetic ballasts.

## Programmed Rapid Start

Lamp starting method which preheats the lamp filaments while not allowing the lamp to ignite and then applies the open circuit voltage (OCV) to start the lamp. The user may experience a half- to one-second delay after turning on the lamps while the preheating takes place. This type of starting circuit keeps lamp end blackening to a minimum and improves lamp life performance, especially in applications where the lamps are frequently switched on and off.

## Pulse Start

A lamp that requires an HID ballast with a high-voltage ignitor to start the lamp.

## Rapid Start

Lamp starting method in which lamp filaments are heated while open circuit voltage (OCV) is applied to facilitate lamp ignition. A Rapid Start fluorescent lamp has two pins at each end connected to the filament. Some rapid start lamps may be instant-started without filament heat, for example, the F32T8 lamp.

## Rated Lamp Life

For most lamp types, rated lamp life is the length of time of a statistically large sample between first use and the point when 50% of the lamps have died (see L70 for LED Lamps).

## Reflector Lamp (R)

A light source with a built-in reflecting surface. Sometimes, the term is used to refer specifically to blown bulbs like the "R" and "ER" lamps; at other times, it includes all reflectorized lamps like PAR and MR.

## Series Lamp Operation

Refers to ballasts that employ a single current path passing through all lamps operated by the ballast. If one lamp should fail, companion lamps operated by the same ballasts will also extinguish or dim.

## Specification Series (SP) Colors

Energy-efficient, all-purpose tri-phosphor fluorescent lamp colors that provide good color rendering. The CRI for SP colors is 70 or above and varies by specific lamp type.

## Specification Series Deluxe (SPX) Colors

Energy-efficient tri-phosphor fluorescent lamp colors that provide better color rendering than Specification Series (SP) colors. The CRI for SPX colors is 80 or higher and varies by specific lamp type.

**Spectral Power Distribution (SPD)**

A graph of the radiant power emitted by a light source as a function of wavelength. SPDs provide a visual profile or "fingerprint" of the color characteristics of the source throughout the visible part of the spectrum. Also called "spectral curve" or "spectrum."

**TCLP Test**

The Toxicity Characteristic Leaching Procedure (TCLP) test, specified in the Resource Conservation and Recovery Act (RCRA) of 1990, is used to characterize fluorescent lamp waste as hazardous or nonhazardous waste. The TCLP test measures the ability of the mercury and/or lead in a lamp to leach from a landfill into ground water.

**THD** (see TOTAL HARMONIC DISTORTION).

**TM21**

Technical Memorandum developed by the Illuminating Engineering Society to provide method for projecting lumen maintenance of an LED source, array or module as a function of temperature. This will allow LED Luminaire manufacturers to predict lumen depreciation in their fixtures, based on the operating temperature of the LED in that package. See also, "L70, L85, etc."

**Total Harmonic Distortion (THD)**

A measure of the distortion of the input current on alternating current (AC) power systems caused by higher order harmonics of the fundamental frequency (60Hz in North America). THD is expressed in percent and may refer to individual electrical loads (such as a ballast) or a total electrical circuit or system in a building. ANSI C82.77 recommends THD not exceed 32% for individual commercial electronic ballasts, although some electrical utilities may require lower THDs on some systems. Excessive THDs on electrical systems can cause efficiency losses as well as overheating and deterioration of system components.

**Voltage**

A measurement of the electromotive force in an electrical circuit or device expressed in volts. Voltage can be thought of as being analogous to the pressure in a waterline.

**Watt**

A unit of electrical power. Lamps are rated in watts to indicate the rate at which they consume energy.



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