

# 22 mm Push Button Specifications

Bulletin Numbers 598, 800B, 800F, 800FC, 800FD

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# Summary of Changes

This publication contains the following new or updated information. This list includes substantive updates only and is not intended to reflect all changes.

| Topic                                                                             | Page       |
|-----------------------------------------------------------------------------------|------------|
| Added UL/NEMA Type rating details to Specifications pages.                        | throughout |
| Replaced obsolete key-operated selector switch catalog numbers with current ones. | 33         |
| Added text that potentiometer legend plates are for series A potentiometers only. | 52         |
| Removed discontinued product Cat. No. 800F-N240.                                  | 52, 86     |
| Removed assembled station, Cat. No. 800FD-ISP6Q.                                  | 86         |
| Added Flush, Momentary, Push Button/Pilot Lights.                                 | 90         |
| Removed discontinued Oiltight Operators (Bulletins 800MB and 800MR).              | —          |

Our Bulletin 800F 22 mm round operator family meets demanding performance specifications. We use state-of-the-art solid modeling techniques and finite element analysis to optimize the durability and performance of our push buttons.

## 800FP Plastic Operators

- IP69K
- IP65/66, Type 4/4X/13
- Engineering grade thermoplastics
- Chemical-resistant for harsh environments



## 800FM Metal Operators

- IP65/66, Type 4/13
- Die-cast metal construction
- Chrome-plated



## 3-across x 2-deep Back-of-panel (6 Circuits Max)

- Rugged snap-fit design for plastic or metal latch
- Stackable contact blocks
- Rotating collar for easy one-hand latch removal
- Color-coded contact block plungers for contact identification

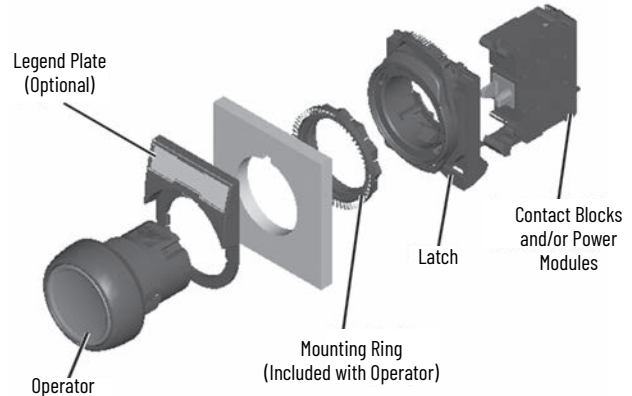


Plastic Latch with Contact Block



Metal Latch with Contact Block

## Assembly Overview



## Specifications

### Product Certifications

| Attribute                        | Plastic (Bulletin 800FP) and Metal (Bulletin 800FM)                      |
|----------------------------------|--------------------------------------------------------------------------|
| Certifications                   | UR/UL, CSA, CCC, CE                                                      |
| Standards Compliance — CE Marked | NEMA ICS-5; UL 508, EN ISO 13850, EN 60947-1, EN 60947-5-1, EN 60947-5-5 |
| Terminal Identification          | EN/IEC 60947-1                                                           |
| Shipping Approvals               | ABS                                                                      |
| RoHS                             | Yes                                                                      |

## Front-of-Panel (Operators)

**IMPORTANT Performance Data** — Performance data that is given in this publication is provided only as a guide for you to determine suitability and does not constitute a performance warranty of any kind. Such data can represent the results of accelerated testing at elevated stress levels, and you are responsible for correlating the data to actual application requirements. ALL WARRANTIES AS TO ACTUAL PERFORMANCE, WHETHER EXPRESS OR IMPLIED, ARE EXPRESSLY DISCLAIMED.

**Table 1 - Mechanical Ratings — Operators**

| Attribute                                                     |                   | Plastic (Bulletin 800FP)                                                                                           | Metal (Bulletin 800FM)                              |
|---------------------------------------------------------------|-------------------|--------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| Vibration (assembled to panel)                                |                   | Tested at 10...2000 Hz, 1.52 mm (0.06 in.) displacement (peak-to-peak) max./10 G max. for 3 hr duration, no damage |                                                     |
| Shock                                                         |                   | Tested at 1/2 cycle sine wave for 11 ms; no damage at 100 G                                                        |                                                     |
| Degree of protection <sup>(1) (2)</sup>                       |                   | IP69K <sup>(3)</sup> and IP65/66 (NEMA/UL Type 3/3R/4/4X/12/13 <sup>(4)</sup> )                                    | IP65/66 (NEMA/UL Type 3/3R/4/12/13 <sup>(4)</sup> ) |
| Mechanical durability per EN 60947-5-1 (Annex C)              | 10,000,000 Cycles | Momentary push buttons, momentary mushroom                                                                         |                                                     |
|                                                               | 1,000,000 Cycles  | Multi-function, selector switch, key selector switch, selector jog, SensEject™ key selector switch                 |                                                     |
|                                                               | 500,000 Cycles    | Non-illuminated push-pull E-stop <sup>(5)</sup>                                                                    |                                                     |
|                                                               | 300,000 Cycles    | Twist-to-release E-stop, illuminated push-pull E-stop <sup>(5)</sup> , alternate action push buttons               |                                                     |
|                                                               | 100,000 Cycles    | Potentiometer, toggle switch                                                                                       |                                                     |
| Operating forces (typical with one contact block)             |                   | Flush/extended = 5 N, E-stop = 36 N<br>Mushroom = 9 N                                                              |                                                     |
| Operating torque (typical application with one contact block) |                   | Selector switch = 0.25 N•m (2.2 lb•in)                                                                             |                                                     |
| Mounting torque                                               | Plastic           | 1.7 N•m (15 lb•in)                                                                                                 |                                                     |
|                                                               | Metal             | 4.4 N•m (40 lb•in)                                                                                                 |                                                     |

(1) Momentary mushroom operators are IP65. Plastic keyed operators are IP66, NEMA/UL Type 4/13; not NEMA/UL Type 4X.

(2) IP65/66 products are compliant to IEC 60529.

(3) IP69K products listed in [Table 2](#) are compliant to ISO 20653 (replaces DIN 40050 Part 9) for IP69K and IEC 60529 for all other IP ratings.

(4) NEMA/UL Type 13 does NOT apply to plastic and metal multi-function devices.

(5) Limit of four contact blocks max for these devices.

**Table 2 - IP69K Operators and Assembled Stations**

| IP69K Rated Operators                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                          | IP69K Rated Assembled Stations                                                                                                                                                                                                                                                                                                                                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>800FD-MT44*</li> <li>800FP-F*</li> <li>800FP-F* with 800F-AB7</li> <li>800FP-LF*</li> <li>800FP-E*</li> <li>800FP-E* with 800F-ABE7</li> <li>800FP-LE*</li> <li>800FP-FA*</li> <li>800FP-LFA*</li> <li>800FP-G*</li> <li>800FP-P*</li> <li>800FP-MT3*</li> <li>800FP-MT4*</li> <li>800FP-LMT4*</li> <li>800FP-MT6*</li> <li>800F-1YMD and 800F-ALC2 (1 pc) and IP69K rated operators</li> <li>800F-2PM and 800F-ALC2 (2 pcs) and IP69K rated operators</li> <li>800F-3PM and 800F-ALC2 (3 pcs) and IP69K rated operators</li> <li>800F-4PM and 800F-ALC2 (4 pcs) and IP69K rated operators</li> <li>800F-6PM and 800F-ALC2 (6 pcs) and IP69K rated operators</li> <li>800F-AHA1</li> <li>800F-1YMD51, 800F-1YMD52, and 800F-1YMD81</li> </ul> | <ul style="list-style-type: none"> <li>800FP-LMT6*</li> <li>800FP-LMP3*</li> <li>800FP-MP4*</li> <li>800FP-LMP4*</li> <li>800FP-MM4*</li> <li>800FP-LMM4*</li> <li>800FP-MM6*</li> <li>800FP-LMP6*</li> <li>800FP-MP9*</li> <li>800FP-LMP9*</li> <li>800FP-U2*</li> <li>800FP-LU2*</li> <li>800FP-U3*</li> <li>800FP-MM9*</li> <li>800FP-POT*</li> </ul> | <ul style="list-style-type: none"> <li>800F-1YP1</li> <li>800F-1YP2</li> <li>800F-1YP3</li> <li>800F-1YP7</li> <li>800F-1YP8</li> <li>800F-1YM1</li> <li>800F-1YM2</li> <li>800F-1YM3</li> <li>800F-1YM7</li> <li>800F-1YM8</li> <li>800F-1YML1</li> <li>800F-1YML2</li> <li>800F-1YML3</li> <li>800F-1YMD51</li> <li>800F-1YMD52</li> <li>800F-1YMD81</li> </ul> |

**Table 3 - Environmental — Operators**

| Attribute         |                    | Plastic (Bulletin 800FP)                    | Metal (Bulletin 800FM) |
|-------------------|--------------------|---------------------------------------------|------------------------|
| Temperature Range | Operating          | -25...+70 °C (-13...+158 °F) <sup>(1)</sup> |                        |
|                   | Short-term Storage | -40...+85 °C (-40...+185 °F)                |                        |
| Humidity          |                    | ≤95% RH from 25...60 °C (77...140 °F)       |                        |

(1) Operating temperatures below 0 °C (32 °F) are based on the absence of freezing moisture and liquids, UL Recognized to 55 °C (131 °F) - Incandescent module max. 40 °C (104 °F).



## Back-of-panel Components

**IMPORTANT Performance Data** — Performance data that is given in this publication is provided only as a guide for you to determine suitability and does not constitute a performance warranty of any kind. Such data can represent the results of accelerated testing at elevated stress levels, and you are responsible for correlating the data to actual application requirements. ALL WARRANTIES AS TO ACTUAL PERFORMANCE, WHETHER EXPRESS OR IMPLIED, ARE EXPRESSLY DISCLAIMED.

**Table 4 - Electrical Ratings — Back-of-panel Components**

| Attribute                                        |                               | Screw Termination                                                                                 | Spring Clamp Termination |                 |              |
|--------------------------------------------------|-------------------------------|---------------------------------------------------------------------------------------------------|--------------------------|-----------------|--------------|
| Standard Contact Block Ratings                   |                               | A600, Q600<br>600V AC                                                                             | A300, Q300<br>300V AC    |                 |              |
|                                                  |                               | AC 15, DC 13 to IEC/EN 60947-5-1 and UL 508, 17V, 5 mA min.                                       |                          |                 |              |
| Low-voltage Contact Block Ratings <sup>(1)</sup> |                               | 5V, 1 mA DC min.<br>C300, R150, AC 15, DC 13 to EN 60947-5-1 and UL 508                           |                          |                 |              |
|                                                  | Lamp Voltage                  | Voltage Range                                                                                     | Current, Typical         | Leakage Current | Frequency    |
| Light-emitting diode (LED) Module Ratings        | Universal                     | 24...120V AC/DC                                                                                   | 15 mA (AC), 12 mA (DC)   | 3 mA            | 50/60 Hz, DC |
|                                                  | 24V AC                        | 10...29V AC                                                                                       | 31 mA                    | 3 mA            | 50/60 Hz     |
|                                                  | 24V DC                        | 10...30V DC                                                                                       | 24 mA                    | 3 mA            | DC           |
|                                                  | 120V AC                       | 102...132V AC                                                                                     | 6 mA                     | 3 mA            | 50/60 Hz     |
|                                                  | 240V AC                       | 204...264V AC                                                                                     | 6 mA                     | 3 mA            | 50/60 Hz     |
| Thermal Current                                  |                               | 10 A max. enclosed (40 °C [104 °F] ambient) to UL508, EN 60947-5-1 @ A600                         |                          |                 |              |
| Insulation Voltage (U <sub>i</sub> )             |                               | Screw terminal = 690V, spring-clamp = 300V                                                        |                          |                 |              |
| Wire Capacity                                    | Screw Terminal <sup>(2)</sup> | #18...12 AWG (0.75...2.5 mm <sup>2</sup> ); Max. (2) #14 AWG or (1) #12 AWG                       |                          |                 |              |
|                                                  | Spring-clamp terminal         | #18...14 AWG (0.75...1.5 mm <sup>2</sup> ) One per spring clamp, two spring clamps per terminal   |                          |                 |              |
| Recommended Tightening Torque on Screw Terminals |                               | 0.7...0.9 N•m (6...8 lb•in)                                                                       |                          |                 |              |
| Dielectric Strength (Minimum)                    |                               | 2500V for 1 minute                                                                                |                          |                 |              |
| External Short Circuit Protection                | Standard blocks               | 10 A type gL/gG cartridge fuse to EN 60269-2-1 or gN (Class J to UL 248-8 or Class C to UL 248-4) |                          |                 |              |
|                                                  | Low-voltage contact blocks    | 6 A type gL/gG cartridge fuse to EN 60269-2-1 or gN (Class J to UL 248-8 or Class C to UL 248-4)  |                          |                 |              |
| Electrical shock protection                      |                               | Fingersafe conforming to IP2X                                                                     |                          |                 |              |

(1) Low-voltage contacts are recommended for applications below 17V, 5 mA.

(2) Wires less than #18 AWG (0.75 mm<sup>2</sup>) may not hold in terminal securely.

**Table 5 - Mechanical Ratings — Back-of-panel Components**

| Attribute                                     |                              | Value                                                                           |
|-----------------------------------------------|------------------------------|---------------------------------------------------------------------------------|
| Vibration (assembled to panel)                |                              | Tested at 10...2000 Hz, 1.52 mm displacement (peak-to-peak) max./10 G max. 6 hr |
| Shock                                         |                              | Tested at 1/2 cycle sine wave for 11 ms and no damage at 100 G max.             |
| Contact durability per EN 60947-5-1 (Annex C) |                              | 10,000,000 cycles                                                               |
| Contact operation                             | N.O.                         | Slow double make and break                                                      |
|                                               | N.C. & S.M.C.B.              | Slow double make and break — positive opening<br>⤵                              |
|                                               | N.O.E.M.                     | Double break / double make, early make                                          |
|                                               | N.C.L.B.                     | Double break / double make, late break — positive opening<br>⤵                  |
|                                               | N.C.E.B.                     | Double break / double make, early break — positive opening<br>⤵                 |
|                                               |                              |                                                                                 |
| Push button travel to change electrical state | N.C. and N.O.E.M.            | 1.5 mm (0.060 in.)                                                              |
|                                               | N.O. and N.C.L.B.            | 2.5 mm (0.1 in.)                                                                |
| Operating forces (typical)                    | Single-circuit contact block | 3.4 N                                                                           |
|                                               | Dual-circuit contact block   | 5...6.5 N                                                                       |

Table 6 - Illumination – Back-of-panel Components

| Attribute                    | Green   | Red     | White   |
|------------------------------|---------|---------|---------|
| LED Dominant Wavelength      | 525 nm  | 629 nm  | —       |
| LED Luminous Intensity       | 780 mcd | 780 mcd | 360 mcd |
| Incandescent maximum wattage | 2.6 W   |         |         |

Table 7 - Materials – Back-of-panel Components

| Attribute           |              | Value                                      |
|---------------------|--------------|--------------------------------------------|
| Springs             |              | Stainless steel and zinc coated music wire |
| Electrical contacts | Standard     | Silver-nickel                              |
|                     | Low-voltage  | Gold-plated over silver                    |
| Terminals           | Screw        | Brass                                      |
|                     | Spring-clamp | Silver-plated brass                        |

## Material Listing

| Component                           | For Use with                                                                                                                                                                                        | Material Used                           |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| Panel gasket                        | All operators                                                                                                                                                                                       | Nitrile, TPE                            |
| Diaphragm seal                      | Illuminated push button, non-illuminated push button                                                                                                                                                | Automotive industry acceptable silicone |
| K-seal                              | Selector switch, key selector switch, push/twist-to-release E-stop, key E-stop, push/pull mushroom                                                                                                  | Nitrile                                 |
| Diaphragm retainer, return spring I | Illuminated push button, non-illuminated push button, momentary mushroom                                                                                                                            | Stainless steel                         |
| Return spring II                    | Reset, selector switch, key selector switch, alternate action, push/twist-to-release E-stop, key E-stop, push/pull mushroom                                                                         | Zinc-coated music wire                  |
| Button cap/mushroom head            | Non-illuminated push button, momentary mushroom, reset, push/twist-to-release E-stop, key E-stop, push/pull mushroom, multi-function                                                                | PBT/polycarbonate blend                 |
| 2-color molded button cap           | Non-illuminated push button                                                                                                                                                                         | PBT/polycarbonate blend                 |
| Lens                                | Multi-function                                                                                                                                                                                      | Acetal                                  |
| Lens, knob                          | Illuminated push button, illuminated momentary mushroom, illuminated selector switch                                                                                                                | Polyamide                               |
| Knob                                | Non-illuminated selector switch                                                                                                                                                                     | Glass-filled polyamide                  |
| Plastic bezel/bushing I             | Non-illuminated push button, illuminated push button, momentary mushroom, selector switch, key selector switch, push/twist-to-release E-stop, key E-stop, push/pull mushroom, multi-function, reset | Glass-filled polyamide                  |
| Plastic bezel/bushing II, jam nut   | Pilot light, reset jam nut, reset pushers                                                                                                                                                           | Glass-filled PBT                        |
| Metal bezel/bushing                 | All metal operators                                                                                                                                                                                 | Zinc                                    |
| Diffuser                            | Illuminated push button, pilot light                                                                                                                                                                | Polycarbonate                           |
| Legend frames                       | —                                                                                                                                                                                                   | Glass-filled polyamide                  |
| Plastic mounting ring               | All plastic operators                                                                                                                                                                               | Glass-filled polyamide                  |
| Metal mounting ring                 | All metal operators                                                                                                                                                                                 | Chromated zinc                          |
| Plastic latch                       | —                                                                                                                                                                                                   | Glass-filled polyamide                  |
| Metal latch                         | —                                                                                                                                                                                                   | Chromated zinc + stainless steel        |
| Plastic enclosure                   | —                                                                                                                                                                                                   | PBT/polycarbonate blend                 |
| Metal enclosure                     | —                                                                                                                                                                                                   | Aluminum                                |
| Terminal screws                     | LED module, incandescent module, contact blocks                                                                                                                                                     | Zinc-plated steel with chromate         |
| Terminals                           | LED module, incandescent module, contact blocks                                                                                                                                                     | Brass with silver-nickel contacts       |
| Spring clamps                       | LED module, incandescent module, contact blocks                                                                                                                                                     | Stainless steel                         |
| Lamp socket                         | Incandescent module                                                                                                                                                                                 | Brass                                   |
| Housing                             | Incandescent module, LED module                                                                                                                                                                     | Glass-filled polyamide                  |
| Low-voltage terminals               | Contact blocks                                                                                                                                                                                      | Gold-plated silver-nickel contacts      |
| Low-voltage spanner                 | Contact blocks                                                                                                                                                                                      | Gold-plated silver-nickel contacts      |
| Spanner                             | Contact blocks                                                                                                                                                                                      | Brass with silver-nickel contacts       |
| Boot                                | Toggle Switch, illuminated push button, non-illuminated push button, multi-function illuminated and non-illuminated                                                                                 | Automotive industry acceptable silicone |

# Momentary Push Button Operators

## Non-illuminated – Flush, Extended, Guarded



Flush Operator  
Cat. No. 800FP-F3



Extended Operator  
Cat. No. 800FM-E4



Guarded Operator  
Cat. No. 800FP-G6

| Color | Package Quantity | Flush    |          | Extended |          |
|-------|------------------|----------|----------|----------|----------|
|       |                  | Plastic  | Metal    | Plastic  | Metal    |
|       |                  | Cat. No. | Cat. No. | Cat. No. | Cat. No. |
| Black | 1                | 800FP-F2 | 800FM-F2 | 800FP-E2 | 800FM-E2 |
| Green |                  | 800FP-F3 | 800FM-F3 | 800FP-E3 | 800FM-E3 |
| Red   |                  | 800FP-F4 | 800FM-F4 | 800FP-E4 | 800FM-E4 |

800F   P   -   F   3   -      
          a           b           c           d

| a                     |                                                    |
|-----------------------|----------------------------------------------------|
| Operator Construction |                                                    |
| Code                  | Description                                        |
| P                     | Round plastic operator (IP69K; IP66, Type 4/4X/13) |
| M                     | Round metal operator (IP66, Type 4/13)             |

| b             |             |
|---------------|-------------|
| Operator Type |             |
| Code          | Description |
| F             | Flush       |
| E             | Extended    |
| G             | Guarded     |

| c         |                                |
|-----------|--------------------------------|
| Color Cap |                                |
| Code      | Description                    |
| 0         | Orange                         |
| 1         | White                          |
| 2         | Black                          |
| 3         | Green                          |
| 4         | Red                            |
| 5         | Yellow                         |
| 6         | Blue                           |
| 8         | Gray <sup>(1)</sup>            |
| 9         | No cap                         |
| X         | Assortment pack <sup>(2)</sup> |

| d         |                               |
|-----------|-------------------------------|
| Packaging |                               |
| Code      | Description                   |
| Blank     | 1 per package                 |
| BP        | 10 per package <sup>(3)</sup> |

(1) Available in flush only.

(2) Assortment pack contains one cap of each color, not available in BP packaging.

(3) Only available with no color cap (option 9 from [Table c](#)).

## Non-illuminated – with Two-color Molded Legend Caps



Flush Operator  
Cat. No. 800FP-F301

| Button Color | Text Color | Legend Text | Package Quantity | Flush      |            | Extended   |            |
|--------------|------------|-------------|------------------|------------|------------|------------|------------|
|              |            |             |                  | Plastic    | Metal      | Plastic    | Metal      |
|              |            |             |                  | Cat. No.   | Cat. No.   | Cat. No.   | Cat. No.   |
| Green        | White      | START       | 1                | 800FP-F301 | 800FM-F301 | —          | —          |
|              |            | I           |                  | 800FP-F306 | 800FM-F306 | —          | —          |
| Red          | White      | STOP        |                  | 800FP-F402 | 800FM-F402 | 800FP-E402 | 800FM-E402 |
|              |            | O           |                  | —          | —          | 800FP-E405 | 800FM-E405 |
| Black        | White      | →           |                  | 800FP-F208 | 800FM-F208 | 800FP-E208 | 800FM-E208 |

800F    P    -    F    3    01  
                  a                    b                    c                    d

| a                     |                                                    |
|-----------------------|----------------------------------------------------|
| Operator Construction |                                                    |
| Code                  | Description                                        |
| P                     | Round plastic operator (IP69K; IP66, Type 4/4X/13) |
| M                     | Round metal operator (IP66, Type 4/13)             |

| b             |             |
|---------------|-------------|
| Operator Type |             |
| Code          | Description |
| F             | Flush       |
| E             | Extended    |
| G             | Guarded     |

| c         |             |
|-----------|-------------|
| Color Cap |             |
| Code      | Description |
| 0         | Orange      |
| 1         | White       |
| 2         | Black       |
| 3         | Green       |
| 4         | Red         |
| 5         | Yellow      |
| 6         | Blue        |

| d                                                                       |                        |
|-------------------------------------------------------------------------|------------------------|
| Legend Text <sup>(1)</sup> <sup>(2)</sup> <sup>(3)</sup> <sup>(4)</sup> |                        |
| Code                                                                    | Description            |
| Blank                                                                   | No Text                |
| 01                                                                      | START                  |
| 02                                                                      | STOP                   |
| 05                                                                      | O                      |
| 06                                                                      | I                      |
| 08                                                                      | →                      |
| 09                                                                      | Forward <sup>(5)</sup> |
| 10                                                                      | Reverse <sup>(5)</sup> |
| 11                                                                      | R                      |

- (1) For custom laser-engraved legend cap, consult your local Rockwell Automation sales office or Allen-Bradley distributor.  
 (2) White and yellow caps have black text. All other color caps have white text.  
 (3) Legend button cap supplied loose for customer installation.  
 (4) For valid combinations, see [Table 8](#).  
 (5) Available for flush only.

**Table 8 - Valid Color Cap/Legend Text Codes**

| Color  | Text                             |               |
|--------|----------------------------------|---------------|
|        | Flush Caps                       | Extended Caps |
| White  | FORWARD, REVERSE, START, I, →, R | →, R          |
| Black  | FORWARD, REVERSE, →, R           | STOP, O, →, R |
| Green  | FORWARD, REVERSE, START, I, →    | →             |
| Red    | FORWARD, REVERSE, STOP, O, →     | STOP, O, →    |
| Yellow | FORWARD, REVERSE, →              | →             |
| Blue   | FORWARD, REVERSE, →, R           | →, R          |

## Illuminated – Flush, Extended, Guarded



Flush Operator  
Cat. No. 800FM-LF4



Extended Operator  
Cat. No. 800FP-LE3



Guarded Operator  
Cat. No. 800FP-LG3

| Color  | Package Quantity | Flush     |           | Extended  |           |
|--------|------------------|-----------|-----------|-----------|-----------|
|        |                  | Plastic   | Metal     | Plastic   | Metal     |
|        |                  | Cat. No.  | Cat. No.  | Cat. No.  | Cat. No.  |
| Green  | 1                | 800FP-LF3 | 800FM-LF3 | 800FP-LE3 | 800FM-LE3 |
| Red    |                  | 800FP-LF4 | 800FM-LF4 | 800FP-LE4 | 800FM-LE4 |
| Yellow |                  | 800FP-LF5 | 800FM-LF5 | 800FP-LE5 | 800FM-LE5 |
| Clear  |                  | 800FP-LF7 | 800FM-LF7 | 800FP-LE7 | 800FM-LE7 |

800F    P    -    LE    3    -        
                  a                    b                    c                    d

| a                     |                                                    |
|-----------------------|----------------------------------------------------|
| Operator Construction |                                                    |
| Code                  | Description                                        |
| P                     | Round plastic operator (IP69K; IP66, Type 4/4X/13) |
| M                     | Round metal operator (IP66, Type 4/13)             |

| b             |             |
|---------------|-------------|
| Operator Type |             |
| Code          | Description |
| F             | Flush       |
| E             | Extended    |
| G             | Guarded     |

| c                        |                       |
|--------------------------|-----------------------|
| Color Cap <sup>(1)</sup> |                       |
| Code                     | Description           |
| 0                        | Amber <sup>(2)</sup>  |
| 3                        | Green                 |
| 4                        | Red                   |
| 5                        | Yellow <sup>(2)</sup> |
| 6                        | Blue <sup>(2)</sup>   |
| 7                        | Clear                 |
| 9                        | No cap                |

| d         |                               |
|-----------|-------------------------------|
| Packaging |                               |
| Code      | Description                   |
| Blank     | 1 per package                 |
| BP        | 10 per package <sup>(3)</sup> |

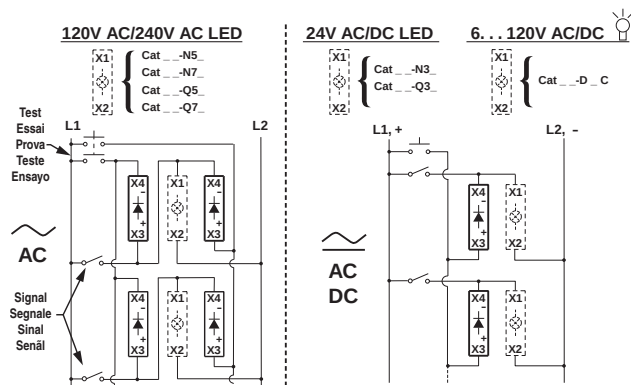
(1) For custom laser-engraved operator, consult your local Rockwell Automation sales office or Allen-Bradley distributor.

(2) When using LED for illumination, a white LED is recommended.

(3) Only available with no color cap (9 from [Table c](#)).

## Push-to-test Push Button Device Schematic

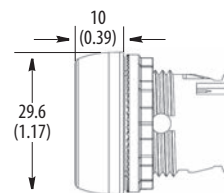
Illuminated push buttons can be wired as a push-to-test device by using the following schematic and a catalog number 800F-XD7 diode module (see [page 52](#)).



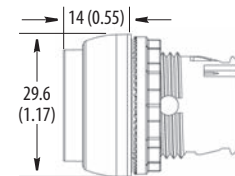
## Approximate Dimensions – Momentary Operators

Dimensions in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.

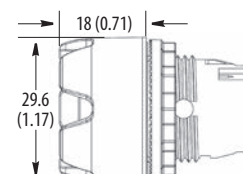
Illuminated and Non-illuminated Momentary Flush



Illuminated and Non-illuminated Momentary Extended

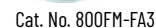


Illuminated Momentary Guarded



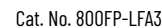
$$\frac{800F}{a} - \frac{FA}{b} - \frac{3}{c}$$

| C                             |                                |
|-------------------------------|--------------------------------|
| Lens Cap Color <sup>(2)</sup> |                                |
| Code                          | Description                    |
| 0                             | Orange                         |
| 1                             | White                          |
| 2                             | Black                          |
| 3                             | Green                          |
| 4                             | Red                            |
| 5                             | Yellow                         |
| 6                             | Blue                           |
| 9                             | No cap                         |
| X                             | Assortment pack <sup>(3)</sup> |



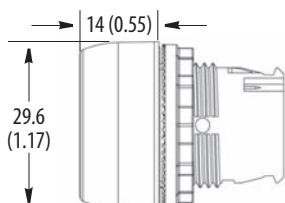
- ## Illuminated

| C                        |                       |
|--------------------------|-----------------------|
| Color Cap <sup>(3)</sup> |                       |
| Code                     | Description           |
| 0                        | Amber <sup>(4)</sup>  |
| 3                        | Green                 |
| 4                        | Red                   |
| 5                        | Yellow <sup>(4)</sup> |
| 6                        | Blue <sup>(4)</sup>   |
| 7                        | Clear                 |
| 9                        | No cap                |



- ## Approximate Dimensions

### Non-illuminated Guarded, Illuminated, and Non-illuminated Alternate Action Push Button Operators



Pilot Light Operators



Plastic Pilot Light  
Cat. No. 800FP-P7



Metal Pilot Light  
Cat. No. 800FM-P4

| Color  | Package Quantity | Plastic  | Metal    |
|--------|------------------|----------|----------|
|        |                  | Cat. No. | Cat. No. |
| Green  | 1                | 800FP-P3 | 800FM-P3 |
| Red    |                  | 800FP-P4 | 800FM-P4 |
| Yellow |                  | 800FP-P5 | 800FM-P5 |

800F      P      -      P        3      -            
                  a                    b                    c                    d

| a                     |                                                       |
|-----------------------|-------------------------------------------------------|
| Operator Construction |                                                       |
| Code                  | Description                                           |
| P                     | Round plastic operator<br>(IP69K; IP66, Type 4/4X/13) |
| M                     | Round metal operator<br>(IP66, Type 4/13)             |

| b             |             |
|---------------|-------------|
| Operator Type |             |
| Code          | Description |
| P             | Diffuser    |

| c                         |                       |
|---------------------------|-----------------------|
| Lens Color <sup>(1)</sup> |                       |
| Code                      | Description           |
| 0                         | Amber <sup>(2)</sup>  |
| 3                         | Green                 |
| 4                         | Red                   |
| 5                         | Yellow <sup>(2)</sup> |
| 6                         | Blue <sup>(2)</sup>   |
| 7                         | Clear                 |
| 9                         | No cap                |

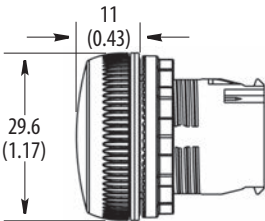
| d         |                               |
|-----------|-------------------------------|
| Packaging |                               |
| Code      | Description                   |
| Blank     | 1 per package                 |
| BP        | 10 per package <sup>(3)</sup> |

(1) For custom laser-engraved operator, consult your local Rockwell Automation sales office or Allen-Bradley distributor.  
(2) When using LED for illumination, a white LED is recommended.  
(3) Only available with no color cap (Code 9 from [Table c](#)).

Approximate Dimensions

Dimensions in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.

Pilot Light Operators



Selector Switch Operators

2-position, Non-illuminated



Standard Knob  
Cat. No. 800FP-SM22



Knob Lever  
Cat. No. 800FP-HM22

Switching Angle

Table 9 - Target Table and Operator Position <sup>(1)</sup>

| Contact Type <sup>(2)</sup> |   |   |  |
|-----------------------------|---|---|--|
| N.O.                        | O | X |  |
| N.C.                        | X | O |  |

(1) Target table for spring return from left is reversed from what is shown in the table.  
(2) Contact selection is limited to the following options, consult your local Rockwell Automation sales office or Allen-Bradley distributor for other options.  
**Note:** X = Closed / O = Open

| Color                   | Operator Type                    |  | Package Quantity | Standard Knob |            |
|-------------------------|----------------------------------|--|------------------|---------------|------------|
|                         |                                  |  |                  | Plastic       | Metal      |
|                         |                                  |  |                  | Cat. No.      | Cat. No.   |
| Black with White Insert | Maintained (60° switching angle) |  | 1                | 800FP-SM22    | 800FM-SM22 |

800F      P      -      S        M2        2      -            
                  a                                  b                                  c                                  d                                  e                                  f

| a                     |                                             |
|-----------------------|---------------------------------------------|
| Operator Construction |                                             |
| Code                  | Description                                 |
| P                     | Round plastic operator (IP66, Type 4/4X/13) |
| M                     | Round metal operator (IP66, Type 4/13)      |

| b             |                           |
|---------------|---------------------------|
| Operator Type |                           |
| Code          | Description               |
| S             | Standard knob             |
| H             | Knob lever <sup>(1)</sup> |

| c                 |                                                    |
|-------------------|----------------------------------------------------|
| Operator Function |                                                    |
| Code              | Type                                               |
| M2                | Maintained (60° switching angle)<br>               |
| L2                | Spring return from left (60° switching angle)<br>  |
| R2                | Spring return from right (60° switching angle)<br> |

| d                 |            |              |
|-------------------|------------|--------------|
| Knob/Insert Color |            |              |
| Code              | Knob Color | Insert Color |
| 2                 | Black      | White        |

| e           |                           |
|-------------|---------------------------|
| Orientation |                           |
| Code        | Description               |
| Blank       | Standard                  |
| N           | 90° offset <sup>(2)</sup> |

| f         |                               |
|-----------|-------------------------------|
| Packaging |                               |
| Code      | Description                   |
| Blank     | 1 per package                 |
| BP        | 10 per package <sup>(3)</sup> |

(1) 30 mm hole spacing does not work if knob lever is used. See [page 47](#) for recommended operator panel spacing.  
(2) For use in vertical mount Bulletin 800F enclosures.  
(3) Not available with 90° offset orientation.



## 2-position, Illuminated



Standard Knob  
Cat. No. 800FP-LSM26

**IMPORTANT** Crevices can exist on product that make it unsuitable for certain applications. Consult your local Rockwell Automation sales office or Allen-Bradley distributor.

### Switching Angle

**Table 10 - Target Table and Operator Position <sup>(1)</sup>**

| Contact Type <sup>(2)</sup> |   |   |  |
|-----------------------------|---|---|--|
| N.O.                        | 0 | X |  |
| N.C.                        | X | 0 |  |

(1) Target table for spring return from left is reversed from what is shown in the table.

(2) Contact selection is limited to the following options, consult your local Rockwell Automation sales office or Allen-Bradley distributor for other options.

**Note:** X = Closed / 0 = Open

| Color  | Operator Type                    |  | Package Quantity | Standard Knob |             |
|--------|----------------------------------|--|------------------|---------------|-------------|
|        |                                  |  |                  | Plastic       | Metal       |
|        |                                  |  |                  | Cat. No.      | Cat. No.    |
| Green  | Maintained (60° switching angle) |  | 1                | 800FP-LSM23   | 800FM-LSM23 |
| Red    |                                  |  |                  | 800FP-LSM24   | 800FM-LSM24 |
| Yellow |                                  |  |                  | 800FP-LSM25   | 800FM-LSM25 |

800F    P    -    LS    M2    3    \_\_\_\_\_  
                  a                    b                    c                    d                    e

| a                     |                                             |
|-----------------------|---------------------------------------------|
| Operator Construction |                                             |
| Code                  | Description <sup>(1)</sup>                  |
| P                     | Round plastic operator (IP66, Type 4/4X/13) |
| M                     | Round metal operator (IP66, Type 4/13)      |

| b             |                           |
|---------------|---------------------------|
| Operator Type |                           |
| Code          | Description               |
| LS            | Standard knob             |
| LH            | Knob lever <sup>(3)</sup> |

| c                 |                                                    |
|-------------------|----------------------------------------------------|
| Operator Function |                                                    |
| Code              | Type                                               |
| M2                | Maintained (60° switching angle)<br>               |
| L2                | Spring return from left (60° switching angle)<br>  |
| R2                | Spring return from right (60° switching angle)<br> |

| d                 |                       |              |
|-------------------|-----------------------|--------------|
| Knob/Insert Color |                       |              |
| Code              | Knob Color            | Insert Color |
| 0                 | Amber <sup>(2)</sup>  | White        |
| 3                 | Green                 | White        |
| 4                 | Red                   | White        |
| 5                 | Yellow <sup>(2)</sup> | Black        |
| 6                 | Blue <sup>(2)</sup>   | White        |
| 7                 | Clear                 | Black        |

| e           |                           |
|-------------|---------------------------|
| Orientation |                           |
| Code        | Description               |
| Blank       | Standard                  |
| N           | 90° offset <sup>(4)</sup> |

(1) LED module is required for illumination.

(2) Use of a white LED is recommended.

(3) Only available in clear.

(4) For use in vertical mount enclosures.

3-position, Non-illuminated



Standard Knob  
Cat. No. 800FP-SM32

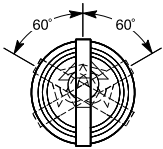


Knob Lever  
Cat. No. 800FM-HM32

Switching Angle

Table 11 - Target Table and Operator Position (60° Switching Angle)

| Contact Type <sup>(1)</sup> | Position on Mounting Latch |  |  |  |
|-----------------------------|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| N.O.                        | Left                       | X                                                                                 | 0                                                                                 | 0                                                                                   |
|                             | Right                      | 0                                                                                 | 0                                                                                 | X                                                                                   |
|                             | Center                     | X                                                                                 | 0                                                                                 | X                                                                                   |
|                             | Center CL <sup>(2)</sup>   | X                                                                                 | 0                                                                                 | 0                                                                                   |
|                             | Center CR <sup>(2)</sup>   | 0                                                                                 | 0                                                                                 | X                                                                                   |
| N.C.                        | Left                       | 0                                                                                 | X                                                                                 | X                                                                                   |
|                             | Right                      | X                                                                                 | X                                                                                 | 0                                                                                   |
|                             | Center                     | 0                                                                                 | X                                                                                 | 0                                                                                   |
|                             | Center CL <sup>(2)</sup>   | 0                                                                                 | X                                                                                 | X                                                                                   |
|                             | Center CR <sup>(2)</sup>   | X                                                                                 | X                                                                                 | 0                                                                                   |



(1) Contact selection is limited to the following options, consult your local Rockwell Automation sales office or Allen-Bradley distributor for other options.  
(2) The center contact block can have the same target output as the left or right contact block, by specifying center left (CL) or center right (CR) option.  
**Note:** X = Closed / 0 = Open

| Color                   | Operator Type                                                                                                         |                                                                                     |                                                                                     | Package Quantity | Standard Knob |            | Knob Lever |            |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------|---------------|------------|------------|------------|
|                         |                                    |  |  |                  | Plastic       | Metal      | Plastic    | Metal      |
|                         |                                                                                                                       |                                                                                     |                                                                                     |                  | Cat. No.      | Cat. No.   | Cat. No.   | Cat. No.   |
| Black with White Insert | Maintained                         |                                                                                     |                                                                                     | 1                | 800FP-SM32    | 800FM-SM32 | 800FP-HM32 | 800FM-HM32 |
|                         | Spring return from left and right  |                                                                                     |                                                                                     |                  | 800FP-SB32    | 800FM-SB32 | 800FP-HB32 | 800FM-HB32 |

800F      P      -      S        M3        2                        
                  a                    b                    c                    d                    e                    f

| a                     |                                             |
|-----------------------|---------------------------------------------|
| Operator Construction |                                             |
| Code                  | Description                                 |
| P                     | Round plastic operator (IP66, Type 4/4X/13) |
| M                     | Round metal operator (IP66, Type 4/13)      |

| b             |                           |
|---------------|---------------------------|
| Operator Type |                           |
| Code          | Description               |
| S             | Standard knob             |
| H             | Knob lever <sup>(1)</sup> |

| c                 |                                                                                                                         |
|-------------------|-------------------------------------------------------------------------------------------------------------------------|
| Operator Function |                                                                                                                         |
| Code              | Type                                                                                                                    |
| M3                | Maintained                         |
| L3                | Spring return from left            |
| R3                | Spring return from right           |
| B3                | Spring return from left and right  |

| d                 |            |              |
|-------------------|------------|--------------|
| Knob/Insert Color |            |              |
| Code              | Knob Color | Insert Color |
| 2                 | Black      | White        |

| e           |                           |
|-------------|---------------------------|
| Orientation |                           |
| Code        | Description               |
| Blank       | Standard                  |
| N           | 90° offset <sup>(2)</sup> |

| f         |                             |
|-----------|-----------------------------|
| Operation |                             |
| Code      | Description                 |
| Blank     | Standard                    |
| CL        | Center left <sup>(3)</sup>  |
| CR        | Center right <sup>(3)</sup> |

(1) 30 mm hole spacing does not work if knob lever is used. See [page 47](#) for recommended operator panel spacing.  
(2) For use in vertical mount Bulletin 800F enclosures.  
(3) The center contact block can have the same target output as the left or right contact block, by specifying center left (CL) or center right (CR) option.



4-position, Non-illuminated



Standard Knob  
Cat. No. 800FP-SM42

Table 13 - Target Table and Operator Position (45° Switching Angle) <sup>(1)</sup>

| Contact Type <sup>(2)</sup> | Position on Mounting Latch |  |  |  |  |
|-----------------------------|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| N.O.                        | Left                       | 0                                                                                 | 0                                                                                 | X                                                                                   | 0                                                                                   |
|                             | Right                      | X                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   |
|                             | Center                     | X                                                                                 | 0                                                                                 | X                                                                                   | 0                                                                                   |
|                             | Center CL                  | 0                                                                                 | 0                                                                                 | X                                                                                   | 0                                                                                   |
|                             | Center CR                  | X                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   |
| N.C.E.B.                    | Left                       | 0                                                                                 | 0                                                                                 | 0                                                                                   | X                                                                                   |
|                             | Right                      | 0                                                                                 | X                                                                                 | 0                                                                                   | 0                                                                                   |
|                             | Center CL                  | 0                                                                                 | 0                                                                                 | 0                                                                                   | X                                                                                   |
|                             | Center CR                  | 0                                                                                 | X                                                                                 | 0                                                                                   | 0                                                                                   |
| N.C.L.B.                    | Left                       | X                                                                                 | X                                                                                 | 0                                                                                   | X                                                                                   |
|                             | Right                      | 0                                                                                 | X                                                                                 | X                                                                                   | X                                                                                   |
|                             | Center                     | 0                                                                                 | X                                                                                 | 0                                                                                   | X                                                                                   |
|                             | Center CL                  | X                                                                                 | X                                                                                 | 0                                                                                   | X                                                                                   |
|                             | Center CR                  | 0                                                                                 | X                                                                                 | X                                                                                   | X                                                                                   |

(1) Must use N.O., N.C.E.B., or N.C.L.B. contact blocks only. Cannot use N.C. or N.O.E.M. contact blocks with 4-position selector switch.  
(2) Contact selection is limited to the following options, consult your local Rockwell Automation sales office or Allen-Bradley distributor for other options.  
**Note:** X = Closed / 0 = Open

| Color                   | Pkg. Quantity | Standard Knob – Maintained |            |
|-------------------------|---------------|----------------------------|------------|
|                         |               | Plastic                    | Metal      |
|                         |               | Cat. No.                   | Cat. No.   |
| Black with White Insert | 1             | 800FP-SM42                 | 800FM-SM42 |

800F    P    -    S    M4    2           
          a        b        c        d        e        f

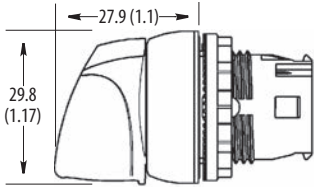
Approximate Dimensions – Selector Switch Operators

| a                     |                                             | b             |               | c                 |                                  |
|-----------------------|---------------------------------------------|---------------|---------------|-------------------|----------------------------------|
| Operator Construction |                                             | Operator Type |               | Operator Function |                                  |
| Code                  | Description                                 | Code          | Description   | Code              | Type                             |
| P                     | Round plastic operator (IP66, Type 4/4X/13) | S             | Standard knob | M4                | Maintained (45° switching angle) |
| M                     | Round metal operator (IP66, Type 4/13)      | H             | Knob lever    |                   |                                  |

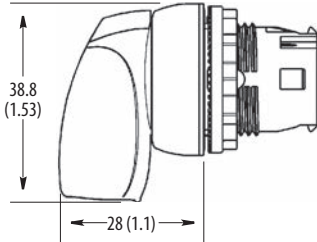
| d                 |            |              | e           |                           | f         |                             |
|-------------------|------------|--------------|-------------|---------------------------|-----------|-----------------------------|
| Knob/Insert Color |            |              | Orientation |                           | Operation |                             |
| Code              | Knob Color | Insert Color | Code        | Description               | Code      | Description                 |
| 2                 | Black      | White        | Blank       | Standard                  | Blank     | Standard                    |
|                   |            |              | N           | 90° offset <sup>(1)</sup> | CL        | Center left <sup>(2)</sup>  |
|                   |            |              |             |                           | CR        | Center right <sup>(2)</sup> |

(1) For use in vertical mount enclosures.  
(2) The center contact block can have the same target output as the left or right contact block, by specifying center left (CL) or center right (CR) option.

Illuminated and Non-illuminated Knob Selector Switch Operators



Non-illuminated Knob Lever Selector Switch Operators

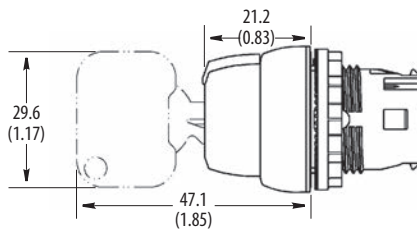






## Approximate Dimensions – Key-operated Selector Switches

### Key Selector Switch Operators



## 2-position, Non-illuminated – Twist-to-release/Push-pull (Trigger Action)

- All emergency stop operators are EN ISO 13850 compliant with standard N.C., N.C.L.B., or self-monitoring contact blocks.
- E-stop operators, latch, and contact block combinations have been third-party tested for B10d values. B10d values can be found in publication [SAFETY-SR001](#).

40 mm Trigger Action  
Twist-to-Release Mushroom  
Cat. No. 800FP-MT44

40 mm Trigger Action  
Push-Pull Mushroom  
Cat. No. 800FP-MP44

90 mm Half-dome  
Cat. No. 800FP-MP94

$$\frac{800F}{a} - \frac{MT_4}{b} \frac{4}{c} \frac{1}{d}$$

| d (4) (5) (6) |                     |
|---------------|---------------------|
| Engraving     |                     |
| Code          | Description         |
| Blank         | No engraving on cap |
| LE            | EMO laser engraved  |
| E             | EMO printed         |

- (1) Only available with red color cap.
- (2) Limit of four contact blocks max. for these devices.
- (3) Half-dome operators only available with black, red, and yellow color caps
- (4) For EMO guards, consult your local Rockwell Automation sales office or Allen-Bradley distributor.
- (5) Only available on 40 mm color cap.
- (6) Only available on red, 40 mm push, twist-to-release operator type (MT44).





2-position, Non-illuminated – Mushroom, Key Release (Trigger Action)

**IMPORTANT**

- All emergency stop operators are EN ISO 13850 compliant with standard N.C., N.C.L.B., or self-monitoring contact blocks.
- E-stop operators, latch, and contact block combinations have been third-party tested for B10d values. B10d values can be found in publication [SAFETY-SR001](#).



40 mm Key Release Mushroom  
Cat. No. 800FP-MK44

| Color | Package Quantity | 2-Position (Trigger Action) 40 mm Mushroom Key Release |            |
|-------|------------------|--------------------------------------------------------|------------|
|       |                  | Plastic                                                | Metal      |
|       |                  | Cat. No.                                               | Cat. No.   |
| Red   | 1                | 800FP-MK44                                             | 800FM-MK44 |

800F      P      -      MK4      4

            a                      b                      c                      d

| a                     |                                          |
|-----------------------|------------------------------------------|
| Operator Construction |                                          |
| Code                  | Description                              |
| P                     | Round plastic operator (IP66, Type 4/13) |
| M                     | Round metal operator (IP66, Type 4/13)   |

| b                    |       |
|----------------------|-------|
| Operator Type        |       |
| Key Release Mushroom |       |
| Code                 | Type  |
| MK4                  | 40 mm |

| c              |       |
|----------------|-------|
| Lens Cap Color |       |
| Code           | Color |
| 4              | Red   |

| d                          |                 |
|----------------------------|-----------------|
| Ronis Key Lock (1) (2) (3) |                 |
| Code                       | Key No.         |
| Blank                      | 3825 (Standard) |
| R                          | 455             |
| 01R                        | 3801            |
| 02R                        | 3802            |
| 03R                        | 3803            |
| 04R                        | 3804            |
| 05R                        | 3805            |
| 06R                        | 3806            |
| 27R                        | 4001            |
| 28R                        | 4002            |
| 29R                        | 4003            |
| 30R                        | 4004            |
| 31R                        | 4005            |
| 32R                        | 4006            |
| 33R                        | 4007            |

(1) Keyed operators are IP66, Type 4/13.  
(2) Not intended for high security applications. Interoperability is possible with certain key/cylinder lock combinations. Consult your local Rockwell Automation sales office or Allen-Bradley distributor for interoperability information.  
(3) For replacement Ronis keys, consult your local Rockwell Automation sales office or Allen-Bradley distributor.

### 3-position, Illuminated and Non-illuminated – Mushroom



Illuminated 3-position Push-pull  
Cat. No. 800FM-LMP44E3

**IMPORTANT** Sold as standalone operator only. Not available as a composite catalog number.

Table 16 - Target Table and Operator Position <sup>(1)</sup>

| Contact Type <sup>(2)</sup> |  |  |  |
|-----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                             | Out                                                                               | Center                                                                            | In                                                                                  |
| N.O.                        | 0                                                                                 | 0                                                                                 | X                                                                                   |
| N.C.E.B                     | X                                                                                 | 0                                                                                 | 0                                                                                   |
| N.C.L.B                     | X                                                                                 | X                                                                                 | 0                                                                                   |

(1) Must use N.O., N.C.E.B., or N.C.L.B. contact blocks only. Cannot use N.C. or N.O.E.M. contact blocks with 3-position push-pull operators.

(2) Contact selection is limited to the following options, consult your local Rockwell Automation sales office or Allen-Bradley distributor for other options.

Note: X = Closed / 0 = Open

| Operator Function                               | Operator Type   | Color                | Package Quantity | Cat. No.      |
|-------------------------------------------------|-----------------|----------------------|------------------|---------------|
| Momentary Out, Maintained Center, Momentary In  | Non-illuminated | Black <sup>(1)</sup> | 1                | 800FM-MM42E3  |
|                                                 |                 | Green                |                  | 800FM-MM43E3  |
|                                                 |                 | Red <sup>(2)</sup>   |                  | 800FM-MM44E3  |
|                                                 | Illuminated     | Amber <sup>(3)</sup> |                  | 800FM-LMM40E3 |
|                                                 |                 | Green                |                  | 800FM-LMM43E3 |
|                                                 |                 | Red                  |                  | 800FM-LMM44E3 |
|                                                 |                 | Blue <sup>(3)</sup>  |                  | 800FM-LMM46E3 |
|                                                 |                 | Clear <sup>(3)</sup> |                  | 800FM-LMM47E3 |
|                                                 |                 |                      |                  |               |
| Momentary Out, Maintained Center, Maintained In | Non-illuminated | Black <sup>(1)</sup> | 1                | 800FM-MP42E3  |
|                                                 |                 | Green                |                  | 800FM-MP43E3  |
|                                                 |                 | Red <sup>(2)</sup>   |                  | 800FM-MP44E3  |
|                                                 | Illuminated     | Amber <sup>(3)</sup> |                  | 800FM-LMP40E3 |
|                                                 |                 | Green                |                  | 800FM-LMP43E3 |
|                                                 |                 | Red                  |                  | 800FM-LMP44E3 |
|                                                 |                 | Blue <sup>(3)</sup>  |                  | 800FM-LMP46E3 |
|                                                 |                 | Clear <sup>(3)</sup> |                  | 800FM-LMP47E3 |
|                                                 |                 |                      |                  |               |

(1) Available in non-illuminated only.

(2) Replacement caps are available for this device. Order Cat. No. 800F-AMP4.

(3) Available in illuminated only.

800F      M      -      L        MM        4        4        E3    
                  a                    b                    c                    d                    e                    f

| a                     |                                        | b             |                            | c                 |                                                 | d        |               | e         |                          | f         |             |
|-----------------------|----------------------------------------|---------------|----------------------------|-------------------|-------------------------------------------------|----------|---------------|-----------|--------------------------|-----------|-------------|
| Operator Construction |                                        | Operator Type |                            | Operator Function |                                                 | Cap Size |               | Cap Color |                          | Positions |             |
| Code                  | Description                            | Code          | Description                | Code              | Description                                     | Code     | Description   | Code      | Description              | Code      | Description |
| M                     | Round metal operator (IP66, Type 4/13) | Blank         | Non-illuminated            | MM                | Momentary out, Maintained center, Momentary in  | 4        | 40 mm plastic | 0         | Amber <sup>(2) (3)</sup> | E3        | 3-position  |
|                       |                                        | L             | Illuminated <sup>(1)</sup> |                   |                                                 |          |               | 2         | Black <sup>(4)</sup>     |           |             |
|                       |                                        |               |                            | MP                | Momentary out, Maintained center, Maintained in |          |               | 3         | Green                    |           |             |
|                       |                                        |               |                            |                   |                                                 |          |               | 4         | Red                      |           |             |
|                       |                                        |               |                            |                   |                                                 |          |               | 6         | Blue <sup>(2) (3)</sup>  |           |             |
|                       |                                        |               |                            |                   |                                                 |          |               | 7         | Clear <sup>(2) (3)</sup> |           |             |

(1) LED module is required for illumination. Cannot use incandescent module.

(2) Available in illuminated only.

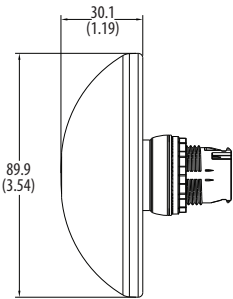
(3) Use of white LED is recommended.

(4) Available in non-illuminated only.

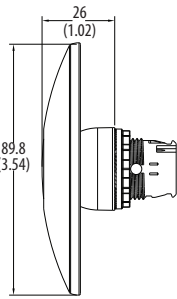
# Approximate Dimensions – Push-pull Operators

Dimensions in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.

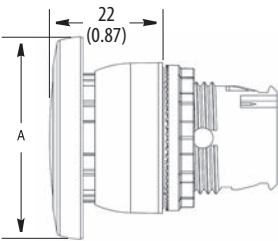
90 mm Half Dome



90 mm Mushroom

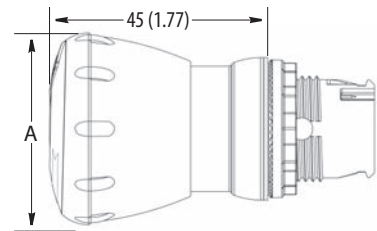


Illuminated and Non-illuminated Momentary Mushroom Operators (40 mm and 60 mm)

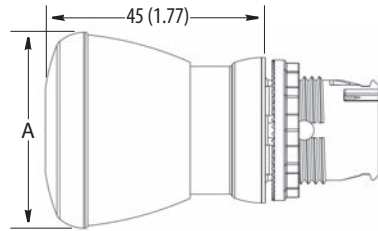


| Operator | A           |
|----------|-------------|
| 40 mm    | 39.8 (1.57) |
| 60 mm    | 59.8 (2.35) |

Illuminated and Non-illuminated Twist-to-release Operators (30 mm, 40 mm, and 60 mm)

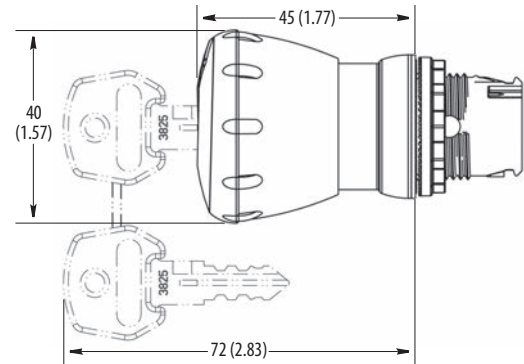


Illuminated and Non-illuminated Push-pull Mushroom Operators (30 mm, 40 mm, and 60 mm)



| Operator | A         |
|----------|-----------|
| 30 mm    | 30 (1.18) |
| 40 mm    | 40 (1.57) |
| 60 mm    | 60 (2.36) |

Mushroom Key Release Operator (40 mm)







40 mm Mushroom  
Cat. No. 800FP-LMM43

| Color  | Package Quantity | 40 mm Mushroom |             |
|--------|------------------|----------------|-------------|
|        |                  | Plastic        | Metal       |
|        |                  | Cat. No.       | Cat. No.    |
| Green  | 1                | 800FP-LMM43    | 800FM-LMM43 |
| Red    |                  | 800FP-LMM44    | 800FM-LMM44 |
| Yellow |                  | 800FP-LMM45    | 800FM-LMM45 |
| Blue   |                  | 800FP-LMM46    | 800FM-LMM46 |
| Clear  |                  | 800FP-LMM47    | 800FM-LMM47 |

$$\frac{800F}{a} - \frac{LMM4}{b} - \frac{3}{c}$$

| a                     |                                                       |
|-----------------------|-------------------------------------------------------|
| Operator Construction |                                                       |
| Code                  | Description                                           |
| P                     | Round plastic operator<br>(IP69K; IP65, Type 4/4X/13) |
| M                     | Round metal operator<br>(IP65, Type 4/13)             |

| b                      |                 |
|------------------------|-----------------|
| Size and Operator Type |                 |
| Code                   | Type            |
| LMM4                   | 40 mm momentary |

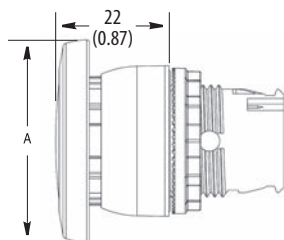
| C         |                       |
|-----------|-----------------------|
| Color Cap |                       |
| Code      | Color                 |
| 3         | Green                 |
| 4         | Red                   |
| 5         | Yellow <sup>(1)</sup> |
| 6         | Blue <sup>(1)</sup>   |
| 7         | Clear <sup>(1)</sup>  |

(1) When using LED for illumination, a white LED is recommended.

### Approximate Dimensions – Momentary Mushroom Push Buttons

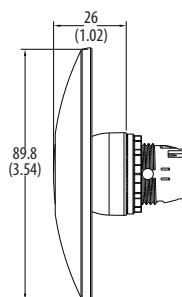
Dimensions in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.

### **Illuminated and Non-illuminated Momentary Mushroom Operators (40 mm and 60 mm)**



| Operator | A           |
|----------|-------------|
| 40 mm    | 39.8 (1.57) |
| 60 mm    | 59.8 (2.35) |

### 90 mm Mushroom



# Momentary Multi-operator

## 2-function, Non-illuminated

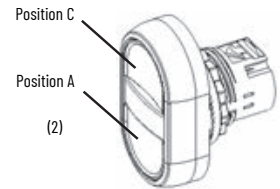


2-function Momentary Multi-operator Non-illuminated  
Cat. No. 800FP-U2E4F3

| Position A |          |       | Position C |       |       | Package Quantity | Plastic      |
|------------|----------|-------|------------|-------|-------|------------------|--------------|
| Color      | Type     | Text  | Color      | Type  | Text  |                  | Cat. No.     |
| Red        | Extended | Blank | Green      | Flush | Blank | 1                | 800FP-U2E4F3 |
|            |          | 0     |            |       | I     |                  | 800FP-U2EFFE |
|            |          | STOP  |            |       | START |                  | 800FP-U2EBFA |

**800F**   **P**   -   **U2**   **E**   **4**   **F**   **3** (with button caps)  
a                      b                      c                      d                      e                      f

**800F**   **P**   -   **U2**   **X** (with button caps)  
a                      b                      c



| a                     |                                                 |
|-----------------------|-------------------------------------------------|
| Operator Construction |                                                 |
| Code                  | Description                                     |
| P                     | Round plastic operator (IP69K; IP66, Type 4/4X) |
| M                     | Round metal operator (IP66, Type 4)             |

| b             |              |
|---------------|--------------|
| Operator Type |              |
| Code          | Description  |
| U2            | Two-function |

| c                                         |                                        |
|-------------------------------------------|----------------------------------------|
| Operator Type – Position A <sup>(2)</sup> |                                        |
| Code                                      | Description                            |
| F                                         | Flush                                  |
| E                                         | Extended                               |
| X                                         | No caps (all positions) <sup>(3)</sup> |

| d                                                   |                         |
|-----------------------------------------------------|-------------------------|
| Operator Color Cap/Text – Position A <sup>(1)</sup> |                         |
| Code                                                | Description             |
| 1                                                   | White                   |
| 2                                                   | Black                   |
| 3                                                   | Green                   |
| 4                                                   | Red                     |
| 5                                                   | Yellow                  |
| 6                                                   | Blue                    |
| A                                                   | Green with "Start" text |
| B                                                   | Red with "Stop" text    |
| C                                                   | White with "Start" text |
| D                                                   | Black with "Stop" text  |
| E                                                   | Green with "I" text     |
| F                                                   | Red with "O" text       |
| G                                                   | White with "I" text     |
| H                                                   | Black with "O" text     |

| e                                         |             |
|-------------------------------------------|-------------|
| Operator Type – Position C <sup>(2)</sup> |             |
| Code                                      | Description |
| F                                         | Flush       |
| E                                         | Extended    |

| f                                                   |                         |
|-----------------------------------------------------|-------------------------|
| Operator Color Cap/Text – Position C <sup>(1)</sup> |                         |
| Code                                                | Description             |
| 1                                                   | White                   |
| 2                                                   | Black                   |
| 3                                                   | Green                   |
| 4                                                   | Red                     |
| 5                                                   | Yellow                  |
| 6                                                   | Blue                    |
| A                                                   | Green with "Start" text |
| B                                                   | Red with "Stop" text    |
| C                                                   | White with "Start" text |
| D                                                   | Black with "Stop" text  |
| E                                                   | Green with "I" text     |
| F                                                   | Red with "O" text       |
| G                                                   | White with "I" text     |
| H                                                   | Black with "O" text     |

(1) Valid color cap/legend text codes shown in [Table 17](#).

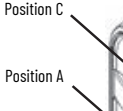
(2) Position 1 of the latch (left position when viewed from the back) corresponds to position A of the operator. Position 2 of the latch (right position when viewed from the back) corresponds to position C of the operator.

(3) For custom-engraved caps, consult your local Rockwell Automation sales office or Allen-Bradley distributor.

**Table 17 - Cap/Legend Text**

| Color | Text       |               |
|-------|------------|---------------|
|       | Flush Caps | Extended Caps |
| White | START, I   | —             |
| Black | —          | STOP, O       |
| Green | START, I   | —             |
| Red   | —          | STOP, O       |

2-function Momentary Multi-operator Illuminated  
Cat. No. 800FP-LU2E2E1



Position C

Position A

(3)

**800F**     **P**     -     **LU2**     **X**     (with button caps)

a                          b                          c

| c                                         |                                        |
|-------------------------------------------|----------------------------------------|
| Operator Type – Position A <sup>(3)</sup> |                                        |
| Code                                      | Description                            |
| F                                         | Flush                                  |
| E                                         | Extended                               |
| X                                         | No caps (all positions) <sup>(4)</sup> |

| f                                        |                         |
|------------------------------------------|-------------------------|
| Operator Color Cap/Text – Position C (1) |                         |
| Code                                     | Description             |
| 1                                        | White                   |
| 2                                        | Black                   |
| 3                                        | Green                   |
| 4                                        | Red                     |
| 5                                        | Yellow                  |
| 6                                        | Blue                    |
| A                                        | Green with "Start" text |
| B                                        | Red with "Stop" text    |
| C                                        | White with "Start" text |
| D                                        | Black with "Stop" text  |
| E                                        | Green with "I" text     |
| F                                        | Red with "O" text       |
| G                                        | White with "I" text     |
| H                                        | Black with "O" text     |

- (1) Valid color cap/legend text codes shown in [Table 18](#).
- (2) LED module is required for illumination, cannot use incandescent module.
- (3) Position 1 of the latch (left position when viewed from the back) corresponds to position A of the operator. Position 2 of the latch (right position when viewed from the back) corresponds to position C of the operator. Position 3 of the latch (center position) is reserved for the power module.
- (4) For custom-engraved caps, consult your local Rockwell Automation sales office or Allen-Bradley distributor.

### Table 18 - Cap/Legend Text

| Color | Text       |               |
|-------|------------|---------------|
|       | Flush Caps | Extended Caps |
| White | START, I   | —             |
| Black | —          | STOP, 0       |
| Green | START, I   | —             |
| Red   | —          | STOP, 0       |





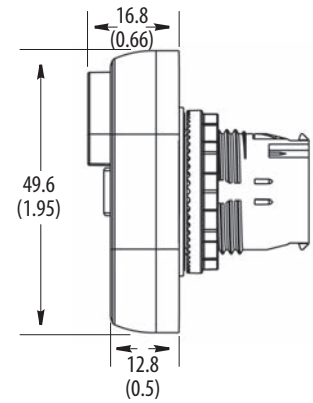
Table 19 - Cap/Legend Text

| Color | Text       |               |
|-------|------------|---------------|
|       | Flush Caps | Extended Caps |
| Black | —          | STOP, 0       |
| Green | START, I   | —             |
| Red   | —          | STOP, 0       |

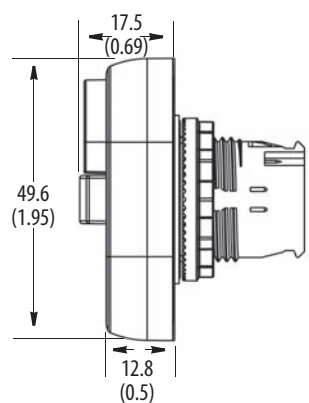
Approximate Dimensions – Momentary Multi-operator

Dimensions in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.

Illuminated and Non-illuminated  
2-position Multi-function Operators



Non-illuminated  
3-position Multi-function Operators



Reset Operator  
Cat. No. 800FP-R611

| Button Color | Legend Text | Pkg. Quantity | Flush – Round |            |
|--------------|-------------|---------------|---------------|------------|
|              |             |               | Plastic       | Metal      |
|              |             |               | Cat. No.      | Cat. No.   |
| Blue         | R           | 1             | 800FP-R611    | 800FM-R611 |
|              | No legend   |               | 800FP-R6      | 800FM-R6   |

$$\frac{800F}{a} - \frac{R}{b} = \frac{6}{c} + \frac{11}{d}$$

| a                     |                                                |
|-----------------------|------------------------------------------------|
| Operator Construction |                                                |
| Code                  | Description                                    |
| P                     | Round plastic operator<br>(IP66, Type 4/4X/13) |
| M                     | Round metal operator<br>(IP66, Type 4/13)      |

| b             |                                     |
|---------------|-------------------------------------|
| Operator Type |                                     |
| Code          | Type                                |
| R             | Reset <sup>(1)</sup> <sup>(2)</sup> |

| C         |       |
|-----------|-------|
| Color Cap |       |
| Code      | Color |
| 1         | White |
| 2         | Black |
| 6         | Blue  |

| d           |         |
|-------------|---------|
| Legend Text |         |
| Code        | Text    |
| Blank       | No text |
| 11          | R       |

- (1) Accepts latch and up to four single-circuit contact blocks or two dual-circuit contact blocks; no contacts are allowed in center position.
- (2) 11 mm (0.4 in.) reset stroke length.



Threaded Reset Rod with 35 mm Pusher  
Cat. No. 800F-ATR19L

| Rod Length [mm (in.)] <sup>(1)</sup> | Rod Length Adjustability [mm (in.)] | Pkg. Quantity | Threaded Reset Rod        |                            |
|--------------------------------------|-------------------------------------|---------------|---------------------------|----------------------------|
|                                      |                                     |               | 10 mm Pusher              | 35 mm Pusher               |
|                                      |                                     |               | Cat. No.                  | Cat. No.                   |
| 40 (1.6)                             | 34...52 (1.3...2.1)                 | 1             | 800F-ATR01                | 800F-ATR01L                |
| 55 (2.2)                             | 50...67 (2.0...2.6)                 |               | 800F-ATR02                | 800F-ATR02L                |
| 85 (3.4)                             | 80...98                             |               | 800F-ATR04                | 800F-ATR04L                |
| 115 (4.5)                            | 110...128                           |               | 800F-ATR06                | 800F-ATR06L                |
| 145 (5.7)                            | 141...159                           |               | 800F-ATR08                | 800F-ATR08L                |
| 315 (12.4)                           | 34...326                            |               | 800F-ATR19 <sup>(2)</sup> | 800F-ATR19L <sup>(2)</sup> |

- (1) If contact blocks are used, they must have a minimum rod length of 55 mm for one level of contact blocks and 85 mm for two levels of contact blocks.
- (2) Rod is threaded along its entire length for ease of cutting to desired length.

Dimensions in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.

# Single-turn Potentiometer Assembly

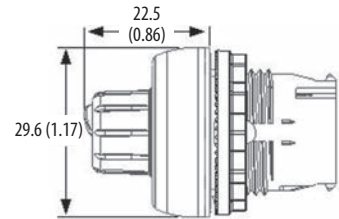


| Resistive Element <sup>(1) (2) (3)</sup> | Series B Cat. No. | Series A Cat. No. <sup>(4)</sup> |
|------------------------------------------|-------------------|----------------------------------|
| None (Operator Only) <sup>(5)</sup>      | 800FP-POT         | 800FP-POTA                       |
| 150 $\Omega$                             | 800FP-POT1        | 800FP-POT1A                      |
| 500 $\Omega$                             | 800FP-POT2        | 800FP-POT2A                      |
| 1000 $\Omega$                            | 800FP-POT3        | 800FP-POT3A                      |
| 2500 $\Omega$                            | 800FP-POT4        | 800FP-POT4A                      |
| 5000 $\Omega$                            | 800FP-POT5        | 800FP-POT5A                      |
| 10,000 $\Omega$                          | 800FP-POT6        | 800FP-POT6A                      |

- (1) Rated 300V AC/DC, 2 W max.  
(2) A latch is not needed.  
(3) Additional hole spacing required for potentiometers. See [Instruction Sheet on page 47](#) for panel hole spacing requirements.  
(4) Not stocked. Longer leadtime.  
(5) The catalog number 800FP-POT is a complete operator assembly supplied without the resistive element, used with potentiometers having a shaft diameter of 6.0 mm (0.23 in.) and a shaft length of 50.0 mm (1.97 in.), or a shaft diameter of 6.4 mm (0.25 in.) and a shaft length of 22.5 mm (0.88 in.). This operator is used with Type J potentiometers only.

## Approximate Dimensions

Dimensions in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.



# Key-operated Selector Switch – SensEject

SensEject™ – patented spring-loaded key ejection system

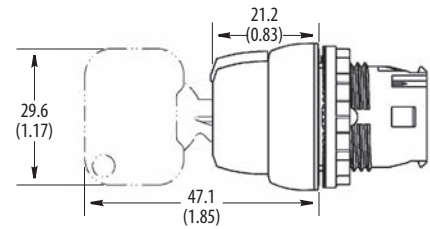


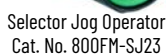
| Operator Construction                                                 | Operator Type                         | Key Eject Position        | Key Option <sup>(1)</sup> | Spare Key Cat. No. | Contact Blocks | Cat. No. <sup>(2)</sup> |
|-----------------------------------------------------------------------|---------------------------------------|---------------------------|---------------------------|--------------------|----------------|-------------------------|
| Round metal operator<br>– SensEject is IP6X<br>(dust-tight) UL Type 1 | 2-position maintained                 | <br>Left with key eject   | Ronis key                 | 800F-AKE006        | None           | 800FM-KEM21R            |
|                                                                       |                                       |                           |                           |                    | 1 N.O., 1 N.C. | 800FM-KEM21RMX11        |
|                                                                       | 3-position spring<br>return from both | <br>Center with key eject | Ronis key                 | 800F-AKE001        | None           | 800FM-KEB34R            |
|                                                                       |                                       |                           |                           |                    | 2 N.O., 3 N.C. | 800FM-KEB34RMX23        |

(1) Not intended for high security applications. Interoperability is possible with certain key/cylinder lock combinations. Consult your local Rockwell Automation sales office or Allen-Bradley distributor for interoperability information.  
(2) Includes latch and spacer block.

## Approximate Dimensions

Dimensions in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.





### Table 20 - Target Table and Operator Position (2-position)

| Contact Type <sup>(1)</sup> | Position on Mounting Latch |  |                         |  |                          |
|-----------------------------|----------------------------|-----------------------------------------------------------------------------------|-------------------------|------------------------------------------------------------------------------------|--------------------------|
|                             |                            | Selector Left Free                                                                | Selector Left Depressed | Selector Right Free                                                                | Selector Right Depressed |
| N.O.                        | Left                       | 0                                                                                 | X                       | 0                                                                                  | 0                        |
|                             | Right                      | 0                                                                                 | 0                       | 0                                                                                  | X                        |
|                             | Center                     | 0                                                                                 | X                       | 0                                                                                  | X                        |
| N.C.                        | Left                       | X                                                                                 | 0                       | X                                                                                  | X                        |
|                             | Right                      | X                                                                                 | X                       | X                                                                                  | 0                        |
|                             | Center                     | X                                                                                 | 0                       | X                                                                                  | 0                        |

### Table 21 - Target Table and Operator Position (3-position)

| Contact Type <sup>(1)</sup> | Position on Mounting Latch |  |                         |  |                           |  |                          |
|-----------------------------|----------------------------|-----------------------------------------------------------------------------------|-------------------------|-----------------------------------------------------------------------------------|---------------------------|-----------------------------------------------------------------------------------|--------------------------|
|                             |                            | Selector Left Free                                                                | Selector Left Depressed | Selector Center Free                                                              | Selector Center Depressed | Selector Right Free                                                               | Selector Right Depressed |
| N.O.                        | Left                       | 0                                                                                 | X                       | 0                                                                                 | X                         | 0                                                                                 | 0                        |
|                             | Right                      | 0                                                                                 | 0                       | 0                                                                                 | X                         | 0                                                                                 | X                        |
|                             | Center                     | 0                                                                                 | X                       | 0                                                                                 | X                         | 0                                                                                 | X                        |
| N.C.                        | Left                       | X                                                                                 | 0                       | X                                                                                 | 0                         | X                                                                                 | X                        |
|                             | Right                      | X                                                                                 | X                       | X                                                                                 | 0                         | X                                                                                 | 0                        |
|                             | Center                     | X                                                                                 | 0                       | X                                                                                 | 0                         | X                                                                                 | 0                        |

**Note:** X = Closed / 0 = Open

$$\frac{800F}{a} - \frac{SJ}{b} - \frac{2}{c} - \frac{2}{d}$$

| <b>a</b>                     |                                                |
|------------------------------|------------------------------------------------|
| <b>Operator Construction</b> |                                                |
| <b>Code</b>                  | <b>Description</b>                             |
| P                            | Round plastic operator<br>(IP66, Type 4/4X/13) |
| M                            | Round metal operator<br>(IP66, Type 4/13)      |

| b             |              |
|---------------|--------------|
| Operator Type |              |
| Code          | Description  |
| SJ            | Selector jog |

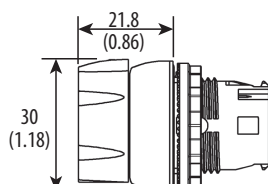
| c                 |             |
|-------------------|-------------|
| Operator Function |             |
| Code              | Description |
| 2                 | 2-position  |
| 3                 | 3-position  |

| d                        |             |
|--------------------------|-------------|
| Color Cap <sup>(1)</sup> |             |
| Code                     | Description |
| 2                        | Black       |
| 3                        | Green       |

(1) Buttons cannot be engraved.

## Approximate Dimensions

Dimensions in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.



## Toggle Switch Operators



Toggle Switch Operator  
Cat. No. 800FM-JM2

Table 22 - Target Table and Operator Position (2-position)

| Contact Type <sup>(2)</sup> | Position on Mounting Latch |  |  |  |
|-----------------------------|----------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                             |                            | Toggle Left                                                                       | Center                                                                              | Toggle Right                                                                        |
| N.O.                        | Left                       | 0                                                                                 | 0                                                                                   | X                                                                                   |
|                             | Right                      | X                                                                                 | 0                                                                                   | 0                                                                                   |
|                             | Center                     | X                                                                                 | 0                                                                                   | X                                                                                   |
| N.C.                        | Left                       | X                                                                                 | X                                                                                   | 0                                                                                   |
|                             | Right                      | 0                                                                                 | X                                                                                   | X                                                                                   |
|                             | Center                     | 0                                                                                 | X                                                                                   | 0                                                                                   |

Table 23 - Target Table and Operator Position (4-position) <sup>(1)</sup>

| Contact Type <sup>(2)</sup> | Position on Mounting Latch |  |  |  |  |  |
|-----------------------------|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                             |                            | Toggle Up                                                                         | Toggle Left                                                                       | Center                                                                             | Toggle Right                                                                        | Toggle Down                                                                         |
| N.O.                        | Left                       | X                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |
|                             | Right                      | 0                                                                                 | X                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |
|                             | Center                     | X                                                                                 | X                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |
| N.C.L.B.                    | Left                       | 0                                                                                 | X                                                                                 | X                                                                                  | X                                                                                   | X                                                                                   |
|                             | Right                      | X                                                                                 | 0                                                                                 | X                                                                                  | X                                                                                   | X                                                                                   |
|                             | Center                     | 0                                                                                 | 0                                                                                 | X                                                                                  | X                                                                                   | X                                                                                   |
| N.C.E.B.                    | Left                       | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | X                                                                                   |
|                             | Right                      | 0                                                                                 | 0                                                                                 | 0                                                                                  | X                                                                                   | 0                                                                                   |

(1) Must use N.O., N.C.E.B., or N.C.L.B. contact blocks only. Cannot use N.C. or N.O.E.M. contact blocks with 4-position toggle switch.

(2) Contact selection is limited to the following options, consult your local Rockwell Automation sales office or Allen-Bradley distributor for other options.

**Note:** X = Closed / 0 = Open

800F      M      -      J        M2    
                  a                                    b                                    c

| a                     |                                        |
|-----------------------|----------------------------------------|
| Operator Construction |                                        |
| Code                  | Description                            |
| M                     | Round metal operator (IP66, Type 4/13) |

| b             |                                             |
|---------------|---------------------------------------------|
| Operator Type |                                             |
| Code          | Description                                 |
| J             | Toggle switch <sup>(1)</sup> <sup>(2)</sup> |

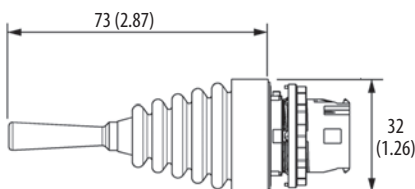
| c                 |                        |
|-------------------|------------------------|
| Operator Function |                        |
| Code              | Description            |
| M2                | 2-position, maintained |
| R2                | 2-position, momentary  |
| M4                | 4-position, maintained |
| R4                | 4-position, momentary  |

(1) Use legend plates 800F-34... and 800F-35...

(2) Silicone boot comes standard with toggle switch, consult your local Rockwell Automation sales office or Allen-Bradley distributor for replacement boots.

## Approximate Dimensions

Dimensions in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.



## Back-of-panel Components

### Contact Blocks with Latch – Composite



800F - P X 0 1 E  
a b c d e

| a     |               |
|-------|---------------|
| Style |               |
| Code  | Description   |
| P     | Plastic latch |
| M     | Metal latch   |

| b                                              |                          |
|------------------------------------------------|--------------------------|
| Contact Block Termination Style <sup>(1)</sup> |                          |
| Code                                           | Description              |
| X                                              | Screw termination        |
| Q                                              | Spring-clamp termination |

| c                             |             |
|-------------------------------|-------------|
| N.O. (Normally Open) Circuits |             |
| Code                          | Description |
| 0                             | No contact  |
| 1                             | 1 N.O.      |
| 2                             | 2 N.O.      |
| 3                             | 3 N.O.      |
| 4                             | 4 N.O.      |
| 5                             | 5 N.O.      |
| 6                             | 6 N.O.      |

| d                               |             |
|---------------------------------|-------------|
| N.C. (Normally Closed) Circuits |             |
| Code                            | Description |
| 0                               | No contact  |
| 1                               | 1 N.C.      |
| 2                               | 2 N.C.      |
| 3                               | 3 N.C.      |
| 4                               | 4 N.C.      |
| 5                               | 5 N.C.      |
| 6                               | 6 N.C.      |

| e                       |                            |
|-------------------------|----------------------------|
| Specialty Contact Block |                            |
| Code                    | Description                |
| Blank                   | Standard blocks            |
| V                       | Low-voltage – QuadConnect™ |
| E                       | N.O. early make            |
| L                       | N.C. late break            |
| B                       | N.C. early break           |
| S                       | N.C. self-monitoring       |

(1) Six circuits maximum allowable.

### Power Modules with Latch – Composite



800F - M N 3 G  
a b c d

| a     |               |
|-------|---------------|
| Style |               |
| Code  | Description   |
| P     | Plastic latch |
| M     | Metal latch   |

| b                                               |                                                 |
|-------------------------------------------------|-------------------------------------------------|
| Power Module Type <sup>(1)</sup> <sup>(2)</sup> |                                                 |
| Code                                            | Description                                     |
| D                                               | Incandescent module, screw termination          |
| N                                               | Integrated LED module, screw termination        |
| Q                                               | Integrated LED module, spring-clamp termination |

| c       |                            |
|---------|----------------------------|
| Voltage |                            |
| Code    | Description                |
| 0       | No bulb <sup>(3)</sup>     |
| 1       | 6V AC/DC <sup>(3)</sup>    |
| 2       | 12V AC/DC <sup>(3)</sup>   |
| 3       | 10...29V AC<br>10...30V DC |
| 4       | 48V AC/DC <sup>(3)</sup>   |
| 5       | 120V AC                    |
| 7       | 240V AC <sup>(4)</sup>     |

| d                         |              |
|---------------------------|--------------|
| Lamp Color <sup>(5)</sup> |              |
| Code                      | Description  |
| C                         | Incandescent |
| R                         | Red LED      |
| G                         | Green LED    |
| W                         | White LED    |

(1) LED modules for use with all illuminated operators. Incandescent module for use with pilot lights, momentary push buttons, and momentary mushroom operators only.

(2) Four circuits maximum allowable when power module is used. Contact blocks cannot be stacked on power module.

(3) Only available for incandescent module.

(4) Only available for integrated LED module.

(5) For best illumination results, LED color should match lens color. For yellow, blue, or amber operator, select a white LED.



## Power Modules with Contact Blocks and Latch – Composite

800F - P N 5 R X 1 0 E  
a b c d e f g h

| a     |               |
|-------|---------------|
| Style |               |
| Code  | Description   |
| P     | Plastic latch |
| M     | Metal latch   |

| b                                    |                                                 |
|--------------------------------------|-------------------------------------------------|
| Power Module Type <sup>(1) (2)</sup> |                                                 |
| Code                                 | Description                                     |
| D                                    | Incandescent module, screw termination          |
| N                                    | Integrated LED module, screw termination        |
| Q                                    | Integrated LED module, spring-clamp termination |

| c       |                            |
|---------|----------------------------|
| Voltage |                            |
| Code    | Description                |
| 0       | No bulb <sup>(3)</sup>     |
| 1       | 6V AC/DC <sup>(3)</sup>    |
| 2       | 12V AC/DC <sup>(3)</sup>   |
| 3       | 10...29V AC<br>10...30V DC |
| 4       | 48V AC/DC <sup>(3)</sup>   |
| 5       | 120V AC                    |
| 7       | 240V AC <sup>(4)</sup>     |

| d                         |              |
|---------------------------|--------------|
| Lamp Color <sup>(5)</sup> |              |
| Code                      | Description  |
| C                         | Incandescent |
| R                         | Red LED      |
| G                         | Green LED    |
| W                         | White LED    |

| e                               |                          |
|---------------------------------|--------------------------|
| Contact Block Termination Style |                          |
| Code                            | Description              |
| X                               | Screw termination        |
| Q                               | Spring-clamp termination |

| f                             |             |
|-------------------------------|-------------|
| N.O. (Normally Open) Circuits |             |
| Code                          | Description |
| 0                             | No contact  |
| 1                             | 1 N.O.      |
| 2                             | 2 N.O.      |
| 3                             | 3 N.O.      |
| 4                             | 4 N.O.      |

| g                               |             |
|---------------------------------|-------------|
| N.C. (Normally Closed) Circuits |             |
| Code                            | Description |
| 0                               | No contact  |
| 1                               | 1 N.C.      |
| 2                               | 2 N.C.      |
| 3                               | 3 N.C.      |
| 4                               | 4 N.C.      |

| h                       |                            |
|-------------------------|----------------------------|
| Specialty Contact Block |                            |
| Code                    | Description                |
| Blank                   | Standard blocks            |
| V                       | Low-voltage – QuadConnect™ |
| E                       | N.O. early make            |
| L                       | N.C. late break            |
| B                       | N.C. early break           |
| S                       | N.C. self-monitoring       |

(1) Four circuits maximum allowable when power module is used. Contact blocks cannot be stacked on power module.

(2) LED modules for use with all illuminated operators. Incandescent module for use with pilot lights, push buttons, and momentary mushroom operators only.

(3) Only available for incandescent module.

(4) Only available for integrated LED module.

(5) For best illuminated results, LED should match lens color. For yellow, blue, or amber operator, select a white LED.

## Other Back-of-panel Components

Table 24 - Latches

|                                                                                                          | Description                                                                                                                                                               | Pkg. Qty. | Cat. No.    |
|----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------------|
| <br>Cat. No. 800F-ALM | <b>Metal Mounting Latch</b><br>Zinc-plated, metal die cast mounting latches.<br>Sold only in multiples of 10. Order (quantity of) 10 to receive one package of 10 pieces. | 10        | 800F-ALM    |
|                                                                                                          | Note: Sold only in multiples of 100. Order (quantity of) 100 to receive one package of 100 pieces.                                                                        | 100       | 800F-ALM-BP |
| <br>Cat. No. 800F-ALP | <b>Plastic Mounting Latch</b><br>Note: Sold only in multiples of 10. Order (quantity of) 10 to receive one package of 10 pieces.                                          | 10        | 800F-ALP    |
|                                                                                                          | Note: Sold only in multiples of 100. Order (quantity of) 100 to receive one package of 100 pieces.                                                                        | 100       | 800F-ALP-BP |

Table 25 - Contact Blocks

|                                                                                                              | Description                                                                                                                                                                                                                  | Contact Type                   | Pkg. Qty. | Cat. No.                    |
|--------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-----------|-----------------------------|
|  <p>Cat. No. 800F-X10</p>   | Contact Block<br>Note: Sold only in multiples of 10. Order (quantity of) 10 to receive one package of 10 pieces. Latch not included.                                                                                         | N.O.                           | 10        | 800F-X10                    |
|                                                                                                              |                                                                                                                                                                                                                              | N.C.                           |           | 800F-X01                    |
|                                                                                                              |                                                                                                                                                                                                                              | N.O. low-voltage — QuadConnect |           | 800F-X10V                   |
|                                                                                                              |                                                                                                                                                                                                                              | N.C. low-voltage — QuadConnect |           | 800F-X01V                   |
|                                                                                                              |                                                                                                                                                                                                                              | N.O.L.M.                       |           | 800F-X10N <sup>(1)</sup>    |
|                                                                                                              |                                                                                                                                                                                                                              | N.O.E.M.                       |           | 800F-X10E                   |
|                                                                                                              |                                                                                                                                                                                                                              | N.O.E.E.M.                     |           | 800F-X10M <sup>(2)</sup>    |
|                                                                                                              |                                                                                                                                                                                                                              | N.C.L.B.                       |           | 800F-X01L                   |
|                                                                                                              |                                                                                                                                                                                                                              | N.C.E.B.                       |           | 800F-X01B <sup>(3)</sup>    |
|                                                                                                              |                                                                                                                                                                                                                              | Self-Monitoring                |           | 800F-X01S <sup>(4)</sup>    |
|                                                                                                              |                                                                                                                                                                                                                              | Dual-circuit of 2 N.O.         |           | 800F-X20D <sup>(4)</sup>    |
|                                                                                                              |                                                                                                                                                                                                                              | Dual-circuit of 2 N.C.         |           | 800F-X02D <sup>(4)</sup>    |
|                                                                                                              |                                                                                                                                                                                                                              | Dual-circuit of 1 N.O.-1 N.C.  |           | 800F-X11D <sup>(4)</sup>    |
|                                                                                                              |                                                                                                                                                                                                                              | N.O. spring-clamp              |           | 800F-Q10                    |
|                                                                                                              |                                                                                                                                                                                                                              | N.C. spring-clamp              |           | 800F-Q01                    |
|                                                                                                              |                                                                                                                                                                                                                              | Ring lug N.O.                  |           | 800F-R10 <sup>(5) (6)</sup> |
|                                                                                                              |                                                                                                                                                                                                                              | Ring lug N.C.                  |           | 800F-R01 <sup>(5) (6)</sup> |
|                                                                                                              | Note: Sold only in multiples of 100. Order (quantity of) 100 to receive one package of 100 pieces. Latch not included.                                                                                                       | N.O.                           | 100       | 800F-X10-BP                 |
|                                                                                                              |                                                                                                                                                                                                                              | N.C.                           |           | 800F-X01-BP                 |
|  <p>Cat. No. 800F-BX01</p> | Base-mounted Contact Block<br>Base-mounted contact blocks can be used in plastic or metal enclosures.<br>Note: Sold only in multiples of 10. Order (quantity of) 10 to receive one package of 10 pieces. Latch not included. | N.O.                           | 10        | 800F-BX10                   |
|                                                                                                              |                                                                                                                                                                                                                              | N.C.                           |           | 800F-BX01                   |

(1) For use with Cat. No. 800FP-CB\_ and Cat. No. 800FP-CC\_ operators.

(2) For use with Cat. No. 800FP-CC\_ operators.

(3) Only for use with 4-position selector switch, 4-position toggle switch, or 3-position push-pull operator.

(4) Cannot stack.

(5) Cannot be used in a composite catalog number.

(6) Replacement screws are available (Cat. No. 800F-ARS1)

Table 26 - Power Modules

|                                                                                                         | Description                                                                                                                                                                                                                                                                                 | Voltage                    | Pkg. Qty. | Cat. No.                      |
|---------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-----------|-------------------------------|
| <br>Cat. No. 800F-D3C  | <b>Incandescent Module</b><br>For use with pilot lights, push buttons, and momentary mushroom operators.<br>Note: Sold in multiples of 10. Order (quantity of) 10 to receive one package of 10 pieces. Latch not included.                                                                  | No bulb                    | 10        | 800F-D0C                      |
|                                                                                                         |                                                                                                                                                                                                                                                                                             | 6V AC/DC                   |           | 800F-D1C <sup>(1)</sup>       |
|                                                                                                         |                                                                                                                                                                                                                                                                                             | 12V AC/DC                  |           | 800F-D2C <sup>(1)</sup>       |
|                                                                                                         |                                                                                                                                                                                                                                                                                             | 24V AC/DC                  |           | 800F-D3C <sup>(1)</sup>       |
|                                                                                                         |                                                                                                                                                                                                                                                                                             | 48V AC/DC                  |           | 800F-D4C <sup>(1)</sup>       |
|                                                                                                         |                                                                                                                                                                                                                                                                                             | 120V AC/DC                 |           | 800F-D5C <sup>(1)</sup>       |
| <br>Cat. No. 800F-N3G  | <b>Integrated LED Module</b><br>For use with all illuminated devices. For best results, LED should match lens color. For amber, yellow, and blue operators use white LED.<br>Note: Sold in multiples of 10. Order (quantity of) 10 to receive one package of 10 pieces. Latch not included. | 24...120V AC/DC            | 10        | 800F-NUx <sup>(2)(3)</sup>    |
|                                                                                                         |                                                                                                                                                                                                                                                                                             | 24V AC/DC                  |           | 800F-N3x <sup>(2)</sup>       |
|                                                                                                         |                                                                                                                                                                                                                                                                                             | 120V AC                    |           | 800F-N5x <sup>(2)</sup>       |
|                                                                                                         |                                                                                                                                                                                                                                                                                             | 208...240V AC              |           | 800F-N7x <sup>(2)</sup>       |
|                                                                                                         |                                                                                                                                                                                                                                                                                             | 24V AC/DC spring-clamp     |           | 800F-Q3x <sup>(2)</sup>       |
|                                                                                                         |                                                                                                                                                                                                                                                                                             | 120V AC spring-clamp       |           | 800F-Q5x <sup>(2)</sup>       |
|                                                                                                         |                                                                                                                                                                                                                                                                                             | 208...240V AC spring-clamp |           | 800F-Q7x <sup>(2)</sup>       |
|                                                                                                         |                                                                                                                                                                                                                                                                                             | 24V AC/DC ring lug         |           | 800F-R3x <sup>(2)(3)(4)</sup> |
| <br>Cat. No. 800F-BN3R | <b>Base-mounted Integrated LED Module</b><br>Base-mounted modules can be used in plastic or metal enclosures. For best illumination results, LED should match lens color.<br>Note: Sold in multiples of 10. Order (quantity of) 10 to receive one package of 10 pieces. Latch not included. | 24V AC/DC                  | 10        | 800F-BN3x <sup>(2)</sup>      |
|                                                                                                         |                                                                                                                                                                                                                                                                                             | 120V AC                    |           | 800F-BN5x <sup>(2)</sup>      |
|                                                                                                         |                                                                                                                                                                                                                                                                                             | 208...240V AC              |           | 800F-BN7x <sup>(2)</sup>      |

(1) Lamp included with power module.

(2) To complete the cat. no., replace the x with one of the following letters for the desired color: R = Red, G = Green, W = White.

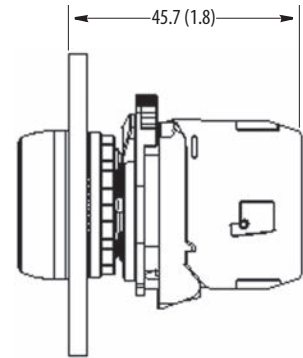
(3) Cannot be used in a composite catalog number.

(4) Replacement screws are available (Cat. No. 800F-ARS1)

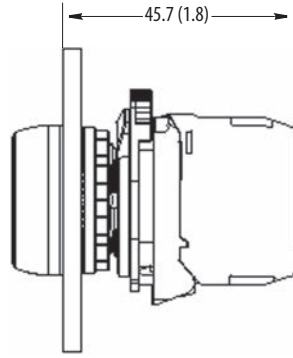
## Approximate Dimensions – Back-of-panel Components

Dimensions in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.

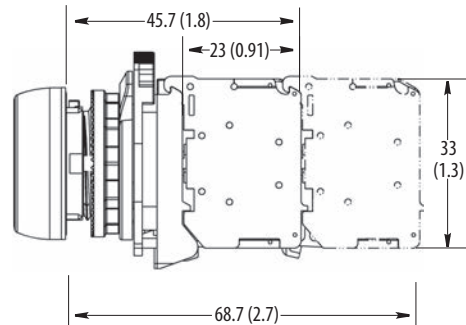
**Incandescent Module with Latch**



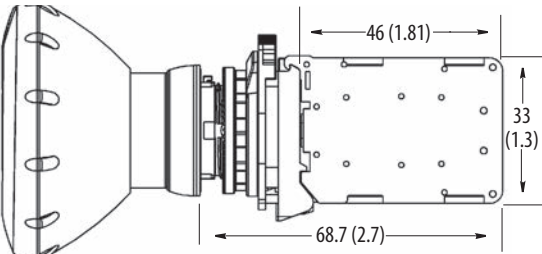
**LED Module with Latch**



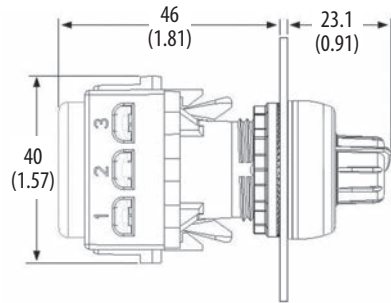
**Contact Cartridges with Latch**



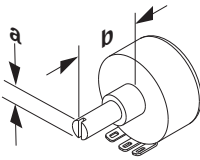
**Dual-circuit Contact Block or Self-monitoring Contact Block (1 Deep, Max)**



**Potentiometer with Resistive Element**



**Customer Supplied Resistive Element**



|               | Max.           |                | Min.           |
|---------------|----------------|----------------|----------------|
| a<br>(Dia.)   | 6.4<br>(0.252) | 5.9<br>(0.232) | 5.7<br>(0.224) |
| b<br>(Length) | 24<br>(0.945)  | 32<br>(1.26)   | 14<br>(0.551)  |

## Plastic and Metal Enclosures

### Plastic Enclosure (Latch/Base Mount)

- Accepts two-piece snap-in legends
- One-hole enclosure accepts 60 mm E-stop legends
- UL Listed and CSA Certified



Cat. No. 800F-3PM

### Metal Enclosure (Latch/Base Mount)

- Feed-through design
- Accepts two-piece snap-in legends
- Includes base mount adapter



Cat. No. 800F-5MM

| Type                         | Pkg. Qty, | Enclosures                                  |                             |                               |                          |
|------------------------------|-----------|---------------------------------------------|-----------------------------|-------------------------------|--------------------------|
|                              |           | Plastic (IP69K <sup>(1)</sup> ; IP66, 4/4X) |                             | Metal – Die Cast (IP66, 4/13) |                          |
|                              |           | PG Conduit Knockouts                        | Metric Conduit Knockouts    | PG Conduit Openings           | Metric Conduit Openings  |
|                              |           | Cat. No.                                    | Cat. No.                    | Cat. No.                      | Cat. No.                 |
| 1-hole                       | 1         | 800F-1PP <sup>(2) (3)</sup>                 | 800F-1PM <sup>(2) (3)</sup> | 800F-1MP <sup>(4)</sup>       | 800F-1MM <sup>(4)</sup>  |
| 2-hole                       |           | 800F-2PP <sup>(2) (3)</sup>                 | 800F-2PM <sup>(2) (3)</sup> | 800F-2MP <sup>(4)</sup>       | 800F-2MM <sup>(4)</sup>  |
| 3-hole                       |           | 800F-3PP <sup>(2) (3)</sup>                 | 800F-3PM <sup>(2) (3)</sup> | 800F-3MP <sup>(4)</sup>       | 800F-3MM <sup>(4)</sup>  |
| 4-hole                       |           | 800F-4PP <sup>(2) (3)</sup>                 | 800F-4PM <sup>(2) (3)</sup> | —                             | —                        |
| 5-hole                       |           | —                                           | —                           | 800F-5MP <sup>(5)</sup>       | 800F-5MM <sup>(5)</sup>  |
| 6-hole                       |           | 800F-6PP <sup>(2) (6)</sup>                 | 800F-6PM <sup>(2) (6)</sup> | —                             | —                        |
| 1-hole (yellow)              |           | 800F-1YP <sup>(2)</sup>                     | 800F-1YM <sup>(2)</sup>     | 800F-1MYP <sup>(4)</sup>      | 800F-1MYM <sup>(4)</sup> |
| 1-hole (yellow) latch only   |           | —                                           | —                           | 800F-1LYP <sup>(4)</sup>      | 800F-1LYM <sup>(4)</sup> |
| 1-hole (yellow) dual-circuit |           | 800F-1YPD <sup>(7)</sup>                    | 800F-1YMD <sup>(7)</sup>    | —                             | —                        |

(1) Select enclosures; see [Table 2 on page 4](#).

(2) Can only use single deep contact block.

(3) Knockouts: PG (PG11/16), Metric (M16/20)

(4) Openings: PG (PG16), Metric (M20)

(5) Openings: PG (PG16), Metric (M32)

(6) Knockouts: PG (PG16), Metric (M25)

(7) Can stack contact blocks two deep or one dual-circuit contact block.

## Assembled Stations

| Enclosure Material     | Operator Type                                          | Illumination Voltage | Contact Configuration | PG Knockouts | Metric Knockouts |
|------------------------|--------------------------------------------------------|----------------------|-----------------------|--------------|------------------|
|                        |                                                        |                      |                       | Cat. No.     | Cat. No.         |
| 1-hole, Yellow Plastic | Red 90 mm momentary                                    | Non-illuminated      | 1 N.C.                | 800F-1YP1M94 | 800F-1YM1M94     |
|                        |                                                        |                      | 1 N.O./1 N.C.         | 800F-1YP2M94 | 800F-1YM2M94     |
|                        |                                                        |                      | 2 N.C.                | 800F-1YP3M94 | 800F-1YM3M94     |
| 1-hole, Gray Plastic   | Black 90 mm momentary                                  |                      | 1 N.O./1 N.C.         | 800F-1PP2M92 | 800F-1PM2M92     |
|                        | Black Push Button                                      |                      | 1 N.O.                | 800F-1PP1    | 800F-1PM1        |
|                        | "0-1" 2-Position Selector Switch                       |                      | 1 N.O.                | 800F-1PP2    | 800F-1PM2        |
|                        | "OFF-ON" 2-position Selector Switch                    |                      | 1 N.O. / 1 N.C.       | 800F-1PP3    | 800F-1PM3        |
|                        | ↔ (Flush Black)                                        |                      | 1 N.O.                | 800F-1PP4    | —                |
| 2-hole, Gray Plastic   | Start and Stop Push Buttons                            |                      | 1 N.O./1 N.C.         | 800F-2PP1    | —                |
| 3-hole, Gray Plastic   | ↑ (Flush Black)<br>0 (Extended Red)<br>↓ (Flush Black) |                      | 4 N.O./1 N.C.         | 800F-3PP1    | —                |

### 1-Hole Enclosure E-Stop Station



Cat. No. 800F-1YP4

Table 27 - Yellow Plastic Enclosure

| Quick Connect | Operator Type              | Illumination Voltage | Contact Configuration | PG Knockouts | Metric Knockouts |              |
|---------------|----------------------------|----------------------|-----------------------|--------------|------------------|--------------|
|               |                            |                      |                       | Cat. No.     | Cat. No.         |              |
| N/A           | Twist-to-release<br>40 mm  | Non-illuminated      | 1 N.C.                | 800F-1YP1    | 800F-1YM1        |              |
|               |                            |                      | 1 N.O./1 N.C.         | 800F-1YP2    | 800F-1YM2        |              |
|               |                            |                      | 2 N.C.                | 800F-1YP3    | 800F-1YM3        |              |
|               | Key Release<br>40 mm       |                      | 1 N.C.                | 800F-1YP4    | 800F-1YM4        |              |
|               |                            |                      | 1 N.O. / 1 N.C.       | 800F-1YP5    | 800F-1YM5        |              |
|               |                            |                      | 2 N.C.                | 800F-1YP6    | 800F-1YM6        |              |
|               | Twist-to-release<br>60 mm  |                      | 2 N.C.                | 800F-1YP7    | —                |              |
|               |                            |                      | 1 N.O. / 2 N.C.       | 800F-1YP8    | —                |              |
|               | Twist-to-release<br>40 mm  | 24V AC/DC            | 1 N.C.                | —            | 800F-1YML1       |              |
|               |                            | 120V AC              |                       | —            | 800F-1YML2       |              |
|               |                            | 240V AC              |                       | —            | 800F-1YML3       |              |
|               | Push-pull<br>Red half dome | Non-illuminated      | 1 N.C.                | 800F-1YP1HD  | 800F-1YM1HD      |              |
|               |                            |                      | 1 N.O./1 N.C.         | 800F-1YP2HD  | 800F-1YM2HD      |              |
|               |                            |                      | 2 N.C.                | 800F-1YP3HD  | 800F-1YM3HD      |              |
|               |                            | 24V AC/DC            | 1 N.C.                | —            | 800F-1YML1HD     |              |
|               |                            |                      |                       | 120V AC      | —                | 800F-1YML2HD |
|               |                            |                      |                       | 240V AC      | —                | 800F-1YML3HD |

Table 27 - Yellow Plastic Enclosure

| Quick Connect   |       | Operator Type             | Illumination Voltage          | Contact Configuration | PG Knockouts | Metric Knockouts |
|-----------------|-------|---------------------------|-------------------------------|-----------------------|--------------|------------------|
|                 |       |                           |                               |                       | Cat. No.     | Cat. No.         |
| AC Micro        | 5-pin | Twist-to-release<br>40 mm | Non-illuminated               | 2 N.C. — Low-voltage  | —            | 800F-1YMQ53V     |
|                 | 6-pin |                           |                               | 1 N.O. / 2 N.C.       | —            | 800F-1YMQA       |
| DC Micro        | 4-pin |                           | Non-illuminated/EMO/<br>Guard | 1 N.C.                | —            | 800F-NX1         |
|                 |       |                           | Non-illuminated               | 1 N.C.                | —            | 800F-1YMQ1       |
|                 |       |                           |                               | 1 N.O. / 1 N.C.       | —            | 800F-1YMQ2       |
|                 |       |                           |                               | 2 N.C.                | —            | 800F-1YMQ3       |
|                 |       |                           | Non-illuminated/EMO/<br>Guard | 2 N.C.                | —            | 800F-1YMQ3VEG    |
|                 |       |                           | 5-pin                         | Non-illuminated       | 2 N.C.       | —                |
| Mini Receptacle | 4-pin |                           | Non-illuminated               | 1 N.C.                | —            | 800F-1YMQ41      |
|                 |       |                           | 24V AC/DC                     | 1 N.O. / 1 N.C.       | —            | 800F-1YMQ44      |
|                 |       |                           | 24V AC/DC                     | 1 N.O./1 N.C.         | —            | 800F-1YMQ4       |
|                 | 6-pin |                           | 120V AC                       | 1 N.O. / 1 N.C.       | —            | 800F-1YMQ5       |
|                 |       |                           | 240V AC                       | 1 N.O. / 1 N.C.       | —            | 800F-1YMQ6       |
|                 |       |                           |                               |                       |              |                  |

Table 28 - Gray Metal Enclosure

| Quick Connect | Operator Type             | Illumination Voltage | Contact Configuration | PG Knockouts | Metric Knockouts |
|---------------|---------------------------|----------------------|-----------------------|--------------|------------------|
|               |                           |                      |                       | Cat. No.     | Cat. No.         |
| N/A           | Twist-to-release<br>40 mm | Non-Illuminated      | 1 N.C.                | —            | 800F-1MM1        |
|               |                           |                      | 1 N.O. / 1 N.C.       | —            | 800F-1MM2        |
|               |                           |                      | 2 N.C.                | —            | 800F-1MM3        |
|               | Key Release<br>40 mm      | Non-Illuminated      | 1 N.C.                | —            | 800F-1MM4        |
|               |                           |                      | 1 N.O. / 1 N.C.       | —            | 800F-1MM5        |
|               |                           |                      | 2 N.C.                | —            | 800F-1MM6        |

Table 29 - Yellow Metal Enclosure

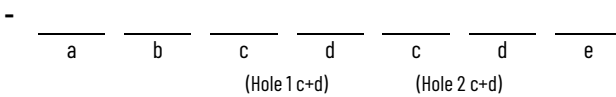
| Quick Connect                  |       | Operator Type             | Illumination Voltage | Contact Configuration | PG Knockouts | Metric Knockouts |
|--------------------------------|-------|---------------------------|----------------------|-----------------------|--------------|------------------|
|                                |       |                           |                      |                       | Cat. No.     | Cat. No.         |
| Mini Receptacle <sup>(1)</sup> | 6-pin | Twist-to-release<br>40 mm | 24V AC/DC            | 1 N.O./1 N.C.         | —            | 800F-1MYMQ4      |
|                                |       |                           | 120V AC              | 1 N.O./1 N.C.         | —            | 800F-1MYMQ5      |
|                                |       |                           | 240V AC              | 1 N.O./1 N.C.         | —            | 800F-1MYMQ6      |

(1) See [Assembled Station Pin Out Chart on page 64](#).

## Assembled Stations with DeviceNet

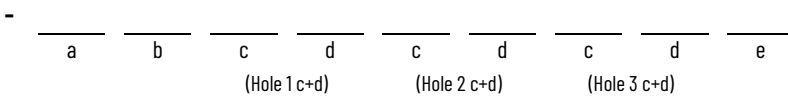
### 2-hole

800F



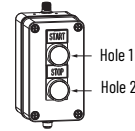
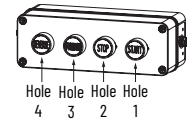
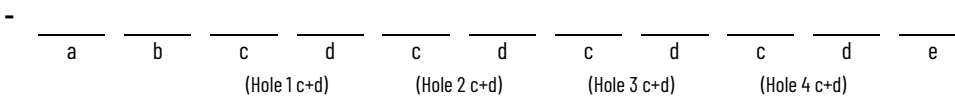
### 3-hole

800F



### 4-hole

800F



4-hole Assembled Station  
Cat. No. 800F-VHA3A4J3J4J

| a                    |                         |
|----------------------|-------------------------|
| Mounting Orientation |                         |
| Code                 | Description             |
| V                    | Vertical <sup>(1)</sup> |
| H                    | Horizontal              |

| b                       |                                                       |
|-------------------------|-------------------------------------------------------|
| Enclosure Style/Legends |                                                       |
| Code                    | Description                                           |
| A                       | 2-hole/legend frames                                  |
| B                       | 3-hole/legend frames                                  |
| C                       | 4-hole/legend frames                                  |
| D                       | 2-hole/no legend frames                               |
| E                       | 3-hole/no legend frames                               |
| F                       | 4-hole/no legend frames                               |
| H                       | 2-hole/E-stop only<br>no legend frames <sup>(2)</sup> |

| c              |                                                      |
|----------------|------------------------------------------------------|
| Operator Types |                                                      |
| Code           | Description                                          |
| A              | Non-illuminated flush button                         |
| B              | Non-illuminated extended button                      |
| C              | Non-illuminated guarded button                       |
| D              | Illuminated flush button <sup>(3)</sup>              |
| E              | Illuminated extended button <sup>(3)</sup>           |
| F              | Illuminated guarded button <sup>(3)</sup>            |
| G              | Non-illuminated<br>2-position selector switch        |
| H              | Non-illuminated<br>3-position selector switch        |
| J              | Pilot light (diffused)                               |
| K              | Hole plug <sup>(4)</sup>                             |
| L              | Non-illuminated TTR E-stop <sup>(4)(5)</sup>         |
| M              | Non-illuminated push-pull <sup>(4)(5)</sup>          |
| N              | 2-position key selector switch                       |
| P              | 3-position key selector switch                       |
| R              | Non-illuminated<br>40 mm mushroom                    |
| T              | E-stop key release <sup>(4)(5)</sup>                 |
| U              | Potentiometer <sup>(5)(6)</sup>                      |
| W              | Illuminated push-pull                                |
| X              | Illuminated 2-position<br>maintained selector switch |
| Y              | Illuminated 3-position<br>maintained selector switch |
| Z              | Illuminated 40 mm mushroom                           |

| d          |                                                  |
|------------|--------------------------------------------------|
| Color/Text |                                                  |
| Code       | Description                                      |
| 1          | White                                            |
| 2          | Black                                            |
| 3          | Green                                            |
| 4          | Red                                              |
| 5          | Yellow                                           |
| 6          | Blue                                             |
| 7          | Clear                                            |
| 8          | Gray <sup>(7)</sup>                              |
| 9          | No cap                                           |
| O          | Amber                                            |
| A          | Green with "Start" text                          |
| B          | Red with "Stop" text                             |
| C          | Black with "→" symbol                            |
| D          | Black with "←" symbol                            |
| E          | Black with "↑" symbol                            |
| F          | Black with "↓" symbol                            |
| G          | Green with "I" symbol                            |
| H          | Red with "O" symbol                              |
| L          | Blue with "R" text                               |
| M          | Red with yellow<br>metal guard <sup>(8)</sup>    |
| N          | Yellow with yellow<br>metal guard <sup>(8)</sup> |

| e                                   |                                                                 |
|-------------------------------------|-----------------------------------------------------------------|
| External I/O Version <sup>(9)</sup> |                                                                 |
| Code                                | Description                                                     |
| Blank                               | No external I/O                                                 |
| A                                   | 1 input/1 output (sinking)                                      |
| B                                   | 1 input/1 output (sourcing)                                     |
| C                                   | 2 input                                                         |
| E                                   | 2 output (sourcing)                                             |
| F                                   | 1 E-stop block <sup>(10)</sup>                                  |
| G                                   | 2 E-stop block <sup>(10)</sup>                                  |
| H                                   | 2 input/2 output                                                |
| K                                   | 2 input/2 output (sourcing)                                     |
| L                                   | 1 input/1 output (sinking)<br>+ 1 E-stop block <sup>(10)</sup>  |
| M                                   | 1 input/1 output (sourcing)<br>+ 1 E-stop block <sup>(10)</sup> |
| N                                   | 1 input/1 output (sinking)<br>+ 2 E-stop block <sup>(10)</sup>  |
| P                                   | 1 input/1 output (sourcing)<br>+ 2 E-stop block <sup>(10)</sup> |
| Q                                   | 2 input + 1 E-stop block <sup>(10)</sup>                        |
| R                                   | 2 input + 2 E-stop block <sup>(10)</sup>                        |
| U                                   | 2 output (sourcing)<br>+ 1 E-stop block <sup>(10)</sup>         |
| W                                   | 2 output (sourcing)<br>+ 2 E-stop block <sup>(10)</sup>         |
| X                                   | 2 input + 1 input/1 output<br>(sinking)                         |

(1) Selector Switches in a vertical mount enclosure are mounted with a horizontal orientation.

(2) Enclosure Style/Legend option H from Table [b](#) can only select one operator from Table [c](#). Valid options are L, M, and T. Also see footnote [5](#).

(3) Cannot be ordered with "No Cap" (Code 9 from Table [d](#) - Color/Text).

(4) Operator Types K, L, M, T, and U from Table [c](#) are not available with legend frames.

(5) Operator Types L, M, and T from Table [c](#) can be used as emergency stops. To be valid as an E-stop, operators must use color/text code 4 from Table [d](#) and it must be placed in the last hole position in the enclosure, where a yellow round E-stop legend plate is provided. An E-stop connector must also be chosen from Table [e](#). Also see footnote [10](#).

(6) A potentiometer is allowed in first hole position only.

(7) Available in flush only.

(8) Only available with non-illuminated push-pull operator (Code M from Table [c](#)).

(9) This is an 8-in/4-out device. 2-in and 1-out are assigned to each hole position in the enclosure. If a 2-hole enclosure is selected, 4-in and 2-out are assigned internally and up to 4 unassigned I/O points can be assigned to external connectors. This device contains up to two physical external I/O connectors. The "+" symbol in the Description field of table [e](#) indicates that two external connectors exist. If an E-stop connector is used, 2 unassigned I/O points can be assigned to the other connector.

(10) External I/O Versions F, L, M, Q, and U receive only one contact block for the external E-stop string. These connectors are rated 3 A. If more than 3 A of current is needed or if there are two E-stop strings, use External I/O Versions G, N, P, R, and W. These versions receive two contact blocks. This configuration allows for 6 A of switching or for two E-stop strings.



## Pendant Stations

### Latch Mounting

- Blank legend cap marking
- Connector not included. See [Miscellaneous on page 48](#) for ordering information.



Pendant Station  
Cat. No. 800F-P25

| Type                              | Pkg. Quantity | Yellow Plastic (IP66, 4/4X/13) |
|-----------------------------------|---------------|--------------------------------|
|                                   |               | Cat. No. <sup>(1)</sup>        |
| 1 hole in face                    | 1             | 800F-P15                       |
| 2 holes in face                   |               | 800F-P25                       |
| 1 hole in bottom                  |               | 800F-P35                       |
| 1 hole in face / 1 hole in bottom |               | 800F-P45                       |

(1) Only use with single-deep contact block.

### Assembled Two-Hole Pendant Stations

Table 30 - Prewired Pendant Station with Mini Quick Disconnect Connector <sup>(1)</sup>

| Push Button and Contact Selection                                                                                             | Cat. No. <sup>(2)</sup> |
|-------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| Green flush (no text) in face with 1 N.O. contact;<br>Red pilot light in bottom with 1 N.O. contact; 24V AC/DC                | 800F-PN2                |
| White flush (with up arrow — ↑) with 1 N.O./1 N.C. contact;<br>Black flush (with down arrow — ↓) with 1 N.O./1 N.C. contact   | 800F-P251               |
| Black flush (with "Forward" text) with 1 N.O./1 N.C. contact;<br>Black flush (with "Reverse" text) with 1 N.O./1 N.C. contact | 800F-P252               |
| Black flush (with "On" text) with 1 N.O. contact;<br>Black flush (with "Off" text) with 1 N.C. contact                        | 800F-P253               |
| Green flush (with "Start" text) with 1 N.O. contact;<br>Red flush (with "Stop" text) with 1 N.C. contact                      | 800F-P254               |
| 2 flush black push buttons (no text), each with 1 N.O. contact                                                                | 800F-P255               |

(1) Connector is a 4-pin mini plug.

(2) Only use with single-deep contact block.

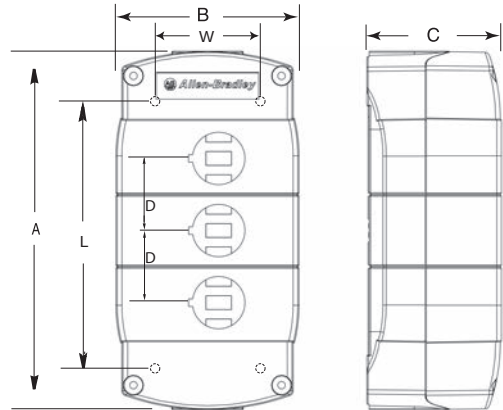


Pendant Station  
Cat. No. 800F-PN2

# Approximate Dimensions – Enclosures

Dimensions in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.

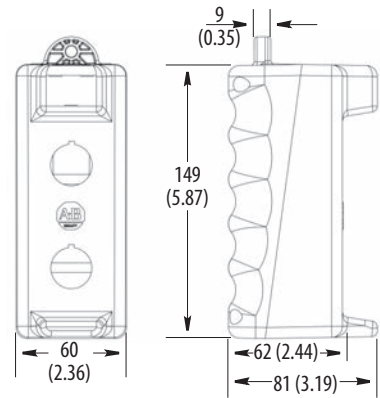
## Plastic Enclosures (1)



| Cat. No.                 | Holes | A             | B            | C            | D            | Mounting Holes |                 |
|--------------------------|-------|---------------|--------------|--------------|--------------|----------------|-----------------|
|                          |       |               |              |              |              | W              | L               |
| 800F-1P(2)<br>800F-1Y(2) | 1     | 85<br>(3.35)  | 89<br>(3.5)  | 58<br>(2.28) | —            | 58<br>(2.28)   | 59<br>(2.32)    |
| 800F-1Y(2)D              | 1     | 85<br>(3.35)  | 89<br>(3.5)  | 74<br>(2.91) | —            | 58<br>(2.28)   | 65<br>(2.56)    |
| 800F-2P(2)               | 2     | 124<br>(4.88) | 79<br>(3.11) | 58<br>(2.28) | 31<br>(1.22) | 48 (1.89)      | 102.5<br>(4.04) |
| 800F-3P(2)               | 3     | 155<br>(6.1)  | 79<br>(3.11) | 58<br>(2.28) | 31<br>(1.22) | 48 (1.89)      | 133<br>(5.24)   |
| 800F-4P(2)               | 4     | 186<br>(7.32) | 79<br>(3.11) | 58<br>(2.28) | 31<br>(1.22) | 48 (1.89)      | 164.5<br>(6.48) |
| 800F-6P(2)               | 6     | 248<br>(9.76) | 87<br>(3.43) | 64<br>(2.52) | 31<br>(1.22) | 55 (2.17)      | 224<br>(8.82)   |

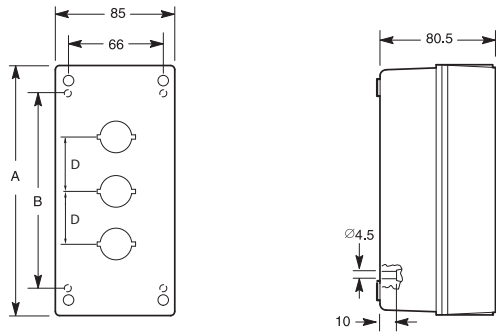
- (1) Mounting screw — pan head with diameter ≤ 7 mm (0.28 in.).  
(2) P = PG conduit holes or M = Metric conduit holes

## Pendant Stations



**Note:** Cable opening = 21.2 mm (0.83 in.) diameter

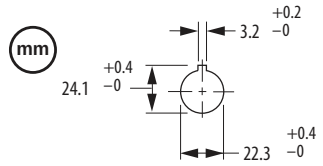
## Metal Enclosures



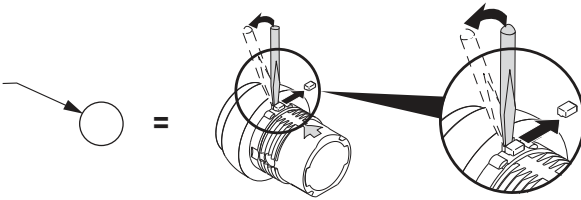
| Cat. No.   | Holes | A          | D           | Mounting Holes |
|------------|-------|------------|-------------|----------------|
|            |       |            |             | L              |
| 800F-1M(1) | 1     | 99 (3.9)   | —           | 62 (2.44)      |
| 800F-2M(1) | 2     | 137 (5.39) | 37.5 (1.48) | 100 (3.94)     |
| 800F-3M(1) | 3     | 174 (6.85) | 37.5 (1.48) | 137 (5.39)     |
| 800F-5M(1) | 5     | 249 (9.8)  | 37.5 (1.48) | 212 (8.35)     |

- (1) P = PG conduit holes or M = Metric conduit holes

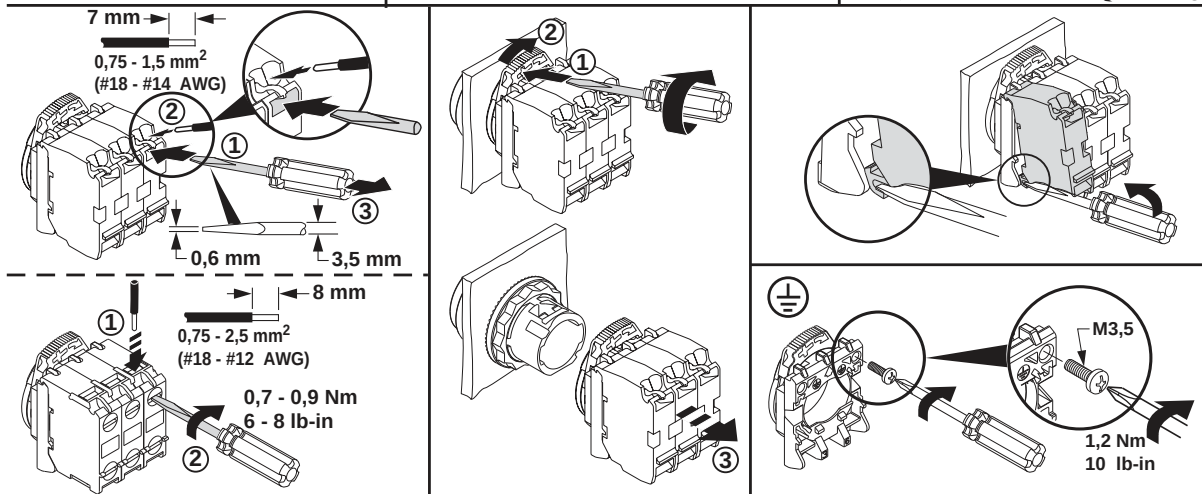
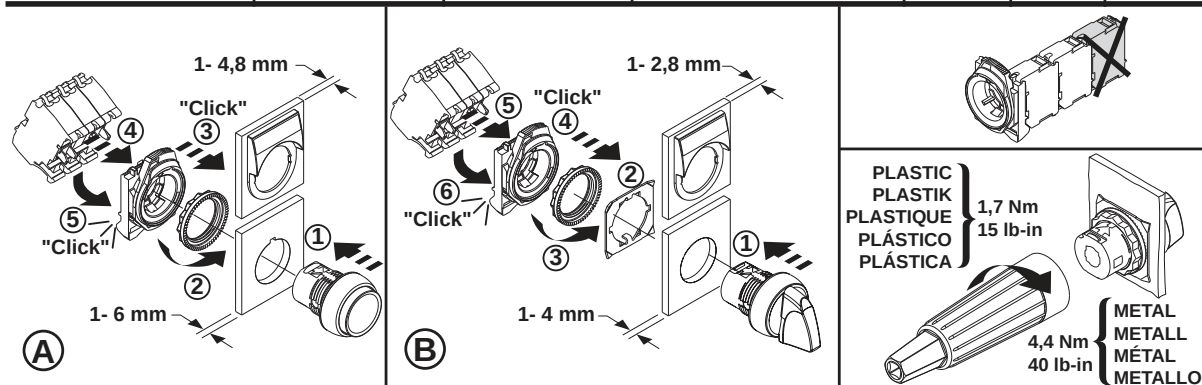
## Instruction Sheet



OPTIONAL  
EN OPTION  
OPTIONAL  
OPCIONAL  
OPZIONALE



|   |    |    |         |         |         |         |
|---|----|----|---------|---------|---------|---------|
| A |    |    |         |         |         |         |
| A |    |    |         |         |         |         |
| B |    |    |         |         |         |         |
|   |    |    |         |         |         |         |
|   | 40 | 50 | 40      | 50      | 40 / 60 | 50 / 60 |
|   | 30 | 48 | 40 / 60 | 60 / 90 | 70      | 50      |



## Accessories

The following accessories are available for use with Bulletin 800F operators.

### Miscellaneous

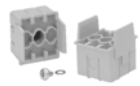
|                                                                                                             | Description                                                                                                                                                                   | Type     | Pkg. Quantity      | Cat. No.                 |
|-------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|--------------------|--------------------------|
| <br>Cat. No. 800F-AHA1     | 30.5 mm to 22.5 mm Hole Size Adapter, Stainless Steel.<br>This adapter allows a 22.5 mm push button operator to be installed in a panel with existing 30.5 mm mounting holes. | Metal    | 1                  | 800F-AHA1 <sup>(1)</sup> |
| <br>Cat. No. 888N-M4AF1-1F | Quick Disconnect<br>Plug receptacle for pendant stations.                                                                                                                     | 4-pin    |                    | 888N-M4AF1-1F            |
|                                                                                                             |                                                                                                                                                                               | 5-pin    |                    | 888N-M5AF1-1F            |
|                                                                                                             | Description                                                                                                                                                                   | Material | Pkg. Quantity      | Cat. No.                 |
| <br>Cat. No. 800F-ARP      | Replacement Mounting Rings                                                                                                                                                    | Plastic  | 10 <sup>(2)</sup>  | 800F-ARP                 |
|                                                                                                             |                                                                                                                                                                               | Metal    |                    | 800F-ARM                 |
|                                                                                                             | Description                                                                                                                                                                   |          | Pkg. Quantity      | Cat. No.                 |
| <br>Cat. No. 800F-AW2      | Mounting Ring Wrench<br>This mounting ring wrench is used to tighten plastic or metal mounting rings quickly and securely.                                                    |          | 1                  | 800F-AW2                 |
| <br>Cat. No. 800F-ALR1    | Bulb Removal Tool<br>For quick and easy removal of lamps from incandescent modules.                                                                                           |          |                    | 800F-ALR1                |
| <br>Cat. No. 1492-MS5X9  | Snap-In Marker<br>This item can be used for circuit identification on all back-of-panel components.                                                                           |          |                    | (3)                      |
| <br>Cat. No. 800F-ATK2   | Stab Terminals<br>Can be used with all single-circuit contact blocks. Minimum spacing requirements apply. See instruction sheet for details.                                  |          | 100 <sup>(4)</sup> | 800F-ATK2                |
| <br>Cat. No. 800F-AGS1   | Ground Screws<br>These are self-tapping #6-32 (M3.5) ground screws for metal latches.                                                                                         |          | 10 <sup>(2)</sup>  | 800F-AGS1                |
| <br>Cat. No. 800F-AGS2   | Ground Screws<br>This accessory is used for grounding on Bulletin 800F plastic enclosures only.                                                                               |          |                    | 800F-AGS2                |

(1) Comes with anti-rotation washer (800F-ALC1).

(2) Sold only in multiples of 10. Order (quantity of) 10 to receive one package of 10 pieces.

(3) See <https://ab.rockwellautomation.com/Terminal-Blocks> for ordering information.

(4) Sold only in multiples of 100. Order (quantity of) 100 to receive one package of 100 pieces.

|                                                                                                          | Description                                                                                                                                                                                           | Panel Thickness with Legend Plates | Pkg. Qty.         | Cat. No.  |
|----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|-------------------|-----------|
| <br>Cat. No. 800F-ALC1  | Locking Washer (Anti-rotation Washer)<br>This item provides an extra anti-rotation feature for rotary operators such as selector switches.                                                            | 1...4 mm                           | 10 <sup>(1)</sup> | 800F-ALC1 |
|                                                                                                          |                                                                                                                                                                                                       | 1...5 mm                           |                   | 800F-ALC2 |
|                                                                                                          | Description                                                                                                                                                                                           |                                    | Pkg. Qty.         | Cat. No.  |
| <br>Cat. No. 800F-ATW1  | Replacement Trim Washer<br>This accessory comes standard with all enclosures. It must be used if using base-mounted contact blocks/power modules without legend plates.                               |                                    | 10 <sup>(1)</sup> | 800F-ATW1 |
| <br>Cat. No. 800F-A3BA  | Replacement Base Mount Adapter<br>This accessory comes standard with all metal enclosures. It is required when using metal enclosures with base-mounted contact blocks or base-mounted power modules. |                                    |                   | 800F-A3BA |
| <br>Cat. No. 800F-ABZ1  | Square Bezel<br>Gives round operator a square appearance. This item is made of plastic. Not for use with toggle switch operators.                                                                     |                                    |                   | 800F-ABZ1 |
|                                                                                                          | Description                                                                                                                                                                                           | Material                           | Pkg. Qty.         | Cat. No.  |
| <br>Cat. No. 800F-ABJS  | Replacement Boot for Toggle Switch                                                                                                                                                                    | Silicone                           | 1                 | 800F-ABJS |
|                                                                                                          |                                                                                                                                                                                                       | Nitrile                            |                   | 800F-ABJN |
| <br>Cat. No. 800F-N2   | Hole Plug for 22.5 mm holes.                                                                                                                                                                          | Black plastic                      |                   | 800F-N2   |
|                                                                                                          |                                                                                                                                                                                                       | Gray plastic                       |                   | 800F-N8   |
| <br>Cat. No. 800F-ACP | Selector Switch Tabs<br>Changes functionality of selector switch from normal to CenterLeft or CenterRight.                                                                                            |                                    | 10 <sup>(1)</sup> | 800F-ACP  |

(1) Sold only in multiples of 10. Order (quantity of) 10 to receive one package of 10 pieces.

## Guards

|                                                                                                          | Description                                                                                                                                                                                                                                                                                                                                                                                    | Type                      | Pkg. Qty.         | Cat. No.   |
|----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-------------------|------------|
| <br>Cat. No. 800F-AMRG  | Protective Ring for use with illuminated/non-illuminated 2-position maintained and illuminated/non-illuminated 3-position mushroom operators (30 mm and 40 mm only)                                                                                                                                                                                                                            | Shiny metal               | 1                 | 800F-AMRG  |
|                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                | Black                     |                   | 800F-AMRGB |
|                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                | Yellow metal              |                   | 800F-AMRGY |
| <br>Cat. No. 800F-A6PR5 | Plastic Guard for use with the following operators: <ul style="list-style-type: none"> <li>• 40 mm E-stop (SEMI Standards Compliant)</li> <li>• 40 mm illuminated/non-illuminated alternate action and momentary operators</li> <li>• 60 mm illuminated/non-illuminated momentary operators</li> <li>• Selector switches (standard knob and key operated)</li> <li>• Potentiometers</li> </ul> | Yellow, round             |                   | 800F-A6PR5 |
| <br>Cat. No. 800F-AMEGY | Narrow Plastic Guard for use with the following operators: <ul style="list-style-type: none"> <li>• Bul. 800FD monolithic E-stops (SEMI standards compliant)</li> <li>• Flush/extended/guarded push buttons</li> <li>• Alternate action operators</li> <li>• Selector switches (standard knob and key operated)</li> <li>• Potentiometers</li> </ul>                                           | Yellow                    |                   | 800F-AMEGY |
| <br>Cat. No. 800F-AMMG  | 40 mm Protective Guard that is used with illuminated and non-illuminated momentary mushroom operators (40 mm) only.                                                                                                                                                                                                                                                                            | Shiny metal               |                   | 800F-AMMG  |
| <br>Protective Boots    | Clear silicone Protective Boot used on illuminated and non-illuminated, flush and extended operators.                                                                                                                                                                                                                                                                                          | Flush push button         | 10 <sup>(1)</sup> | 800F-AB7   |
|                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                | Extended push button      |                   | 800F-ABE7  |
|                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                | 3-position multi-function |                   | 800F-AUB1  |
|                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                | 2-position multi-function |                   | 800F-AUB2  |

(1) Sold in multiples of 10. Order (quantity of) 10 to receive one package of 10 pieces.

## Locking Attachments

|                                                                                                            | Description                                                                                                                                                                                                                                                                                         | Type                                              | Pkg. Qty. | Cat. No.    |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|-----------|-------------|
| <br>Cat. No. 800F-AFL1    | Locking Attachments are used to lock push button in the depressed position. <ul style="list-style-type: none"> <li>• N.C. contacts are open</li> <li>• N.O. contacts may or may not be open</li> <li>• N.C.L.B. contacts may or may not be closed</li> <li>• N.O.E.M contacts are closed</li> </ul> | Flush momentary, non-illuminated                  | 1         | 800F-AFL1   |
| <br>Cat. No. 800F-AEL1    |                                                                                                                                                                                                                                                                                                     | Extended momentary, non-illuminated               |           | 800F-AEL1   |
| <br>Cat. No. 800F-AML1    |                                                                                                                                                                                                                                                                                                     | Momentary mushroom                                |           | 800F-AML1   |
| <br>Cat. No. 800F-AML2    |                                                                                                                                                                                                                                                                                                     | Maintained mushroom                               |           | 800F-AML2   |
|                                                                                                            | Description                                                                                                                                                                                                                                                                                         | Lock Position                                     | Pkg. Qty. | Cat. No.    |
| <br>Cat. No. 800F-ASL2L   | Selector Switch Locking Attachment<br>Locks standard knob selector switch in specified position                                                                                                                                                                                                     | 2-position selector switches, left lock           | 1         | 800F-ASL2L  |
|                                                                                                            |                                                                                                                                                                                                                                                                                                     | 3-position selector switches, center lock         |           | 800F-ASL3C  |
| <br>Cat. No. 800F-ASL23A | Selector Switch Locking Attachment<br>Ability to put two locks on standard knob selector switch.                                                                                                                                                                                                    | 2- or 3-position selector switches, all positions |           | 800F-ASL23A |
| <br>Cat. No. 800F-AL01  | Locking Cover<br>Used on flush, extended and guarded momentary and alternate action operators, and standard knob selector switch operators.                                                                                                                                                         |                                                   |           | 800F-AL01   |

## Replacement Keys

|                                                                                                              | Description                                                                 | Pkg. Qty.        | Key No. (Std)       | Cat. No.     | Key No. (Std)       | Cat. No.     |
|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|------------------|---------------------|--------------|---------------------|--------------|
| <br>Cat. No. 800F-AKR3825 | Replacement Ronis Key<br>Standard replacement key is Cat. No. 800F-AKR3825. | 1 <sup>(1)</sup> | 3825                | 800F-AKR3825 | 3910 <sup>(2)</sup> | 800F-AKR3910 |
|                                                                                                              |                                                                             |                  | 455                 | 800F-AKR455  | 3920 <sup>(2)</sup> | 800F-AKR3920 |
|                                                                                                              |                                                                             |                  | 3801                | 800F-AKR3801 | 4001                | 800F-AKR4001 |
|                                                                                                              |                                                                             |                  | 3802                | 800F-AKR3802 | 4002                | 800F-AKR4002 |
|                                                                                                              |                                                                             |                  | 3803                | 800F-AKR3803 | 4003                | 800F-AKR4003 |
|                                                                                                              |                                                                             |                  | 3804                | 800F-AKR3804 | 4004                | 800F-AKR4004 |
|                                                                                                              |                                                                             |                  | 3805                | 800F-AKR3805 | 4005                | 800F-AKR4005 |
|                                                                                                              |                                                                             |                  | 3806                | 800F-AKR3806 | 4006                | 800F-AKR4006 |
|                                                                                                              |                                                                             |                  | 3901 <sup>(2)</sup> | 800F-AKR3901 | 4007                | 800F-AKR4007 |

(1) Standard package quantity is one set with two keys.

(2) Master key. See [page 17](#) for details.

## Other Accessories

|                                                                                                         | Description                                                                     | Volts      | Pkg. Qty.         | Cat. No.  |
|---------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|------------|-------------------|-----------|
| <br>Cat. No. 800F-XD7  | Diode Module<br>For lamp checking circuits. Latch not included.                 | ≤600V AC   | 10 <sup>(1)</sup> | 800F-XD7  |
|                                                                                                         | Null Block<br>For wire terminations only.                                       |            |                   | 800F-NX70 |
| <br>Cat. No. 800F-30WN | Potentiometer Legend Plate<br>Scale 0...9<br>(Series A potentiometers only)     | 10         |                   | 800F-30WN |
| <br>Cat. No. 800F-30WG | Potentiometer Legend Plate<br>Graphical scale<br>(Series A Potentiometers only) |            |                   | 800F-30WG |
|                                                                                                         | Description                                                                     | Resistance | Pkg. Qty.         | Cat. No.  |
| <br>Cat. No. 800F-AC1  | Replacement resistive elements for the 800FP potentiometer operator.            | 150 Ω      | 1                 | 800F-AC1  |
|                                                                                                         |                                                                                 | 500 Ω      |                   | 800F-AC2  |
|                                                                                                         |                                                                                 | 1000 Ω     |                   | 800F-AC3  |
|                                                                                                         |                                                                                 | 2500 Ω     |                   | 800F-AC4  |
|                                                                                                         |                                                                                 | 5000 Ω     |                   | 800F-AC5  |
|                                                                                                         |                                                                                 | 10,000 Ω   |                   | 800F-AC6  |

(1) Sold only in multiples of 10. Order (quantity of) 10 to receive one package of 10 pieces.

## Replacement Lamps for Incandescent Modules

| Lamp                                                                                                      | Type                      | Typical Current | Voltage    | ANSI No. | Pkg. Quantity     | Cat. No.                  |
|-----------------------------------------------------------------------------------------------------------|---------------------------|-----------------|------------|----------|-------------------|---------------------------|
| <br>Cat. No. 800F-N130 | Full-voltage Incandescent | 150 mA          | 6V AC/DC   | 755      | 10 <sup>(1)</sup> | 800F-N65                  |
|                                                                                                           |                           | 80 mA           | 12V AC/DC  | 756      |                   | 800F-N141                 |
|                                                                                                           |                           | 70 mA           | 24V AC/DC  | 757      |                   | 800F-N157                 |
|                                                                                                           |                           | 50 mA           | 48V AC/DC  | 1835     |                   | 800F-N48                  |
|                                                                                                           |                           | 22 mA           | 130V AC/DC | 949      |                   | 800F-N130                 |
|                        | LED                       | 50 mA           | 6V AC/DC   | —        |                   | 800T-N318x <sup>(2)</sup> |
|                                                                                                           |                           | 12 mA/17 mA     | 32V AC/DC  | —        |                   | 800T-N363x <sup>(2)</sup> |
|                                                                                                           |                           | 9 mA/14 mA      | 48V AC/DC  | —        |                   | 800T-N364x <sup>(2)</sup> |
|                                                                                                           |                           | 4.5 mA/6.2 mA   | 130V AC/DC | —        |                   | 800T-N321x <sup>(2)</sup> |

(1) Sold in multiples of 10. Order (quantity of) 10 to receive one package of 10 pieces.

(2) To complete the cat. no., replace the x with one of the following letters for the desired color: A = Amber; B = Blue; G = Green; R = Red; W = White. White LEDs only available in 6V and 130V.



## Caps, Diffusers, Lenses

Color caps listed below are for completion of devices that are ordered with color caps omitted.

**Table 31 - Non-illuminated Color Caps (without Text)**

|                                                                                   | Color  | Pkg. Qty.         | Momentary Extended | Momentary Flush/Guarded | Alternate Action Flush |
|-----------------------------------------------------------------------------------|--------|-------------------|--------------------|-------------------------|------------------------|
|                                                                                   |        |                   | Cat. No.           | Cat. No.                | Cat. No.               |
|  | Orange | 10 <sup>(1)</sup> | 800F-AE0           | 800F-AF0                | 800F-AFA0              |
|                                                                                   | White  |                   | 800F-AE1           | 800F-AF1                | 800F-AFA1              |
|                                                                                   | Black  |                   | 800F-AE2           | 800F-AF2                | 800F-AFA2              |
|                                                                                   | Green  |                   | 800F-AE3           | 800F-AF3                | 800F-AFA3              |
|                                                                                   | Red    |                   | 800F-AE4           | 800F-AF4                | 800F-AFA4              |
|                                                                                   | Yellow |                   | 800F-AE5           | 800F-AF5                | 800F-AFA5              |
|                                                                                   | Blue   |                   | 800F-AE6           | 800F-AF6                | 800F-AFA6              |
|                                                                                   | Gray   |                   | —                  | 800F-AF8                | —                      |

(1) Sold only in multiples of 10. Order (quantity of) 10 to receive one package of 10 pieces.

**Table 32 - Non-illuminated Color Caps – Multi-Function Operators (without Text)**

|                                                                                    | Color  | Pkg. Qty.         | Flush     | Extended  |
|------------------------------------------------------------------------------------|--------|-------------------|-----------|-----------|
|                                                                                    |        |                   | Cat. No.  | Cat. No.  |
|  | White  | 10 <sup>(1)</sup> | 800F-AFU1 | 800F-AEU1 |
|                                                                                    | Black  |                   | 800F-AFU2 | 800F-AEU2 |
|                                                                                    | Green  |                   | 800F-AFU3 | 800F-AEU3 |
|                                                                                    | Red    |                   | 800F-AFU4 | 800F-AEU4 |
|                                                                                    | Yellow |                   | 800F-AFU5 | 800F-AEU5 |
|                                                                                    | Blue   |                   | 800F-AFU6 | 800F-AEU6 |

(1) Sold only in multiples of 10. Order (quantity of) 10 to receive one package of 10 pieces.

**Table 33 - Illuminated Color Lens Caps and Pilot Light Lenses (without Text)**

|                                                                                     | Color  | Pkg. Qty.         | Color Lens Caps –<br>Flush, Alternate Action | Color Lens Caps –<br>Extended, Guarded | Pilot Light Lenses –<br>Standard Lens |
|-------------------------------------------------------------------------------------|--------|-------------------|----------------------------------------------|----------------------------------------|---------------------------------------|
|                                                                                     |        |                   | Cat. No. <sup>(1)</sup>                      | Cat. No. <sup>(1)</sup>                | Cat. No. <sup>(1)</sup>               |
|  | Amber  | 10 <sup>(2)</sup> | 800F-ALF0                                    | 800F-ALE0                              | 800F-AP0                              |
|                                                                                     | Green  |                   | 800F-ALF3                                    | 800F-ALE3                              | 800F-AP3                              |
|                                                                                     | Red    |                   | 800F-ALF4                                    | 800F-ALE4                              | 800F-AP4                              |
|                                                                                     | Yellow |                   | 800F-ALF5                                    | 800F-ALE5                              | 800F-AP5                              |
|                                                                                     | Blue   |                   | 800F-ALF6                                    | 800F-ALE6                              | 800F-AP6                              |
|                                                                                     | Clear  |                   | 800F-ALF7                                    | 800F-ALE7                              | 800F-AP7                              |

(1) Includes diffuser.

(2) Sold only in multiples of 10. Order (quantity of) 10 to receive one package of 10 pieces.

**Table 34 - Operator Diffusers (without Text)**

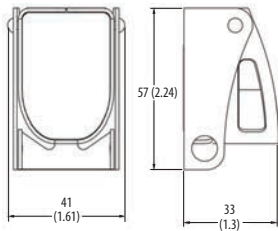
|                                                                                     | Description                                  | Pkg. Qty.         | Cat. No. |
|-------------------------------------------------------------------------------------|----------------------------------------------|-------------------|----------|
|  | Illuminated push buttons – flush             | 10 <sup>(1)</sup> | 800F-AD2 |
|                                                                                     | Pilot lights                                 |                   | 800F-AD3 |
|                                                                                     | Illuminated push buttons – extended, guarded |                   | 800F-AD4 |

(1) Sold only in multiples of 10. Order (quantity of) 10 to receive one package of 10 pieces.

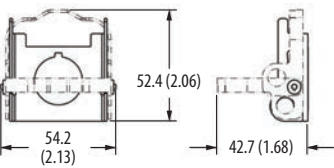
# Approximate Dimensions – Accessories

Dimensions in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.

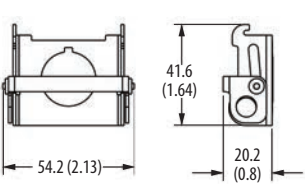
## Locking Cover



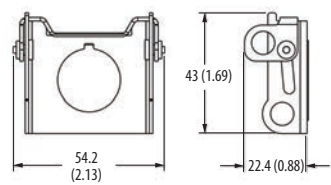
## Maintained Mushroom Locking Attachment



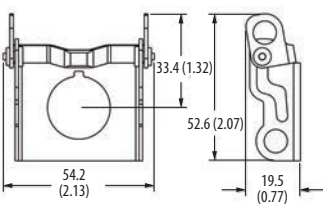
## Momentary Mushroom Locking Attachment



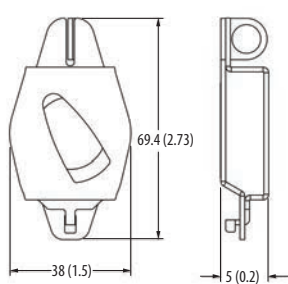
## Extended Non-illuminated Locking Attachment



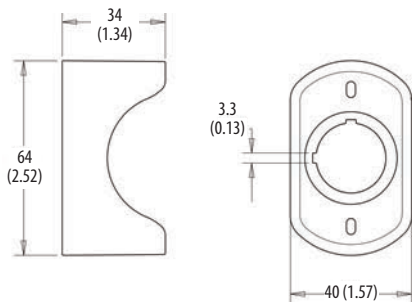
## Flush Non-illuminated Locking Attachment



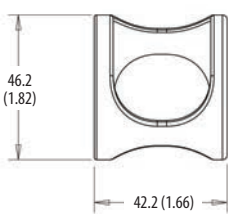
## Selector Switch Locking Cover (Same for All Lock Positions)



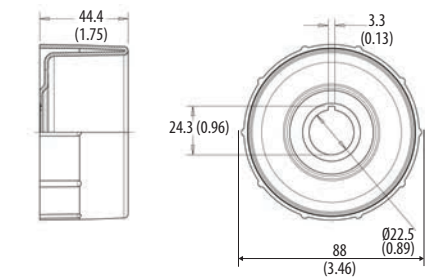
## Narrow Guard



## Protective Ring



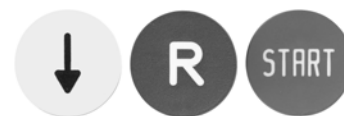
## Plastic Guard



## Legend Plates/Caps

### Two-color Molded Legend Caps – Non-illuminated Push Buttons

800F -  $\frac{\text{AF}}{\text{a}}$   $\frac{3}{\text{b}}$   $\frac{01}{\text{c}}$



Cat. No. 800F-15YSE112

| a               |             |
|-----------------|-------------|
| Button Cap Type |             |
| Code            | Description |
| AF              | Flush       |
| AE              | Extended    |

| b         |             |
|-----------|-------------|
| Color Cap |             |
| Code      | Description |
| 1         | White       |
| 2         | Black       |
| 3         | Green       |
| 4         | Red         |
| 5         | Yellow      |
| 6         | Blue        |

| c                                                   |                        |
|-----------------------------------------------------|------------------------|
| Legend Text (English) <sup>(1)</sup> <sup>(2)</sup> |                        |
| Code                                                | Description            |
| 01                                                  | START                  |
| 02                                                  | STOP                   |
| 05                                                  | 0                      |
| 06                                                  | I                      |
| 08                                                  | →                      |
| 09                                                  | FORWARD <sup>(3)</sup> |
| 10                                                  | REVERSE <sup>(3)</sup> |
| 11                                                  | R                      |

(1) White and yellow caps have black text. All other color caps have white text.

(2) See [Table 35](#) for valid color cap text codes.

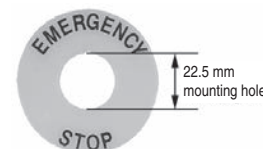
(3) Available in flush only.

**Table 35 - Valid Color Cap Text Codes**

| Color  | Text                             |               |
|--------|----------------------------------|---------------|
|        | Flush Caps                       | Extended Caps |
| White  | FORWARD, REVERSE, START, I, →, R | →, R          |
| Black  | FORWARD, REVERSE, →, R           | STOP, 0, →, R |
| Green  | FORWARD, REVERSE, START, I, →    | →             |
| Red    | FORWARD, REVERSE, STOP, 0, →     | STOP, 0, →    |
| Yellow | FORWARD, REVERSE, →              | →             |
| Blue   | FORWARD, REVERSE, →, R           | →, R          |

### Emergency Stop Legend Plates <sup>(5)</sup>

800F -  $\frac{15YS}{\text{a}}$   $\frac{\quad}{\text{b}}$



| a                   |                                                       |
|---------------------|-------------------------------------------------------|
| Size/Color (Yellow) |                                                       |
| Code                | Description                                           |
| 15Y                 | 60 mm round<br>(30.5 mm mounting hole)                |
| 15YS                | 60 mm round<br>(22.5 mm mounting hole) <sup>(1)</sup> |
| 16Y                 | 90 mm round<br>(22.5 mm mounting hole) <sup>(1)</sup> |

| b     |                                         |
|-------|-----------------------------------------|
| Text  |                                         |
| Code  | Description                             |
| Blank | No text                                 |
| E112  | EMERGENCY STOP                          |
| F112  | ARRÊT D'URGENCE <sup>(2)</sup>          |
| S112  | PARO DE EMERGENCIA                      |
| G112  | NOT HALT                                |
| T112  | ARRESTO EMERGENZA                       |
| N112  | NØDSTOPP, EMERGENCY STOP <sup>(2)</sup> |
| P112  | PARADA DE EMERGENCIA                    |

| b (continued) |                                                                         |
|---------------|-------------------------------------------------------------------------|
| Text          |                                                                         |
| Code          | Description                                                             |
| W112          | NØDSTOPP, EMERGENCY STOP <sup>(2)</sup>                                 |
| A112          | NØDSTOP                                                                 |
| B112          | EMERGENCY STOP, ARRÊT D'URGENCE,<br>PARADA DE EMERGENCIA <sup>(2)</sup> |
| D112          | NØDSTOP <sup>(2)</sup>                                                  |
| M112          | OT HALT, ARRESTO EMERGENZA,<br>ARRÊT D'URGENCE <sup>(3)</sup>           |
|               | EMERGENCY STOP, ARRÊT<br>D'URGENCE, NOT HALT <sup>(4)</sup>             |
| L112          | NEYÐARSTOPP, NEYÐARSTOPP <sup>(2)</sup>                                 |
| H112          | NØD-STOP, HÄTÄ-SEIS, NØD-STOP <sup>(2)</sup>                            |

(1) Not for use with base-mounted contact blocks.

(2) Not available on 15YS version.

(3) Text is printed on the 15Y version only.

(4) Text is printed on the 15YS & 16Y versions only.

(5) Sold only multiples of 10. Order (quantity of) 10 to receive one package of 10 pieces.

Legend Plate Ordering Information (a) (b) (c)

Standard Text/Symbols

- 1. Select the catalog number for the appropriate legend size and color from the selection tables on this page.
- 2. Complete the catalog number by adding the appropriate suffix number selected from [page 59](#). Font size is automatically determined by the number of characters, as shown in the following table. Do not add the font code to the catalog number.

| Font Size    | Number of Characters   |                        |                                     |
|--------------|------------------------|------------------------|-------------------------------------|
|              | One-Piece Legend Plate | Two-Piece Legend Plate | Special Multi-Function Legend Plate |
| K (small)    | >14                    | >13                    | >6                                  |
| S (standard) | ≤14                    | ≤13                    | ≤ 6                                 |

**Example:** Catalog number 800F-11WE101 identifies a white, 30 x 40 mm snap-in legend plate and frame with AUTO engraved on it.



Custom Text (d)

- 1. Select the catalog number for the appropriate legend size and color from the Selection Tables on this page.
- 2. Add E100 followed by the font code (K, S, L) from the following table.

| Font Size    | Type of Legend Plate |                   |            |                     |                   |                          |                        |
|--------------|----------------------|-------------------|------------|---------------------|-------------------|--------------------------|------------------------|
|              | One-Piece            |                   |            | Two-Piece           |                   |                          | Special Multi-Function |
|              | Char. per Line, Max  | No. of Lines, Max |            | Char. per Line, Max | No. of Lines, Max |                          | Char. per Line, Max    |
|              |                      | 30 x 40 mm        | 30 x 50 mm |                     | 30 x 40 mm        | 30 x 50 mm or 30 x 60 mm |                        |
| K (small)    | 16                   | 2                 | 5          | 15                  | 2                 | 5                        | 7                      |
| S (standard) | 14                   | 2                 | 3          | 13                  | 1                 | 3                        | 6                      |
| L (large)    | 10                   | 1                 | 3          | 9                   | 1                 | 3                        | 4                      |

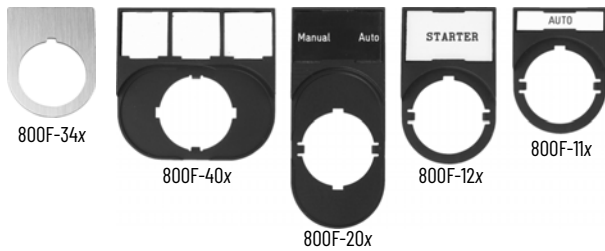
- 3. Complete the catalog number by adding custom text to the order memo text or notes field.

**Example:** Catalog number 800F-12WE100K, with STARTER text entered into memo text on order, identifies a white, 30 x 50 mm snap-in legend plate and frame with custom text STARTER engraved in small font.



(a) Blank legend frames sold only in multiples of 10. Order (quantity of) 10 to receive one package of 10 pieces. Legends with standard text/symbols or custom text are packaged in quantities of 1.  
(b) Font code K = 0.08 in; font code S = 0.10 in; font code L = 0.14 in.  
(c) Use ProposalWorks™ software to configure the product. ProposalWorks software is available from [rok.auto/systemtools](http://rok.auto/systemtools).  
(d) Text found on [page 61](#).

## Selection Tables



| Type <sup>(1)</sup>                                                   | Description              | Cat. No. (Blank) | Cat. No. (with Text Symbols) |
|-----------------------------------------------------------------------|--------------------------|------------------|------------------------------|
| 30 x 40 mm<br>2-piece<br>snap-in plate<br>and frame                   | Red with white text      | 800F-11RE100     | 800F-11Rxxx                  |
|                                                                       | White with black text    | 800F-11WE100     | 800F-11Wxxx                  |
|                                                                       | Black with white text    | 800F-11BE100     | 800F-11Bxxx                  |
|                                                                       | Aluminum with black text | 800F-11AE100     | 800F-11Axxx                  |
| 30 x 50 mm<br>2-piece<br>snap-in plate<br>and frame                   | White with black text    | 800F-12WE100     | 800F-12Wxxx                  |
|                                                                       | Black with white text    | 800F-12BE100     | 800F-12Bxxx                  |
|                                                                       | Aluminum with black text | 800F-12AE100     | 800F-12Axxx                  |
| 30 x 60 mm<br>2-piece<br>snap-in plate<br>and frame                   | White with black text    | 800F-20WE100     | 800F-20Wxxx                  |
|                                                                       | Black with white text    | 800F-20BE100     | 800F-20Bxxx                  |
|                                                                       | Aluminum with black text | 800F-20AE100     | 800F-20Axxx                  |
| Special multi-<br>function<br>4-piece snap-<br>in plates and<br>frame | White with black text    | 800F-40WE100     | —                            |
|                                                                       | Black with white text    | 800F-40BE100     | —                            |
|                                                                       | Aluminum with black text | 800F-40AE100     | —                            |
| 30 x 40 mm<br>1-piece                                                 | Red with white text      | 800F-34RE100     | 800F-34Rxxx                  |
|                                                                       | White with black text    | 800F-34WE100     | 800F-34Wxxx                  |
|                                                                       | Black with white text    | 800F-34BE100     | 800F-34Bxxx                  |
|                                                                       | Aluminum with black text | 800F-34AE100     | 800F-34Axxx                  |
| 30 x 50 mm<br>1-piece                                                 | Red with white text      | 800F-35RE100     | 800F-35Rxxx                  |
|                                                                       | White with black text    | 800F-35WE100     | 800F-35Wxxx                  |
|                                                                       | Black with white text    | 800F-35BE100     | 800F-35Bxxx                  |
|                                                                       | Aluminum with black text | 800F-35AE100     | 800F-35Axxx                  |
| 30 x 40 mm<br>snap-in plate<br>only                                   | Red with white text      | 800F-17RE100     | 800F-17Rxxx                  |
|                                                                       | White with black text    | 800F-17WE100     | 800F-17Wxxx                  |
|                                                                       | Black with white text    | 800F-17BE100     | 800F-17Bxxx                  |
|                                                                       | Aluminum with black text | 800F-17AE100     | 800F-17Axxx                  |
| 30 x 50 mm<br>snap-in plate<br>only                                   | White with black text    | 800F-18WE100     | 800F-18Wxxx                  |
|                                                                       | Black with white text    | 800F-18BE100     | 800F-18Bxxx                  |
|                                                                       | Aluminum with black text | 800F-18AE100     | 800F-18Axxx                  |
| Special multi-<br>function<br>snap-in plate<br>only <sup>(2)</sup>    | White with black text    | 800F-42WE100     | 800F-42Wxxx                  |
|                                                                       | Black with white text    | 800F-42BE100     | 800F-42Bxxx                  |
|                                                                       | Aluminum with black text | 800F-42AE100     | 800F-42Axxx                  |
| 30 x 66 mm<br>1-piece                                                 | Yellow with black text   | 800F-37YE100     | 800F-37Yxxx                  |

(1) Plate dimensions found on [page 62](#).

(2) Three snap-in plates are required for each legend frame.

| Legend Plate Frame — 2-Piece Snap-In <sup>(1)</sup> |          |                                         |          |
|-----------------------------------------------------|----------|-----------------------------------------|----------|
| Type                                                | Cat. No. | Type                                    | Cat. No. |
| 30 x 40 mm                                          | 800F-110 | 30 x 60 mm                              | 800F-200 |
| 30 x 50 mm                                          | 800F-120 | Special<br>multifunction <sup>(2)</sup> | 800F-400 |

(1) Blank legend frames sold only in multiples of 10. Order (quantity of) 10 to receive one package of 10 pieces. Legends with standard text/symbols or custom text are packaged in quantities of 1.

(2) Three snap-in plates are required for each legend frame.

## Custom Laser-engraved Caps and Diffusers

### Ordering Information <sup>(a)</sup> <sup>(b)</sup> <sup>(c)</sup>

#### Standard Text/Symbols

1. Select the catalog number for the appropriate product and color from configurator tables [a](#) and [b](#).
2. Complete the catalog number by adding the appropriate suffix number selected from [page 59](#).

**Example:** Catalog number 800F-AF3CE166 identifies a flush, green cap with custom-engraved text ON.

3. Font size is automatically determined by the number of characters. <sup>(d)</sup> Do not add a font code to the catalog number.

| Font Size | No. of Characters |
|-----------|-------------------|
| 12 pt     | 7                 |
| 16 pt     | 5...6             |
| 20 pt     | 1...4             |

#### Custom Text <sup>(e)</sup>

1. Select the catalog number for the appropriate product and color from configurator tables a and b.
2. Add E100 followed by the font code (G, H, J), based on the number of custom characters.
3. Complete the catalog number by adding custom text to the order memo text or notes field.

**Example:** Catalog number 800F-AF3CE100J, with FILL text entered into memo text on order, identifies a flush, green push button cap with custom laser-engraved text FILL in large font.

| Font Size             | No. of Characters | Number of Lines, Max |
|-----------------------|-------------------|----------------------|
| G (small) (12 pt.)    | 7                 | 1                    |
| H (standard) (16 pt.) | 5...6             | 1                    |
| J (large) (20 pt.)    | 1...4             | 1                    |

#### Custom Symbols/Graphics <sup>(f)</sup>

1. Select the catalog number for the appropriate product and color from configurator tables a and b.
2. Add U100 to identify the custom symbol or graphic.
3. Contact your local Rockwell Automation sales office or Allen-Bradley distributor to submit the graphic.

**Example:** Catalog number 800F-AD3CU100

#### Push Button, Multi-function Caps



800F - A F 1 C  
a b

| a    |                                              |
|------|----------------------------------------------|
| Type |                                              |
| Code | Description                                  |
| E    | Push button extended cap                     |
| F    | Push button flush cap                        |
| FA   | Alternate action cap                         |
| FAU  | Multi-function flush cap (for position A)    |
| EAU  | Multi-function extended cap (for position A) |
| FCU  | Multi-function flush cap (for position C)    |
| ECU  | Multi-function extended cap (for position C) |

| b     |             |
|-------|-------------|
| Color |             |
| Code  | Description |
| 0     | Amber       |
| 1     | White       |
| 2     | Black       |
| 3     | Green       |
| 4     | Red         |
| 5     | Yellow      |
| 6     | Blue        |

#### Pilot Light Diffuser

800F-AD3C



#### Illuminated Push Button Diffusers

800F-AD2C (Flush or Alternate Action)



800F-AD4C (Extended and Guarded)

(a) Package quantity of one for all laser-engraved caps and diffusers.

(b) Standard font is Arial Narrow.

(c) Use ProposalWorks™ software to configure the product. ProposalWorks software is available from [rok.auto/systemtools](http://rok.auto/systemtools).

(d) Seven characters maximum allowable.

(e) Text found on [page 61](#).

(f) Symbols found on [page 59](#).

## Legend Texts

### Standard Symbols

| Marking <sup>(1)</sup> | Description                                                | Std.               | Suffix No. |
|------------------------|------------------------------------------------------------|--------------------|------------|
| (Blank)                | Blank                                                      | —                  | U100       |
|                        | —                                                          | —                  | U112       |
|                        | START <sup>(2) (3) (4) (5)</sup>                           | ISO 71             | U219       |
|                        | — <sup>(2) (3) (4) (5)</sup>                               | ISO 72             | U220       |
|                        | START <sup>(2) (3) (4) (5)</sup>                           | ISO 5232           | U221       |
|                        | CONTINUOUS MOTION<br>LEFT, RIGHT <sup>(6)</sup>            | —                  | U226       |
|                        | CONTINUOUS MOTION<br>UP, DOWN <sup>(6)</sup>               | —                  | U227       |
| 0                      | STOP                                                       | —                  | U228       |
| I                      | STEP 1                                                     | —                  | U229       |
| II                     | STEP 2                                                     | —                  | U230       |
| 0-I                    | STOP-START <sup>(6)</sup>                                  | —                  | U231       |
| I-0                    | START-STOP <sup>(6)</sup>                                  | —                  | U232       |
| I-II                   | — <sup>(6)</sup>                                           | —                  | U233       |
| I-0-II                 | — <sup>(6)</sup>                                           | —                  | U234       |
|                        | — <sup>(6)</sup>                                           | —                  | U236       |
|                        | — <sup>(6)</sup>                                           | —                  | U237       |
| I-II-III               | — <sup>(6)</sup>                                           | —                  | U240       |
|                        | CONTINUOUS MOTION                                          | —                  | U241       |
|                        | CONTINUOUS MOTION                                          | —                  | U242       |
|                        | CONTINUOUS MOTION                                          | —                  | U243       |
| III                    | STEP 3                                                     | —                  | U249       |
| 0- →                   | — <sup>(6)</sup>                                           | —                  | U256       |
| I-0-I                  | START-STOP-START <sup>(6)</sup>                            | —                  | U282       |
| 0-I-2                  | — <sup>(6)</sup>                                           | —                  | U285       |
| IV                     | STEP 4                                                     | —                  | U604       |
| V                      | STEP 5                                                     | —                  | U605       |
|                        | CONTINUOUS MOTION                                          | ISO 1              | U700       |
|                        | LINEAR MOTION TWO DIRECTIONS                               | ISO 2              | U701       |
|                        | VERTICAL MOTION                                            | —                  | U702       |
|                        | INTERRUPTED MOTION <sup>(2) (4)</sup>                      | —                  | U703       |
|                        | LIMITED MOTION <sup>(2) (4)</sup>                          | ISO 4              | U704       |
|                        | LIMITED MOTION AND RETURN <sup>(2) (4)</sup>               | ISO 5              | U705       |
|                        | OSCILLATING MOTION,<br>CONTINUOUS CYCLE <sup>(2) (4)</sup> | —                  | U706       |
|                        | CONTINUOUS ROTATION<br>TO RIGHT <sup>(2) (4)</sup>         | DIN 100,<br>ISO 7A | U707       |
|                        | CONTINUOUS ROTATION TO LEFT <sup>(2) (4)</sup>             | ISO 7B             | U708       |
|                        | INTERRUPTED ROTATION<br>TO LEFT <sup>(2) (4)</sup>         | —                  | U710       |

| Marking <sup>(1)</sup> | Description                                         | Std.   | Suffix No. |
|------------------------|-----------------------------------------------------|--------|------------|
|                        | INTERRUPTED ROTATION<br>TO RIGHT <sup>(2) (4)</sup> | —      | U711       |
|                        | DIRECTION OF SPINDLE SPEED <sup>(2) (4)</sup>       | —      | U717       |
|                        | FEED <sup>(2) (4)</sup>                             | ISO 16 | U720       |
|                        | REDUCED SPEED <sup>(2) (4)</sup>                    | —      | U723       |
|                        | RAPID FEED <sup>(2) (4)</sup>                       | —      | U724       |
|                        | NORMAL FEED <sup>(2) (4)</sup>                      | —      | U725       |
|                        | LONGITUDINAL FEED <sup>(2) (4)</sup>                | —      | U726       |
|                        | TRANSVERSE FEED <sup>(2) (4)</sup>                  | —      | U727       |
|                        | RAPID TRANSVERSE <sup>(2) (4)</sup>                 | ISO 26 | U728       |
|                        | THREADING <sup>(2) (4)</sup>                        | —      | U729       |
| +                      | INCREASE <sup>(2) (4)</sup>                         | ISO 28 | U730       |
| —                      | DECREASE <sup>(2) (4)</sup>                         | ISO 29 | U731       |
|                        | CONVENTIONAL MILLING <sup>(2) (4)</sup>             | —      | U736       |
|                        | CLIMB MILLING <sup>(2) (4)</sup>                    | —      | U737       |

- (1) Items in gray shaded table cells only available on legend plates. Not available as laser-engraved text on button caps, illuminated push button diffusers, or pilot light diffusers.  
(2) Not available on -11 or -17 legend plates.  
(3) Not available on -12, -18, or -20 legend plates.  
(4) Not available on -34 legend plates.  
(5) Not available on -35 legend plates.  
(6) Not available on -42 legend plates.

## Standard Symbols, Continued

| Marking                                                                             | Description                                      | Std.                | Suffix No.<br>(1) (2) |
|-------------------------------------------------------------------------------------|--------------------------------------------------|---------------------|-----------------------|
|    | ELECTRIC MOTOR <sup>(2)</sup> (4)                | ISO 41              | U800                  |
|    | TURNING SPINDLE <sup>(2)</sup> (4)               | —                   | U803                  |
|    | DRILLING SPINDLE <sup>(2)</sup> (4)              | —                   | U804                  |
|    | MILLING SPINDLE <sup>(2)</sup> (4)               | —                   | U805                  |
|    | GRINDING SPINDLE <sup>(2)</sup> (4)              | —                   | U806                  |
|    | PUMP <sup>(2)</sup> (4)                          | ISO 48              | U807                  |
|    | COOLANT PUMP <sup>(2)</sup> (4)                  | —                   | U808                  |
|    | LUBRICATION PUMP <sup>(2)</sup> (4)              | —                   | U809                  |
|    | HYDRAULIC SYSTEMS PUMP <sup>(2)</sup> (4)        | —                   | U810                  |
|    | HYDRAULIC MOTOR <sup>(2)</sup> (4)               | —                   | U811                  |
|    | TRACER <sup>(2)</sup> (4)                        | —                   | U812                  |
|    | SHEAR PIN CONSTRUCTION <sup>(2)</sup> (4)        | ISO 91              | U850                  |
|    | ATTENTION/DANGER <sup>(2)</sup> (4)              | DIN 131,<br>ISO 92  | U851                  |
|    | CAUTION <sup>(2)</sup> (4)                       | ISO 93              | U852                  |
|    | MAIN SWITCH <sup>(2)</sup> (4)                   | ISO 94              | U853                  |
|   | ACOUSTIC WARNING<br>EQUIPMENT <sup>(2)</sup> (4) | DIN 155             | U854                  |
|  | SETUP                                            | DIN 986             | U855                  |
|  | COOLANT FLUID                                    | ISO 101             | U875                  |
|  | LIGHT                                            | ISO 139, 102        | U876                  |
|  | WEIGHT                                           | —                   | U877                  |
|  | REFILLING                                        | DIN 256,<br>ISO 104 | U878                  |
|  | FULL LEVEL                                       | —                   | U879                  |
|  | DRAIN                                            | DIN 257,<br>ISO 106 | U880                  |
|  | OVERFLOW                                         | DIN 258,<br>ISO 105 | U881                  |
|  | OIL LUBRICATION                                  | DIN 175,<br>ISO 107 | U882                  |
|  | BLOWING UNIT                                     | DIN 263,<br>ISO 108 | U883                  |
|  | SUCTION UNIT                                     | DIN 264,<br>ISO 109 | U884                  |
|  | STEPLESS OPERATION                               | ISO 61              | U900                  |
|  | CLAMP OR TIGHTEN                                 | ISO 63A             | U901                  |
|  | CLAMP OR TIGHTEN                                 | —                   | U902                  |
|  | LOOSEN                                           | ISO 64A             | U903                  |

| Marking                                                                           | Description                              | Std.              | Suffix No.<br>(1) (2) |
|-----------------------------------------------------------------------------------|------------------------------------------|-------------------|-----------------------|
|  | LOOSEN                                   | —                 | U904                  |
|  | BRAKE ON                                 | ISO 65            | U905                  |
|  | BRAKE RELEASE                            | ISO 66            | U906                  |
|  | AUTO CYCLE                               | —                 | U907                  |
|  | MANUAL                                   | DIN 35            | U908                  |
|  | START                                    | ISO 69            | U909                  |
|  | STOP                                     | ISO 70            | U910                  |
|  | TAKE ACTION WHEN<br>CONTROL IS OPERATING | —                 | U912                  |
|  | ENGAGE                                   | DIN 46,<br>ISO 74 | U913                  |
|  | DISENGAGE                                | DIN 45,<br>ISO 75 | U914                  |
|  | ENGAGE TRACE                             | —                 | U917                  |
|  | DISENGAGE TRACE                          | —                 | U918                  |
|  | CHANGE SPEED ONLY IN<br>STOPPED POSITION | —                 | U919                  |
|  | CHANGE SPEED ONLY<br>WHEN IN MOTION      | —                 | U920                  |
|  | CONTINUOUS ADJUSTMENT                    | ISO 62            | U921                  |
|  | AUTOMATIC OR<br>SEMI-AUTOMATIC CYCLE     | DIN 267           | U922                  |
| R                                                                                 | R RESET                                  | —                 | U924                  |

(1) Not available on -11 or -17 legend plates.

(2) Not available on -34 legend plates.



## Standard Text

**IMPORTANT**

For legend plates in French, Spanish, German, Italian, or Swedish contact your local Allen-Bradley distributor or Rockwell Automation sales office.

| Marking (1)                | Suffix No. | Marking (1)              | Suffix No. | Marking (1)          | Suffix No. | Marking (1)                                   | Suffix No. | Marking (1)           | Suffix No. |
|----------------------------|------------|--------------------------|------------|----------------------|------------|-----------------------------------------------|------------|-----------------------|------------|
| (Blank)                    | E100       | FOR-AUTO-REV (4)         | E252       | JOG-STOP-RUN (4)     | E144       | POWER ON                                      | E178       | SOFT STOP             | E292       |
| I-O-AUTO (2)(3)(4)         | E235       | FOR-OFF-REV (4)          | E261       | LAST STOP            | E278       | PULL TO START                                 | E180       | SPEED                 | E293       |
| ACCU-STOP (4)              | E284       | FOR-REV (4)              | E253       | LEFT                 | E145       | PULL TO RESET                                 | E176       | START                 | E208       |
| AT SPEED                   | E285       | FOR-STOP-REV (4)         | E254       | LEFT-RIGHT (4)       | E146       | PUMP STOP                                     | E290       | START CYCLE           | E209       |
| AUTO                       | E101       | FORWARD                  | E120       | LOCAL-REMOTE (4)     | E147       | PURGE                                         | E271       | START-JOG (4)         | E210       |
| AUTO-O-HAND (2)(3)(4)      | E250       | FORWARD-AUTO-REVERSE (4) | E121       | LOW                  | E148       | PUSH TO STOP                                  | E179       | START-STOP (4)        | E211       |
| AUTO-HAND (4)              | E102       |                          |            | LOW-HIGH (4)         | E149       | PUSH TO STOP-TWIST OR PULL, RELEASE (2)(4)(5) | E262       | STOP                  | E212       |
| AUTO-MAN-OFF (4)           | E103       | FORWARD-OFF-REVERSE (4)  | E122       | LOW-OFF-HIGH (4)     | E150       |                                               |            | STOP-CYCLE (4)        | E213       |
| AUTO-MANUAL (4)            | E286       |                          |            | LOW SPEED            | E151       | PUSH-TO-TEST                                  | E181       | STOP-RESET (4)        | E214       |
| AUTO-OFF-HAND (4)          | E104       | FORWARD-STOP-REVERSE (4) | E123       | LOWER                | E152       | RAISE                                         | E182       | STOP-START (4)        | E215       |
| BLOWER                     | E268       |                          |            | LOW-OFF-RAISE (4)    | E153       | RAISE-LOWER (4)                               | E183       | SUMMER-OFF-WINTER (4) | E216       |
| BRAKE                      | E105       | FORWARD-REVERSE (4)      | E124       | LOWER-RAISE (4)      | E154       | RAISE-OFF-LOWER (4)                           | E184       |                       |            |
| BYPASS-OFF-DRIVE (2)(3)(4) | E297       | FULL SPEED               | E125       | MANUAL               | E155       | READY                                         | E185       | SUMMER-WINTER (4)     | E217       |
| BYPASS ON (2)(3)(4)        | E295       | HAND                     | E126       | MAN-O-AUTO (2)(3)(4) | E238       | RESET                                         | E186       | SUPPLY ON             | E218       |
| BYPASS START (2)(3)(4)     | E299       | HAND-I-AUTO (2)(3)(4)    | E239       | MAN-AUTO (4)         | E258       | RETURN                                        | E187       | TEST                  | E219       |
| BYPASS STOP (2)(3)(4)      | E298       | HAND-O-AUTO (4)          | E283       | MANUAL-AUTO (4)      | E156       | REV-FOR (4)                                   | E260       | TRANSFER (4)          | E220       |
| CLAMP                      | E106       | HAND-AUTO (4)            | E127       | MAN-OFF-AUTO (4)     | E259       | REVERSE                                       | E188       | TRIP                  | E221       |
| CLOSE                      | E107       | HAND-OFF-AUTO (4)        | E128       | MANUAL-OFF-AUTO (4)  | E157       | REVERSE-FORWARD (4)                           | E189       | UNCLAMP               | E222       |
| CYCLE START                | E108       | HAND OFF                 | E264       | MOTOR RUN            | E158       | REVERSE-OFF-FORWARD (4)                       | E190       | UP                    | E223       |
| DECREASE (4)               | E109       | HAND ON                  | E263       | MOTOR RUNNING        | E159       |                                               |            | UP-DOWN (4)           | E224       |
| DRIVE-START (4)            | E287       | HAND START               | E265       | MOTOR START          | E160       | RIGHT                                         | E191       | UP-OFF-DOWN (4)       | E225       |
| DRIVE-STOP (4)             | E288       | HAND STOP                | E266       | MOTOR STOP           | E161       | RIGHT-LEFT (4)                                | E192       |                       |            |
| DOWN                       | E110       | HEAT                     | E270       | MOTOR STOPPED        | E162       | ROTATE CW                                     | E246       |                       |            |
| DOWN-OFF-UP (4)            | E111       | HIGH                     | E129       | NO FLIP              | E275       | ROTATE CCW                                    | E247       |                       |            |
| DRIVE ON (2)(3)(4)         | E296       | HIGH-LOW (4)             | E130       | OFF                  | E163       | RUN                                           | E193       |                       |            |
| EMERG STOP                 | E251       | HIGH-OFF-LOW (4)         | E131       | OFF CIRCUIT          | E244       | RUN-JOG (4)                                   | E194       |                       |            |
| EMERGENCY (4)              | E248       | IN                       | E132       | OFF-COOLANT-ON (4)   | E164       | RUN-SAFE-JOG (4)                              | E195       |                       |            |
| EMERGENCY OFF (4)          | E294       | IN-OUT (4)               | E133       | OFF-LIGHT-ON (4)     | E272       | RUNNING                                       | E243       |                       |            |
| EMERGENCY STOP (4)         | E112       | INCH                     | E134       | OFF-ON (4)           | E165       | SAFE                                          | E196       |                       |            |
| ENABLE                     | E279       | INCH-REV (4)             | E257       | ON                   | E166       | SAFE-RUN (4)                                  | E197       |                       |            |
| ENTER                      | E277       | INCH-REVERSE (4)         | E135       | ON CIRCUIT           | E245       | SETUP                                         | E198       |                       |            |
| ERROR                      | E273       | INCH-RUN (4)             | E136       | ON-OFF (4)           | E167       | SETUP-RUN (4)                                 | E302       |                       |            |
| EXHAUSTER (4)              | E269       | INCREASE (4)             | E137       | ON-OFF-AUTO (4)      | E168       | SETUP-SERVICE (4)                             | E199       |                       |            |
| FAULT                      | E113       | INSPECT                  | E274       | ON-STOP-SAFE (4)     | E169       | SEQUENCE-TEST (4)                             | E200       |                       |            |
| FAST                       | E114       | JOG                      | E138       | OPEN                 | E170       | SLOW                                          | E201       |                       |            |
| FAST-OFF-SLOW (4)          | E289       | JOG-FOR (4)              | E255       | OPEN-CLOSE (4)       | E171       | SLOWER                                        | E202       |                       |            |
| FASTER                     | E115       | JOG-FORWARD (4)          | E139       | OPEN-OFF-CLOSE (4)   | E172       | SLOWEST                                       | E203       |                       |            |
| FEED START                 | E116       | JOG-OFF-RUN (4)          | E140       | OUT                  | E173       | SLOW-FAST (4)                                 | E204       |                       |            |
| FEED STOP                  | E117       | JOG-REV (4)              | E256       | OVERLOAD (4)         | E267       | SLOW-OFF-FAST (4)                             | E205       |                       |            |
| FEEDER OFF                 | E118       | JOG-REVERSE (4)          | E141       | OVERLOAD TRIP (4)    | E174       | SLOW-STOP-FAST (4)                            | E206       |                       |            |
| FEEDER ON                  | E119       | JOG-RUN (4)              | E142       | OVERLOAD RESET (4)   | E175       | SLOW-OFF-START (4)                            | E207       |                       |            |
| FIFO                       | E276       | JOG-SAFE-RUN (4)         | E143       | POWER OFF            | E177       | SLOW SPEED                                    | E291       |                       |            |

(1) Items in gray shaded table cells only available on legend plates. Not available as laser-engraved text on button caps, illuminated push button diffusers, or pilot light diffusers.

(2) Not available on -34 legend plates.

(3) Not available on -35 legend plates.

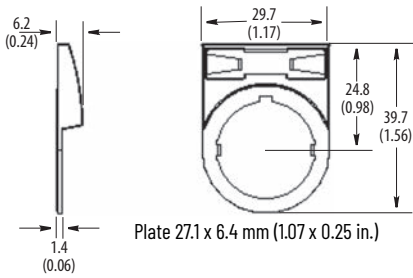
(4) Not available on -42 legend plates.

(5) Not available on -11 or -17 legend plates.

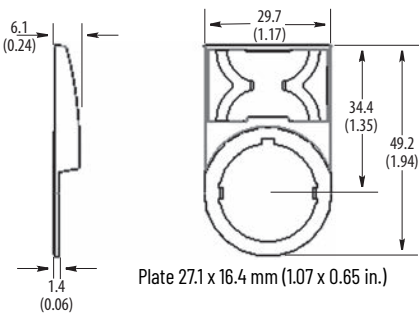
# Approximate Dimensions – Legend Plates

Dimensions in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.

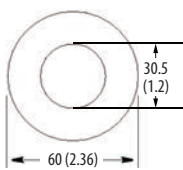
## 30 x 40 mm Snap-in Legend Plate



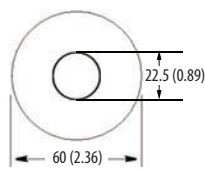
## 30 x 50 mm Snap-in Legend Plate



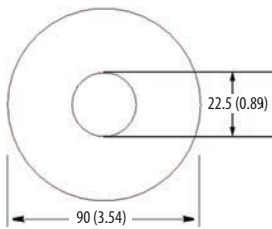
## 60 mm Round Legend – 15Y



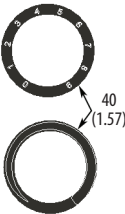
## 60 mm Round Legend – 15YS



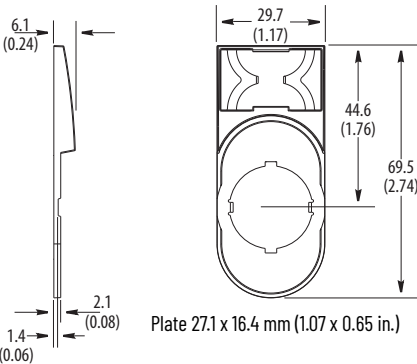
## 90 mm Round Legend



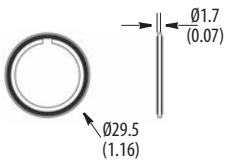
## Potentiometer Legend Plate (Series A)



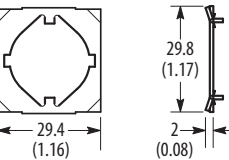
## 30 x 60 mm Snap-in Legend Plate



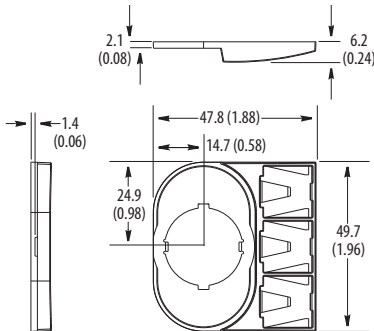
## Trim Washer

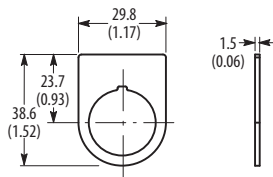
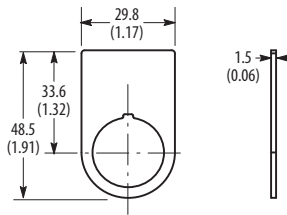
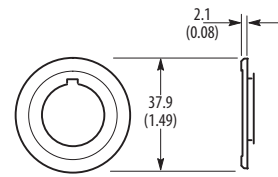
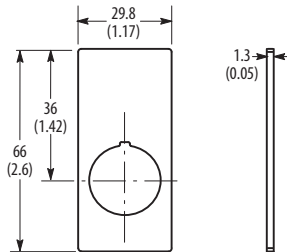
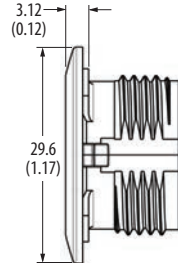
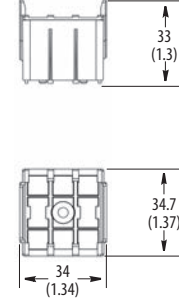


## Anti-rotation Washer



## Special Multi-function Snap-in Legend Plate

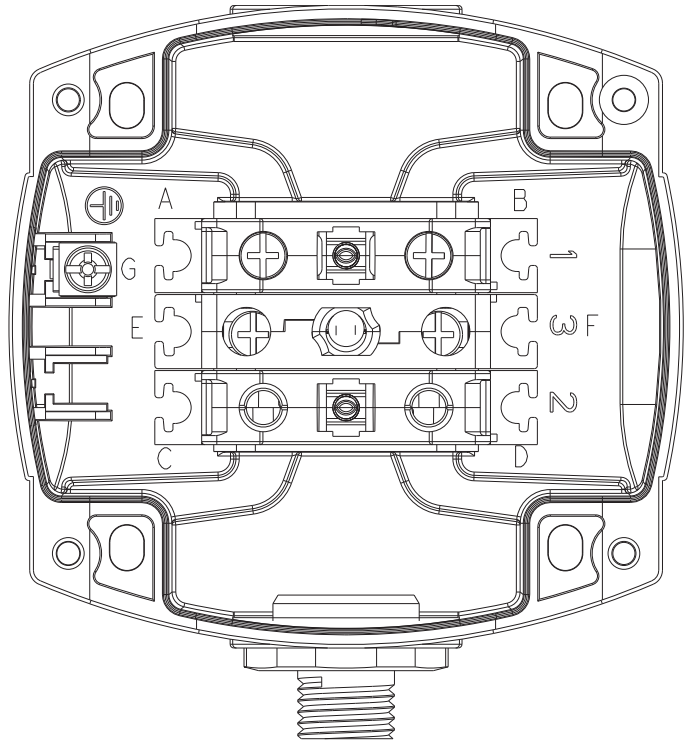


**30 x 40 mm One-piece Legend Plate****30 x 50 mm One-piece Legend Plate****30 mm to 22.5 mm Hole Adapter****30 x 66 mm One-piece Legend Plate****Hole Plug****Base Mount Adapter**

Panel thickness range is 1.0...6.0 mm (0.04...0.24 in.) maximum.

Panel thickness is reduced to 4 mm (0.16 in. [standard anti-rotation washer]) or 5 mm (0.2 in. [thin anti-rotation washer]) when optional legend plates are used.

Assembled Station Pin Out Chart

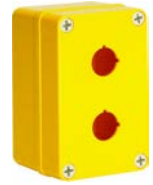


| Cat. No.      | Connector Style /<br>Number of Pins | Location 1 | A to Pin<br># | B to Pin<br># | Location 2 | C to Pin<br># | D to Pin<br># | Location 3 | E to Pin<br># | F to Pin<br># | G to Pin<br># |
|---------------|-------------------------------------|------------|---------------|---------------|------------|---------------|---------------|------------|---------------|---------------|---------------|
| 800F-1YM053V  | AC Micro / 5-pin                    | BX01       | 1             | 2             | BX01       | 4             | 5             | —          | —             | —             | 3             |
| 800F-1YMQA    | AC Micro / 6-pin                    | BX01       | 1             | 5             | BX01       | 2             | 6             | BX10       | 3             | 4             | —             |
| 800F-NX1      | DC Micro / 4-pin                    | BX01       | 1/4           | 2/3           | —          | —             | —             | —          | —             | —             | —             |
| 800F-1YM01    |                                     | BX01       | 1/4           | 2/3           | —          | —             | —             | —          | —             | —             | —             |
| 800F-1YM02    |                                     | BX10       | 2             | 4             | BX01       | 1             | 3             | —          | —             | —             | —             |
| 800F-1YM03    |                                     | BX01       | 1             | 3             | BX01       | 2             | 4             | —          | —             | —             | —             |
| 800F-1YM03VEG |                                     | BX01       | 1             | 3             | BX01       | 2             | 4             | —          | —             | —             | —             |
| 800F-1YM03V   |                                     | BX01       | 1             | 2             | BX01       | 4             | 5             | —          | —             | —             | 3             |
| 800F-1YM041   | Mini Receptacle / 4-pin             | BX01       | 2             | 4             | —          | —             | —             | —          | —             | —             | —             |
| 800F-1YM044   |                                     | BX10       | 1             | J             | BX01       | 2             | 4             | BN3R       | 3             | J             | J             |
| 800F-1YM04    | Mini Receptacle / 6-pin             | BX10       | 1             | J             | BX01       | 6             | 5             | BN3R       | 2             | J             | J             |
| 800F-1YM05    |                                     | BX10       | 1             | J             | BX01       | 6             | 5             | BN5R       | 2             | J             | J             |
| 800F-1YM06    |                                     | BX10       | 1             | J             | BX01       | 6             | 5             | BN7R       | 2             | J             | J             |
| 800F-1MYMQ4   |                                     | BX10       | 1             | J             | BX01       | 6             | 5             | BN3R       | 2             | J             | J             |
| 800F-1MYMQ5   |                                     | BX10       | 1             | J             | BX01       | 6             | 5             | BN5R       | 2             | J             | J             |
| 800F-1MYMQ6   |                                     | BX10       | 1             | J             | BX01       | 6             | 5             | BN7R       | 2             | J             | J             |

J = Jumper

# Bulletin 598 General-purpose Push Button Enclosures

Our enclosures are designed to house 22.5 mm push buttons. These enclosures are available in both gray and yellow.



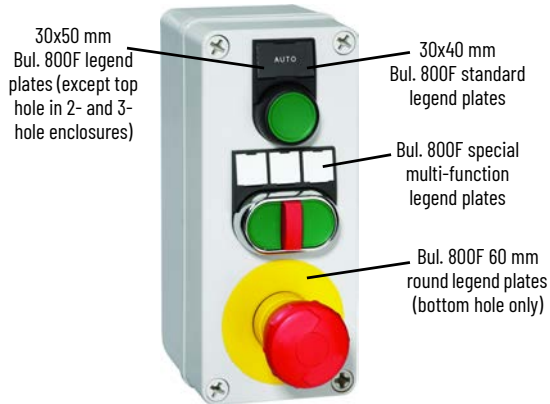
**Table 36 - Product Selection**

| Enclosure <sup>(1)</sup>                                    | Pkg. Qty.              | Cat. No. (1-hole)                     | Cat. No. (2-hole)                     | Cat. No. (3-hole)                     | Cat. No. (4-hole)                     |
|-------------------------------------------------------------|------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| Gray Enclosure                                              | 1                      | 598-1PB22G                            | 598-2PB22G                            | 598-3PB22G                            | 598-4PB22G                            |
| Yellow Enclosure                                            | 1                      | 598-1PB22Y                            | 598-2PB22Y                            | 598-3PB22Y                            | 598-4PB22Y                            |
| Outside Dimensions (H x W x D) <sup>(2)</sup><br>[mm (in.)] |                        | 110 x 80 x 85<br>(4.33 x 3.15 x 3.35) | 130 x 80 x 85<br>(5.12 x 3.15 x 3.35) | 180 x 80 x 85<br>(7.09 x 3.15 x 3.35) | 250 x 80 x 85<br>(9.84 x 3.15 x 3.35) |
| Base Depth [mm (in.)]                                       | 50 (1.97)              |                                       |                                       |                                       |                                       |
| Cover Depth [mm (in.)]                                      | 35 (1.38)              |                                       |                                       |                                       |                                       |
| Cover Screw Material                                        | Glass-reinforced nylon |                                       |                                       |                                       |                                       |
| Recommended Tightening<br>Torque [N•m (lb•in)]              | 1.0...1.2 (9...11)     |                                       |                                       |                                       |                                       |
| Approx. Shipping Weight [g (lb)]                            |                        | 232 (0.51)                            | 271 (0.60)                            | 357 (0.79)                            | 435 (0.96)                            |

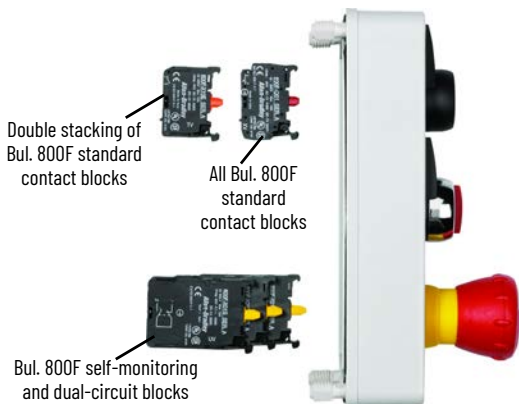
(1) Holes are premolded to fit 22.5 mm push buttons, such as 800F push buttons.

(2) Dimensions are not intended to be used for manufacturing purposes.

## Legend Plate Compatibility/Options



## Contact Block Compatibility/Options

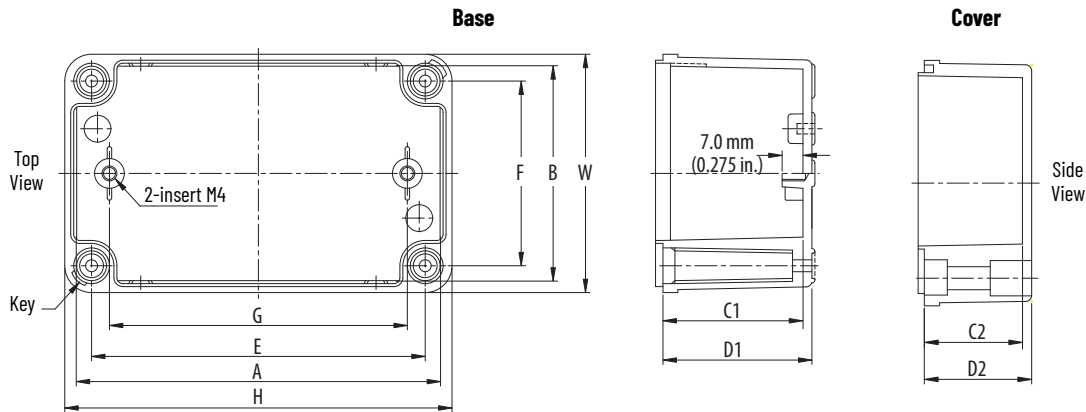


Specifications

| Product Certification       |                                                                  |
|-----------------------------|------------------------------------------------------------------|
| Approvals/Certifications    | cULus Listed (File No. E54866; Guide No. NITW, NITW7), CE Marked |
| Standards Compliance        | UL 508A and CSA C22.2, No. 14                                    |
| Degree of Protection        | NEMA/UL Type 4, 4X, 12, and 13, IP66 (indoor/outdoor)            |
| Environmental               |                                                                  |
| Storage Temperature Range   | -40...+75 °C (-40...+158 °F)                                     |
| Operating Temperature Range | -40...+55 °C (-40...+131 °F)                                     |
| Material                    |                                                                  |
| Enclosure                   | Thermoplastic polyester blend, UL94; 5VA                         |
| Gasket                      | Foam-in-place polyurethane                                       |

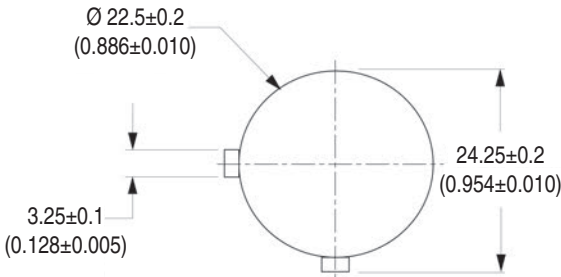
Approximate Dimensions

Dimensions in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.

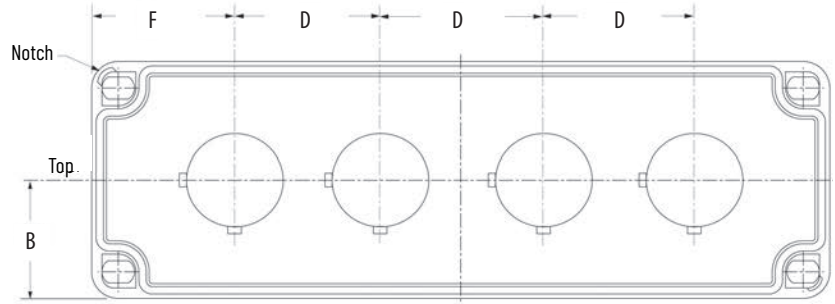
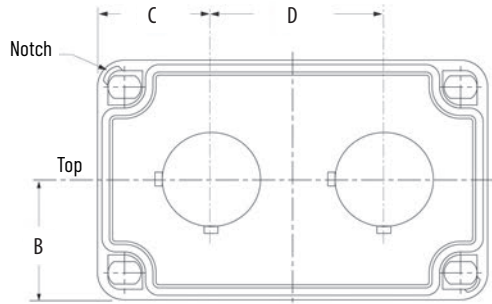
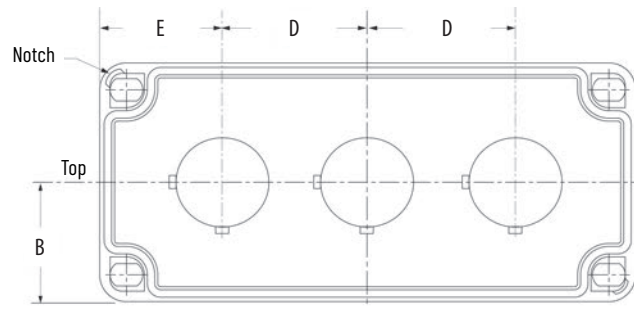
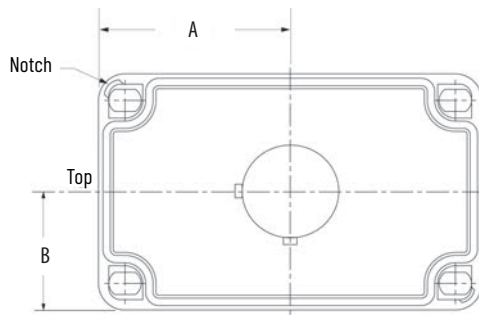


| Cat. No.     | Overall Dimension |           |           |           | Inside Dimension |           |             |             | Enclosure Mounting Dimension |           | Mounting Plate Mounting Dim. |
|--------------|-------------------|-----------|-----------|-----------|------------------|-----------|-------------|-------------|------------------------------|-----------|------------------------------|
|              | H                 | W         | D1        | D2        | A                | B         | C1          | C2          | E                            | F         | G                            |
| 598-1PB22... | 110 (4.33)        | 80 (3.15) | 50 (1.97) | 35 (1.38) | 104 (4.09)       | 74 (2.91) | 46.5 (1.83) | 31.5 (1.24) | 92 (3.62)                    | 62 (2.44) | 80 (3.15)                    |
| 598-2PB22... | 130 (5.12)        | 80 (3.15) | 50 (1.97) | 35 (1.38) | 120 (4.72)       | 70 (2.76) | 46.5 (1.83) | 31.5 (1.24) | 112 (4.41)                   | 62 (2.44) | 100 (3.94)                   |
| 598-3PB22... | 180 (7.09)        | 80 (3.15) | 50 (1.97) | 35 (1.38) | 170 (6.69)       | 70 (2.76) | 46.5 (1.83) | 31.5 (1.24) | 162 (6.38)                   | 62 (2.44) | 50 (5.91)                    |
| 598-4PB22... | 250 (9.84)        | 80 (3.15) | 50 (1.97) | 35 (1.38) | 240 (9.45)       | 70 (2.76) | 46.5 (1.83) | 31.5 (1.24) | 232 (9.13)                   | 62 (2.44) | 220 (8.66)                   |

Push Button Hole



## Push Button Hole Spacing



| Cat. No.   | Type   | A                                        | B                                    | C                                       | D                                          | E                                                | F                                        |
|------------|--------|------------------------------------------|--------------------------------------|-----------------------------------------|--------------------------------------------|--------------------------------------------------|------------------------------------------|
| 598-1PB22G | 1-hole | $55 \pm 0.216$<br>( $2.165 \pm 0.0085$ ) | $40 \pm 0.5$<br>( $1.57 \pm 0.020$ ) | —                                       | $50.0 \pm 0.191$<br>( $1.968 \pm 0.0075$ ) | —                                                | —                                        |
| 598-2PB22G | 2-hole | —                                        |                                      | $40 \pm 0.175$<br>( $1.57 \pm 0.0069$ ) |                                            | —                                                | —                                        |
| 598-3PB22G | 3-hole | —                                        |                                      | —                                       |                                            | $40 + 0.32/-0.18$<br>( $1.57 + 0.0126/-0.0071$ ) | —                                        |
| 598-4PB22G | 4-hole | —                                        |                                      | —                                       |                                            | —                                                | $50 \pm 0.216$<br>( $1.968 \pm 0.0085$ ) |

# Bulletin 800FC 22.5 mm Configured Pendant Stations

Our pendant stations use the time-saving line of Bulletin 800F 22.5 mm push buttons for minimum inventory and maximum efficiency. We also offer multiple options and customization options to fit your unique needs.

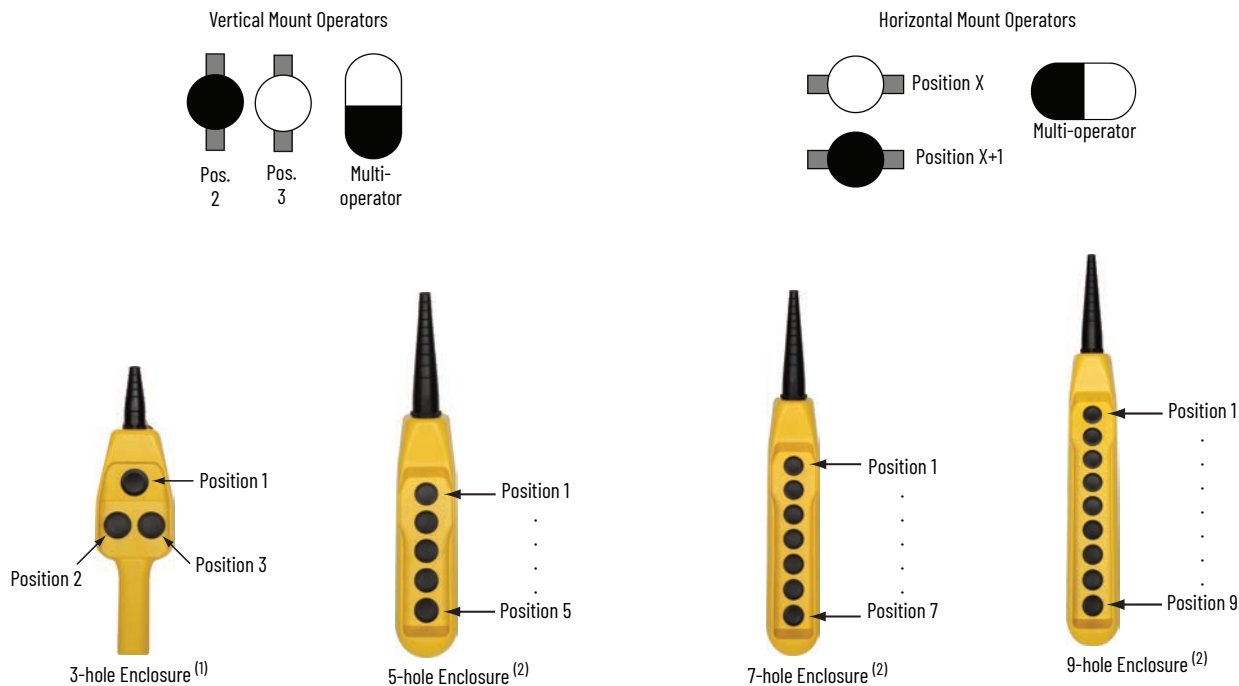
## Operator Mounting and Sequence

### Operator Mounting - Vertical vs. Horizontal Definition

Because of the design of the enclosures, operators can be mounted in both a vertical and horizontal orientation. The easiest way to visualize the operator orientation is by observing the contact block direction that is attached to the operators. If the contact blocks are mounted vertically, the operator is mounted vertically in the enclosure.

Vertical mounted operators are only found in position 2 and 3 of the 3-hole enclosure. If the contact blocks are mounted horizontally, the operator is mounted horizontally in the enclosure. Horizontal mounted operators are found in position 1 of the 3-hole enclosure and all positions of the 5-...9-hole enclosures. It is necessary to have this knowledge when ordering individual operators for populating at the customer location.

### Operator Assembly Sequence and Mounting Orientation



- (1) Operator in Position 1 is mounted horizontally, contact blocks are horizontal. Operators in Positions 2 and 3 are mounted vertically, contact blocks are vertical.  
(2) Operators in all positions are mounted horizontally, contact blocks are horizontal.

## Enclosures

| Enclosure Color/Material | Enclosure Type | Degree of Protection | Pkg. Quantity | Cat. No. <sup>(1)</sup> |
|--------------------------|----------------|----------------------|---------------|-------------------------|
| Yellow plastic           | 3-hole         | IP66                 | 1             | 800FC-3Z                |
|                          | 5-hole         |                      |               | 800FC-5Z                |
|                          | 7-hole         |                      |               | 800FC-7Z                |
|                          | 9-hole         |                      |               | 800FC-9Z                |

(1) Housings supplied with cable sleeve, hanger ring, cable clamp, wire guides, and gasket.



# 1-, 2-, and 3-speed Operators



800FP - C A 1 U243  
a b c

| a                                |                        |
|----------------------------------|------------------------|
| Operator Type <sup>(1) (2)</sup> |                        |
| Code                             | Description            |
| A                                | 1-speed single arrow   |
| D                                | 1-speed double arrow   |
| B                                | 2-speed                |
| C                                | 3-speed <sup>(3)</sup> |

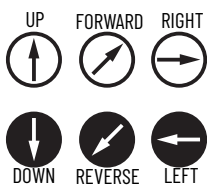
| b         |             |
|-----------|-------------|
| Cap Color |             |
| Code      | Description |
| 1         | White       |
| 2         | Black       |

- (1) Catalog number 800F-ALP (standard latch) and catalog number 800FC-ALP (mechanical interlock latch) can be used with these operators.  
 (2) Booted style of operators for pendant stations.  
 (3) Proper contact block assembly of these devices is required.

| c                                                                                   |                       |                                |                            |                           |                           |                           |
|-------------------------------------------------------------------------------------|-----------------------|--------------------------------|----------------------------|---------------------------|---------------------------|---------------------------|
|                                                                                     | Symbol                |                                |                            |                           |                           |                           |
|                                                                                     | Code                  | Valid with<br>Table a<br>Code: | Description <sup>(1)</sup> |                           |                           |                           |
|                                                                                     |                       |                                | Vertical Mounting          |                           | Horizontal Mounting       |                           |
|                                                                                     |                       |                                | Black with<br>White Arrow  | White with<br>Black Arrow | Black with<br>White Arrow | White with<br>Black Arrow |
|                                                                                     | U100                  | A, B, C                        | Blank                      | Blank                     | Blank                     | Blank                     |
|   | One-speed Operators   |                                |                            |                           |                           |                           |
|                                                                                     | U241                  | A                              | DOWN                       | UP                        | —                         | —                         |
|                                                                                     | U243                  |                                | —                          | —                         | LEFT                      | RIGHT                     |
|                                                                                     | U244                  |                                | REVERSE                    | FORWARD                   | —                         | —                         |
|                                                                                     | U246                  |                                |                            |                           | REVERSE                   | FORWARD                   |
|                                                                                     | U700                  |                                | LEFT                       | RIGHT                     | DOWN                      | UP                        |
|  | U261                  | D                              | DOWN FAST                  | UP FAST                   | —                         | —                         |
|                                                                                     | U263                  |                                | —                          | —                         | LEFT FAST                 | RIGHT FAST                |
|                                                                                     | U264                  |                                | REVERSE FAST               | FORWARD FAST              | —                         | —                         |
|                                                                                     | U266                  |                                |                            |                           | REVERSE FAST              | FORWARD FAST              |
|                                                                                     | U260                  |                                | LEFT FAST                  | RIGHT FAST                | DOWN FAST                 | UP FAST                   |
|  | Two-speed Operators   |                                |                            |                           |                           |                           |
|                                                                                     | U271                  | B                              | 2-speed DOWN               | 2-speed UP                | —                         | —                         |
|                                                                                     | U273                  |                                | —                          | —                         | 2-speed LEFT              | 2-speed RIGHT             |
|                                                                                     | U274                  |                                | 2-speed REVERSE            | 2-speed FORWARD           | —                         | —                         |
|                                                                                     | U276                  |                                |                            |                           | 2-speed REVERSE           | 2-speed FORWARD           |
|                                                                                     | U270                  |                                | 2-speed LEFT               | 2-speed RIGHT             | 2-speed DOWN              | 2-speed UP                |
|  | Three-speed Operators |                                |                            |                           |                           |                           |
|                                                                                     | U291                  | C                              | 3-speed DOWN               | 3-speed UP                | —                         | —                         |
|                                                                                     | U293                  |                                | —                          | —                         | 3-speed LEFT              | 3-speed RIGHT             |
|                                                                                     | U294                  |                                | 3-speed REVERSE            | 3-speed FORWARD           | —                         | —                         |
|                                                                                     | U296                  |                                | —                          | —                         | 3-speed REVERSE           | 3-speed FORWARD           |
|                                                                                     | U290                  |                                | 3-speed LEFT               | 3-speed RIGHT             | 3-speed DOWN              | 3-speed UP                |

- (1) Text (DOWN, UP, LEFT, and so on) indicates arrow direction. Text is not printed on operators.  
 For proper latch and contact block configurations, consult your local Rockwell Automation sales office or Allen-Bradley distributor.

Figure 1 - Arrow Direction Chart



## 800F Two-position Twist-to-release and Twist-to-release/Push-pull Operators



| Description                                                            | Operator Cat. No.                 | Guard Cat. No. |
|------------------------------------------------------------------------|-----------------------------------|----------------|
| Twist-to-release — Red                                                 | 800FP-MT44PX01                    | —              |
| Twist-to-release — Red, illuminated                                    | 800FP-LMT44PNxRX01 <sup>(1)</sup> | —              |
| Keyed twist-to-release — Red                                           | 800FP-MK44PX01                    | —              |
| Twist-to-release or push-pull — Red, monolithic                        | 800FD-MT44X01                     | —              |
| Twist-to-release or push-pull — Red, monolithic with guard, monolithic | 800FD-MT44X01                     | 800F-AMEGY     |

(1) Replace the x with a 3 for 24V AC/DC or 5 for 120V AC.

## 800F Push Button Operators and Caps — Extended and Non-illuminated



**IMPORTANT** Mechanical interlock is not allowed.

| Cap Color | Description            | Symbol Definition | Operator Cat. No. | Cap Cat. No.  | Complete Operator Cat. No. | Composite Cat. No./ No Electrical Interlock <sup>(1)</sup> | Composite Cat. No./ Electrical Interlock <sup>(1)</sup> |
|-----------|------------------------|-------------------|-------------------|---------------|----------------------------|------------------------------------------------------------|---------------------------------------------------------|
| Black     | Blank                  | —                 | 800FP-E2          | —             | —                          | 800FP-E2PX10                                               | 800FP-E2PX11                                            |
|           | LEFT or DOWN           | Single arrow 0°   | 800FP-E9          | 800F-AE208    | 800FP-E208                 | 800FP-E208PX10                                             | 800FP-E208PX11                                          |
|           | REVERSE                | Single arrow 45°  |                   | 800F-AE2CU244 | 800FP-E2U244               | 800FP-E2U244PX10                                           | 800FP-E2U244PX11                                        |
|           | LEFT FAST or DOWN FAST | Double arrow 0°   |                   | 800F-AE2CU261 | 800FP-E2U261               | 800FP-E2U261PX10                                           | 800FP-E2U261PX11                                        |
|           | REVERSE FAST           | Double arrow 45°  |                   | 800F-AE2CU264 | 800FP-E2U264               | 800FP-E2U264PX10                                           | 800FP-E2U264PX11                                        |
| White     | Blank                  | —                 | 800FP-E1          | —             | —                          | 800FP-E1PX10                                               | 800FP-E1PX11                                            |
|           | UP or RIGHT            | Single arrow 0°   | 800FP-E9          | 800F-AE108    | 800FP-E108                 | 800FP-E108PX10                                             | 800FP-E108PX11                                          |
|           | FORWARD                | Single arrow 45°  |                   | 800F-AE1CU244 | 800FP-E1U244               | 800FP-E1U244PX10                                           | 800FP-E1U244PX11                                        |
|           | UP FAST or RIGHT FAST  | Double arrow 0°   |                   | 800F-AE1CU261 | 800FP-E1U261               | 800FP-E1U261PX10                                           | 800FP-E1U261PX11                                        |
|           | FORWARD FAST           | Double arrow 45°  |                   | 800F-AE1CU264 | 800FP-E1U264               | 800FP-E1U264PX10                                           | 800FP-E1U264PX11                                        |
| Green     | Blank                  | —                 | 800FP-E3          | —             | —                          | 800FP-E3PX10                                               | —                                                       |
|           | START/ALARM            | Start/Alarm       | 800FP-E9          | 800F-AE3CU222 | 800FP-E3U222               | 800FP-E3U222PX10                                           |                                                         |
|           | START                  | Start symbol      |                   | 800F-AE3CU909 | 800FP-E3U909               | 800FP-E3U909PX10                                           |                                                         |
| Red       | Blank                  | —                 | 800FP-E4          | —             | —                          | 800FP-E4PX10                                               | —                                                       |
|           | STOP                   | Stop symbol       | 800FP-E9          | 800F-AE405    | 800FP-E405                 | 800FP-E405PX10                                             |                                                         |
| Yellow    | Blank                  | —                 | 800FP-E5          | —             | —                          | 800FP-E5PX10                                               | —                                                       |
|           | ALARM                  | Alarm             | 800FP-E9          | 800F-AE5CU223 | 800FP-E5U223               | 800FP-E5U223PX10                                           |                                                         |
| Blue      | Blank                  | —                 | 800FP-E6          | —             | —                          | 800FP-E6PX10                                               | —                                                       |
|           | R                      | Reset symbol      | 800FP-E9          | 800F-AE611    | 800FP-E611                 | 800FP-E611PX10                                             |                                                         |

(1) For 24V AC/DC units, add V for low-voltage contact blocks. Example: Cat. No. 800FP-E5PX10 becomes Cat. No. 800FP-E5PX10V.

## 800F Push Button Operators — Extended and Illuminated



**IMPORTANT** Mechanical interlock is not allowed.

| Lens Color | Operator Cat. No. | Composite Cat. No. <sup>(1)</sup> |
|------------|-------------------|-----------------------------------|
| Green      | 800FP-LE3         | 800FP-LE3PNxGX10                  |
| Red        | 800FP-LE4         | 800FP-LE4PNxRX10                  |
| Yellow     | 800FP-LE5         | 800FP-LE5PNxWX10                  |
| Blue       | 800FP-LE6         | 800FP-LE6PNxBX10                  |
| Clear      | 800FP-LE7         | 800FP-LE7PNxWX10                  |

(1) Replace the x with a 3 for 24V AC/DC or 5 for 120V AC.

## 800F Selector Switch Operators — Maintained and Non-illuminated



| Positions | Keyed | Operator Cat. No. | Composite Cat. No. <sup>(1)</sup> |
|-----------|-------|-------------------|-----------------------------------|
| 2         | No    | 800FP-SM22        | 800FP-SM22PX11                    |
|           | Yes   | 800FP-KM21        | 800FP-KM21PX11                    |
| 3         | No    | 800FP-SM32        | 800FP-SM32PX20                    |
|           | Yes   | 800FP-KM34        | 800FP-KM34PX20                    |

(1) For 24V AC/DC units, add V for low-voltage contact blocks. Example: Cat. No. 800FP-E5PX10 becomes Cat. No. 800FP-E5PX10V.

## 800F Multi Operators and Caps – Extended

### IMPORTANT

- Mechanical interlock is not allowed.
- Electrical interlock cannot be performed within the pendant enclosure.



| Description                 | Symbol Definition | Illumination    | Operator Cat. No. | Position A Cap Cat. No. | Position C Cap Cat. No. | Back of Panel Cat. No. <sup>(1)</sup> |
|-----------------------------|-------------------|-----------------|-------------------|-------------------------|-------------------------|---------------------------------------|
| Blank (black and white cap) | —                 | Non-Illuminated | 800FP-U2X         | 800F-AEU2               | 800F-AEU1               | 800F-PX20                             |
|                             |                   | Illuminated     | 800FP-LU2X        |                         |                         | 800F-PNxWX20 <sup>(2)</sup>           |

### Vertical Mounting

|                                                 |                  |                 |            |                 |                 |                             |
|-------------------------------------------------|------------------|-----------------|------------|-----------------|-----------------|-----------------------------|
| UP (white)/<br>DOWN (black)                     | Single arrow 0°  | Non-Illuminated | 800FP-U2X  | 800F-AECU2CU241 | 800F-AECU1CU241 | 800F-PX20                   |
|                                                 |                  | Illuminated     | 800FP-LU2X |                 |                 | 800F-PNxWX20 <sup>(2)</sup> |
| RIGHT (white)/<br>LEFT (black)                  | Single arrow 90° | Non-Illuminated | 800FP-U2X  | 800F-AECU2CU700 | 800F-AECU1CU700 | 800F-PX20                   |
|                                                 |                  | Illuminated     | 800FP-LU2X |                 |                 | 800F-PNxWX20                |
| FORWARD (white)/<br>REVERSE (black)             | Single arrow 45° | Non-Illuminated | 800FP-U2X  | 800F-AECU2CU244 | 800F-AECU1CU244 | 800F-PX20                   |
|                                                 |                  | Illuminated     | 800FP-LU2X |                 |                 | 800F-PNxWX20 <sup>(2)</sup> |
| UP FAST (white)/DOWN<br>FAST (black)            | Double arrow 0°  | Non-Illuminated | 800FP-U2X  | 800F-AECU2CU261 | 800F-AECU1CU261 | 800F-PX20                   |
|                                                 |                  | Illuminated     | 800FP-LU2X |                 |                 | 800F-PNxWX20 <sup>(2)</sup> |
| RIGHT FAST (white)/<br>LEFT FAST (black)        | Double arrow 90° | Non-Illuminated | 800FP-U2X  | 800F-AECU2CU260 | 800F-AECU1CU260 | 800F-PX20                   |
|                                                 |                  | Illuminated     | 800FP-LU2X |                 |                 | 800F-PNxWX20 <sup>(2)</sup> |
| FORWARD FAST<br>(white)/REVERSE FAST<br>(black) | Double arrow 45° | Non-Illuminated | 800FP-U2X  | 800F-AECU2CU264 | 800F-AECU1CU264 | 800F-PX20                   |
|                                                 |                  | Illuminated     | 800FP-LU2X |                 |                 | 800F-PNxWX20 <sup>(2)</sup> |

### Horizontal Mounting

|                                                 |                  |                 |            |                 |                 |                             |
|-------------------------------------------------|------------------|-----------------|------------|-----------------|-----------------|-----------------------------|
| LEFT (black)/<br>RIGHT (white)                  | Single arrow 90° | Non-Illuminated | 800FP-U2X  | 800F-AECU1CU241 | 800F-AECU2CU241 | 800F-PX20                   |
|                                                 |                  | Illuminated     | 800FP-LU2X |                 |                 | 800F-PNxWX20 <sup>(2)</sup> |
| DOWN (black)/<br>UP (white)                     | Single arrow 0°  | Non-Illuminated | 800FP-U2X  | 800F-AECU1CU242 | 800F-AECU2CU242 | 800F-PX20                   |
|                                                 |                  | Illuminated     | 800FP-LU2X |                 |                 | 800F-PNxWX20 <sup>(2)</sup> |
| REVERSE (black)/<br>FORWARD (white)             | Single arrow 45° | Non-Illuminated | 800FP-U2X  | 800F-AECU1CU245 | 800F-AECU2CU245 | 800F-PX20                   |
|                                                 |                  | Illuminated     | 800FP-LU2X |                 |                 | 800F-PNxWX20 <sup>(2)</sup> |
| LEFT FAST (black)/UP<br>FAST (white)            | Double arrow 90° | Non-Illuminated | 800FP-U2X  | 800F-AECU1CU261 | 800F-AECU2CU261 | 800F-PX20                   |
|                                                 |                  | Illuminated     | 800FP-LU2X |                 |                 | 800F-PNxWX20 <sup>(2)</sup> |
| DOWN FAST (black)/UP<br>FAST (white)            | Double arrow 0°  | Non-Illuminated | 800FP-U2X  | 800F-AECU1CU262 | 800F-AECU2CU262 | 800F-PX20                   |
|                                                 |                  | Illuminated     | 800FP-LU2X |                 |                 | 800F-PNxWX20 <sup>(2)</sup> |
| REVERSE FAST<br>(black)/FORWARD<br>FAST (white) | Double arrow 45° | Non-Illuminated | 800FP-U2X  | 800F-AECU1CU265 | 800F-AECU2CU265 | 800F-PX20                   |
|                                                 |                  | Illuminated     | 800FP-LU2X |                 |                 | 800F-PNxWX20 <sup>(2)</sup> |

(1) For 24V AC/DC units, add V for low-voltage contact blocks. Example: Cat. No. 800F-PX20 becomes Cat. No. 800F-PX20V.

(2) Replace the x with 3 for 24V AC/DC or 5 for 120V AC.

800F Pilot Lights – Monolithic

| Lens Color | Lamp Voltage | Cat. No.   |
|------------|--------------|------------|
| Green      | 24V AC/DC    | 800FD-P3N3 |
|            | 120V AC      | 800FD-P3N5 |
| Red        | 24V AC/DC    | 800FD-P4N3 |
|            | 120V AC      | 800FD-P4N5 |
| Yellow     | 24V AC/DC    | 800FD-P5N3 |
|            | 120V AC      | 800FD-P5N5 |
| Blue       | 24V AC/DC    | 800FD-P6N3 |
|            | 120V AC      | 800FD-P6N5 |
| Clear      | 24V AC/DC    | 800FD-P7N3 |
|            | 120V AC      | 800FD-P7N5 |



800F Potentiometer Operators

| Resistive Element (Ω) | Cat. No. <sup>(1)</sup> |
|-----------------------|-------------------------|
| 150                   | 800FP-POT1              |
| 500                   | 800FP-POT2              |
| 1000                  | 800FP-POT3              |
| 2500                  | 800FP-POT4              |
| 5000                  | 800FP-POT5              |
| 10,000                | 800FP-POT6              |



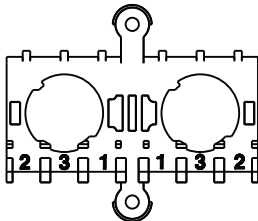
(1) Only available in Position 1 for a 3-hole enclosure, Positions 1 and/or 5 for a 5-hole enclosure, Positions 1 and/or 7 for a 7-hole enclosure, and positions 1 and/or 9 for a 9-hole enclosure. No latches are required.

800F Hole Plug

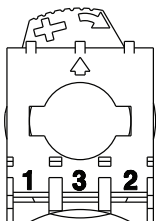
| Color         | Cat. No. |
|---------------|----------|
| Black plastic | 800F-N2  |



1-, 2-, and 3-speed Contact Block Assemblies



Cat. No. 800FC-ALP



Cat. No. 800F-ALP

| Operator Type | Interlock Type                                     | Composite Cat. No.        | Separate Catalog Numbers |                                   |                                   |                                       |
|---------------|----------------------------------------------------|---------------------------|--------------------------|-----------------------------------|-----------------------------------|---------------------------------------|
|               |                                                    |                           | Latch Cat. No.           | Contact Block Location 1 Cat. No. | Contact Block Location 2 Cat. No. | Contact Block Location 3 Cat. No.     |
| 1-speed       | No interlock                                       | 800F-PX10E                | 800F-ALP                 | —                                 | —                                 | 800F-X10E                             |
|               | Electrical interlock                               | 800F-PX11C                | 800F-ALP                 | 800F-X01B                         |                                   |                                       |
|               | Mechanical interlock <sup>(1)</sup>                | 800F-LX20C                | 800FC-ALP                | —                                 |                                   |                                       |
|               | Electrical and mechanical interlock <sup>(1)</sup> | 800F-LX22C                | 800FC-ALP                | 800F-X01B                         |                                   |                                       |
| 2-speed       | No interlock                                       | 800F-PX20C                | 800F-ALP                 | —                                 | 800F-X10N<br>(Speed 2)            | 800F-X10E<br>(Speed 1)                |
|               | Electrical interlock                               | 800F-PX21C                | 800F-ALP                 | 800F-X01B                         |                                   |                                       |
|               | Mechanical interlock <sup>(1)</sup>                | 800F-LX40C                | 800FC-ALP                | —                                 |                                   |                                       |
|               | Electrical and mechanical interlock <sup>(1)</sup> | 800F-LX42C                | 800FC-ALP                | 800F-X01B                         |                                   |                                       |
| 3-speed       | No interlock                                       | 800F-PX30C <sup>(2)</sup> | 800F-ALP                 | 800F-X10N                         | 800F-X10E<br>(Speed 2)            | 800F-X10M<br>(Speed 1) <sup>(3)</sup> |
|               | Mechanical interlock <sup>(1)</sup>                | 800F-LX60C                | 800FC-ALP                | 800F-X10N<br>(Speed 3)            |                                   |                                       |

(1) When ordering separate components, two pieces of each contact block must be ordered, one for each operator.  
(2) Contact blocks come preassembled onto latch.  
(3) For proper operation, Cat. No. 800F-X10M must be mounted in position 3 of either the mechanical or standard latch.

# Configured Pendant Stations

800FC -

|             |   |                |   |                |   |                |   |                |   |                |   |                |   |                |   |                |   |                |
|-------------|---|----------------|---|----------------|---|----------------|---|----------------|---|----------------|---|----------------|---|----------------|---|----------------|---|----------------|
| a           | b | b <sub>1</sub> | c | c <sub>1</sub> | d | d <sub>1</sub> | e | e <sub>1</sub> | f | f <sub>1</sub> | g | g <sub>1</sub> | h | h <sub>1</sub> | j | j <sub>1</sub> | k | k <sub>1</sub> |
| Pos. 1      |   | Pos. 2         |   | Pos. 3         |   | Pos. 4         |   | Pos. 5         |   | Pos. 6         |   | Pos. 7         |   | Pos. 8         |   | Pos. 9         |   |                |
| 3-...9-hole |   |                |   |                |   |                |   |                |   | 5-...9-hole    |   |                |   |                |   |                |   |                |

**Note:** A code from Tables [b...k](#) and [b1...k1](#) must be specified for each operator to create a valid cat. no.

| a                      |              |             |             |             |             |
|------------------------|--------------|-------------|-------------|-------------|-------------|
| Enclosure Code         |              |             |             |             |             |
| Voltage <sup>(1)</sup> | Legend Plate | 3-hole Code | 5-hole Code | 7-hole Code | 9-hole Code |
| 24V AC/DC              | No           | 2           | 4           | 6           | 8           |
| 120V AC                |              | 3           | 5           | 7           | 9           |
| 24V AC/DC              | Yes          | A           | C           | E           | G           |
| 120V AC                |              | B           | D           | F           | H           |

| b <sub>1</sub> ...k <sub>1</sub> |                                                                    |
|----------------------------------|--------------------------------------------------------------------|
| Interlock and/or Rubber Boot     |                                                                    |
| Code                             | Description                                                        |
| N                                | No interlock, no additional boots                                  |
| E                                | Electrical interlock, no additional boots                          |
| M                                | Mechanical interlock, boots standard <sup>(2)</sup>                |
| B                                | Electrical and mechanical interlock, boots standard <sup>(2)</sup> |
| R                                | No interlock, additional rubber boot                               |
| S                                | Electrical interlock, additional rubber boot                       |

| b...k                                                                                      |                                                           |                                   |
|--------------------------------------------------------------------------------------------|-----------------------------------------------------------|-----------------------------------|
| Operator Type                                                                              |                                                           |                                   |
| Single Speed Operators for Use with Mechanical Interlock <sup>(2) (3) (4) (5)</sup>        |                                                           |                                   |
| Code                                                                                       | Description                                               | Legend Plate Text (When Selected) |
| A2                                                                                         | Black operator (no text or symbol)                        | Blank                             |
| AB                                                                                         | Black operator with arrow (reverse – down/left)           | O/H CRANE, REVERSE                |
| AD                                                                                         | Black operator with arrow (down)                          | LIFT, DOWN                        |
| AL                                                                                         | Black operator with arrow (left)                          | HOIST, LEFT                       |
| A1                                                                                         | White operator (no text or symbol)                        | Blank                             |
| AF                                                                                         | White operator with arrow (forward – up/right)            | O/H CRANE, FORWARD                |
| AR                                                                                         | White operator with arrow (right)                         | HOIST, RIGHT                      |
| AU                                                                                         | White operator with arrow (up)                            | LIFT, UP                          |
| Fast Single Speed Operators for use with Mechanical Interlock <sup>(2) (3) (4) (5)</sup>   |                                                           |                                   |
| Code                                                                                       | Description                                               | Legend Plate Text (When Selected) |
| DB                                                                                         | Black operator w/ double arrow (reverse fast – down/left) | O/H CRANE, REVERSE, FAST          |
| DD                                                                                         | Black operator with double arrow (down fast)              | LIFT, DOWN FAST                   |
| DL                                                                                         | Black operator with double arrow (left fast)              | O/H CRANE, LEFT FAST              |
| DF                                                                                         | White operator w/ double arrow (forward fast – up/right)  | O/H CRANE, FORWARD, FAST          |
| DR                                                                                         | White operator with double arrow (right fast)             | O/H CRANE, RIGHT FAST             |
| DU                                                                                         | White operator with double arrow (up fast)                | LIFT, UP FAST                     |
| Two-speed Operators for Use with Mechanical Interlock <sup>(2) (3) (4) (5)</sup>           |                                                           |                                   |
| Code                                                                                       | Description                                               | Legend Plate Text (When Selected) |
| B2                                                                                         | Black operator (no text or symbol)                        | Blank                             |
| BB                                                                                         | Black operator with arrow (reverse – down/left)           | 1-2 SPEED, O/H CRANE, REVERSE     |
| BD                                                                                         | Black operator with arrow (down)                          | 1-2 SPEED, LIFT, DOWN             |
| BL                                                                                         | Black operator with arrow (left)                          | 1-2 SPEED, HOIST, LEFT            |
| B1                                                                                         | White operator (no text or symbol)                        | Blank                             |
| BF                                                                                         | White operator with arrow (forward – up/right)            | 1-2 SPEED, O/H CRANE, FORWARD     |
| BR                                                                                         | White operator with arrow (right)                         | 1-2 SPEED, HOIST, RIGHT           |
| BU                                                                                         | White operator with arrow (up)                            | 1-2 SPEED, LIFT, UP               |
| Three-speed Operators for Use with Mechanical Interlock <sup>(2) (3) (4) (5) (6) (7)</sup> |                                                           |                                   |
| Code                                                                                       | Description                                               | Legend Plate Text (When Selected) |
| C2                                                                                         | Black operator (no text or symbol)                        | Blank                             |
| CB                                                                                         | Black operator with arrow (reverse – down/left)           | 1-2-3 SPEED, O/H CRANE, REVERSE   |
| CD                                                                                         | Black operator with arrow (down)                          | 1-2-3 SPEED, LIFT, DOWN           |
| CL                                                                                         | Black operator with arrow (left)                          | 1-2-3 SPEED, HOIST, LEFT          |
| C1                                                                                         | White operator (no text or symbol)                        | Blank                             |
| CF                                                                                         | White operator with arrow (forward – up/right)            | 1-2-3 SPEED, O/H CRANE, FORWARD   |
| CR                                                                                         | White operator with arrow (right)                         | 1-2-3 SPEED, HOIST, RIGHT         |
| CU                                                                                         | White operator with arrow (up)                            | 1-2-3 SPEED, LIFT, UP             |

- (1) Enclosure code is always required. Voltage is used to select LEDs for illuminated operators. Standard contact blocks are used for both 24V and 120V enclosures.
- (2) For a 3-hole enclosure, when a mechanical interlock (c1 & d1 = M or B) is selected with a 1-...3-speed operator, the black operator is located in position 2 of the enclosure and the opposite white operator is placed in position 3 of the enclosure (Example: ABMAFM or BDMBUM). For a 5-...9-hole enclosure, when a mechanical interlock (b1...k1 = M or B) is selected with a 1-...3-speed operator, the white operator is located in position X of the mechanical interlock and the opposite black operator is placed in position X+1 of the mechanical interlock (Example: AFMABM or BUMBDM).
- (3) Interlock and/or rubber boot selection = **R** (no interlock, additional rubber boot) is **not** allowed.
- (4) Interlock and/or rubber boot selection = **S** (electrical interlock, additional rubber boot) is **not** allowed.
- (5) For proper installation, a trim washer or Cat. No. 800F-36\_ legend plate must be installed with this operator.
- (6) Interlock and/or rubber boot selection = **N** (no interlock, no additional boots) is **not** allowed.
- (7) Interlock and/or rubber boot selection = **E** (electrical interlock, no additional boots) is **not** allowed.

| b...k, Continued                                                    |                                                                         |                     |                                      |
|---------------------------------------------------------------------|-------------------------------------------------------------------------|---------------------|--------------------------------------|
| Operator Type                                                       |                                                                         |                     |                                      |
| Emergency Stop Operators <sup>(1) (2) (3) (4) (5) (6)</sup>         |                                                                         |                     |                                      |
| Code                                                                | Description                                                             |                     | Legend Plate Text<br>(When Selected) |
| MT                                                                  | Red operator – twist-to-release                                         |                     | Not provided                         |
| ME                                                                  | Illuminated red operator – twist-to-release                             |                     |                                      |
| MK                                                                  | Red operator – keyed twist-to-release                                   |                     |                                      |
| MM                                                                  | Red operator – twist-to-release/push-pull <sup>(7)</sup>                |                     |                                      |
| MG                                                                  | Red operator with guard – twist-to-release/<br>push-pull <sup>(7)</sup> |                     |                                      |
| Standard Extended Push Buttons – Non-illuminated <sup>(3) (4)</sup> |                                                                         |                     |                                      |
| E2                                                                  | Black operator (no text or symbol)                                      |                     | Blank                                |
| ED                                                                  | Black operator with arrow (down)                                        |                     | LIFT, DOWN                           |
| EL                                                                  | Black operator with arrow (left)                                        |                     | HOIST, LEFT                          |
| EB                                                                  | Black operator with arrow<br>(reverse – down/left)                      |                     | O/H CRANE, REVERSE                   |
| FD                                                                  | Black operator with double arrow (down fast)                            |                     | LIFT, DOWN FAST                      |
| FL                                                                  | Black operator with double arrow (left fast)                            |                     | O/H CRANE, LEFT FAST                 |
| FB                                                                  | Black operator with double arrow<br>(reverse fast – down/left)          |                     | O/H CRANE, REVERSE, FAST             |
| E1                                                                  | White operator (no text or symbol)                                      |                     | Blank                                |
| EU                                                                  | White operator with arrow (up)                                          |                     | LIFT, UP                             |
| ER                                                                  | White operator with arrow (right)                                       |                     | HOIST, RIGHT                         |
| EF                                                                  | White operator with arrow<br>(forward – up/right)                       |                     | O/H CRANE, FORWARD                   |
| FU                                                                  | White operator with double arrow (up fast)                              |                     | LIFT, UP FAST                        |
| FR                                                                  | White operator with double arrow (right fast)                           |                     | O/H CRANE, RIGHT FAST                |
| FF                                                                  | White operator with double arrow<br>(forward fast – up/right)           |                     | O/H CRANE,<br>FORWARD, FAST          |
| E3                                                                  | Green operator (no text or symbol) <sup>(2) (6)</sup>                   |                     | Blank                                |
| EQ                                                                  | Green operator with Start/Alarm symbol <sup>(2) (6)</sup>               |                     | START, ALARM                         |
| EN                                                                  | Green operator with Start symbol <sup>(2) (6)</sup>                     |                     | START                                |
| E4                                                                  | Red operator (no text or symbol) <sup>(2) (6)</sup>                     |                     | Blank                                |
| ES                                                                  | Red operator with Stop symbol <sup>(2) (6)</sup>                        |                     | STOP                                 |
| E5                                                                  | Yellow operator (no text or symbol) <sup>(2) (6)</sup>                  |                     | Blank                                |
| EA                                                                  | Yellow operator with Alarm symbol <sup>(2) (6)</sup>                    |                     | ALARM                                |
| E6                                                                  | Blue operator (no text or symbol) <sup>(2) (6)</sup>                    |                     | Blank                                |
| R6                                                                  | Blue operator with R                                                    |                     | RESET                                |
| Standard Extended Push Buttons – Illuminated <sup>(3) (4) (6)</sup> |                                                                         |                     |                                      |
| L3                                                                  | Green operator (no text or symbol)                                      |                     | Blank                                |
| L4                                                                  | Red operator (no text or symbol)                                        |                     | Blank                                |
| L5                                                                  | Yellow operator (no text or symbol)                                     |                     | Blank                                |
| L6                                                                  | Blue operator (no text or symbol)                                       |                     | Blank                                |
| L7                                                                  | Clear operator (no text or symbol)                                      |                     | Blank                                |
| Selector Switches <sup>(2) (3) (4) (5) (6)</sup>                    |                                                                         |                     |                                      |
| SH                                                                  | 2-position                                                              | Standard-maintained | O-I                                  |
| KH                                                                  |                                                                         | Keyed-maintained    |                                      |
| SJ                                                                  | 3-position                                                              | Standard-maintained | I-O-II                               |
| KJ                                                                  |                                                                         | Keyed-maintained    |                                      |

(1) Only available in position 1 of a 3-hole enclosure and in positions 1 &amp; 2 of a 5-...9-hole enclosure.

(2) Interlock and/or rubber boot selection = **E** (electrical interlock, no additional boots) is **not** allowed.(3) Interlock and/or rubber boot selection = **M** (mechanical interlock) is **not** allowed.(4) Interlock and/or rubber boot selection = **B** (electrical and mechanical interlock) is **not** allowed.(5) Interlock and/or rubber boot selection = **N** (no interlock, no additional boots) is **not** allowed.(6) Interlock and/or rubber boot selection = **R** (no interlock, additional rubber boot) is **not** allowed.

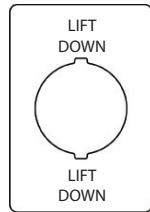
(7) Monolithic style device provided.

(8) Only available in position 1 for a 3-hole enclosure, positions 1 and/or 5 for a 5-hole enclosure, positions 1 and/or 7 for a 7-hole enclosure, and positions 1 and/or 9 for a 9-hole enclosure.

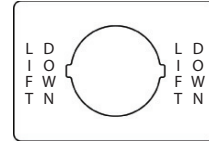
| b...k, Continued                                                  |                                                                                          |                                      |
|-------------------------------------------------------------------|------------------------------------------------------------------------------------------|--------------------------------------|
| Operator Type                                                     |                                                                                          |                                      |
| 2-function Multi-operator Push Buttons <sup>(2) (3) (4) (6)</sup> |                                                                                          |                                      |
| Code                                                              | Description                                                                              | Legend Plate Text<br>(When Selected) |
| VV                                                                | Black/white operator with arrow (down and up)                                            | Not provided                         |
| VW                                                                | Black/white operator with arrow (left and right)                                         |                                      |
| VX                                                                | Black/white operator with arrow<br>(reverse and forward)                                 |                                      |
| WV                                                                | Black/white operator, illuminated,<br>with arrow (down and up)                           |                                      |
| WW                                                                | Black/white operator, illuminated,<br>with arrow (left and right)                        |                                      |
| WX                                                                | Black/white operator, illuminated,<br>with arrow (reverse and forward)                   |                                      |
| XV                                                                | Black/white operator with double arrows<br>(down fast and up fast)                       |                                      |
| XW                                                                | Black/white operator with double arrows<br>(left fast and right fast)                    |                                      |
| XX                                                                | Black/white operator with double arrows<br>(reverse fast and forward fast)               |                                      |
| YV                                                                | Black/white operator, illuminated, with double<br>arrows (down fast and up fast)         |                                      |
| YW                                                                | Black/white operator, illuminated, with double<br>arrows (left fast and right fast)      |                                      |
| YX                                                                | Black/white operator, illuminated, with double<br>arrows (reverse fast and forward fast) |                                      |
| Pilot Lights <sup>(2) (3) (4) (5) (6) (7)</sup>                   |                                                                                          |                                      |
| P0                                                                | Amber light-emitting diode (LED)                                                         | Blank                                |
| P3                                                                | Green LED                                                                                | Blank                                |
| P4                                                                | Red LED                                                                                  | Blank                                |
| P5                                                                | Yellow LED                                                                               | Blank                                |
| P6                                                                | Blue LED                                                                                 | Blank                                |
| P7                                                                | Clear LED                                                                                | Blank                                |
| Potentiometers <sup>(2) (3) (4) (6) (8)</sup>                     |                                                                                          |                                      |
| 1P                                                                | Black operator – 150 Ω                                                                   | Blank                                |
| 2P                                                                | Black operator – 500 Ω                                                                   | Blank                                |
| 3P                                                                | Black operator – 1000 Ω                                                                  | Blank                                |
| 4P                                                                | Black operator – 2500 Ω                                                                  | Blank                                |
| 5P                                                                | Black operator – 5000 Ω                                                                  | Blank                                |
| 6P                                                                | Black operator – 10,000 Ω                                                                | Blank                                |
| Hole Plug <sup>(2) (3) (4) (5) (6)</sup>                          |                                                                                          |                                      |
| N2                                                                | Black hole plug                                                                          | Blank                                |

## Accessories

Figure 2 - Engraved Legend Plates



Cat. No. 800F-36VE416



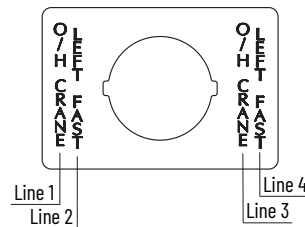
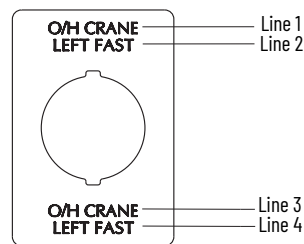
Cat. No. 800F-36HE416

| Description                   | Cat. No. <sup>(1)</sup> |
|-------------------------------|-------------------------|
| Blank                         | 800F-36BE100            |
| O-I                           | 800F-36xU231            |
| I-O-II                        | 800F-36xU234            |
| RESET                         | 800F-36xE186            |
| START                         | 800F-36xE208            |
| STOP                          | 800F-36xE212            |
| 1-2 SPEED, HOIST, LEFT        | 800F-36xE401            |
| 1-2 SPEED, HOIST, RIGHT       | 800F-36xE402            |
| 1-2 SPEED, LIFT, DOWN         | 800F-36xE403            |
| 1-2 SPEED, LIFT, UP           | 800F-36xE404            |
| 1-2 SPEED, O/H CRANE, FORWARD | 800F-36xE405            |
| 1-2 SPEED, O/H CRANE, REVERSE | 800F-36xE406            |
| 1-2-3 SPEED, HOIST, LEFT      | 800F-36xE407            |
| 1-2-3 SPEED, HOIST, RIGHT     | 800F-36xE408            |
| 1-2-3 SPEED, LIFT, DOWN       | 800F-36xE409            |
| 1-2-3 SPEED, LIFT, UP         | 800F-36xE410            |

| Description                     | Cat. No. <sup>(1)</sup>         |
|---------------------------------|---------------------------------|
| 1-2-3 SPEED, O/H CRANE, FORWARD | 800F-36xE411                    |
| 1-2-3 SPEED, O/H CRANE, REVERSE | 800F-36xE412                    |
| ALARM                           | 800F-36xE413                    |
| HOIST, LEFT                     | 800F-36xE414                    |
| HOIST, RIGHT                    | 800F-36xE415                    |
| LIFT, DOWN                      | 800F-36xE416                    |
| LIFT, DOWN FAST                 | 800F-36xE417                    |
| LIFT, UP                        | 800F-36xE418                    |
| LIFT, UP FAST                   | 800F-36xE419                    |
| O/H CRANE, FORWARD              | 800F-36xE420                    |
| O/H CRANE, FORWARD, FAST        | 800F-36xE421                    |
| O/H CRANE, LEFT FAST            | 800F-36xE422                    |
| O/H CRANE, REVERSE              | 800F-36xE423                    |
| O/H CRANE, REVERSE, FAST        | 800F-36xE424                    |
| O/H CRANE, RIGHT FAST           | 800F-36xE425                    |
| START, ALARM                    | 800F-36xE426                    |
| Custom text                     | 800F-36xE100 <sup>(2) (3)</sup> |

- (1) For vertically mounted operators, replace the x with a V. Example: Cat. No. 800F-36xE186 becomes Cat. No. 800F-36VE186.  
 For horizontally mounted operators, replace the x with an H. Example: Cat. No. 800F-36xE186 becomes Cat. No. 800F-36HE186.  
 (2) Font code (K, S, L) must be selected from the table following [Figure 3](#).  
 (3) Please complete the [Custom Text Fax/Scan Sheet on page 81](#) to verify accuracy of legend plate engraving.

Figure 3 - Font Code



| Font Size    | Vertical Mounting (V)    |                   | Horizontal Mounting (H)  |                   |
|--------------|--------------------------|-------------------|--------------------------|-------------------|
|              | Characters Per Line, Max | No. of Lines, Max | Characters Per Line, Max | No. of Lines, Max |
| K (small)    | 16                       | 4                 | 9                        | 4                 |
| S (standard) | 14                       | 4                 | 8                        | 4                 |
| L (large)    | 10                       | 2                 | 7                        | 2                 |

Table 37 - Miscellaneous Accessories

|                                                                                     | Description                           |                                 | Pkg. Quantity | Cat. No.                 |
|-------------------------------------------------------------------------------------|---------------------------------------|---------------------------------|---------------|--------------------------|
|    | Plastic mounting latch                |                                 | 10            | 800F-ALP                 |
|    | Mechanical interlock latch            |                                 | 1             | 800FC-ALP <sup>(1)</sup> |
|    | Replacement wire guide <sup>(2)</sup> |                                 | 10            | 800FC-AWG                |
|    | Replacement trim washer               |                                 | 10            | 800F-ATW1                |
|    | Insulated side jumper                 |                                 | 50            | 1492-SJ5A-24             |
|                                                                                     |                                       |                                 |               | 1492-SJ5A-10             |
|    | Hole plug                             |                                 | 1             | 800F-N2                  |
|   | Description                           | Type                            | Pkg. Quantity | Cat. No.                 |
|                                                                                     | Contact block                         | N.O.                            | 10            | 800F-X10                 |
|                                                                                     |                                       | N.C.                            |               | 800F-X01                 |
|                                                                                     |                                       | N.O. low-voltage — QuadConnect™ |               | 800F-X10V                |
|                                                                                     |                                       | N.C. low-voltage — QuadConnect  |               | 800F-X01V                |
|                                                                                     |                                       | N.C.E.B.                        |               | 800F-X01B                |
|                                                                                     |                                       | N.O.E.M. <sup>(3)</sup>         |               | 800F-X10E                |
|                                                                                     |                                       | N.O.L.M. <sup>(4)</sup>         |               | 800F-X10N                |
|                                                                                     |                                       | N.O.E.E.M. <sup>(5)</sup>       |               | 800F-X10M <sup>(6)</sup> |
|  | Cable sleeve                          | 3-hole (M20 x 1.5)              | 1             | 800FC-AS3                |
|                                                                                     |                                       | 9-hole (M32 x 1.5)              |               | 800FC-AS5                |
|  | Protective boot                       | Extended push button            | 10            | 800F-ABE7 <sup>(7)</sup> |
|                                                                                     |                                       | 2-position multi-operator       |               | 800F-AUB2 <sup>(7)</sup> |
|  | Narrow plastic guard                  | Yellow                          | 1             | 800F-AMEGY               |
|  | Integrated LED module                 | 24V AC/DC                       | 10            | 800F-N3x <sup>(8)</sup>  |
|                                                                                     |                                       | 120V AC                         |               | 800F-N5x <sup>(8)</sup>  |

(1) Only for use with 1-, 2-, and 3-speed operators.

(2) Wire guides are provided with enclosures.

(3) First contact closure of 1- and 2-speed operators.

(4) Second contact closure of 2-speed operators and third contact closure of 3-speed operators.

(5) First contact closure of 3-speed operators.

(6) For proper operation, Cat. No. 800F-X10M must be mounted in position 3 of the mechanical or standard latch.

(7) Not for use with 1-, 2-, and 3-speed operators.

(8) To complete the cat. no., replace the x with one of the following letters for the desired color: Y = Amber, R = Red, G = Green, B = Blue, W = White.



## Specifications

**Table 38 - Front-of-panel (Operators) <sup>(1)</sup>**

| Description                                                   |                   | Mechanical Ratings                                                                                    |
|---------------------------------------------------------------|-------------------|-------------------------------------------------------------------------------------------------------|
|                                                               |                   | Plastic (Bulletin 800FP)                                                                              |
| Vibration (assembled to panel)                                |                   | Tested at 10...2000 Hz, 1.52 mm displacement (peak-to-peak) max/10 G max for 3 hr duration, no damage |
| Shock                                                         |                   | Tested at 1/2 cycle sine wave for 11 ms; no damage at 100 G                                           |
| Degree of protection <sup>(2)</sup>                           |                   | IP66 (NEMA/UL Type 4/4X/13)                                                                           |
| Mechanical durability per EN 60947-5-1 (Annex C)              | 10,000,000 Cycles | Momentary push buttons                                                                                |
|                                                               | 1,000,000 Cycles  | Multi-function, selector switch, key selector switch                                                  |
|                                                               | 300,000 Cycles    | Twist-to-release E-stop, illuminated push-pull E-stop, alternate action push buttons                  |
|                                                               | 100,000 Cycles    | Potentiometer, toggle switch                                                                          |
| Operating forces (typical with one contact block)             |                   | Flush/extended = 5 N, E-stop = 36 N                                                                   |
| Operating torque (typical application with one contact block) |                   | Selector switch = 0.25 N•m (2.2 lb•in)                                                                |
| Mounting torque                                               |                   | 1.7 N•m (15 lb•in)                                                                                    |
|                                                               |                   | Environmental                                                                                         |
| Temperature range (operating)                                 |                   | -25...+70 °C (-13...+158 °F) <sup>(3)</sup>                                                           |
| Temperature range (short-term storage)                        |                   | -40...+85 °C (-40...+185 °F)                                                                          |
| Humidity                                                      |                   | ≤95% RH from 25...60 °C (77...140 °F)                                                                 |

(1) Performance Data — see Important table on [page 4](#).

(2) Plastic-keyed operators are IP66, NEMA/UL Type 4/13; not NEMA/UL Type 4X.

(3) Operating temperatures below 0 °C (32 °F) are based on the absence of freezing moisture and liquids, UL Recognized to 55 °C (131 °F) - Incandescent module max 40 °C (104 °F) - fully populated 9-hole pendant enclosure 45 °C (113 °F) with 75 °C wire.

**Note:** Use UL Listed type S or SJ cords, with a smooth outer jacket rated for wet locations use (marked W) and oil-resistant outer covering (marked O) such as SOW or SJOW with copper wire, rated 75 °C min, 18...12 AWG, with an overall OD of 7.5...15 mm for the small cable sleeve (catalog number 800FC-AS3) and 9...22.5 mm for the large cable sleeve (catalog number 800FC-AS5).

**Table 39 - Product Certifications**

|                         |                                                                                            |
|-------------------------|--------------------------------------------------------------------------------------------|
| Certifications          | UR/UL, CSA, CCC, CE                                                                        |
| Standards Compliance    | NEMA ICS-5, UL 508, CSA C22.2 No. 14, EN ISO 13850, EN 60947-1, EN 60947-5-1, EN 60947-5-5 |
| Terminal Identification | EN/IEC 60947-1                                                                             |
| RoHS                    | Yes                                                                                        |

Table 40 - Material Listing

| Component                           | For Use with                                                                                                                                         | Material Used                           |
|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| Panel gasket                        | All operators                                                                                                                                        | Nitrile, TPE                            |
| Diaphragm seal                      | Illuminated push button, non-illuminated push button                                                                                                 | Automotive industry acceptable silicone |
| K-seal                              | Selector switch, key selector switch, push/twist-to-release E-stop, key E-stop                                                                       | Nitrile                                 |
| Diaphragm retainer, return spring I | Illuminated push button, non-illuminated push button                                                                                                 | Stainless steel                         |
| Return spring II                    | Selector switch, key selector switch, alternate action, push/twist-to-release E-stop, key E-stop                                                     | Zinc-coated music wire                  |
| Button cap                          | Non-illuminated push button, push/twist-to-release, E-stop, key E-stop, multi-function                                                               | PBT/polycarbonate blend                 |
| 2-color molded button cap           | Non-illuminated push button                                                                                                                          | PBT/polycarbonate blend                 |
| Lens                                | Multi-function                                                                                                                                       | Acetal                                  |
| Lens, knob                          | Illuminated push button                                                                                                                              | Polyamide                               |
| Knob                                | Non-illuminated selector switch                                                                                                                      | Glass-filled polyamide                  |
| Plastic bezel/bushing I             | Non-illuminated push button, illuminated push button, selector switch, key selector switch, push/twist-to-release E-stop, key E-stop, multi-function | Glass-filled polyamide                  |
| Plastic bezel/bushing II            | Pilot light                                                                                                                                          | Glass-filled PBT                        |
| Diffuser                            | Illuminated push button, pilot light                                                                                                                 | Polycarbonate                           |
| Plastic mounting ring               | All plastic operators                                                                                                                                | Glass-filled polyamide                  |
| Plastic latch                       | —                                                                                                                                                    | Glass-filled polyamide                  |
| Mechanical interlock latch          | —                                                                                                                                                    | Glass-filled polyamide                  |
| Plastic enclosure                   | —                                                                                                                                                    | PBT/polycarbonate blend                 |
| Terminal screws                     | LED module, contact blocks                                                                                                                           | Zinc-plated steel with chromate         |
| Terminals                           | LED module, contact blocks                                                                                                                           | Brass with silver-nickel contacts       |
| Housing                             | LED module                                                                                                                                           | Glass-filled polyamide                  |
| Low-voltage terminals               | Contact blocks                                                                                                                                       | Gold-plated silver-nickel contacts      |
| Low-voltage spanner                 | Contact blocks                                                                                                                                       | Gold-plated silver-nickel contacts      |
| Spanner                             | Contact blocks                                                                                                                                       | Brass with silver-nickel contacts       |
| Boot                                | Illuminated/non-illuminated push button, illuminated/non-illuminated multi-function                                                                  | Automotive industry acceptable silicone |

**Table 41 - Back-of-Panel Components <sup>(1)</sup>**

| Electrical Ratings                                        |                              |                                                                                                   |                    |           |
|-----------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------------------|--------------------|-----------|
| Standard contact block ratings                            |                              | A600, Q600<br>600V AC<br>AC 15, DC 13 to IEC/EN 60947-5-1 and UL 508, 17V, 5 mA min               |                    |           |
| Low-voltage contact block ratings <sup>(2)</sup>          |                              | 5V, 1 mA DC min<br>C300, R150, AC 15, DC 13 to EN 60947-5-1 and UL 508                            |                    |           |
| Nominal Voltage                                           |                              | Range                                                                                             | Current Draw       | Frequency |
| LED Module Ratings                                        | 24V AC                       | 10...29V AC                                                                                       | 31 mA              | 50/60 Hz  |
|                                                           | 24V DC                       | 10...30V DC                                                                                       | 24 mA              | DC        |
|                                                           | 120V AC                      | 70...132V AC                                                                                      | 25 mA              | 50/60 Hz  |
|                                                           | 240V AC                      | 180...264V AC                                                                                     | 22 mA              | 50/60 Hz  |
| Thermal current                                           |                              | 10 A max enclosed (40 °C [104 °F] ambient) to UL508, EN 60947-5-1                                 |                    |           |
| Insulation voltage ( <i>U<sub>i</sub></i> )               |                              | Screw terminal = 690V, spring-clamp = 300V                                                        |                    |           |
| Wire capacity (screw terminal) <sup>(3)</sup>             |                              | #18...12 AWG (0.75...2.5 mm <sup>2</sup> ) / max (2) #14 AWG or (1) #12 AWG                       |                    |           |
| Wire capacity (spring-clamp terminal)                     |                              | #18...14 AWG (0.75...1.5 mm <sup>2</sup> ) One per spring clamp, two spring clamps per terminal   |                    |           |
| Recommended tightening torque on screw terminals          |                              | 0.7...0.9 N•m (6...8 lb•in)                                                                       |                    |           |
| Dielectric strength (minimum)                             |                              | 2500V for 1 minute                                                                                |                    |           |
| External short circuit protection                         | Standard blocks              | 10 A type gL/gG cartridge fuse to EN 60269-2-1 or gN (Class J to UL 248-8 or Class C to UL 248-4) |                    |           |
|                                                           | Low-voltage contact blocks   | 6 A type gL/gG cartridge fuse to EN 60269-2-1 or gN (Class J to UL 248-8 or Class C to UL 248-4)  |                    |           |
| Electrical shock protection                               |                              | Fingersafe conforming to IP2X                                                                     |                    |           |
| Mechanical Ratings                                        |                              |                                                                                                   |                    |           |
| Vibration (assembled to panel)                            |                              | Tested at 10...2000 Hz, 1.52 mm displacement (peak-to-peak) max/10 G max 6 hr                     |                    |           |
| Shock                                                     |                              | Tested at 1/2 cycle sine wave for 11 ms and no damage at 100 G max                                |                    |           |
| Contact durability per EN 60947-5-1 (Annex C)             |                              | 10,000,000 cycles                                                                                 |                    |           |
| Contact operation                                         | N.O.                         | Slow double make and break                                                                        |                    |           |
|                                                           | N.C.                         | Slow double make and break – positive opening ➞                                                   |                    |           |
|                                                           | N.O.E.M.                     | Double break / double make, early make                                                            |                    |           |
|                                                           | N.C.L.B.                     | Double break / double make, late break – positive opening ➞                                       |                    |           |
|                                                           | N.C.E.B.                     | Double break / double make, early break – positive opening ➞                                      |                    |           |
|                                                           | N.O.E.E.M.                   | Double break / double make, early early make                                                      |                    |           |
|                                                           | N.O.L.M.                     | Double break / double make, late make                                                             |                    |           |
| Standard push button travel to change electrical state    |                              | N.C. and N.O.E.M.                                                                                 | 1.5 mm (0.060 in.) |           |
|                                                           |                              | N.O. and N.C.L.B.                                                                                 | 2.5 mm (0.1 in.)   |           |
| Multi-speed push button travel to change electrical state |                              | N.O.E.E.M.                                                                                        | 3 mm (0.12 in.)    |           |
|                                                           |                              | N.C.E.B.                                                                                          | 4 mm (0.16 in.)    |           |
|                                                           |                              | N.O.L.M.                                                                                          | 7 mm (0.28 in.)    |           |
| Operating forces (typical)                                | Single-circuit contact block | 3.4 N                                                                                             |                    |           |
|                                                           | Dual-circuit contact block   | 5...6.5 N                                                                                         |                    |           |
| Materials                                                 |                              |                                                                                                   |                    |           |
| Springs                                                   |                              | Stainless steel and zinc-coated music wire                                                        |                    |           |
| Electrical contacts                                       | Standard                     | Silver-nickel                                                                                     |                    |           |
|                                                           | Low-voltage                  | Gold-plated over silver                                                                           |                    |           |
| Terminals                                                 | Screw                        | Brass                                                                                             |                    |           |
|                                                           | Spring-clamp                 | Silver-plated brass                                                                               |                    |           |

(1) Performance Data – see Important table on [page 5](#).

(2) Low-voltage contacts are recommended for applications below 17V, 5 mA.

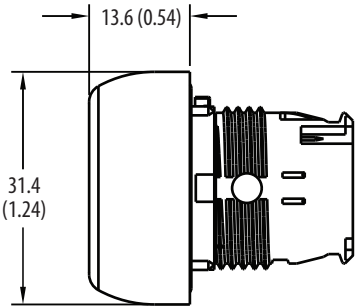
(3) Wires less than #18 AWG (0.75 mm<sup>2</sup>) cannot hold in terminal securely.

|                         | Illumination |         |         |         |         |
|-------------------------|--------------|---------|---------|---------|---------|
|                         | Green        | Red     | Yellow  | Blue    | White   |
| LED dominant wavelength | 525 nm       | 629 nm  | 590 nm  | 470 nm  | –       |
| LED luminous intensity  | 780 mcd      | 780 mcd | 600 mcd | 168 mcd | 360 mcd |

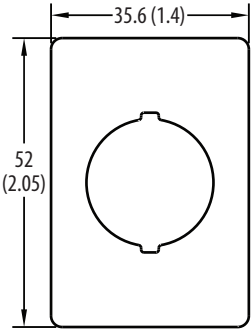
# Approximate Dimensions

Dimensions in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.

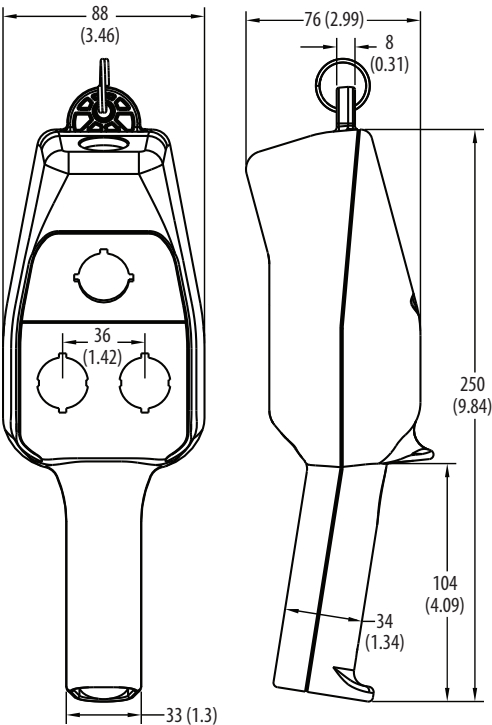
## Bulletin 800FC 1-, 2-, and 3-speed Operator



## Bulletin 800FC Legend Plate



## Bulletin 800FC Pendant Station (3-hole)



## Bulletin 800FC Pendant Station (5-, 7-, and 9-hole)

| Cat. No.      | Holes | A           | B         |
|---------------|-------|-------------|-----------|
| 800FC-4/5/C/D | 5     | 309 (12.17) | 36 (1.42) |
| 800FC-6/7/E/F | 7     | 381 (15)    | 36 (1.42) |
| 800FC-8/9/G/H | 9     | 453 (17.83) | 36 (1.42) |

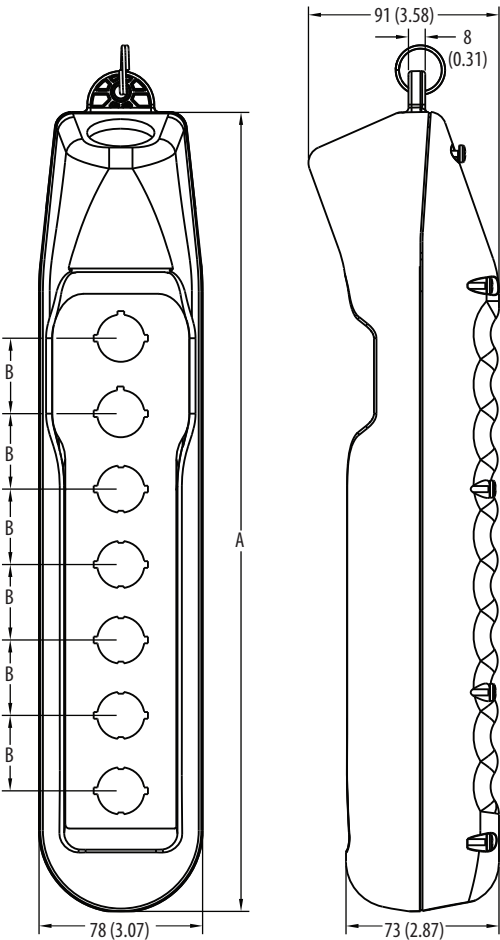


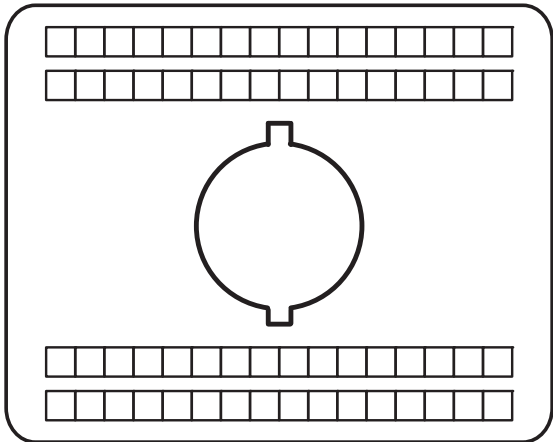
Table 42 - Bulletin 800F Operator Dimensions

| Operator                     | Page                                      |
|------------------------------|-------------------------------------------|
| Momentary push button        | <a href="#">9</a>                         |
| Alternate action             | <a href="#">10</a>                        |
| Pilot light                  | <a href="#">11</a>                        |
| Selector switch              | <a href="#">16</a> and <a href="#">19</a> |
| Push-pull                    | <a href="#">24</a>                        |
| Mushroom                     | <a href="#">26</a>                        |
| Multi-operator               | <a href="#">30</a>                        |
| Reset                        | <a href="#">31</a>                        |
| Potentiometer                | <a href="#">32</a>                        |
| Key-operated selector switch | <a href="#">33</a>                        |
| Selector push button         | <a href="#">34</a>                        |

Custom Text Fax/Scan Sheet

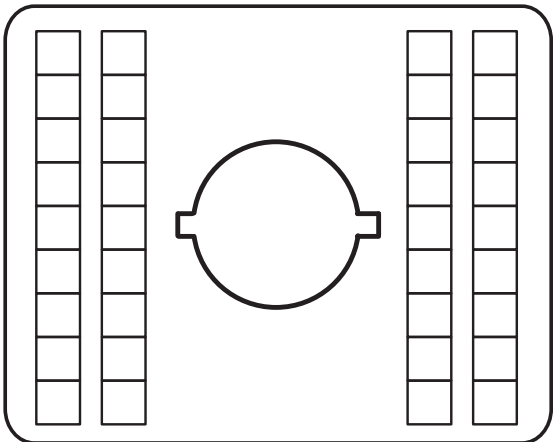
Order/Item \_\_\_\_\_

Vertical Mounting

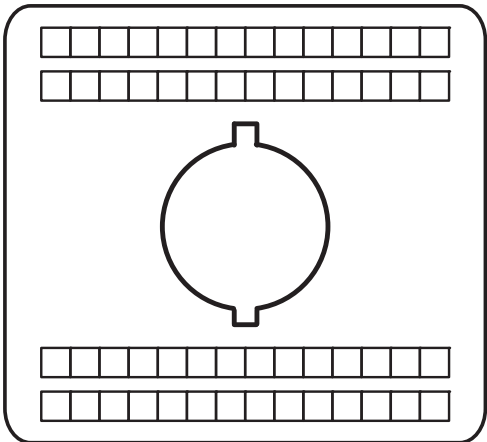


Cat. No. 800F-36VE100K

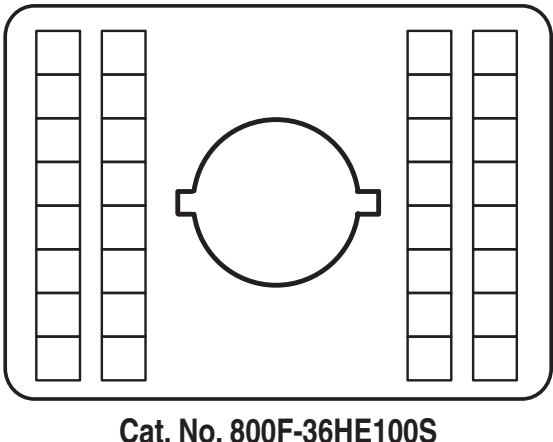
Horizontal Mounting



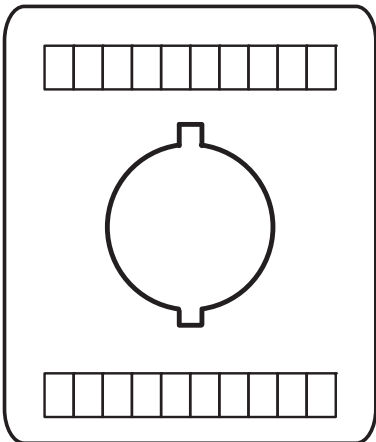
Cat. No. 800F-36HE100K



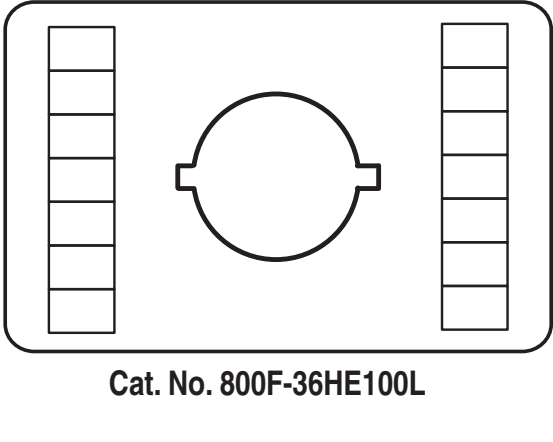
Cat. No. 800F-36VE100S



Cat. No. 800F-36HE100S



Cat. No. 800F-36VE100L



Cat. No. 800F-36HE100L

# Bulletin 800FD 22.5 mm Monolithic Push Buttons

Our monolithic operators are designed to meet worldwide standards. These operators include E-stops and pilot lights with either light indicators or incandescent illumination options. With one catalog number, you can now order a fully assembled product for easy stocking and installation.

## Momentary Push Button Operators, Non-illuminated



800FD - F 3 01 X 11  
a b c d e

| a             |             |
|---------------|-------------|
| Operator Type |             |
| Code          | Description |
| F             | Flush       |
| E             | Extended    |

| b         |        |
|-----------|--------|
| Color Cap |        |
| Code      | Color  |
| 1         | White  |
| 2         | Black  |
| 3         | Green  |
| 4         | Red    |
| 5         | Yellow |
| 6         | Blue   |

| c (1) (2)   |                 |
|-------------|-----------------|
| Legend Text |                 |
| Code        | Text            |
| —           | No text (blank) |
| 01          | START           |
| 02          | STOP            |
| 05          | 0               |
| 06          | I               |
| 08          | →               |
| 09          | FORWARD         |
| 10          | REVERSE         |
| 11          | R               |

| d                 |                |
|-------------------|----------------|
| Termination Style |                |
| Code              | Description    |
| X                 | Standard screw |
| R                 | Ring lug       |

| e              |                |                |
|----------------|----------------|----------------|
| Contact Module |                |                |
| Code           | Number of N.O. | Number of N.C. |
| 01             | 0              | 1              |
| 10             | 1              | 0              |
| 11             | 1              | 1              |
| 02             | 0              | 2              |
| 20             | 2              | 0              |

- (1) White and yellow caps have black text. All other color caps have white text.  
(2) Valid color cap/legend text combinations are as follows:

| Color  | Text                             |                   |
|--------|----------------------------------|-------------------|
|        | Flush Caps                       | Extended Caps     |
| White  | START, I, →, FORWARD, REVERSE, R | →, R              |
| Black  | →, FORWARD, REVERSE, R           | STOP, 0, →, R (1) |
| Green  | START, I, →, FORWARD, REVERSE    | →                 |
| Red    | →, FORWARD, REVERSE              | STOP, 0, → (1)    |
| Yellow | →, FORWARD, REVERSE              | →                 |
| Blue   | →, FORWARD, REVERSE, R           | →, R              |

(1) "STOP" or "0" color cap/legend text are not available for "10" or "20" contact modules.

## Pilot Light Devices

### Light-emitting Diode (LED)



| Lens and LED Color | Pkg. Quantity | Voltage    |            |            |
|--------------------|---------------|------------|------------|------------|
|                    |               | 24V AC/DC  | 120V AC    | 240V AC    |
|                    |               | Cat. No.   | Cat. No.   | Cat. No.   |
| Green              | 1             | 800FD-P3N3 | 800FD-P3N5 | 800FD-P3N7 |
| Red                |               | 800FD-P4N3 | 800FD-P4N5 | 800FD-P4N7 |
| Yellow             |               | 800FD-P5N3 | 800FD-P5N5 | 800FD-P5N7 |

800FD - P 3 N 7  
a b c

| a        |        |
|----------|--------|
| Lens Cap |        |
| Code     | Color  |
| 0        | Amber  |
| 3        | Green  |
| 4        | Red    |
| 5        | Yellow |
| 6        | Blue   |
| 7        | Clear  |

| b       |           |
|---------|-----------|
| Voltage |           |
| Code    | Type      |
| 3       | 24V AC/DC |
| 5       | 120V AC   |
| 7       | 240V AC   |

| c                 |                |
|-------------------|----------------|
| Termination Style |                |
| Code              | Description    |
| Blank             | Standard screw |
| R                 | Ring lug       |

### Incandescent

| Lens and LED Color | Pkg. Quantity | Voltage    |            |
|--------------------|---------------|------------|------------|
|                    |               | 24V AC/DC  | 120V AC    |
|                    |               | Cat. No.   | Cat. No.   |
| Green              | 1             | 800FD-P3D3 | 800FD-P3D5 |
| Red                |               | 800FD-P4D3 | 800FD-P4D5 |
| Yellow             |               | 800FD-P5D3 | 800FD-P5D5 |

800FD - P 3 D 5  
a b c

| a        |                        |
|----------|------------------------|
| Lens Cap |                        |
| Code     | Color                  |
| 0        | Amber                  |
| 3        | Green                  |
| 4        | Red                    |
| 5        | Yellow                 |
| 6        | Blue                   |
| 7        | Clear                  |
| 9        | No lens <sup>(1)</sup> |

| b       |                        |
|---------|------------------------|
| Voltage |                        |
| Code    | Type                   |
| 0       | No bulb <sup>(2)</sup> |
| 1       | 6V AC/DC               |
| 2       | 12V AC/DC              |
| 3       | 24V AC/DC              |
| 4       | 48V AC/DC              |
| 5       | 120V AC/DC             |

| c                 |                |
|-------------------|----------------|
| Termination Style |                |
| Code              | Description    |
| Blank             | Standard screw |
| R                 | Ring lug       |

(1) Only valid with "no bulb" option.

(2) Only valid with "no lens" option.

Selector Switch Operators



Non-illuminated

| Operator Type           | Contact Configuration | Pkg. Quantity | 2-position    | 3-position    |
|-------------------------|-----------------------|---------------|---------------|---------------|
|                         |                       |               | Cat. No.      | Cat. No.      |
| Maintained              | 1 N.O.                | 1             | 800FD-SM22X10 | —             |
|                         | 1 N.C.                |               | 800FD-SM22X01 | —             |
|                         | 2 N.O.                |               | 800FD-SM22X20 | 800FD-SM32X20 |
|                         | 2 N.C.                |               | 800FD-SM22X02 | 800FD-SM32X02 |
|                         | 1 N.O.,1 N.C.         |               | 800FD-SM22X11 | 800FD-SM32X11 |
| Spring Return From Both | 2 N.O.                |               | —             | 800FD-SB32X20 |
|                         | 2 N.C.                |               | —             | 800FD-SB32X02 |
|                         | 1 N.O.,1 N.C.         |               | —             | 800FD-SB32X11 |

800FD - S L3 2 X 11  
a b c

| a                 |                               |
|-------------------|-------------------------------|
| Operator Function |                               |
| Code              | Description                   |
| M2                | Maintained, 2-position        |
| L2                | Return from left, 2-position  |
| R2                | Return from right, 2-position |
| M3                | Maintained, 3-position        |
| L3                | Return from left, 3-position  |
| R3                | Return from right, 3-position |
| B3                | Return from both, 3-position  |

| b                 |                |
|-------------------|----------------|
| Termination Style |                |
| Code              | Description    |
| X                 | Standard screw |
| R                 | Ring lug       |

| c                 |                |                |
|-------------------|----------------|----------------|
| Contact Module    |                |                |
| Code              | Number of N.O. | Number of N.C. |
| 01 <sup>(1)</sup> | 0              | 1              |
| 10 <sup>(1)</sup> | 1              | 0              |
| 11                | 1              | 1              |
| 02                | 0              | 2              |
| 20                | 2              | 0              |

(1) Only available for 2-position selector switch.

Table 43 - Selector Switch

| 2-Position    |      |       |      |       |
|---------------|------|-------|------|-------|
| Knob Position |      |       |      |       |
|               | Left | Right | Left | Right |
| 01            | X    | —     | 0    | —     |
| 10            | —    | 0     | —    | X     |
| 11            | X    | 0     | 0    | X     |
| 02            | X    | X     | 0    | 0     |
| 20            | 0    | 0     | X    | X     |

| 3-Position    |      |       |      |       |      |       |
|---------------|------|-------|------|-------|------|-------|
| Knob Position |      |       |      |       |      |       |
|               | Left | Right | Left | Right | Left | Right |
| 11            | 0    | 0     | X    | 0     | X    | X     |
| 02            | 0    | X     | X    | X     | X    | 0     |
| 20            | X    | 0     | 0    | 0     | 0    | X     |

Note: X = Closed/0 = Open



## Push-pull/Twist-to-release Mushroom Operators

### 2-position, Non-illuminated


**IMPORTANT**

- All emergency stop operators are EN ISO 13850 compliant with standard NC, NCLB, or self-monitoring contact blocks.
- E-stop operators, latch, and contact block combinations have been third-party tested for B10d values. B10d values can be found in publication [SAFETY-SR001](#).

| Color | Contacts | Pkg. Quantity | Cat. No.      |
|-------|----------|---------------|---------------|
| Red   | 1 N.C.   | 1             | 800FD-MT44X01 |
|       | 2 N.C.   |               | 800FD-MT44X02 |

800FD - MT4  $\frac{4}{a}$   $\frac{X}{b}$   $\frac{11}{c}$

| a         |             |
|-----------|-------------|
| Color Cap |             |
| Code      | Description |
| 2         | Black       |
| 3         | Green       |
| 4         | Red         |
| 4E        | Red - EMO   |
| 5         | Yellow      |
| 6         | Blue        |

| b                 |                |
|-------------------|----------------|
| Termination Style |                |
| Code              | Description    |
| X                 | Standard screw |
| R                 | Ring lug       |

| c                             |                |                |
|-------------------------------|----------------|----------------|
| Contact Module <sup>(1)</sup> |                |                |
| Code                          | Number of N.O. | Number of N.C. |
| 01                            | 0              | 1              |
| 11                            | 1              | 1              |
| 02                            | 0              | 2              |

(1) E-stops must contain at least one N.C. circuit.

## Plastic Enclosures – 1-hole Only

- Feed-through design
- Knockout sizes: PG 11/16
- Not UL Listed or CSA Certified
- Monolithic or latch-mounted contact blocks
- Double insulated ☐



| Type   | Pkg. Quantity | Plastic Enclosures (IP66, NEMA 4/4X/13) <sup>(1)</sup> |           |
|--------|---------------|--------------------------------------------------------|-----------|
|        |               | Gray                                                   | Yellow    |
|        |               | Cat. No.                                               | Cat. No.  |
| 1-hole | 1             | 800FD-1P                                               | 800FD-1PY |

(1) Can only use single deep contact block.

Assembled Stations

| Enclosure Color | Quick Connect  | Operator Type                        | Contact Configuration | Cat. No.     |
|-----------------|----------------|--------------------------------------|-----------------------|--------------|
| Gray            | —              | 2-position selector switch           | 1 N.O.                | 800FD-1SP5   |
|                 |                |                                      | 1 N.O./1 N.C.         | 800FD-1SP6   |
| Yellow          | —              | Red 40 mm push-pull/twist-to-release | 1 N.O./1 N.C.         | 800FD-1SYP2  |
|                 | DC Micro 4-pin |                                      |                       | 800FD-1SYP2Q |

Replacement Parts

Table 44 - Replacement Lamps

| Lamp                                                                                                    | Type                      | Typical Current | Voltage    | ANSI No. | Pkg. Quantity | Cat. No.  |
|---------------------------------------------------------------------------------------------------------|---------------------------|-----------------|------------|----------|---------------|-----------|
| <br>Cat. No. 800F-N130 | Full-voltage Incandescent | 150 mA          | 6V AC/DC   | 755      | 10            | 800F-N65  |
|                                                                                                         |                           | 80 mA           | 12V AC/DC  | 756      |               | 800F-N141 |
|                                                                                                         |                           | 70 mA           | 24V AC/DC  | 757      |               | 800F-N157 |
|                                                                                                         |                           | 50 mA           | 48V AC/DC  | 1835     |               | 800F-N48  |
|                                                                                                         |                           | 22 mA           | 130V AC/DC | 949      |               | 800F-N130 |

Table 45 - Replacement Lenses

| Lens Color | Pkg. Quantity     | Cat. No.  |
|------------|-------------------|-----------|
| Amber      | 10 <sup>(1)</sup> | 800FD-AP0 |
| Green      |                   | 800FD-AP3 |
| Red        |                   | 800FD-AP4 |
| Yellow     |                   | 800FD-AP5 |
| Blue       |                   | 800FD-AP6 |
| Clear      |                   | 800FD-AP7 |

(1) Sold in multiples of 10. Order (quantity of) 10 to receive one package of 10 pieces.

# Specifications

**IMPORTANT Performance Data** — Performance data that is given in this publication is provided only as a guide for you to determine suitability and does not constitute a performance warranty of any kind. Such data can represent the results of accelerated testing at elevated stress levels, and you are responsible for correlating the data to actual application requirements. ALL WARRANTIES AS TO ACTUAL PERFORMANCE, WHETHER EXPRESS OR IMPLIED, ARE EXPRESSLY DISCLAIMED.

| Mechanical Ratings                                             |                  |                                                                                                                                   |              |           |
|----------------------------------------------------------------|------------------|-----------------------------------------------------------------------------------------------------------------------------------|--------------|-----------|
| Vibration (assembled to panel)                                 |                  | Tested at 10...2000 Hz, 1.52 mm displacement (peak-to-peak) max/10 G max for 3 hr duration, no damage                             |              |           |
| Shock                                                          |                  | Shock Tested at 1/2 cycle sine wave for 11 ms; no damage at 100 G                                                                 |              |           |
| Degree of protection                                           |                  | IP66 (NEMA/UL Type 3/3R/4/4X/12/13)                                                                                               |              |           |
| Mechanical durability per EN 60947-5-1 (Annex C)               | 300,000 cycles   | Selector switch                                                                                                                   |              |           |
|                                                                |                  | Push-pull/twist-to-release E-stop                                                                                                 |              |           |
|                                                                | 2,000,000 cycles | Momentary push buttons                                                                                                            |              |           |
| Operating forces                                               |                  | E-stop = 36 N                                                                                                                     |              |           |
| Operating torque (typical application with one contact block)  |                  | Selector switch = 0.25 N•m                                                                                                        |              |           |
| Contact operation                                              | N.O.             | Slow double make and break                                                                                                        |              |           |
|                                                                | N.C.             | Slow double make and break – positive opening  |              |           |
| Push button travel to change electrical state                  | N.O.             | 2.5 mm (0.1 in.)                                                                                                                  |              |           |
|                                                                | N.C.             | 1.5 mm (0.060 in.)                                                                                                                |              |           |
| Environmental                                                  |                  |                                                                                                                                   |              |           |
| Temperature range (operating)                                  |                  | -25...+60 °C (-13...+140 °F) <sup>(1)</sup>                                                                                       |              |           |
| Temperature range (short-term storage)                         |                  | -40...+85 °C (-40...+185 °F)                                                                                                      |              |           |
| Humidity                                                       |                  | ≤95% RH from 25...60 °C (77...140 °F)                                                                                             |              |           |
| Electrical Ratings                                             |                  |                                                                                                                                   |              |           |
| Standard contact block ratings                                 |                  | B300, R300<br>AC 15, DC 13<br>300VAC<br>EN/IEC 60947-5-1 and UL 508, 17V, 5 mA min                                                |              |           |
| Low-voltage contact block ratings                              |                  | 5V, 1 mA DC min<br>C300, R150, AC 15, DC 13 to EN 60947-5-1 and UL 508                                                            |              |           |
| Nominal Voltage                                                |                  | Range                                                                                                                             | Current Draw | Frequency |
| LED Module Ratings                                             | 24V AC           | 20...26V AC                                                                                                                       | 32 mA        | 50/60 Hz  |
|                                                                | 24V DC           | 18...30V DC                                                                                                                       | 24 mA        | DC        |
|                                                                | 120V AC          | 102...132V AC                                                                                                                     | 22 mA        | 50/60 Hz  |
|                                                                | 240V AC          | 204...264V AC                                                                                                                     | 22 mA        | 50/60 Hz  |
| Thermal current                                                |                  | 5 A max enclosed (40 °C [104 °F] ambient) to UL 508, EN/IEC 60947-5-1                                                             |              |           |
| Insulation voltage ( <i>U<sub>i</sub></i> )                    |                  | 300V                                                                                                                              |              |           |
| Wire capacity (screw terminal)                                 |                  | #18...14 AWG (0.75...2.5 mm <sup>2</sup> )<br>Max (2) #14 AWG, uses same size wire only                                           |              |           |
| Recommendations for ring lug termination option <sup>(2)</sup> |                  | 6.35 mm (0.250 in.) max outer diameter with 3.8 mm (0.148 in.) hole diameter                                                      |              |           |
| Recommended tightening torque on screw terminals               |                  | 0.7...0.9 N•m (6...8 lb•in)                                                                                                       |              |           |
| Dielectric strength (min)                                      |                  | 2500V for 1 minute                                                                                                                |              |           |
| External short circuit protection                              |                  | 5 A Type gL/gG cartridge fuse to EN 60269-2-1 or gN (Class J to UL 248-8 or Class CC to UL 248-4)                                 |              |           |
| Electrical shock protection                                    |                  | Fingersafe conforming to IP2X                                                                                                     |              |           |

(1) Operating temperatures below 0 °C (32 °F) are based on the absence of freezing moisture and liquids.

(2) 3M MV018-R/S (#22...18 AWG) or 3M MVU14-6R/S (#16...14 AWG)

|                           | Illumination |         |         |         |         |
|---------------------------|--------------|---------|---------|---------|---------|
|                           | Green        | Red     | Yellow  | Blue    | White   |
| LED dominant wavelength   | 525 nm       | 629 nm  | 590 nm  | 470 nm  | —       |
| LED luminous intensity    | 780 mcd      | 780 mcd | 600 mcd | 168 mcd | 360 mcd |
| Incandescent wattage, max | 2.6 W        |         |         |         |         |

| Materials                |                                            |                        |                                 |
|--------------------------|--------------------------------------------|------------------------|---------------------------------|
| Springs                  | Stainless steel and zinc-coated music wire | Lens (pilot light)     | Acrylic                         |
| Electrical contacts      | Brass with silver-nickel contacts          | Bezel/bushing, housing | Glass-filled polyester          |
| Terminals                | Brass and phosphor bronze                  | Legend frames          | Glass-filled polyamide          |
| Panel gasket             | Nitrile and polyester-based TPE            | Mounting ring          | Glass-filled polyamide          |
| Seal                     | Nitrile                                    | Terminal screws        | Zinc-plated steel with chromate |
| Button cap/mushroom head | Polyester/polycarbonate blend              | Lamp socket            | Brass and Phosphor bronze       |

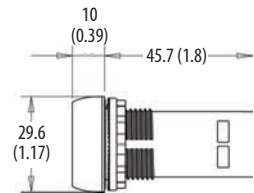
Table 46 - Standards Compliance and Certifications

|                                     |                                                              |
|-------------------------------------|--------------------------------------------------------------|
| Certifications                      | UL, CSA, CCC, CE                                             |
| Conformity to standards – CE Marked | UL 508, EN/ISO 13850, EN 60947-1, EN 60947-5-1, EN 60947-5-5 |
| Terminal identification             | EN/IEC 60947-1                                               |

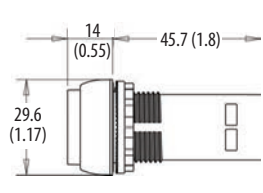
Approximate Dimensions

Dimensions in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.

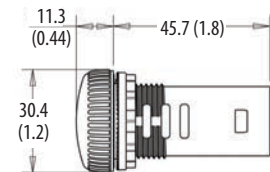
Momentary Push Button Operators – Flush



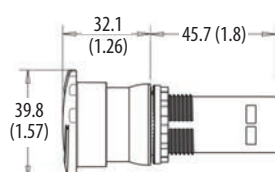
Momentary Push Button Operators – Extended



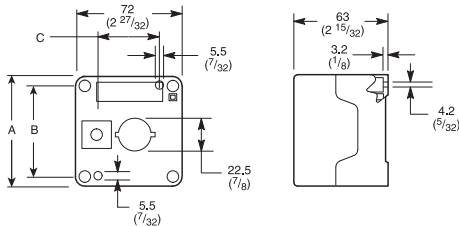
Pilot Light Devices



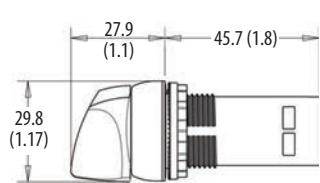
2-Position Push-pull/Twist-to-release Mushroom Operators



Plastic Enclosures

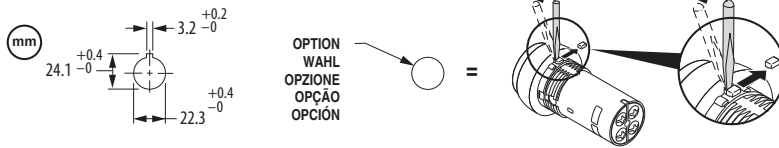


Selector Switch Operators

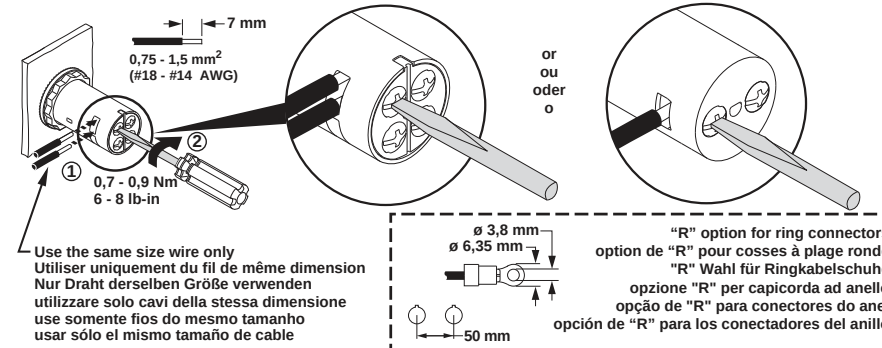
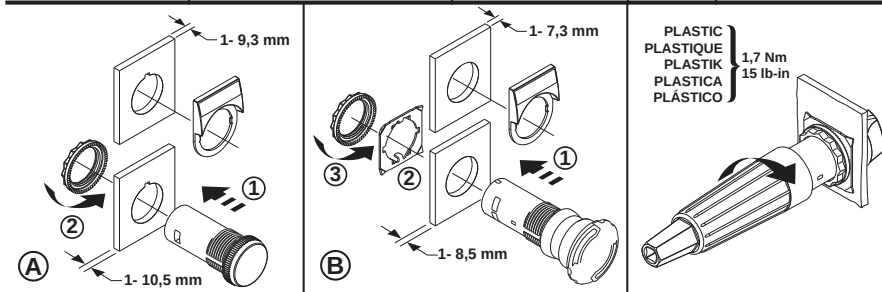


| Plastic Enclosures [mm (in.)] |                      |           |          |         |          |
|-------------------------------|----------------------|-----------|----------|---------|----------|
| Cat. No.                      | No. of Units (Holes) | A         | B        | C       | Weight   |
| 800FD-1P                      | 1                    | 72        | 59       | 41      | 95 g     |
| 800FD-1PY                     |                      | (2-27/32) | (2-5/16) | (1-5/8) | (3.5 oz) |

# Instruction Sheet



|     |    |    |    |    |    |          |
|-----|----|----|----|----|----|----------|
| (A) |    |    |    |    |    |          |
| (A) |    |    |    |    |    |          |
| (B) |    |    |    |    |    |          |
|     |    |    |    |    |    |          |
|     |    |    |    |    |    | ø60, ø90 |
|     | 30 | 40 | 50 | 40 | 50 | 60 / 90  |
|     | 30 |    | 40 |    |    |          |



Our 16 mm operators can meet your light industrial and instrumentation application needs with their highly configurable and flexible design. These operators are excellent for applications with limited panel space or a small footprint. They are made of corrosion-proof plastic to deliver long push button life.

### Push Button and Pilot Light Operators

| Operator Type <sup>(1)</sup>                 | Pkg. Quantity |  |  |  |  |
|----------------------------------------------|---------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                              |               | Round Cat. No.                                                                    | Square Cat. No.                                                                   | Rectangle Cat. No.                                                                  | Large Square Cat. No.                                                               |
| Extended, momentary, push button/pilot light | 1             | 800B-EPA                                                                          | 800B-EPB                                                                          | 800B-EPC                                                                            | 800B-EPD                                                                            |
| Extended, maintained, push button            |               | 800B-EAA                                                                          | 800B-EAB                                                                          | 800B-EAC                                                                            | 800B-EAD                                                                            |
| Flush, momentary, push button/pilot light    |               | 800B-FPA                                                                          | 800B-FPB                                                                          | 800B-FPC                                                                            | —                                                                                   |

(1) All operators are sold without a lens cap and diffuser.

### Lens Cap with Diffuser

| Lens Color <sup>(1)</sup> | Pkg. Quantity |  |  |  |  |
|---------------------------|---------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                           |               | Round Cat. No.                                                                    | Square Cat. No.                                                                   | Rectangle Cat. No.                                                                  | Large Square Cat. No.                                                               |
| Green                     | 1             | 800B-ALA3                                                                         | 800B-ALB3                                                                         | 800B-ALC3                                                                           | 800B-ALD3                                                                           |
| Red                       |               | 800B-ALA4                                                                         | 800B-ALB4                                                                         | 800B-ALC4                                                                           | 800B-ALD4                                                                           |
| Yellow                    |               | 800B-ALA5                                                                         | 800B-ALB5                                                                         | 800B-ALC5                                                                           | 800B-ALD5                                                                           |
| Blue                      |               | 800B-ALA6                                                                         | 800B-ALB6                                                                         | 800B-ALC6                                                                           | 800B-ALD6                                                                           |
| White                     |               | 800B-ALA7                                                                         | 800B-ALB7                                                                         | 800B-ALC7                                                                           | 800B-ALD7                                                                           |

(1) For illuminated devices, LED bulbs are color specific. (Green LED bulb with green lens caps, red LED bulbs with red lens cap, white LED bulbs with yellow, blue, and white lens cap.) Incandescent bulbs can be used with any lens cap color.

## Selector Switch Operators

| Operator Type <sup>(1)</sup> | Pkg. Quantity | 2-position Selector Switches                                                      |                                                                                   | 3-Position Selector Switches                                                        |                                                                                     |
|------------------------------|---------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                              |               |  |  |  |  |
|                              |               | Maintained                                                                        | Return from Right                                                                 | Maintained                                                                          | Return from Both                                                                    |
| Cat. No.                     | 1             | 800B-SM2A                                                                         | 800B-SR2A                                                                         | 800B-SM3A                                                                           | 800B-SB3A                                                                           |
| Operator Type <sup>(1)</sup> | Pkg. Quantity |  |  |  |  |
|                              |               | Keyed, Maintained                                                                 | Keyed, Return from Right                                                          | Keyed, Maintained                                                                   | Keyed, Return from Both                                                             |
|                              |               | Cat. No.                                                                          | 1                                                                                 | 800B-KM2A                                                                           | 800B-KR2A                                                                           |

(1) To illuminate a selector switch, add either an LED or incandescent bulb. All selector switches have a clear lens. Green and red LED bulbs can be used to change the selector switch color.

Table 47 - Target Table and Operator Position

| Contact Block Cat. No. | Contact Block Location | Contact Type | 2-position Target Table <sup>(1)</sup>                                            |                                                                                   | 3-position Target Table <sup>(1)</sup>                                              |                                                                                     |                                                                                     |
|------------------------|------------------------|--------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                        |                        |              |  |  |  |  |  |
| 800B-PS11              | Top                    | —            | —                                                                                 | —                                                                                 | —                                                                                   | —                                                                                   | —                                                                                   |
|                        | Bottom                 | N.C.         | X                                                                                 | 0                                                                                 | 0                                                                                   | X                                                                                   | X                                                                                   |
|                        |                        | N.O.         | 0                                                                                 | X                                                                                 | X                                                                                   | 0                                                                                   | 0                                                                                   |
| 800B-PS22              | Top                    | N.C.         | X                                                                                 | 0                                                                                 | X                                                                                   | X                                                                                   | 0                                                                                   |
|                        |                        | N.O.         | 0                                                                                 | X                                                                                 | 0                                                                                   | 0                                                                                   | X                                                                                   |
|                        | Bottom                 | N.C.         | X                                                                                 | 0                                                                                 | 0                                                                                   | X                                                                                   | X                                                                                   |
|                        |                        | N.O.         | 0                                                                                 | X                                                                                 | X                                                                                   | 0                                                                                   | 0                                                                                   |
| 800B-PT01              | Top                    | —            | —                                                                                 | —                                                                                 | —                                                                                   | —                                                                                   | —                                                                                   |
|                        | Bottom                 | N.C.         | X                                                                                 | 0                                                                                 | 0                                                                                   | X                                                                                   | X                                                                                   |
| 800B-PT02              | Top                    | N.C.         | X                                                                                 | 0                                                                                 | X                                                                                   | X                                                                                   | 0                                                                                   |
|                        | Bottom                 |              | X                                                                                 | 0                                                                                 | 0                                                                                   | X                                                                                   | X                                                                                   |
| 800B-PT11              | Top                    | N.O.         | 0                                                                                 | X                                                                                 | 0                                                                                   | 0                                                                                   | X                                                                                   |
|                        | Bottom                 | N.C.         | X                                                                                 | 0                                                                                 | 0                                                                                   | X                                                                                   | X                                                                                   |

(1) X = Closed, 0 = Open

## Emergency Stop Operators

Table 48 - Non-illuminated, Twist-to-release (Trigger Action)

|                                                                                     | Description             | Pkg. Quantity | Cat. No. <sup>(1)</sup> |
|-------------------------------------------------------------------------------------|-------------------------|---------------|-------------------------|
|  | Emergency stop operator | 1             | 800B-MT                 |

(1) Operator is EN ISO 13850 compliant with standard slow make/break, direct drive N.C. contact blocks (Cat. Nos. 800B-PT01, 800B-PT02, and 800B-PT11).

# Contact Block/Latch Module

|                                                                                     | Description                   | Pkg. Quantity | Cat. No.  |
|-------------------------------------------------------------------------------------|-------------------------------|---------------|-----------|
| Push Button/Selector Switch                                                         |                               |               |           |
|    | 1 N.O./1 N.C. snap action     | 1             | 800B-PS11 |
|    | 2 N.O./2 N.C. snap action     | 1             | 800B-PS22 |
| Pilot Light                                                                         |                               |               |           |
|    | Dummy block                   | 1             | 800B-PL   |
| Emergency Stop <sup>(1)</sup> /Push Button/Selector Switch                          |                               |               |           |
|    | 1 N.C. slow make/break        | 1             | 800B-PT01 |
|   | 2 N.C. slow make/break        | 1             | 800B-PT02 |
|  | 1 N.O./1 N.C. slow make/break | 1             | 800B-PT11 |

(1) 800B-PT contact blocks must be used with an emergency stop operator to have a UL E-stop device.

# Replacement Parts and Accessories

Table 49 - Replacement Bulbs

|                                                                                     | Description                                    | Lamp Color | Lamp Voltage   | Pkg. Quantity | Cat. No. |
|-------------------------------------------------------------------------------------|------------------------------------------------|------------|----------------|---------------|----------|
|  | Light-emitting diode (LED) bulb <sup>(1)</sup> | Green      | 12...24V AC/DC | 1             | 800B-N3G |
|                                                                                     |                                                |            | 120V AC        |               | 800B-N5G |
|                                                                                     |                                                | Red        | 12...24V AC/DC |               | 800B-N3R |
|                                                                                     |                                                |            | 120V AC        |               | 800B-N5R |
|                                                                                     |                                                | White      | 12...24V AC/DC |               | 800B-N3W |
|                                                                                     |                                                |            | 120V AC        |               | 800B-N5W |
|  | Incandescent bulb <sup>(2)</sup>               | Clear      | 6V AC/DC       | 1             | 800B-N1C |
|                                                                                     |                                                |            | 12V AC/DC      |               | 800B-N2C |
|                                                                                     |                                                |            | 24V AC/DC      |               | 800B-N3C |

(1) Not available in 6V AC/DC.

(2) Not available in 120V AC.



Table 50 - Accessories

|                                                                                     | Description                      | Pkg. Quantity | Cat. No.     |
|-------------------------------------------------------------------------------------|----------------------------------|---------------|--------------|
|    | Replacement mounting ring        | 10            | 800B-ARP     |
|    | Mounting ring wrench             | 1             | 800B-AW2     |
|    | Bulb removal tool                | 1             | 800B-ALR1    |
|    | Lens removal tool                | 1             | 800B-ALR2    |
|    | Locking washer (anti-rotation)   | 10            | 800B-ALW1    |
|    | Stab connector (insulated)       | 10            | 800B-ATK     |
|   | Hole plug                        | 10            | 800B-N2      |
|  | Replacement key                  | 1             | 800B-AK1     |
|  | Printed circuit board pin socket | 10            | 800B-APCB    |
|  | Emergency stop legend plate      | 1             | 800B-15YE112 |
|  | Square bezel                     | 10            | 800B-ABZB    |
|  | Rectangle bezel                  | 10            | 800B-ABZC    |
|  | Large square bezel               | 10            | 800B-ABZD    |

# Specifications

| Mechanical Ratings                                            |                  |                                                                                                                        |           |
|---------------------------------------------------------------|------------------|------------------------------------------------------------------------------------------------------------------------|-----------|
| Vibration (assembled to panel)                                |                  | Tested at 10...2000 Hz, 1.52 mm displacement (peak-to-peak) max/10 G max for 6 hr duration, no damage                  |           |
| Shock                                                         |                  | Tested at 1/2 cycle sine wave for 11 ms; no damage at 100 G                                                            |           |
| Degree of protection <sup>(1)</sup>                           |                  | IP66, NEMA/UL Type 4/4X/13                                                                                             |           |
| Mechanical durability per EN 60947-5-1 (Annex C)              | 2,000,000 Cycles | Push buttons – momentary                                                                                               |           |
|                                                               | 1,000,000 Cycles | Push buttons – maintained                                                                                              |           |
|                                                               | 250,000 Cycles   | Selector switch                                                                                                        |           |
|                                                               | 200,000 Cycles   | Key selector switch                                                                                                    |           |
|                                                               | 200,000 Cycles   | Twist-to-release E-stop                                                                                                |           |
| Operating forces (typical with one contact block)             |                  | Extended = 5...8 N / E-stop = 14...16 N                                                                                |           |
| Operating torque (typical application with one contact block) |                  | Selector switch = 0.06 N•m (0.5 lb•in)                                                                                 |           |
| Mounting torque                                               |                  | 1.1 N•m (10 lb•in)                                                                                                     |           |
| Environmental                                                 |                  |                                                                                                                        |           |
| Temperature range (operating)                                 |                  | -25...+55 °C (-13...+131 °F)                                                                                           |           |
| Temperature range (short-term storage)                        |                  | -40...+70 °C (-40...+158 °F)                                                                                           |           |
| Humidity                                                      |                  | ≤95% RH from 25...60 °C (77...140 °F)                                                                                  |           |
| Mechanical Ratings – Contact Blocks <sup>(2)</sup>            |                  |                                                                                                                        |           |
| Vibration (assembled to panel)                                |                  | Tested at 10...2000 Hz, 1.52 mm displacement (peak-to-peak) max/10 G max 6 hr                                          |           |
| Shock                                                         |                  | Tested at 1/2 cycle sine-wave for 11 ms and no damage at 100 G max                                                     |           |
| Contact durability                                            |                  | 200,000 cycles (Cat. No. 800B-PS...)                                                                                   |           |
| Contact operation                                             | N.O. / N.C.      | Snap action                                                                                                            |           |
|                                                               | N.C.             | Slow make/break – positive opening  |           |
|                                                               | N.O.             | Slow make/break                                                                                                        |           |
| Push button travel to change electrical state                 |                  | 1.4 mm (0.06 in.)                                                                                                      |           |
| Operating forces (typical)                                    |                  | 1 contact block = 3 N<br>2 contact blocks = 6 N                                                                        |           |
| Electrical Ratings                                            |                  |                                                                                                                        |           |
| Standard contact block ratings                                |                  | AC 15, B300, 1.5 A/240V AC, 3 A/120V AC / DC 13, R300, 0.1 A/250V DC, 0.22 A/125V DC                                   |           |
| LED Module ratings                                            | Nominal Voltage  | Current                                                                                                                | Frequency |
|                                                               | 12...24V AC      | 12 mA                                                                                                                  | 50/60 Hz  |
|                                                               | 12...24V DC      | 12 mA                                                                                                                  | DC        |
|                                                               | 120V AC          | 9 mA                                                                                                                   | 50/60 Hz  |
| Thermal current                                               |                  | I <sub>th</sub> = 5 A (AC), I <sub>th</sub> = 1 A (DC)                                                                 |           |
| Insulation voltage (U <sub>i</sub> )                          |                  | 300V                                                                                                                   |           |
| Stab termination                                              |                  | 2.8 x 0.5 mm                                                                                                           |           |
| Dielectric strength, min                                      |                  | 1500V 1 min.                                                                                                           |           |
| External short circuit protection – standard blocks           |                  | 6 A type gL/gG cartridge fuse to EN 60269-2-1 or gN (Class J to UL 248-8 or Class C to UL 248-4)                       |           |
| Electrical shock protection                                   |                  | Fingersafe conforming to IP2X                                                                                          |           |

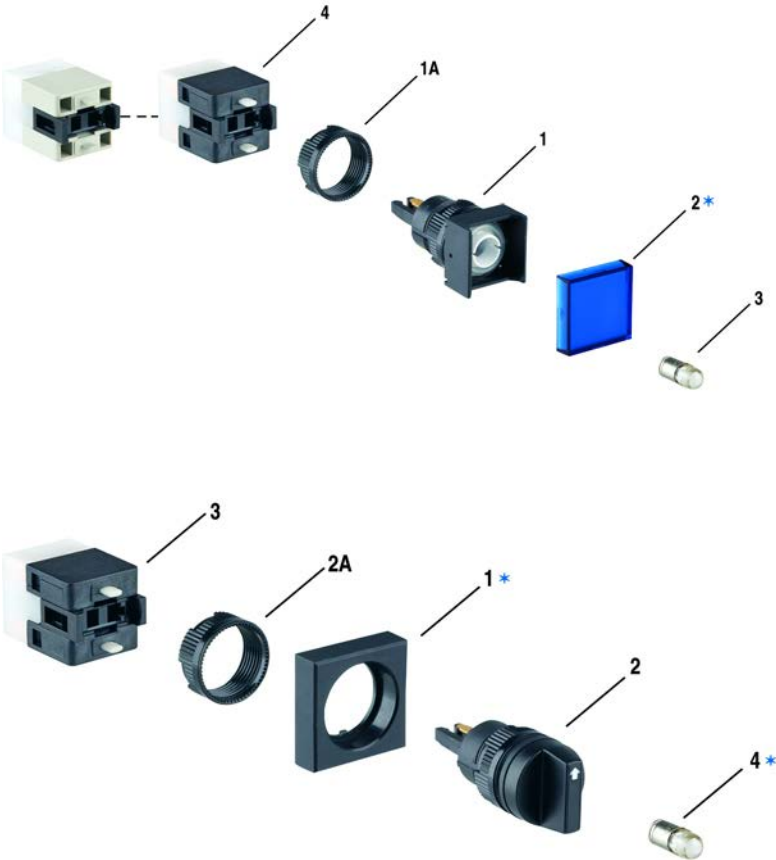
(1) Keyed selector switches do not meet NEMA/UL Type 4X rating.

(2) 800B-PT contact blocks must be used with an emergency stop operator to have a UL E-stop device.

| Illumination              |       |                                                    |
|---------------------------|-------|----------------------------------------------------|
| LED Dominant wavelength   | Green | 525 nm                                             |
|                           | Red   | 624 nm                                             |
|                           | White | —                                                  |
| LED Luminous intensity    | Green | 500 mcd                                            |
|                           | Red   | 400 mcd                                            |
|                           | White | 1000 mcd                                           |
| Incandescent wattage, max |       | 1.2 W                                              |
| Materials                 |       |                                                    |
| Springs                   |       | Stainless steel and gold-plated, high-carbon steel |
| Electrical contacts       |       | Gold-plated silver                                 |
| Stab terminals            |       | Phosphor bronze with gold or nickel plating        |
| Lenses                    |       | Polycarbonate                                      |

| Standards Compliance and Certifications |                                                              |
|-----------------------------------------|--------------------------------------------------------------|
| Certifications                          | UR, CSA, CCC, CE                                             |
| Standards Compliance                    | UL 508, EN ISO 13850, EN 60947-1, EN 60947-5-1, EN 60947-5-5 |
| Terminal Identification                 | EN/IEC 60947-1                                               |
| RoHS Compliant                          | Yes                                                          |

# Operator Assembly Sequence

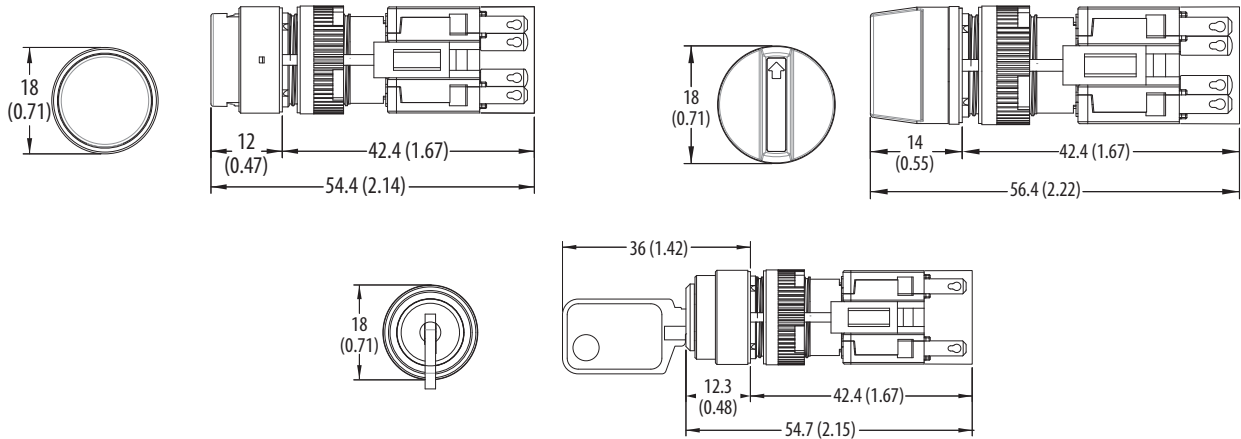


\* Optional

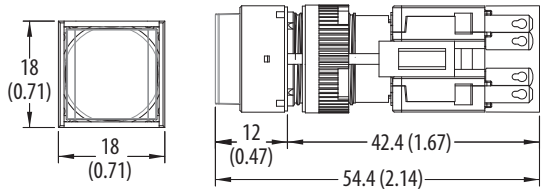
# Approximate Dimensions

Dimensions in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.

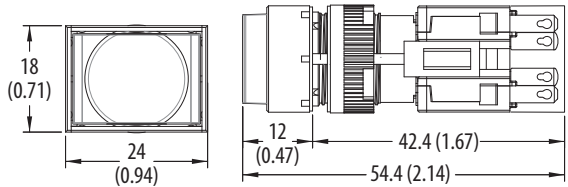
## Round



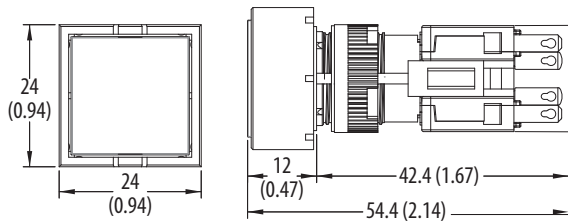
## Square



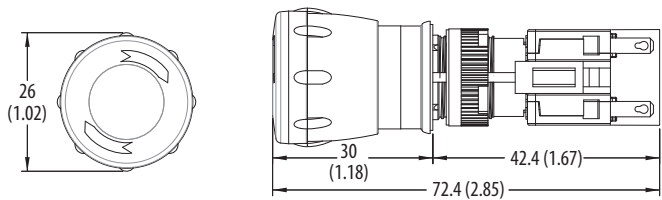
## Rectangle



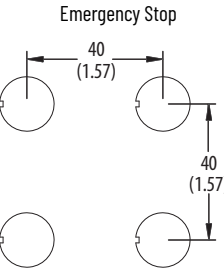
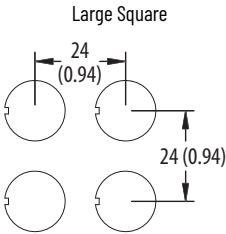
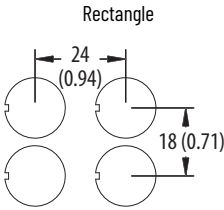
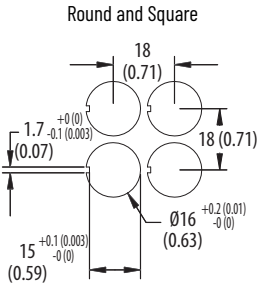
## Large Square



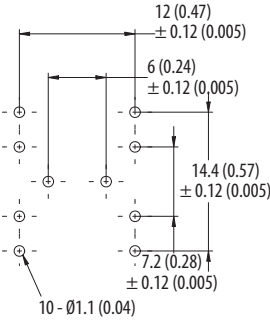
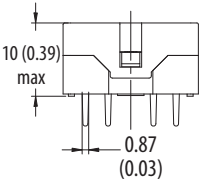
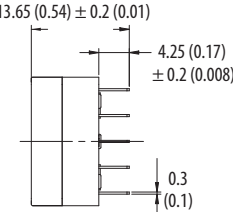
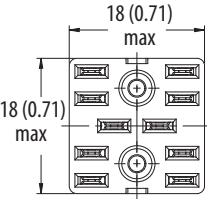
## Emergency Stop



Hole Patterns



Printed Circuit Board Pin Socket



**Notes:**

## Additional Resources

These documents contain additional information concerning related products from Rockwell Automation. You can view or download publications at [rok.auto/literature](http://rok.auto/literature).

| Resource                                                                                                                           | Description                                                                                                                                                                                                                                                                     |
|------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 800F 22 mm Push Button Brochure, publication <a href="#">800F-BR001</a>                                                            | Provides an overview of the Bulletin 800F product family.                                                                                                                                                                                                                       |
| Don't Let Contact Build-up Cause Machine Downtime, publication <a href="#">800-AT002</a>                                           | Provides solutions to help prevent downtime due to contact build-up.                                                                                                                                                                                                            |
| UL Standards Listing for Industrial Control Products, publication <a href="#">CMPNTS-SR002</a>                                     | Assists original equipment manufacturers (OEMs) with construction of panels, to help ensure that they conform to the requirements of Underwriters Laboratories.                                                                                                                 |
| American Standards, Configurations, and Ratings: Introduction to Motor Circuit Design, publication <a href="#">IC-AT001</a>        | Provides an overview of American motor circuit design based on methods that are outlined in the NEC.                                                                                                                                                                            |
| Industrial Components Preventive Maintenance, Enclosures, and Contact Ratings Specifications, publication <a href="#">IC-TD002</a> | Provides a quick reference tool for Allen-Bradley industrial automation controls and assemblies.                                                                                                                                                                                |
| Safety Guidelines for the Application, Installation, and Maintenance of Solid-state Control, publication <a href="#">SGI-1.1</a>   | Designed to harmonize with NEMA Standards Publication No. ICS 1.1-1987 and provides general guidelines for the application, installation, and maintenance of solid-state control in the form of individual devices or packaged assemblies incorporating solid-state components. |
| Industrial Automation Wiring and Grounding Guidelines, publication <a href="#">1770-4.1</a>                                        | Provides general guidelines for installing a Rockwell Automation industrial system.                                                                                                                                                                                             |
| Product Selection and Configuration tools, <a href="http://rok.auto/systemtools">rok.auto/systemtools</a>                          | Helps configure complete, valid catalog numbers and build complete quotes based on detailed product information.                                                                                                                                                                |
| Product Certifications website, <a href="http://rok.auto/certifications">rok.auto/certifications</a>                               | Provides declarations of conformity, certificates, and other certification details.                                                                                                                                                                                             |

# Rockwell Automation Support

Use these resources to access support information.

|                                                         |                                                                                                         |                                                                  |
|---------------------------------------------------------|---------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| <b>Technical Support Center</b>                         | Find help with how-to videos, FAQs, chat, user forums, Knowledgebase, and product notification updates. | <a href="http://rok.auto/support">rok.auto/support</a>           |
| <b>Local Technical Support Phone Numbers</b>            | Locate the telephone number for your country.                                                           | <a href="http://rok.auto/phonesupport">rok.auto/phonesupport</a> |
| <b>Technical Documentation Center</b>                   | Quickly access and download technical specifications, installation instructions, and user manuals.      | <a href="http://rok.auto/techdocs">rok.auto/techdocs</a>         |
| <b>Literature Library</b>                               | Find installation instructions, manuals, brochures, and technical data publications.                    | <a href="http://rok.auto/literature">rok.auto/literature</a>     |
| <b>Product Compatibility and Download Center (PCDC)</b> | Download firmware, associated files (such as AOP, EDS, and DTM), and access product release notes.      | <a href="http://rok.auto/pcdc">rok.auto/pcdc</a>                 |

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