

Hazardous Location Push Button Specifications

Bulletin Numbers 800G, 800H, and 800R

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Additional Resources

These documents contain additional information concerning related products from Rockwell Automation.

Resource	Description
Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1	Provides general guidelines for installing a Rockwell Automation industrial system.
Product Certifications website, http://www.rockwellautomation.com/global/certification/overview.page	Provides declarations of conformity, certificates, and other certification details.

You can view or download publications at <http://www.rockwellautomation.com/literature/>. To order paper copies of technical documentation, contact your local Allen-Bradley distributor or Rockwell Automation sales representative.



Product Description (Bul. 800H)

Application

When properly mounted in a Type 7 & 9 enclosure, Bulletin 800H Type 7 & 9 operators are designed to meet the requirements of the National Electrical Code for Class I, Divisions 1 & 2, Groups B, C & D Hazardous Gas; Class II, Divisions 1 & 2, Groups E, F and G Hazardous Dust; and, Class III Hazardous Fiber Locations. In addition, the single-gang shallow base, Cat. No. 800H-IHZX7, meets Class I, Group B requirements. This Type 7 & 9 equipment is listed by Underwriters Laboratories, Inc.

Per National Electrical Code:

Zone 1: In Class I, Zone 1 locations, all wiring methods permitted for Class I, Division 1 locations and Class I, Zone 0 or Zone 1 locations, including requirements for sealing, shall be permitted.

Zone 2: In Class I, Zone 2 locations, all wiring methods permitted for Class I, Division 2, Class I, Division 1 or Division 2, and Class I, Zone 0 or Zone 1 locations, including requirements for sealing, shall be permitted.

Operator Construction

The Allen-Bradley line of hazardous location devices features copper-free (less than 0.4 of 1% copper content) die cast aluminum bushings and mounting rings, Type #316 stainless steel operating shafts and an O-ring seal for added corrosion resistance. These components mount into a threaded hole (3/4 in.-14 NPSM) in a suitable enclosure.

Bulletin 800H Type 7 & 9 components are available in two basic formats: standard barrel (Bulletin 800H) and long barrel (Bulletin 800HL). Standard barrel devices are suitable for mounting in panel thickness up to 1 in. thick. Long barrel devices are suitable for mounting in panel thickness greater than 1 in. and no thicker than 2-1/2 in. Both style operators offer a unique locking bracket, which provides an anti-turn feature to prevent the operator from coming loose. The mounting rings in front of the panel are knurled to provide a second way to tighten each unit into the panel.

Outdoor Use

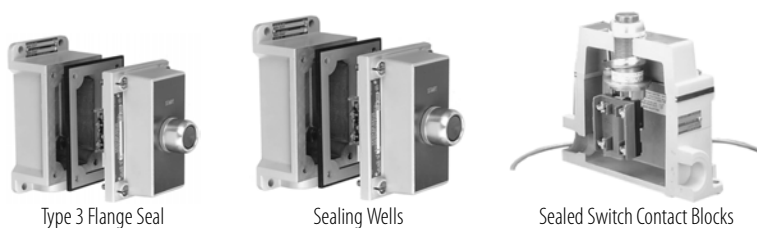
Bulletin 800H Type 7 & 9 stations and enclosures are not configured for outdoor use as standard. A Type 3 rating is available, while maintaining Type 7 & 9 integrity of the enclosure, by the addition of a Type 3 sealing flange and an approved drain. The sealing flange that is shown in [Figure 1](#) can be purchased as an option or as an accessory. A Type 4 rating can be achieved by using sealing nuts to seal the push button operators along with the sealing flange. Sealing nuts are available as accessories (see our [website](#).)

Elimination of Conduit Seal Off Requirement

Bulletin 800H Type 7 & 9 units can be installed with various sealing options. By using a flanged sealing well, these stations can be installed without a conduit seal off in most applications (subject to applicable codes and laws). The sealing wells that are shown in [Figure 1](#) can be purchased as an option or as an accessory. Sealing wells have an integral Type 3 flange seal for outdoor applications.

Sealed switch contact blocks are another way to help eliminate the need for conduit seal fittings in most applications (subject to applicable codes and laws). Sealed switch contact blocks can be purchased as an option on assembled stations by changing the Bulletin No. from 800H to 800R. Sealed switch contact blocks can be ordered as an accessory (see our [website](#)). A push button station with a sealed switch contact block is shown in [Figure 1](#).

Figure 1 - Sealing Options



Notes:

Specifications (Bul. 800H)



ATTENTION: 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 may 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 - Electrical Ratings

Contact Ratings	See the contact ratings on page 6 .
Dielectric Strength	2200V for 1 minute, 1300V for 1 minute (Logic Reed)
Electrical Design Lifecycles	1 000 000 at max. rated load, 200 000 at max. rated load (Logic Reed)

Table 2 - Mechanical Ratings

Vibration	10 . . . 2000 Hz 1.52 mm displacement (peak-to-peak) Max./10 G Max. (except Logic Reed)
Shock	1/2 cycle sine-wave for 11 ms \geq 25 G (contact fragility) and no damage at 100 G
Degree of Protection	Type 7 & 9 Explosion Proof (Type 3 and Type 4 ratings available with accessories)
Mechanical Design Lifecycles	
Push Buttons	250 000 minimum
Potentiometers	100 000 minimum
All other devices	200 000 minimum
Contact Operation	Shallow and mini contact blocks: slow double make and break Logic Reed and sealed switch contact blocks: snap-action
Wire Gauge/Terminal Screw Torque	# 18 . . . 12 AWG/6 . . . 8 lb•in
Typical Operating Forces	
Operators without contact blocks:	<i>Flush, extended, standard mushroom, jumbo mushroom:</i> 2.9 lb max. <i>Jumbo and extended aluminum mushroom head:</i> 3.95 lb maximum <i>Maintained selector switch:</i> 4.0 in•lb maximum
Spring-return Selector Switches	5 in•lb to stop, 0.2 in•lb to return
Illuminated Push Buttons and Push-to-test Pilot Lights	5.6 lb maximum
2-Position Push-Pull	9 lb maximum push or pull
3-Position Push-Pull	12 lb maximum push to in position or pull to center position (15 lb maximum pull to out position)
Contact Blocks	<i>800T-XA:</i> 1 lb <i>Logic Reed:</i> 1 lb maximum <i>Sealed Switch:</i> 3 lb maximum at 0.205 in. plunger travel <i>Stackable Sealed Switch:</i> 1 lb maximum

Table 3 - Environmental

Temperature Range	<i>Operating:</i> -4 . . . 13 °F (-20 . . . 55 °C) <i>Storage:</i> -40 . . . 185 °F (-40 . . . 85 °C)
Note: Operating temperatures below freezing are based on the absence of freezing moisture and liquids.	
Humidity	50% at 104 °F (40 °C)

Standard Contact Ratings

Maximum thermal continuous current I_{th} 10 A AC/2.5 A DC. Bulletin 800H Type 7 & 9 units with Cat. No. 800T-XA contacts have ratings as follows:

Table 4 - Standard Contact Ratings

Max. Operational Volts U_e	Utilization Category		Rated Operational Currents		
	IEC	NEMA	Volts U_e	Make	Break
AC 600	AC-15	A600	120...600	7200VA	720VA
			72...120	60 A	720VA
			24...28 ①	60 A	10 A
DC 600	DC-13	Q600	28...600	69VA	
			24...28 ①	2.5 A	

① For applications below 24V and 24 mA, PenTUFF™, Logic Reed, or stackable sealed switch contacts are recommended.

Sealed Switch Contact Ratings

Maximum continuous current I_{th} 5 A.

Table 5 - Sealed Switch Contact Ratings

Max. Operational Volts U_e	Utilization Category		Rated Operational Currents		
	IEC	NEMA	Volts U_e	Make	Break
AC 600	AC-15	B600	120...600	3600VA	360VA
			0...120	30 A	3 A
DC 300	DC-13	P300	24...300	138VA	
			0...28	5.0 A	

Stackable Sealed Switch Contact Ratings

Maximum continuous current I_{th} 3 A. Bulletin 800T units have control circuit ratings with sealed switch contact blocks as follows:

Table 6 - Stackable Sealed Switch Contact Ratings

Max. Operational Volts U_e	Utilization Category		Rated Operational Currents		
	IEC	NEMA	Volts U_e	Make	Break
AC 300	AC-15	C300	120...300	1800VA	180VA
			0...120	15 A	1.5 A
DC 150	DC-13	Q150	24...150	69VA	
			0...24	2.5 A	

Logic Reed Contact Ratings

Maximum: 150V AC, 0.15 A, 8VA and 30V DC, 0.06 A, 1.8VA.

Should only be used with resistive loads.

PenTUFF (Low Voltage) Contact Ratings

Minimum DC: 5V, 1 mA

Maximum thermal continuous current I_{th} 2.5 A AC/1.0 A DC.

Bulletin 800H units with Cat. No. 800T-XAV contacts have ratings as follows:

Table 7 - PenTUFF (Low Voltage) Contact Ratings

Max. Operational Volts U_e	Utilization Category		Rated Operational Currents		
	IEC	NEMA	Volts U_e	Make	Break
AC 300	AC-15	C300	120...300	1800VA	180VA
			0...120	15 A	1.5 A
DC 150	DC-13	R150	24...150	28VA	
			0...24	1.0 A	

Standards Compliance

UL508, UL698, UL1203, UL1604,
CSA C22.2 No. 14, CSA C22.2 No. 25, CSA C22.2 No. 30

Certifications

Enclosures:

UL Listed (File No. E71673 Guide No. NNNY)
CSA (File No. LR11924)

Devices:

UL Listed (File No. E10314 Guide No. NOIV)
CSA (File No. LR11924)

Notes:

Momentary Contact Push Buttons Units (Bul. 800H)

Non-Illuminated



Flush Head Unit
Cat. No. 800H-AP1A



Extended Head Unit
Cat. No. 800H-BP6B



Mushroom Head Unit
Cat. No. 800H-DP6A

800 H – AP 1 A

a *b* *c* *d* *e*

a

Barrel Type	
Code	Description
H	Standard barrel
HL	Long barrel

b

Operator Type	
Code	Description
AP	Flush head
BP	Extended head
DP	Mushroom head
DPX	Mushroom head (less color cap)

c

Color Cap	
Code	Description
Blank	Used only when operator type Code DPX (Table b) is ordered
1	Green
2	Black
3	Orange
4	Gray
6	Red
7	Blue
9	Yellow

d

Special Mushroom Head ❶	
Code	Description
Blank	No special head
J	Jumbo mushroom head — plastic
L	Jumbo mushroom head — metal

❶ Special mushroom head options only apply to mushroom head operator type code **DP** (Table b).

e

Contact Blocks ❷	
Standard	
Code	Description
Blank	No contacts
D1	1 N.O.
D2	1 N.C.
D5	1 N.O. (Mini)
D6	1 N.C. (Mini)
A2	2 N.O.
A4	2 N.C.
A	1 N.O. - 1 N.C.
B	2 N.O. - 2 N.C.
H	3 N.O. - 3 N.C.
C	4 N.O. - 4 N.C.
PenTUFF™ (Low Voltage)	
Code	Description
D1V	1 N.O.
D2V	1 N.C.
AV	1 N.O. - 1 N.C.
BV	2 N.O. - 2 N.C.
HV	3 N.O. - 3 N.C.
CV	4 N.O. - 4 N.C.

❷ For sealed switch and Logic Reed contact blocks, consult your local Rockwell Automation sales office or Allen-Bradley distributor.

Dual Momentary Contact Push Button Units

800 **H** – **DP** **H** **16** **AAXX** **64**

a *b* *c* *d* *e* *f*



Dual Push Button Unit
Cat. No. 800H-DPH16AXX64

a

Barrel Type	
Code	Description
H	Standard barrel
HL	Long barrel

d

Color of Button	
Code	Description
16	Left green flush/right red extended
22	Left black flush/right black flush

f

Marking		
Code	Description	
	Left button (horizontal) Top button (vertical)	Right button (horizontal) Bottom button (vertical)
Blank	No mark specified	No mark specified
64	START	STOP
50	ON	OFF
51	FORWARD	REVERSE
57	OPEN	CLOSE
66	UP	DOWN
99 ②	Marking specified	Marking specified

b

Operator Type	
Code	Description
DP	Dual push button

e

Contact Blocks ①		
Code	Contact Arrangement	
	Left button (horizontal) Top button (vertical)	Right button (horizontal) Bottom button (vertical)
AAXX	1 N.O. - 1 N.C.	1 N.O. - 1 N.C.
AAAA	2 N.O. - 2 N.C.	2 N.O. - 2 N.C.

c

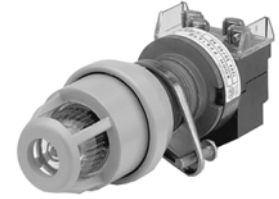
Mounting	
Code	Description
H	Horizontal
B	Vertical

① For sealed switch and Logic Reed contact blocks, consult your local Rockwell Automation sales office or Allen-Bradley distributor.

② To order with special marking, please specify; seven characters maximum per button, single line only.

Illuminated

800 H – PPB H 16 M
 a *b* *c* *d* *e* *f*



Extended Head with Guard
 Cat. No. 800H-PPB16M

a

Barrel Type	
Code	Description
H	Standard barrel
HL	Long barrel

b

Power Module Type	
Code	Description
PPB	Transformer (or dual input)
QPB	Full voltage/Universal

c

Illumination Options	
Code	Description
Blank	Incandescent
H	LED

Dual Input	
Code	Description
D	Diode type, incandescent ❶
T	Transformer — relay type, incandescent
TH	Transformer — relay type, LED

❶ Diode type dual input provides circuit isolation via opposing diodes. Not recommended for use with solid-state outputs and neon indicators.

d

Voltage	
Code	Description
Transformer	
16	120V AC 50/60 Hz
26	240V AC 50/60 Hz
46	480V AC 50/60 Hz
56	600V AC 50/60 Hz
Full Voltage — Incandescent	
24	24V AC/DC
10	120V AC/DC
20	240V AC/DC
Universal — LED	
2	12...130V AC/DC
Dual Input	
16	120V AC
24	24V AC/DC ❷

❷ Dual input diode only.

e

Lens Color	
Code	Description
Blank	No lens, with standard contacts 1 N.O. - 1 N.C.
X	No lens provided with any contacts ordered other than standard 1 N.O. - 1 N.C.
M	Multi-color ❸

❸ Multi-color insert packet includes amber, blue, green, red, and white.

f

Contact Blocks ❹	
Code	Description
Standard	
Blank	1 N.O. - 1 N.C.
X	No contacts
D1	1 N.O.
D2	1 N.C.
A2	2 N.O.
A4	2 N.C.
PenTUFF (Low Voltage)	
D1V	1 N.O.
D2V	1 N.C.
AV	1 N.O. - 1 N.C.

❹ For sealed switch and Logic Reed contact blocks, consult your local Rockwell Automation sales office or Allen-Bradley distributor.

Notes:

Push Pull Units (Bul. 800H)

Non-illuminated 2-position

800 H – FPX 1 A1
 a *b* *c* *d* *e*



2-Position Push-Pull
Cat. No. 800H-FPX6A5

a

Barrel Type	
Code	Description
H	Standard barrel
HL	Long barrel

b

Operator Type	
Code	Description
FPX	Push-pull unit



c

Head Type	
Code	Description
Blank	Mushroom head
J	Jumbo mushroom head ❶

d

Color Cap	
Code	Description
Blank	No cap
1	Green
2	Black
4	Gray (silver)
6	Red
7	Blue
9	Yellow (gold)

e

Contact Blocks			
Code	Operator Position		Description
			
	Out	In	
Standard			
Blank	—	—	No contacts
A1	0 X	X 0	1 N.O. - 1 N.C.L.B. ❶
A5	X X	0 0	2 N.C.L.B. ❶
D1	0	X	1 N.O.
D4	X	0	1 N.C.L.B. ❶
PenTUFF™ (Low Voltage)			
D1V	0	X	1 N.O.
AV	0 X	X 0	1 N.O. - 1 N.C.

Note: X = Closed/0 = Open

- ❶ Normally closed late break contact. When button is pushed from the OUT to the IN position, the mechanical detent action of the operator occurs before electrical contacts change state. When the button is pulled from the IN to the OUT position, the electrical contacts change state before the mechanical detent occurs.

3-position

800 H – FPX M 1 A7
 a *b* *c* *d* *e* *f*



3-Position Push-Pull
 Cat. No. 800H-FPX M6A7

a

Barrel Type	
Code	Description
H	Standard barrel
HL	Long barrel

b

Operator Type	
Code	Description
FPX	Push-pull unit

c

Head Type	
Code	Description
Blank	Mushroom head
J	Jumbo mushroom head ❶

❶ Not valid with color cap option code **Blank** (Table e)

d

Operator Function			
Code	Operator Position		
	Out	Center	In
M	Momentary	Maintained	Maintained
N	Momentary	Maintained	Momentary

e

Color Cap	
Code	Description
Blank	No cap
1	Green
2	Black
4	Gray (silver)
6	Red
7	Blue
9	Yellow (gold)

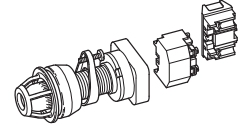
f

Contact Blocks				
Standard				
Code	Operator Position			Description
	Out	Center	In	
Blank	—	—	—	No contacts
A	0 X	0 0	X 0	1 N.O. - 1 N.C.
A1	0 X	0 X	X 0	1 N.O. - 1 N.C.L.B.
A7	X X	0 X	0 0	1 N.C. - 1 N.C.L.B.
B6	X X	0 X	0 0	2 N.C. - 2 N.C.L.B.
PentUFF (Low Voltage)				
AV	0 X	0 0	X 0	1 N.O. - 1 N.C.

Note: X = Closed/0 = Open

Illuminated

2- and 3-position



800 **H** – **FPX** **PH** **16** **M** **A1**

a *b* *c* *d* *e* *f* *g*

a

Barrel Type	
Code	Description
H	Standard barrel
HL	Long barrel

b

Operator Type	
Code	Description
FPX	Push-pull unit

c

Operator Function	
2-Position	
Code	Description
Blank	Push-pull

3-Position			
Code	Operator Position		
	Out	Center	In
M	Mom.	Main.	Main.
N	Mom.	Main.	Mom.

Note Mom. = Momentary
Main. = Maintained

Table 1 - Target Selection

g Code	2-Position		Contact Description	3-Position			g Code
A, AV, R	0 X	X 0	N.O. N.C.	0 X	0 0	X 0	A, AV, AR
A1	0 X	X 0	N.O. N.C.L.B.	0 X	0 X	X 0	A1
A2	0 X	0 X	N.O. N.O.	— —	— —	— —	—
A5	X 0	X 0	N.C.L.B. N.C.L.B.	— —	— —	— —	—
—	— —	— —	N.C. N.C.L.B.	X X	0 X	0 0	A7
D1, D1V, D1R	0	X	N.O.	—	—	—	—
D4	X	0	N.C.L.B.	—	—	—	—

d

Illumination Options	
Code	Description
Transformer	
P	Incandescent
PH	LED
Full Voltage	
Q	Incandescent
QH	Universal LED
Dual Input	
D	Dual input — diode ❶
DT	Dual input — transformer relay
DTH	Dual input transformer — relay LED

❶ Diode type dual input provides circuit isolation via opposing diodes. Not recommended for use with solid-state outputs and neon indicators.

e

Voltage	
Code	Description
Transformer	
16	120V AC 50/60 Hz
26	240V AC 50/60 Hz
46	480V AC 50/60 Hz
56	600V AC 50/60 Hz
Full Voltage — Incandescent	
24	24V AC/DC
10	120V AC/DC
20	240V AC/DC
Universal — LED	
2	12...130V AC/DC
Universal — LED	
16	120V AC
24	24V AC/DC ❷

❷ Dual input diode only.

f

Color Cap	
Code	Description
Blank	No lens with no contacts
X	No lens with contacts
M	Multi-color ❸

❸ Multi-color insert packet includes amber, blue, green, red, and white.

g

Contact Blocks	
Code	Description
Standard	
Blank	No contacts
D1	1 N.O.
D4	1 N.C.L.B. ❹
A	1 N.O. - 1 N.C.
A1	1 N.O. - 1 N.C.L.B. ❹
A2	2 N.O.
A5	2 N.C.L.B.
A7	1 N.C. - 1 N.C.L.B. ❹

PenTUFF Low Voltage	
D1V	1 N.O.
D2V	1 N.C.
AV	1 N.O. - 1 N.C.

Logic Reed	
D1R	1 N.O.
D2R	1 N.C.
AR	1 N.O. - 1 N.C.
A2R	2 N.O.
A4R	2 N.C.

❹ Normally closed late break contact. When button is pushed from the OUT to the IN position, the mechanical detent action of the operator occurs before electrical contacts change state. When the button is pulled from the IN to the OUT position, the electrical contacts change state before the mechanical detent occurs.

Notes:

Selector Switch Units (Bul. 800H)

Non-illuminated

2-position



Standard Knob Operator
Cat. No. 800H-HP2KB6AXXX



Knob Lever Operator
Cat. No. 800H-HP17KB6AXXX



Metal Wing Lever Operator
Cat. No. 800H-HP11KB6AXXX

800 H — HP A 2 KB6 AXXX (Knob/Wing Lever)
 a b c d e f

800 H — HP 31 KB6 AXXX (Cylinder Lock)
 a b c₁ d₁ e f

a

Barrel Type	
Code	Description
H	Standard barrel
HL	Long barrel

b

Number of Positions	
Code	Description
HP	2-position

c

Knob Insert Colors ❶	
Code	Description
Blank	White
X	Packet of colored inserts ❷

Metal Wing Lever Colors

A	Red
Blank	Gray

❶ Each standard and knob lever operator is factory-assembled with a white insert. Other colors are available, factory-assembled, if ordered in quantities of 10 or more.

❷ One insert of each color (blue, green, orange, red, and yellow).

c₁

Key Removal Position	
Code	Description
Maintained	
31	Key removal — left
32	Key removal — right
33	Key removal — both
Spring Return from Left	
42	Key removal — right ❸
Spring Return from Right	
48	Key removal — left

❸ Target tables are reversed.

d

Operator Type and Function	
Code	Description
Standard Knob	
2	Maintained
4	Spring return from left ❹
5	Spring return from right

Knob Lever

17	Maintained
18	Spring return from left ❹
19	Spring return from right

Metal Wing Lever

11	Maintained
15	Spring return from left ❹
16	Spring return from right

❹ Target tables are reversed.

d₁

Optional Keys			
Code	D Series Key No.	Code	T Series Key No.
Blank	D018 (std. key)	15	T112
03	D020	16	T115
04	D025	17	T324
05	D335	18	T382
06	D429	19	T404
07	D461	20	T171
08	D111	21	T484
09	D587	22	T547
10	D682	23	T569
11	D713	24	T692
12	D900	25	T752
13	D992	26	T178
14	D118	—	—

e

Cam Option	
Code	Description
KB6	Cam for maintained operators
KL8	Cam for spring return operators

f

Contact Blocks			
Code	Contact Configuration	2-position	
Standard			
Blank	No contacts	—	—
DXXX	1 N.O.	0	X
EXXX	1 N.C.	X	0
MXXX	2 N.O.	0 0	X X
NXXX	2 N.C.	X X	0 0
AXXX	1 N.O. - 1 N.C.	0 X	X 0
AAXX	2 N.O. - 2 N.C.	0 X 0 X	X 0 X 0

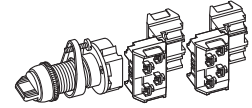
PenTUFF™ (Low Voltage)

HXXX	1 N.O.	0	X
UXXX	1 N.C.	X	0
FXXX	1 N.O. - 1 N.C.	0 X	X 0
FFXX	2 N.O. - 2 N.C.	0 X 0 X	X 0 X 0

Note: X = Closed/0 = Open

4-position

800 H – NP 2 KF4 AAXX (Knob/Wing Lever)



800 H – NP 31 KF4 AAXX (Cylinder Lock)

a	
Barrel Type	
Code	Description
H	Standard barrel
HL	Long barrel

b	
Number of Positions	
Code	Description
NP	4-position

c	
Knob Insert Colors ❶	
Code	Description
Blank	White
X	Packet of colored inserts ❷

c	
Metal Wing Lever Colors	
Code	Description
A	Red
Blank	Gray

❶ Each standard and knob lever operator is factory-assembled with a white insert. Other colors are available, factory-assembled, if ordered in quantities of 10 or more.

❷ One insert of each color (blue, green, orange, red, and yellow).

c₁	
Key Removal Position and Operator Function	
Code	Description
Maintained	
31	Key removal position 1
32	Key removal position 2
33	Key removal position 3
34	Key removal position 4
61	Key removal all positions
Spring Return from Position 1 to 2	
132	Key removal position 2
133	Key removal position 3
134	Key removal position 4
154	Key removal positions 2, 3, and 4
Spring Return from Position 4 to 3	
231	Key removal position 1
232	Key removal position 2
233	Key removal position 3
251	Key removal positions 1, 2, and 3

d	
Operator Type and Function	
Code	Description
Standard Knob	
2	Maintained
3	Spring return position 1 to 2
9	Spring return from position 4 to 3
Knob Lever	
17	Maintained
29	Spring return from position 1 to 2
30	Spring return from position 4 to 3
Metal Wing Lever	
11	Maintained
13	Spring return from position 1 to 2
14	Spring return from position 4 to 3

d₁	
Optional D-Series Keys ❸	
Code	Description
Blank	D018 (standard key)

❸ Devices are supplied with two keys. Replacement part number for standard D018 key is X-181170.

e	
Cam Option	
Code	Description
KF4	F cam (standard)
KG4	G cam
KK4	K cam
KM4	M cam
KP4	P cam
KH4	Overlapping cam

f	
Contact Block Options	
Code	Description
Blank	No contacts
AAXX	Two contact targets for a given cam as shown in the W (white side) column of Table 1 and two contact targets for the same cam as shown in the B (black side) column of Table 1. (One Cat. No. 800T-XA contact block per side. Two contact blocks total)
AAAA	Four contact targets for a given cam as shown in the W (white side) column of Table 1 and four contact targets for the same cam as shown in the B (black side) column of Table 1. (Two Cat. No. 800T-XA contact blocks per side. Four contact blocks total.)
PentUFF (Low Voltage)	
FFXX	Two contact targets for a given cam as shown in the W (white side) column of Table 1 and two contact targets for the same cam as shown in the B (black side) column of Table 1. (One Cat. No. 800T-XAV contact block per side. Two contact blocks total)
FFFF	Four contact targets for a given cam as shown in the W (white side) column of Table 1 and four contact targets for the same cam as shown in the B (black side) column of Table 1. (Two Cat. No. 800T-XAV contact blocks per side. Four contact blocks total.)

Table 1 - Selector Switch Cam Targets

Contact Block Suffix Code	Contact Block Side	Circuits	Cam Codes																									
			KF4				KG4				KK4 ❶				KM4 ❶				KP4				KN4 ❷					
			↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻		
AAAA FFFF	White	A	X	0	0	0	X	X	0	0	0	0	X	X	X	0	0	0	0	0	0	0	X	0	X	0	0	
		B	0	X	0	0	0	0	X	0	X	X	0	0	0	X	X	0	0	X	0	0	X	0	0	0	0	X
		A	0	0	0	X	X	0	0	0	X	0	0	X	0	0	0	X	0	0	X	0	0	X	0	0	0	0
		B	0	0	X	0	0	0	0	X	0	X	X	0	0	X	0	0	X	0	0	X	0	0	X	0	0	0
	Black	A	X	0	0	0	X	X	0	0	0	0	X	X	X	0	0	0	0	0	0	0	X	0	X	0	0	
		B	0	X	0	0	0	0	X	0	X	X	0	0	0	X	X	0	0	X	0	0	X	0	0	0	0	X
		A	0	0	0	X	X	0	0	0	X	0	0	X	0	0	0	X	0	0	X	0	0	X	0	0	X	0
		B	0	0	X	0	0	0	0	X	0	X	X	0	0	X	0	0	X	0	0	X	0	0	X	0	0	0

❶ Not available with wing lever operator.

❷ Overlapping cam.

Note: X = Closed, 0 = Open For additional targets and overlapping cams, see Publication [800T-2.8](#).

Notes:

Pilot Light Devices (Bul. 800H)



Transformer Type Pilot Light
Cat. No. 800H-PP16M



Push-to-test Pilot Light
Cat. No. 800H-PPT16M



Pigtail Pilot Light
Cat. No. 800H-LP24M

800 H – PP T 16 M
 a b c d e f

a

Barrel Type	
Code	Description
H	Standard barrel
HL	Long barrel

b

Power Module Type	
Code	Description
PP	Transformer (or dual input)
QP	Full voltage/Universal
LP	Pigtail — full voltage ❶
LPK	Pigtail — full voltage ❶ (for dual push buttons)

❶ Lamp test option is not available with pigtail.

c

Lamp Test Options	
Code	Description
Blank	No test option
T	Push-to-test
D	Dual input — diode ❷
DT	Dual input — transformer relay ❷

❷ Only available with power module type code PP (Table b).

d

Illumination Option	
Code	Description
Blank	Incandescent
H	LED ❸

❸ LED illumination option is not available with diode-type dual-input lamp test options.

e

Voltage	
Code	Description
Transformer	
16	120V AC, 50/60 Hz
26	240V AC, 50/60 Hz
46	480V AC, 50/60 Hz
56	600V AC, 50/60 Hz
Full Voltage — Incandescent	
24	24V AC/DC
10	120V AC/DC
20	240V AC/DC
Universal — LED	
2	12...130V AC/DC
Dual Input	
16	120V AC
24	24V AC/DC ❹
Pigtail	
24	24V AC/DC
10	120V AC/DC
20	240V AC/DC

❹ Dual input diode only.

f

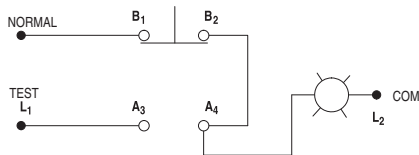
Lens Color	
Code	Description
Blank	No lens with no contacts
M	Multi-color ❺

❺ Multi-color insert packet includes amber, blue, green, red, and white.

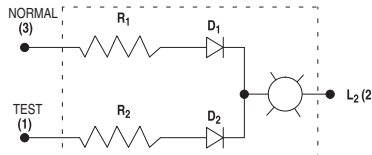
Typical Pilot Light Wiring Diagrams

See applicable codes and laws.

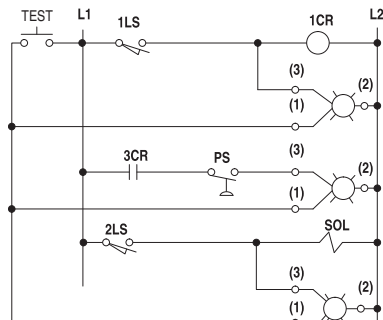
Push-to-test Pilot Light Device



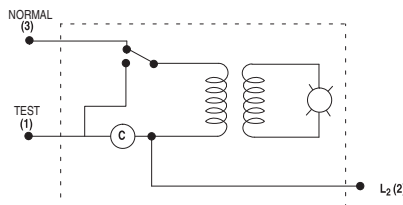
Dual Input Diode Pilot Device



Dual Input Pilot Light Typical Application



Dual Input Pilot Light Transformer Type Device



Notes:

Potentiometer Units ①②

800 H – UP 13

a

b



Potentiometer Units
Cat. No. 800H-UP24

a

Barrel Type	
Code	Description
H	Standard barrel
HL	Long barrel

b

Resistance ③	
Code	Description
13	1 kΩ
19	2.5 kΩ
24	5 kΩ
29	10 kΩ

- ① Single-turn operation with 312° rotation.
- ② Rated for 300V AC/DC, 2W maximum.
- ③ For operator only (no resistive element), order **catalog number 800H-NP37** which is for use with Type J potentiometers having a shaft length of 7/8 in. (22.2 mm) and a shaft diameter of 1/4 in. (6.3 mm).

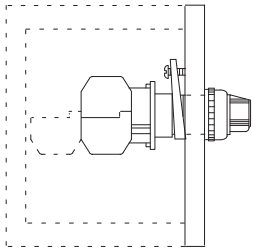
Notes:

Station Design Guidelines (Bul. 800H)

(Also see Applicable Codes and Standards)

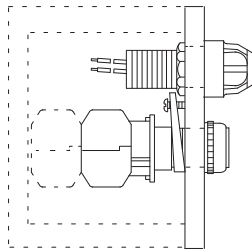
1. Push-to-test pilot lights, illuminated push buttons, push-to-pull units, 4-position selector switches, and all operators with two contact blocks that are fastened along side one another or with a power module and contact block along side one another must be installed in a single-hole cover. Illuminated operators that use the Universal LED module must also be installed in a single-hole cover.
2. Dual push button units can only be installed in a single-hole cover or the specially designed two-hole cover (catalog number 800H-NP33), which can accommodate the dual push button and the special pigtail pilot light (catalog number 800H-LPK10R).
3. When two components are installed in one cover, contact blocks are restricted to one side of the operator. Contact blocks of each operator must face each other.
4. One level of contact blocks is maximum in a shallow base or deep base when used with a sealing well. Contact blocks, except sealed switch type, can be mounted two deep in other bases.
5. If sealed switch contact blocks or a sealing well are used, a deep enclosure is required.
6. Push buttons/pilot lights:
 - a. START push buttons should be green or black flush, installed to the left or above STOP push buttons.
 - b. EMERGENCY STOP push buttons should be a red mushroom.
 - c. STOP push buttons should be red extended, installed to the right or below START push button.
 - d. STOP push buttons should be installed in the last position (bottom or right) of each unit when required.
 - e. Pilot lights should be installed in the first position (top or left side) of each unit when required.

Design Guideline #1



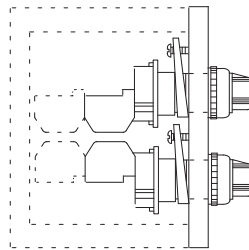
Push-to-test pilot lights, illuminated push buttons, push-pull units, 4-position selector switches, all operators with two contact blocks that are fastened along side one another or with a power module and contact block along side one another must be installed in a single-hole cover. Illuminated operators that use the Universal LED module must also be installed in a single-hole cover.

Design Guideline #2



Dual push button units can only be installed in a single-hole cover or the specially designed two-hole cover (catalog number 800H-NP33), which can accommodate the dual push button and the special pigtail pilot light (catalog number 800H-LPK10R).

Design Guideline #3



When two components are installed in one cover, contact blocks are restricted to one side of the operator. Contact blocks of each operator must face each other.

Design Guideline #4

One level of contact blocks is maximum in a shallow base or deep base when used with a sealing well. Contact blocks, except sealed switch type, can be mounted two deep in other bases.

Bases for Multi-gang Stations

Example:

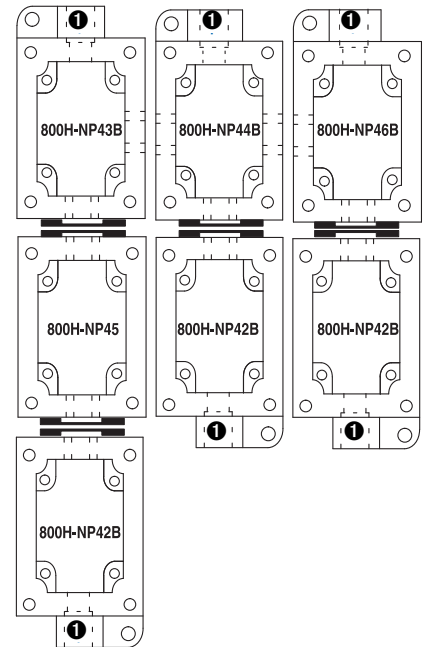
7-gang base with 1-in. through-feed conduit consists of:

- 3-catalog number 800H-NP42B
- 1-catalog number 800H-NP43B
- 1-catalog number 800H-NP44B
- 1-catalog number 800H-NP45
- 1-catalog number 800H-NP46B
- 6-catalog number 800H-NP7

Plus up to four 1-in. plugs (catalog number 800H-NP11) to close unused conduit openings.



WARNING: Do not assemble more than eight enclosure gangs together, to avoid exceeding the internal volume for which the flame path of these enclosures is designed.

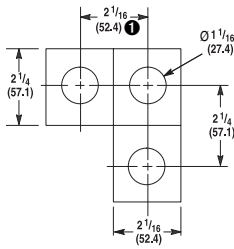


❶ 1-in. conduit through-feed (all gangs).

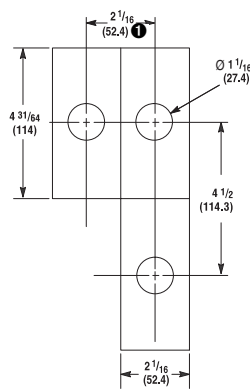
Approximate Dimensions & Shipping Weights (Bul. 800H)

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

Standard Legend Plate
(used with two-hole cover)



Jumbo Legend Plate
(used with one-hole cover)

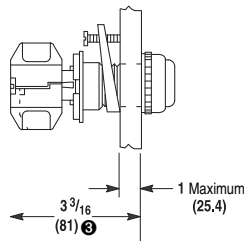


Note: Mounting hole requirements for components — 3/4 in. - 14 NPSM. ②

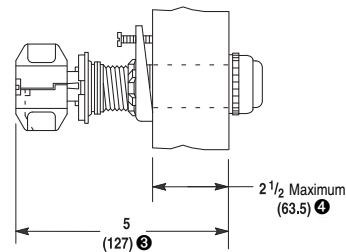
- ① Sketch illustrates the minimum distance between center lines when mounting Bulletin 800H units with legend plates either side by side or one above the other in non Allen-Bradley enclosures. Minimum spacing without legend plate: When units are mounted so that the contact block terminals face each other, the 2-1/4 in. (57.2 mm) dimension must be used to get proper electrical clearance. When control units are mounted so that the contact block terminals do not face each other, the 1-27/32 in. (46.8 mm) dimension can be used.
- ② External thread major diameter: 1.034 in. max., 1.024 in. min.
Internal thread minor diameter: 0.958 in. min., 0.970 in. max.

Panel Thickness Requirements

Standard Barrel
[devices fit panels up to 1 in. (25.4 mm)]



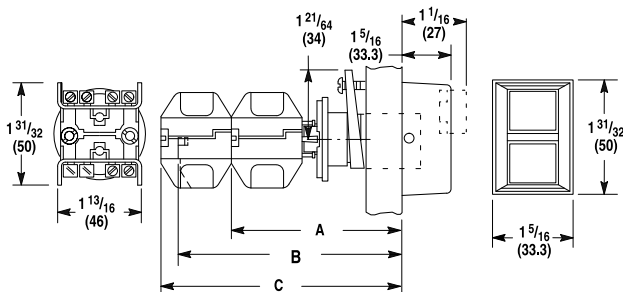
Long Barrel
[devices fit panels up to 2-1/2 in. (63.5 mm)]



- ③ This dimension for push buttons only.
- ④ When mounting in a panel thicker than 2-1/8 in. (54 mm) a locking bracket is not required.

Push Buttons

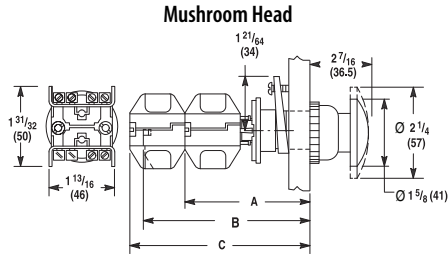
Dual Head



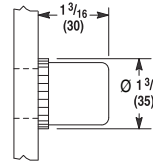
Dim.	A	B	C	Ship. Wt. [oz (kg)]
Standard Barrel	3-5/16 (84.1)	4-3/16 (106.4)	4-7/16 (112.7)	10-3/8 (0.30)
Long Barrel	4-19/32 (116.7)	5-15/32 (138.9)	5-23/32 (145.2)	13 (0.37)

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

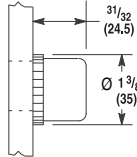
Push Buttons



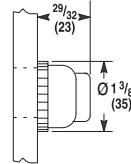
Push Button with Extra Long Guard



Flush Head



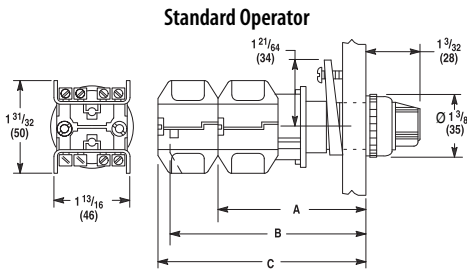
Extended Head



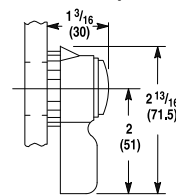
Type	Standard Barrel				Long Barrel			
	A ❶	B	C	Ship. Wt. [oz (kg)]	A ❷	B	C	Ship. Wt. [oz (kg)]
Mushroom, Flush, and Extended Head	3-3/16 (81)	4-1/8 (105)	4-3/8 (111)	9-7/8 (0.28)	5 (127)	5-7/8 (149.2)	6-1/8 (155.6)	13-5/16 (0.38)
Extra Long Guard	3-3/16 (81)	4-1/8 (105)	4-3/8 (111)	10-7/8 (0.31)	5 (127)	5-7/8 (149.2)	6-1/8 (155.6)	14-5/16 (0.40)

- ❶ When using sealed switch contact block, this dimension is 4-1/16 in. (103 mm).
- ❷ When using sealed switch contact block, this dimension is 5-7/8 in. (149.2 mm).

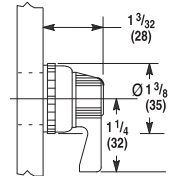
Selector Switches



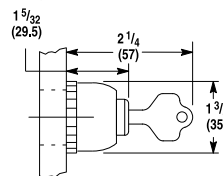
Knob Lever Operator



Wing Lever Operator



Cylinder Lock Operator

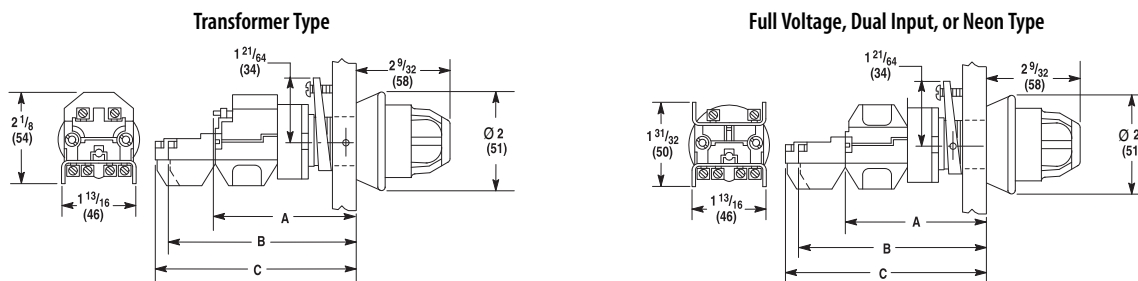


Type	Standard Barrel				Long Barrel			
	A ❸	B	C	Ship. Wt. [oz (kg)]	A ❹	B	C	Ship. Wt. [oz (kg)]
Standard and Knob Lever	3-3/16 (81)	4-1/8 (105)	4-3/8 (111)	9-1/2 (0.27)	5 (127)	5-7/8 (149.2)	6-1/8 (155.6)	14-3/8 (0.41)
Wing Lever	3-3/16 (81)	4-1/8 (105)	4-3/8 (111)	10-1/2 (0.30)	5 (127)	5-7/8 (149.2)	6-1/8 (155.6)	15 (0.42)
Cylinder Lock	3-3/16 (81)	4-1/8 (105)	4-3/8 (111)	11-1/4 (0.32)	5 (127)	5-7/8 (149.2)	6-1/8 (155.6)	16 (0.45)

- ❸ When using sealed switch contact block, this dimension is 4-1/16 in. (103 mm).
- ❹ When using sealed switch contact block, this dimension is 5-7/8 in. (149.2 mm).

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

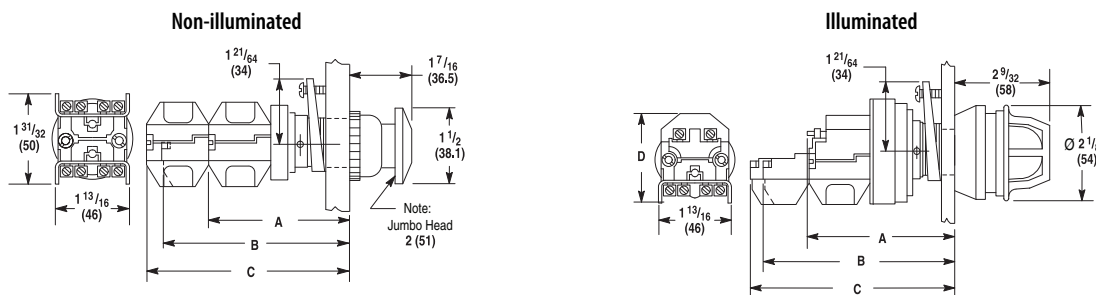
Illuminated Push Buttons or Push-to-test Pilot Lights



Description	Style	A ①	B	C	Ship. Wt. [oz (kg)]
Transformer Type	Standard Barrel	3-5/32 (80.2)	3-29/32 (99)	4-1/8 (105)	14 (0.40)
	Long Barrel	5-1/16 (128.6)	5-13/16 (147.6)	6-1/16 (154)	16-3/16 (0.45)
Full Voltage, Dual Input, or Neon Type	Standard Barrel	3-1/32 (77)	3-29/32 (99)	4-1/8 (105)	11-5/8 (0.33)
	Long Barrel	4-15/16 (125.4)	5-13/16 (147.6)	6-1/16 (154)	13-7/16 (0.38)

① When using sealed switch contact block, add 7/8 in. (22.2 mm) to the listed dimension.

Push-Pull Units

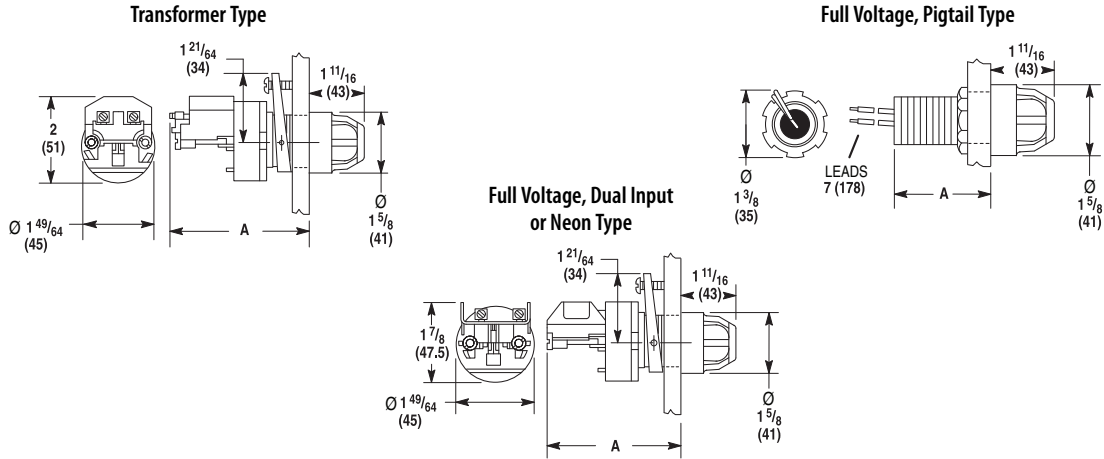


Description	Style	A ②	B	C	D	Ship. Wt. [oz (kg)]
Illuminated Transformer Type	Standard Barrel	3-9/16 (90.5)	4-9/16 (115.9)	4-5/8 (117.5)	2-1/8 (54)	15-1/2 (0.44)
	Long Barrel	4-21/32 (118.3)	5-13/32 (137)	5-21/32 (143.7)	2-1/8 (54)	17-7/16 (0.49)
Illuminated Full Voltage Type	Standard Barrel	3-7/16 (87.3)	4-9/16 (115.9)	4-5/8 (117.5)	1-31/32 (50)	12-13/16 (0.33)
	Long Barrel	4-17/32 (115.1)	5-13/32 (137)	5-21/32 (143.7)	1-31/32 (50)	14-3/4 (0.41)
Non-illuminated Push-Pull Units	Standard Barrel	3-1/2 (88.9)	4-3/8 (111.1)	4-5/8 (117.5)	—	11-1/8 (0.32)
	Long Barrel	4-17/32 (115.1)	5-13/32 (137)	5-21/32 (143.7)	—	12-5/16 (0.34)

② When using sealed switch contact block, add 7/8 in. (22.2 mm) to the listed dimension.

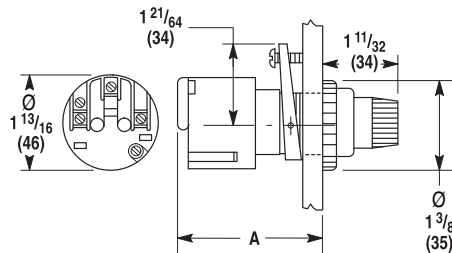
Dimensions in inches (millimeters). Dimensions are not intended to be used for manufacturing purposes.

Pilot Lights



Description	Style	A	Ship. Wt. [oz (kg)]
Transformer type and dual-input transformer-type pilot lights	Standard Barrel	3-5/32 (80)	8-9/16 (0.24)
	Long Barrel	4-9/16 (115.9)	30-1/4 (0.85)
Full voltage, neon, or dual-input diode and resistor-type pilot lights	Standard Barrel	3-1/32 (77)	5-13/16 (0.17)
	Long Barrel	4-7/16 (112.7)	27-1/2 (0.77)
Full-voltage pigtail-type pilot lights	Standard Barrel	2-3/16 (55.5)	5-5/8 (0.16)
	Long Barrel	3-43/64 (94)	8-5/16 (0.24)

Potentiometer Units



Style	A	Ship. Wt. [oz (kg)]
Standard Barrel	3-1/8 (79.5)	5-3/8 (0.16)
Long Barrel	4-1/2 (114.3)	8 (0.23)

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

Shallow Base Stations

Figure 1
Shallow Base Station Lever Type

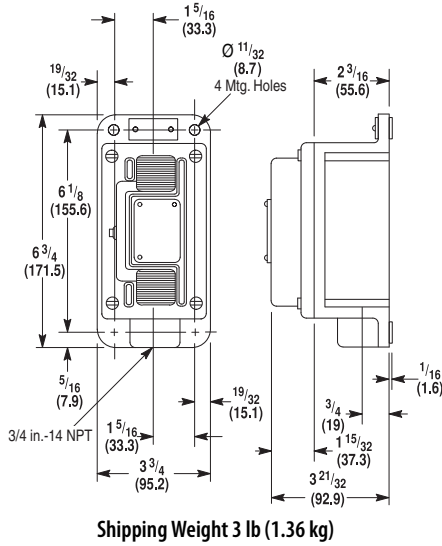
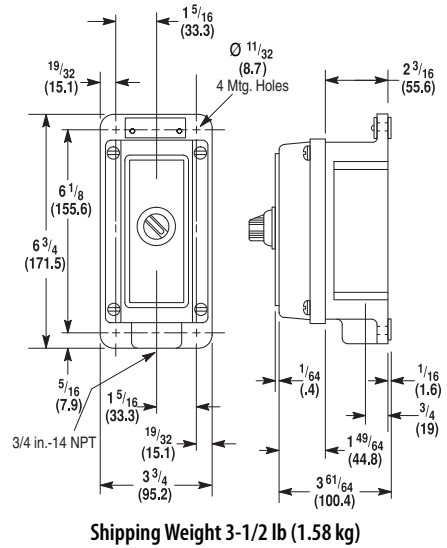


Figure 2
Shallow Base Station Component Type
1-Gang (one or two devices)



Deep Base Stations

Figure 3
Deep Base Station Lever Type
1-Gang

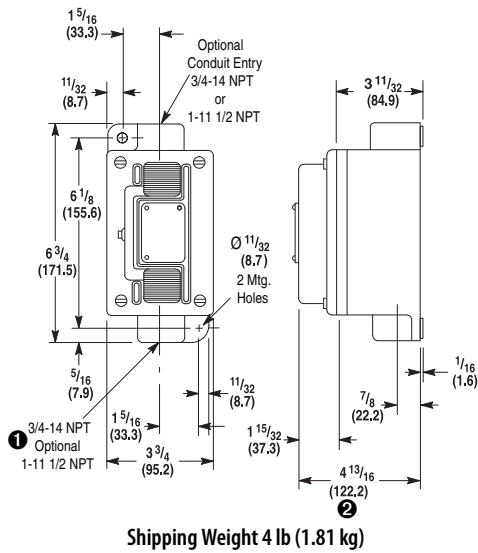
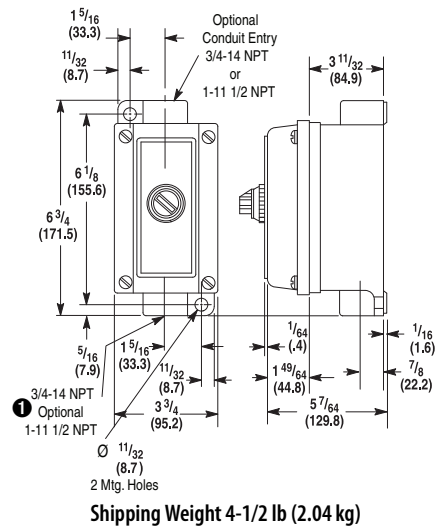


Figure 4
Deep Base Station Component Lever Type
1-Gang (one or two devices)

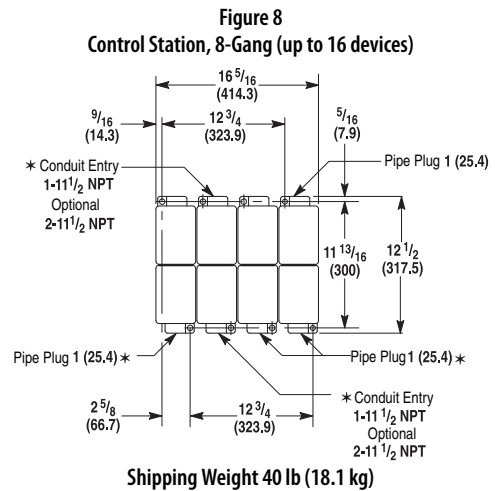
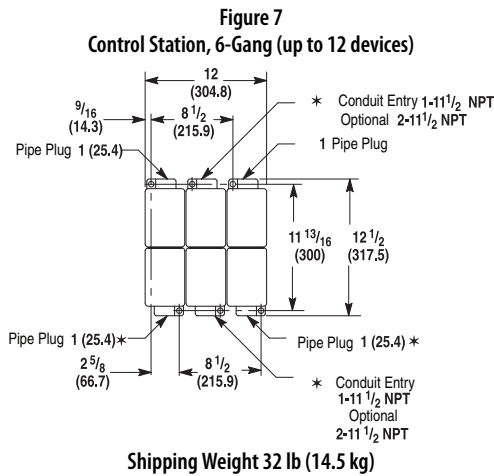
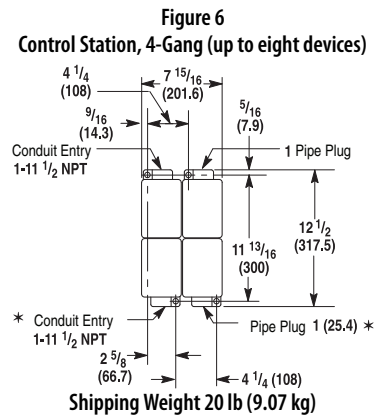
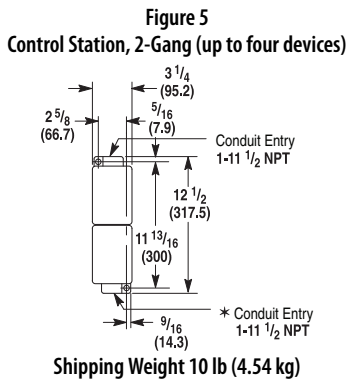
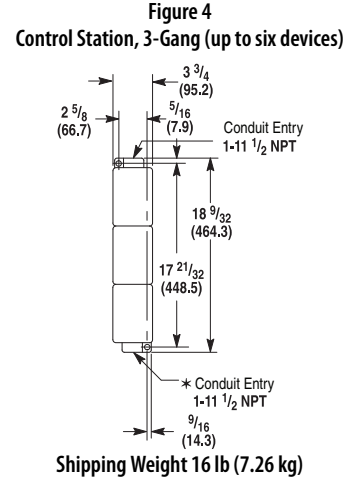
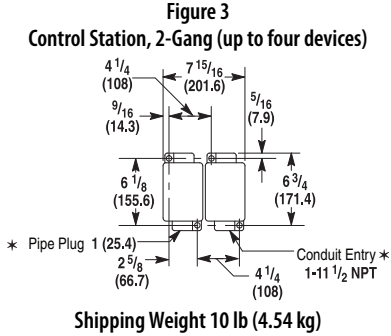


- ❶ When using a flange seal, an approved drain fitting must be provided (refer to National Electrical Code).
- ❷ When used, add the following to the max. depth: flange seal adds 3/16 in. (4.8 mm); sealing well with integral flange seal adds 1/2 in. (12.7 mm).

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

Factory-Assembled Stations

For depth dimensions, refer to Figure 3 or 4 on [page 31](#).



Specifications (Bul. 800R)



ATTENTION: 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 may 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 8 - Electrical Ratings

Contact Ratings	See the contact ratings on page 34
Dielectric Strength	2200V for 1 minute, 1300V for 1 minute (Logic Reed)
Electrical Design Lifecycles	1 000 000 at maximum rated load, 200 000 at maximum rated load (Logic Reed)

Table 9 - Mechanical Ratings

Vibration	10...2000 Hz 1.52 mm displacement (peak-to-peak) Max./10 G Max. (except Logic Reed)
Shock	1/2 cycle sine-wave for 11 ms \geq 25 G (contact fragility) and no damage at 100 G
Degree of Protection	Type 4/4X/13, 4/13; Watertight/Corrosion-Resistant IEC 529 IP66/65
Mechanical Design Lifecycles	
Push Buttons (Momentary, Non-Illuminated) (Momentary, Illuminated) (Push-Pull/Twist-to-Release)	1 000 000 min. 250 000 min. 250 000 min.
Selector Switches (Non-Illuminated) (Illuminated)	1 000 000 min. 200 000 min.
All other devices	200 000 min.
Contact Operation	Logic Reed and sealed switch contact blocks: single break magnetic
Typical Operating Forces	
Operators without contact blocks:	Flush, extended, standard mushroom, jumbo plastic mushroom: 2 lb max. Maintained selector switch: 3.6 in•lb maximum
Spring-return Selector Switches	3.6 in•lb to stop 0.2 in•lb to return
Illuminated Push Buttons and Push-to-test Pilot Lights	5 lb maximum
3-Position Push-Pull	8 lb maximum push to in position or pull to center position (15 lb maximum pull to out position)
Push-Pull and Push-Pull/Twist	9 lb maximum push or pull 30 in•oz maximum twist, 6 in•oz minimum return
Contact Blocks Logic Reed Sealed Switch Stackable Sealed Switch	1 lb maximum 3 lb maximum at 0.205 in. plunger travel 1 lb maximum

Table 10 - Environmental

Temperature Range	Operating: -40...131 °F (-40...55 °C) Storage: -40...185 °F (-40...85 °C)
Note: Operating temperatures below freezing are based on the absence of freezing moisture and liquids. ❶	
Humidity	50% at 104 °F (40 °C)

❶ Consult your local Rockwell Automation sales office or Allen-Bradley distributor for use in lower temperature applications.

Control Stations

Bulletin 800R control stations are designed for Division 2 hazardous locations. They consist of Bulletin 800H (Type 4/4X/13) or Bulletin 800T (Type 4/13) operators with sealed contact blocks. Bulletin 800R units are available as factory assembled stations or as components for field assembly.

Hazardous Locations

Since the contacts are enclosed in a hermetically sealed chamber, the contact block is suitable for use in Class I, Division 2 Groups A, B, C, and D hazardous locations and is listed by Underwriters Laboratories for this class of service. Complete stations as shown on our [website](#) can be used for Class I, Division 2 applications. The individual components that are shown in the Bulletin 800T and 800H sections are also suitable for Class I, Division 2 locations providing they are suitably mounted by the customer in an enclosure as required for the application and by applicable codes and laws.

Note: Allen-Bradley Logic Reed contact blocks are also listed by Underwriters Laboratories for the Division 2 hazardous locations that are listed above.



WARNING: The complete stations and individual components that are listed on our [website](#) are not suitable for use in Class I Division 1 hazardous locations. For Class I and II Division 1 hazardous locations, order Bulletin 800H Type 7 & 9 stations and units.

Sealed Switch Contact Ratings

Maximum continuous current I_{th} 5 A. Bulletin 800T and 800H units have control circuit ratings with sealed switch contact blocks as follows:

Table 11 - Sealed Switch Contact Ratings

Max. Operational Volts U_e	Utilization Category		Rated Operational Currents		
	IEC	NEMA	Volts U_e	Make	Break
AC 600	AC-15	B600	120...600	3600VA	360VA
			0...120	30 A	3VA
DC 300	DC-13	P300	24...300	138VA	
			0...24	5 A	

Stackable Sealed Switch Contact Ratings

Maximum continuous current I_{th} 2.5 A. Bulletin 800T and 800H units have control circuit ratings with sealed switch contact blocks as follows:

Table 12 - Sealed Switch Contact Ratings

Max. Operational Volts U_e	Utilization Category		Rated Operational Currents		
	IEC	NEMA	Volts U_e	Make	Break
AC 300	AC-15	C300	120...300	1800VA	180VA
			0...120	15 A	1.5A
DC 150	DC-13	Q150	24...150	69VA	
			0...24	2.5 A	

Logic Reed Contact Ratings

Maximum DC: 30V, 0.06 A Maximum AC: 150V, 0.15 A

Should only be used with resistive loads.

Standards Compliance

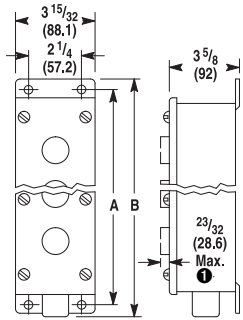
- ISA 12.12.01
- CSA C22.2, No. 213

Certifications

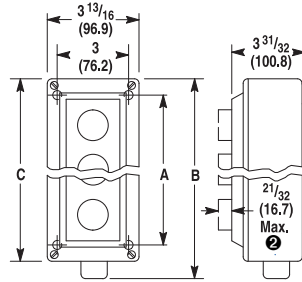
- UL Listed (File No. E10314, Guide No. NOIV)
- CSA Certified (File No. LR11924)

Approximate Dimensions & Shipping Weights (Bul. 800R)

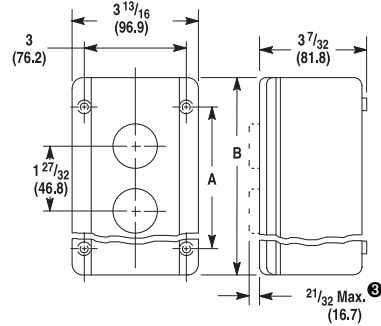
Dimensions in inches (millimeters). Dimensions are not intended to be used for manufacturing purposes.



**Type 4/4X/13
Stainless Steel
Watertight/Oiltight/
Corrosion-Resistant Enclosure**



**Type 4/4X/13
Rosite Glass Polyester
Watertight/Oiltight/
Corrosion-Resistant Enclosure**

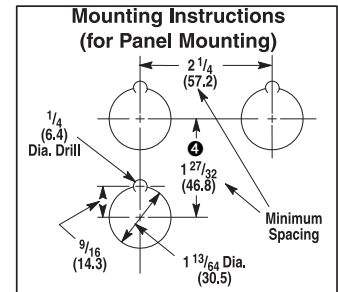


**Type 4/13
Cast Aluminum Enclosure
Watertight/Oiltight**

- ❶ Selector switch is 1-5/32 (29.4) maximum; pilot light is 1-7/32 (31).
- ❷ Selector switch is 1-3/32 (27.8) maximum; pilot light is 1-5/32 (29.4) maximum.
- ❸ Selector switch is 1-7/32 (30.9) maximum; pilot light is 1-9/32 (32.5).

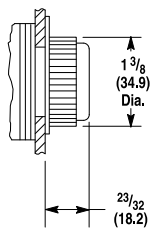
Dimension	Number of Units					
	1	2	3	4	5	6
Stainless Steel Type 4/4X/13						
A	5-5/32 (135)	7 (178)	8-27/32 (225)	10-11/16 (271)	12-17/32 (318)	14-3/8 (360)
B	6-13/32 (163)	8-1/4 (210)	10-1/8 (257)	11-31/32 (304)	14-1/32 (359)	15-7/8 (403)
Pip Tap Size	3/4					1
Glass Polyester Type 4/4X/13						
A	4-1/2 (114)	4-1/2 (114)	6-1/4 (159)	8 (203)	12-1/8 (308)	12-1/8 (308)
B	7-1/32 (181)	7-1/32 (181)	8-23/32 (221)	10-21/32 (271)	14-7/8 (378)	14-7/8 (378)
C	5-7/8 (149)	5-7/8 (149)	7-9/16 (192)	9-1/2 (241)	13-1/2 (343)	13-1/2 (343)
Pipe Tap Size	3/4					1
Cast Aluminum Type 4/13						
A	2-3/4 (69.8)	4-1/2 (114)	6-1/4 (159)	8 (203)	—	12-1/8 (308)
B	4-3/16 (106)	5-7/8 (149)	7-9/16 (192)	9-1/2 (241)	—	13-1/2 (343)
Conduit Opening	3/4 in. 14 N.P.T.					1 in. 11-1/2 N.P.T.

Mounting Instructions for Panel Mounting

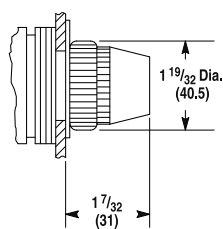


- ❹ Minimum vertical spacing dimension for jumbo legend plate is 2-15/32 (62.7).

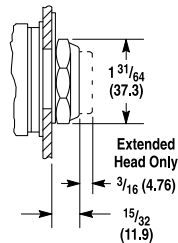
Operator Extension in Front of Panel



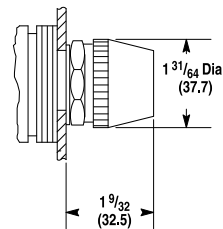
**Type 4/4X/13
Booted Flush and Extended
Head Push Button**



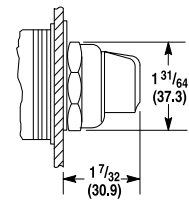
**Type 4/4X/13
Pilot Light**



**Type 4/13 and Type 4/4X/13
Bootless Flush and Extended
Head Push Button**



**Type 4/13
Pilot Light**



**Type 4/13 and Type 4/4X/13
Standard Knob Selector
Switches**


Specifications (Bul. 800G)



ATTENTION: 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 may 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.

Standard Assembled Stations

Table 13 - Mechanical Ratings

Protection Type	 II 2G Ex edm IIC T6 AEx edm IIC T6 Ex edm IIC T6
Certification	PTB 01 ATEX 1036 UL E10314 CE0044
Rated Insulation Voltage	Max. 690V AC
Rated Current	Dependent on components used
Degree of Protection	IP66, Type 4X: -20...60 °C (-4...140 °F) IP54: -55...60 °C (-67...140 °F)
Enclosure Material	
Enclosure	Thermoplastic
Seals	EPDM
Cable Glands	
Standard	Plastic M20 x 1.5 for cable Ø 6...12 mm
Custom	Plastic M25 for cable Ø 13...18 mm 1/2 in. NPT conduit 3/4 in. NPT conduit
Wire/Cable Size	2.5 mm ² (12 AWG) stranded max.
PE Conductor Terminals	4 x 2.5 mm ² (12 AWG) stranded max.
Storage Temperature	-55...70 °C (-67...158 °F)
Operational Temperature Range	-55...60 °C (-67...140 °F)

Assembled Stations

Bulletin 800G control stations are designed for Class I, Zone 1 and 2 and Class 1/Division 2 hazardous location applications. They consist of Bulletin 800G front-of-panel components with back-of-panel components: contact blocks or power modules. Bulletin 800G units are available as factory assembled stations or as components for component replacement. A third party must inspect and certify field assembled stations that are used in a Class I, Zone 1 or Zone 2 application.

Components

Since the back-of-panel components are enclosed in a flame-proof enclosure, they are suitable for use in **Class I, Zone 1 and Zone 2 Groups IIA, IIB, and IIC and Class I/Division 2, Groups A, B, C, and D hazardous locations and is listed by Underwriters Laboratories and certified by PTB for this class of service.** The components have “d” and “e” protection methods except for the cable termination. Cable termination has only “d” protection method, which is restricted by the cable and not the contacts.



WARNING: The assembled stations and individual components that are listed on our [website](#) are not suitable for the use in Zone 0, Class I/Division 1 and Class II/Division 1 and Division 2 applications. For Class I and II/Division 1 hazardous locations, order Bulletin 800H Type 7 & 9 stations and units. For Class II/ Division 2 hazardous locations, order Bulletin 800R stations.

B_{10D}/MTTF_D/Lambda_D Specifications

Table 14 - Non-Illuminated Components

Description	Cat. No.	B _{10D} Value [cycles] ①
Front of Panel		
Push Button (Non-illuminated – Flush)	800G-F_	5,800,000
Momentary Mushroom Push Button	800G-M2	
Double Push Button (Non-illuminated – Flush)	800G-U2FX	
	800G-V2FX	
Key Release Mushroom Push Button	800G-MKE	12,000
Key Release Push Button	800G-K_	
2-Position Selector Switch (Knob)	800G-S_2_	
3-Position Selector Switch (Knob)	800G-S_3_	
2-Position Key Selector Switch (Key Operated)	800G-KS_2_	
3 Position Key Selector Switch (Key Operated)	800G-KS_3_	
Push-Pull Mushroom Push Button	800G-MPE	140,000
Back of Panel		
Base Mount Contact Block (Screw Termination)	800G-XB_	1,200,000
Latch Mount Contact Block (Screw Termination)	800G-XLS_	
Latch Mount Contact Block (Cable Termination)	800G-XLC3_	

① The B_{10D} value [cycles] states the number of switching cycles up to which 10% of the elements failed dangerously. The determination was done via a statistical evaluation of field data.

Table 15 - Illuminated Components

Description	Cat. No.	MTTF _D (Years) ②	Lambda _D (Dangerous Failures/Year) ②
Illuminated Push Button			
Push Button (Illuminated – Flush)	800G-LF*	3.92E+02 Years	2.91E-07
Used with one of the following:			
Base Mount Power Module with Contact Block (Screw Termination)	800G-DB*X*		
Latch Mount Power Module with Contact Block (Screw Termination)	800G-DLS*X*		
Latch Mount Power Module with Contact Block (Cable Termination)	800G-DLC3*X*		
Pilot Light			
Pilot Light	800G-P*	9.34E+03 Years	1.22E-08
Used with one of the following:			
Base Mount Power Module (Screw Termination)	800G-DB*		
Latch Mount Power Module (Screw Termination)	800G-DLS*		
Latch Mount Power Module (Cable Termination)	800G-DLC3*		

② The operating hours of all delivered products or comparable product clusters are determined and divided by the number of reports of failures for that product. The result is the MTTF_D or Lambda_D rating we can offer for the products our customers received.



Back-of-Panel Components

Contact Block

Table 16 - Electrical Ratings

	Screw Termination			Cable Termination		
Rated Insulation Voltage	690V			400V (Limited by the cable, not the contacts)		
Rated Voltage	250V (per ATEX certificates)		24V	250V (per ATEX certificates)		24V
Rated Operating Currents	16 A	10 A	1 A	16 A	10 A	1 A
Utilization Category	AC-12	AC-15	DC-13	AC-12	AC-15	DC-13
Thermal Continuous Current	16 A at 40 °C (104 °F), 11 A at 60 °C (140 °F)			16 A at 40 °C (104 °F), 11 A at 60 °C (140 °F)		
Contact Rating per UL 508	A600		P600	A600		P600
Max. Rated Voltage per UL Contact Rating	600V		600V	600V		600V
Max. "Make" Current at Rated Voltage per UL Contact Rating	12 A		0.2 A	12 A		0.2 A
Max. "Break" Current at Rated Voltage per UL Contact Rating	1.2 A		0.2 A	1.2 A		0.2 A
Thermal Continuous Test Current per UL Contact Rating	10 A		5 A	10 A		5 A
Short Circuit Protection	10 A Slow Blow, Type DT, gl			10 A Slow Blow, Type DT, gl		

Table 17 - Mechanical Ratings



	Screw Termination	Cable Termination
Protection Type	 II 2G Ex de IIC Class I, Zone 1 AEx de IIC Class I, Zone 1 Ex de IIC	 II 2G Ex d IIC T6 Class I, Zone 1 AEx d IIC T6 Class I, Zone 1 Ex d IIC T6
Certification	PTB 01 ATEX 1040U UL E10314	PTB 01 ATEX 1039X UL E10314
Contact Options	1 N.O. - 1 N.C. 2 N.O. 2 N.C.	1 N.O. - 1 N.C. 2 N.O. 2 N.C.
Contact Material	AgSnO ₂	AgSnO ₂
Housing Material	Thermoplastic	Thermoplastic
Physical Shock Resistance	DIN IEC 68 part 2-27, 30 g 18 ms	DIN IEC 68 part 2-27, 30 g 18 ms
Design Life	1 000 000 cycle mechanical life	1 000 000 cycle mechanical life
Operating Force (Maximum)	22.2 N (5 lb) to open N.C. 15.6 N (3.5 lb) to close N.O. 28.9 N (6.5 lb) full travel	22.2 N (5 lb) to open N.C. 15.6 N (3.5 lb) to close N.O. 28.9 N (6.5 lb) full travel
Temperature (Storage/Transport)	-55...70 °C (-67...158 °F)	-55...70 °C (-67...158 °F)
Operational Temperature Range	-55...60 °C (-67...140 °F)	-55...60 °C (-67...140 °F)
Wire/Cable Size	2.5 mm ² (12 AWG) stranded max.	3 m (9.8 ft) long cable 4 x 1.5 mm ² (9.1 mm/0.36 in. OD)
Degree of Protection	IP20, with operators and enclosure IP66	With operators IP67
Mounting	<i>Base Mount:</i> Secures to rail integral to enclosure base <i>Panel Mount:</i> Secures to operator with integral latch	<i>Panel Mount:</i> Secures to operator with integral latch

Power Module

Table 18 - Electrical Ratings

	Screw Termination	Cable Termination
Rated Insulation Voltage	300V	300V
Power Consumption	≤1 W	≤1 W
Lamp	Multi-LED (Red, Yellow, Green, White, Blue)	Multi-LED (Red, Yellow, Green, White, Blue)
Rated Voltage	12...60V DC 12...250V AC	24...60V DC 24...60V AC and 110...250V AC

Table 19 - Mechanical Ratings

	Screw Termination	Cable Termination
Protection Type	 II 2G Ex de IIC Class I, Zone 1 AEx de IIC Class I, Zone 1 Ex de IIC	 II 2G Ex d IIC T6 Class I, Zone 1 AEx d IIC T6 Class I, Zone 1 Ex d IIC T6
Certification	PTB 01 ATEX 1037U UL E10314	PTB 01 ATEX 1038X UL E10314
Housing Material	Thermoplastic	Thermoplastic
Physical Shock Resistance	DIN IEC 68 part 2-27, 30 g, 18 ms	DIN IEC 68 part 2-27, 30 g, 18 ms
Design Life	100 000 hours	100 000 hours
Temperature (Storage/Transport)	-55...70 °C (-67...158 °F)	-55...70 °C (-67...158 °F)
Operational Temperature Range	-55...60 °C (-67...140 °F)	-55...60 °C (-67...140 °F)
Wire/Cable Size	2.5 mm ² (12 AWG) stranded max.	3 m (9.8 ft) long cable 4 x 1.5 mm ² (9.1 mm/0.36 in. OD)
Degree of Protection	IP20, with operators and enclosure IP66	With operators IP67
Mounting	<i>Base Mount:</i> Secures to rail integral to enclosure base <i>Panel Mount:</i> Secures to operator with integral latch	<i>Panel Mount:</i> Secures to operator with integral latch



Power Module/Contact Block Combination

Table 20 - Electrical Ratings

	Screw Termination		Cable Termination	
Rated Insulation Voltage	300V		300V	
Power Consumption	≤1 W		≤1 W	
Lamp	Multi-LED (red, yellow, green, white, blue)		Multi-LED (red, yellow, green, white, blue)	
Rated Voltage	24...48V DC 24...250V AC		24...48V DC 24...250V AC	
Contact Rating per UL 508	A600	P600	A600	P600
Thermal Continuous Current	1 A	0.25 A	1 A	0.25 A
Max. Rated Voltage	600V	600V	600V	600V


Power Module/Contact Block Combination, Cont'd.

Table 21 - Mechanical Ratings

	Screw Termination	Cable Termination
Protection Type	 II 2G EEx de IIC Class I, Zone 1 AEx de IIC Class I, Zone 1 Ex de IIC	 II 2G EEx d IIC T6 Class I, Zone 1 AEx d IIC T6 Class I, Zone 1 Ex d IIC T6
Certification	PTB 01 ATEX 1037U UL E10314	PTB 01 ATEX 1038X UL E10314
Housing Material	Thermoplastic	Thermoplastic
Physical Shock Resistance	DIN IEC 68 part 2-27, 30 g, 18 ms	DIN IEC 68 part 2-27, 30 g, 18 ms
Design Life	100 000 hours	100 000 hours
Temperature (Storage/Transport)	-55...70 °C (-67...158 °F)	-30...70 °C (-22...158 °F)
Operational Temperature Range	-55...60 °C (-67...140 °F)	-30...60 °C (-22...140 °F)
Wire/Cable Size	2.5 mm ² (12 AWG) stranded max.	3 m (9.8 ft) long cable 4 x 1.5 mm ² (9.1 mm/0.36 in. OD)
Degree of Protection	IP20, with operators and enclosure IP66	With operators IP67
Mounting	<i>Base Mount:</i> Secures to rail integral to enclosure base <i>Panel Mount:</i> Secures to operator with integral latch	<i>Panel Mount:</i> Secures to operator with integral latch

Front-of-Panel Operators

Table 22 - Mechanical Ratings

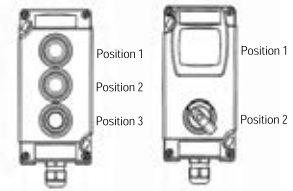
Device	Operational Temperature	Operating Force ^①	Mechanical Design Life	Impact Resistance	Materials	Ingress Protection	Ex Protection Type
Push Button	-55...70 °C (-67...158 °F)	6.7 N (1.5 lb)	1 000 000 cycles	7 N•m	Thermoplastic Housing EPDM Seals	IP66: -20...+70 °C (-4...+158 °F) IP54: -55...-20 °C (-67...-4 °F) Type 4X: -20...+70 °C (-4...+158 °F)	 II 2G EEx e II PTB 01 ATEX 1035U UL E10314
Selector Switch	-55...70 °C (-67...158 °F)	—					
Key Release Push Button	-55...70 °C (-67...158 °F)	15.6 N (3.5 lb)					
Key Release Mushroom	-55...70 °C (-67...158 °F)	15.6 N (3.5 lb)					
Mushroom	-55...70 °C (-67...158 °F)	6.7 N (1.5 lb)					
E-stop	-55...70 °C (-67...158 °F)	44.5 N Push/89 N Pull (10 lb Push/20 lb Pull)	6000 cycles				
Pilot Light (Red, Yellow, White, Green, Blue)	-55...70 °C (-67...158 °F)	—	N/A	4 N•m			
Hole Plug	-55...70 °C (-67...158 °F)	—	N/A	7 N•m			
Illuminated Push Button	-55...70 °C (-67...158 °F)	6.7 N (1.5 lb)	1 x 10 ⁶	7 N•m			
Key Selector Switch	-55...70 °C (-67...158 °F)	—	1 000 000 cycles	7 N•m			

^① Excludes contact block.

Complete Assembled Stations (Bul. 800G)

800G – $\frac{2}{a}$ $\frac{F}{b}$ $\frac{3}{c}$ $\frac{M}{d}$ $\frac{F}{b}$ $\frac{4}{c}$ $\frac{N}{d}$ $\frac{b}{b}$ $\frac{c}{c}$ $\frac{d}{d}$ $\frac{3}{e}$

Size Position 1 Position 2 Position 3 Conduit Entry



a

Enclosure Size	
Code	Description
1	1-hole
2	2-hole
3	3-hole

b

Operator/Meter	
Code	Description
B	Key release mushroom push button ❶
D	Momentary mushroom push button ❷
E	Push-pull mushroom push button ❶
F	Non-illuminated flush push button ❸
H	2-position selector switch ❷
J	3-position selector switch ❷
K	Key release push button
L	Illuminated push button — flush ❹
M	Ammeter ❺
N	Hole plug ❷
P	Pilot light ❹

- ❶ Only available in red.
- ❷ Only available in black.
- ❸ Only available in white, black, green, red, or yellow.
- ❹ Only available in white, green, red, yellow, and blue.
- ❺ For ammeter, choose 3-hole enclosure with meter in pos. 1 and either an operator or hole plug in pos. 2 (Cat. No. 800G-3 M1X J1A or Cat. No. 800G-3 M1X N2X)
- ❻ Only available for 3-position selector switch.
- ❼ For use with illuminated push button only.
- ❽ For through-feed enclosure, selected conduit entry is applied for both bottom and top entry.

c

Push Button Color/Text	
Code	Description
1	White
2	Black
3	Green
4	Red
5	Yellow
6	Blue
A	START (green background/white text)
B	STOP (red background/white text)
G	I (green background/white text)
H	O (red background/white text)
J	ON (green background/white text)
K	OFF (red background/white text)
Key Release	
1	Lockable in initial position, key removal in initial position
2	Lockable in both positions, key removal in both positions
3	Lockable in depressed position, key removal in depressed position
Selector Switch	
M	Maintained in all positions
B	Spring return from both positions ❻
L	Spring return from left ❻
R	Spring return from right ❻
Meters ❺	
1	1 A
5	5 A

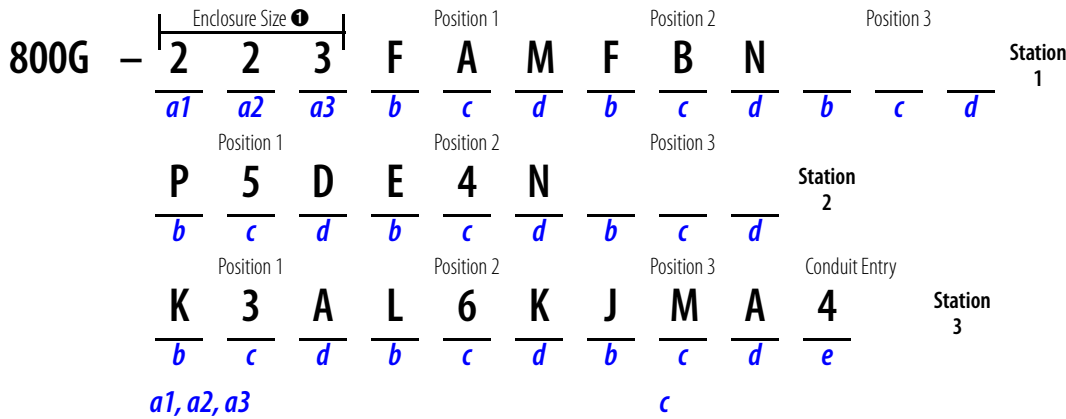
d

Contact Block/Lamp Module	
Code	Description
A	1 N.O. - 1 N.C. base mount
M	2 N.O. base mount
N	2 N.C. base mount
D	Lamp module base mount (same color as requested lens color in Table c)
X	N/A (ammeter, hole plug)
K	1 N.O. with lamp module ❼
L	1 N.C. with lamp module ❼

e

Conduit Entry	
Code	Description
Bottom Entry	
Blank	M20X1.5 threaded hole
1	1/2 in. NPT conduit hub
2	3/4 in. NPT conduit hub
3	1 M20 plastic cable gland for cable diameter 6...12 mm
4	1 M25 plastic cable gland for cable diameter 13...18 mm
5	M20 blind plug
6	M25 blind plug
7	2 M20 plastic cable gland
8	1 M20 metal cable gland
9	1 M25 metal cable gland
0	2 M20 metal cable gland
Top Entry	
A	M20X1.5 threaded hole
B	1/2 in. NPT conduit hub
C	3/4 in. NPT conduit hub
D	1 M20 plastic cable gland for cable diameter 6...12 mm
E	1 M25 plastic cable gland for cable diameter 13...18 mm
F	M20 blind plug
G	M25 blind plug
H	2 M20 plastic cable gland
J	1 M20 metal cable gland
K	1 M25 metal cable gland
L	2 M20 metal cable gland
Through Feed ❽	
M	M20X1.5 threaded hole
N	1/2 in. NPT conduit hub
P	3/4 in. NPT conduit hub
Q	1 M20 plastic cable gland for cable diameter 6...12 mm
R	1 M25 plastic cable gland for cable diameter 13...18 mm
T	M20 blind plug
U	M25 blind plug
V	2 M20 plastic cable gland
W	1 M20 metal cable gland
X	1 M25 metal cable gland
Y	2 M20 metal cable gland

Configurable Ganged Assembled Stations (Bul. 800G)



Note: Up to 31 characters after “800G–”

① a1 is the enclosure size for station 1, a2 for station 2, and a3 for station 3. If there are two enclosures that are ganged together, leave a3 blank. If there are three enclosures that are ganged together, complete a3 with the appropriate value.

Enclosure Size	
Code	Description
1	1-hole
2	2-hole
3	3-hole

b

Operator/Meter	
Code	Description
B	Key release mushroom push button ②
D	Momentary mushroom push button ③
E	Push-pull mushroom push button ②
F	Non-illuminated flush push button ④
H	2-position selector switch ③
J	3-position selector switch ③
K	Key release push button
L	Illuminated push button — flush ⑤
M	Ammeter ⑥
N	Hole plug ⑥
P	Pilot light ⑥

- ② Only available in red.
- ③ Only available in black.
- ④ Only available in white, black, green, red, or yellow.
- ⑤ Only available in white, green, red, yellow, and blue.
- ⑥ For ammeter, choose 3-hole enclosure with meter in pos. 1 and either an operator or hole plug in pos. 2 (Cat. No. 800G-3 M1X J1A or Cat. No. 800G-3 M1X N2X)
- ⑦ Only available for 3-position selector switch.
- ⑧ For use with illuminated push button only.
- ⑨ For through-feed enclosure, selected conduit entry is applied for both bottom and top entry.

Push Button Color/Text	
Code	Description
1	White
2	Black
3	Green
4	Red
5	Yellow
6	Blue
A	START (green background/white text)
B	STOP (red background/white text)
G	I (green background/white text)
H	O (red background/white text)
J	ON (green background/white text)
K	OFF (red background/white text)

Key Release	
1	Lockable in initial position, key removal in initial position
2	Lockable in both positions, key removal in both positions
3	Lockable in depressed position, key removal in depressed position

Selector Switch	
M	Maintained in all positions
B	Spring return from both positions ⑦
L	Spring return from left ⑦
R	Spring return from right ⑦

Meters ⑥	
1	1 A
5	5 A

d

Contact Block/Lamp Module	
Code	Description
A	1 N.O. – 1 N.C. base mount
M	2 N.O. base mount
N	2 N.C. base mount
D	Lamp module base mount (same color as requested lens color in Table c)
X	N/A (ammeter, hole plug)
K	1 N.O. with lamp module ⑧
L	1 N.C. with lamp module ⑧

Conduit Entry	
Code	Description
Bottom Entry	
Blank	M20X1.5 threaded hole
1	1/2 in. NPT conduit hub
2	3/4 in. NPT conduit hub
3	1 M20 plastic cable gland for cable diameter 6...12 mm
4	1 M25 plastic cable gland for cable diameter 13...18 mm
5	M20 blind plug
6	M25 blind plug
7	2 M20 plastic cable gland
8	1 M20 metal cable gland
9	1 M25 metal cable gland
0	2 M20 metal cable gland

Top Entry	
A	M20X1.5 threaded hole
B	1/2 in. NPT conduit hub
C	3/4 in. NPT conduit hub
D	1 M20 plastic cable gland for cable diameter 6...12 mm
E	1 M25 plastic cable gland for cable diameter 13...18 mm
F	M20 blind plug
G	M25 blind plug
H	2 M20 plastic cable gland
J	1 M20 metal cable gland
K	1 M25 metal cable gland
L	2 M20 metal cable gland

Through Feed ⑨	
M	M20X1.5 threaded hole
N	1/2 in. NPT conduit hub
P	3/4 in. NPT conduit hub
Q	1 M20 plastic cable gland for cable diameter 6...12 mm
R	1 M25 plastic cable gland for cable diameter 13...18 mm
T	M20 blind plug
U	M25 blind plug
V	2 M20 plastic cable gland
W	1 M20 metal cable gland
X	1 M25 metal cable gland
Y	2 M20 metal cable gland

Push Button Units (Bul. 800G)

Non-Illuminated — Flush

$$800G \quad \frac{F}{a} - \frac{3}{b}$$



Cat. No. 800G-F3

a

Operator Construction	
Code	Description
F	Flush operator

b

Color	
Code	Description
1	White
2	Black
3	Green
4	Red
5	Yellow

Double Push Button, Non-Illuminated — Flush

$$800G - \frac{U}{a} \quad 2FX$$



Cat. No. 800G-U2FX

a

Base	
Code	Description
U	Curved base for use with Bul. 800G enclosures
V	Flat base for use with customer provided enclosures

Illuminated — Flush

$$800G \quad \frac{LF}{a} - \frac{3}{b}$$



Cat. No. 800G-LF3

a

Operator Construction	
Code	Description
LF	Illuminated flush operator

b

Color	
Code	Description
1	White
3	Green
4	Red
5	Yellow
6	Blue

Mushroom — Non-Illuminated and Key Release

800G $\frac{M}{a} - \frac{2}{b}$



a

Operator Style	
Code	Description
M	Momentary
MP	Push-pull ❶
MK	Key release ❶

b

Color or Feature	
Code	Description
2	Black with black bezel
E	Red E-stop with yellow bezel and printing on head

❶ Only available in E-stop, code **E** from Table b.

Key Release

800G $\frac{K}{a} - \frac{14}{b}$



a

Operator Style	
Code	Description
K	Key release push button

b

Locking Position	
Code	Description
14	Lockable in initial position; key removal in initial position
16	Lockable in both positions; key removal in both positions
24	Lockable in depressed position; key removal in depressed position

Selector Switch Units (Bul. 800G)

Knob and Key Operated





Knob Selector Switch
Cat. No. 800G-SM3






Key Operated Switch
Cat. No. 800G-KSM33H

2-Position Target Table

Contact Type		
N.O.	0	X
N.C.	X	0

3-Position Target Table

Contact Type	Pos. on Latch or Base			
N.O.	Top	0	0	X
	Bottom	X	0	0
N.C.	Top	X	X	0
	Bottom	0	X	X

800G – S M3
 a b c d

a

Operator Style	
Code	Description
S	Knob
KS	Key operated

b

No. of Positions/Functions	
Code	Description
M2	2-position maintained
B3	3-position spring return left and right to center
L3	3-position spring return left to center
M3	3-position maintained
R2	2-position spring return right to left ❶
R3	3-position spring return right to center

- ❶ Only available with key selector (code **KS** from Table a).
- ❷ Only available with knob selector (code **S** from Table a).

c

Key Removal	
Code	Description
Blank	For knob selector switches
1	Left ❶
2	Right ❶
3	All ❶
4	Center ❶
5	Left/center ❶
6	Left/right ❶
7	Right/center ❶

d

Knob Position	
Code	Description
Blank	For latch mount or base mount in horizontal Bulletin 800G enclosure ❷
H	For base mount in vertical Bulletin 800G enclosure

Pilot Lights (Bul. 800G)



Cat. No. 800G-P3

800G – P 3
a *b*

a

Operator Style	
Code	Description
P	Pilot light

b

Lens Color	
Code	Description
1	White
3	Green
4	Red
5	Yellow
6	Blue

Ammeter (Bul. 800G)



Cat. No. 800G-AMP1B

800G – AMP 1 B
a

a

Amperage	
Code	Description
1	1 A
5	5 A

Enclosures (Bul. 800G)

Plastic (Base mount only)



Cat. No. 800G-1P

800G – $\frac{3}{a}$ $\frac{P}{b}$ $\frac{T}{c}$ $\frac{1}{d}$

a

Enclosure Size	
Code	Description
1	1-hole
2	2-hole
3	3-hole

b

Enclosure Style	
Code	Description
P	Plastic
PA	Plastic with ammeter window 1

c

Conduit Entry	
Code	Description
Blank	Bottom feed
T	Top feed
F	Through feed
X	No holes

d

Conduit Style	
Code	Description
Blank	M20 x 1.5 threaded hole
1	1/2 in. NPT conduit hub
2	3/4 in. NPT conduit hub
3	M20 plastic cable gland
4	M25 plastic cable gland
5	M20 blind plug
6	M25 blind plug
7	Two M20 plastic cable glands
8	M20 metal cable gland
9	M25 metal cable gland
0	Two M20 metal cable glands

Back-of-Panel Components (Bul. 800G)

Latch and Base Mount Contact Block



Base Mount
Cat. No. 800G-XBA



Latch Mount Screw Termination
Cat. No. 800G-XLSA

800G – $\frac{XLS}{a}$ $\frac{A}{b}$

a

Contact Block/Latch Type	
Code	Description
XB	Base mount
XLS	Latch mount with screw termination
XLC3	Latch mount with 3 m (9.84 ft) cable termination

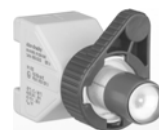
b

Contact Configuration	
Code	Description
A	1 N.O. - 1 N.C.
M	2 N.O.
N	2 N.C.

Latch and Base Mount Power Module ①



Base Mount
Cat. No. 800G-DBG



Latch Mount Screw Termination
Cat. No. 800G-DLSG

800G – $\frac{DB}{a}$ $\frac{G}{b}$

a

Power Module/Latch Type	
Code	Description
DB	Base mount
DLS	Latch mount with screw termination
DLC3	Latch mount with 3 m (9.84 ft) cable termination

b

Color	
Code	Description
W	White
G	Green
R	Red
Y	Yellow
B	Blue

① Bulletin 800G LED modules can only be powered from dry contact circuits (with no leakage current in the OFF state).

Power Module with Contact Block ②



Base Mount
Cat. No. 800G-DBGXK

800G – $\frac{DB}{a}$ $\frac{G}{b}$ $\frac{XK}{c}$

a

Power Module/Latch Type	
Code	Description
DB	DB Base
DLS	Latch mount with screw termination
DLC3	Latch mount with 3 m (9.84 ft) cable termination

b

Color	
Code	Description
W	White
G	Green
R	Red
Y	Yellow
B	Blue

c

Contact Configuration	
Code	Description
XK	1 N.O.
XL	1 N.C.

② Bulletin 800G LED modules can only be powered from dry contact circuits (with no leakage current in the OFF state).

Legend Plates

800G – 11 S E 166 K
 a *b* *c* *d* *e*

a

Type	
Code	Description
11	Legend plate and frame
17	Legend plate only

c

Language	
Code	Description
E	English
F	French
G	German
T	Italian
S	Spanish
U	Universal symbol

d

Legend Identification	
See our website	

b

Insert Color	
Code	Description
S	Silver background with black legend text

e

Type	
Code	Description
K	0.080 size font



Legend Frame
Cat. No. 800G-110

Adhesive Back Legend Plate
Cat. No. 800G-17SE100

Special Engraving

Besides the standard text and symbols that are listed on our [website](#), special legend plates are readily available. To order:

- Select font code from table below.
- Specify desired text (reference table below for restriction on characters and number of lines).

Type of Legend	Size	Font Size	Font Code	Approximate Size	Max. Characters/Line	Max. Number of Lines	Example	Example (Legend Plate with Frame)
Legend Plate	30 x 4 mm	Small	K	SAMPLE	19	1	800G-17SE100K STARTER	800G-11SE100K STARTER

800G – AEL S LINE 1 , LINE 2 , LINE 3
 a *b* *c* *d* *e*

a

Insert Color	
Code	Description
AEL	Enclosure identification label with silver background and black text

b

Font Size	
Code	Description
S	0.10 size font
L	0.14 size font

c, d, e

Customized Text	
Example of customer specified text that is based on max. characters per line and max. number of lines. When separated by a comma, the following text is engraved on the next line.	

Adhesive Back Legend Plate
Cat. No. 800G-17SE100

Special Engraving

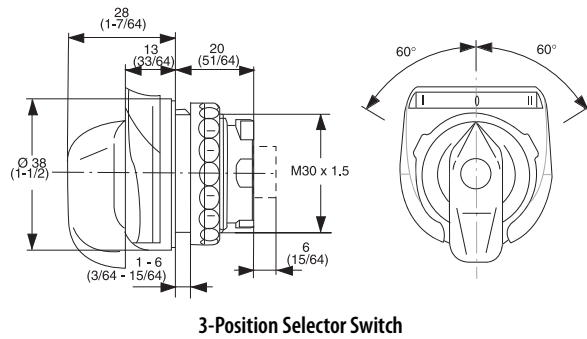
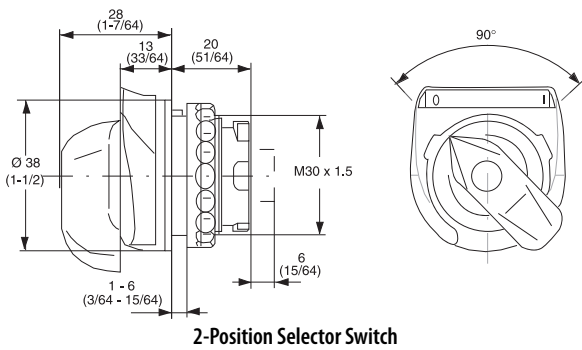
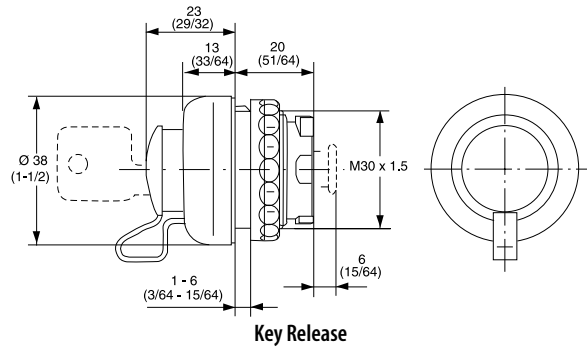
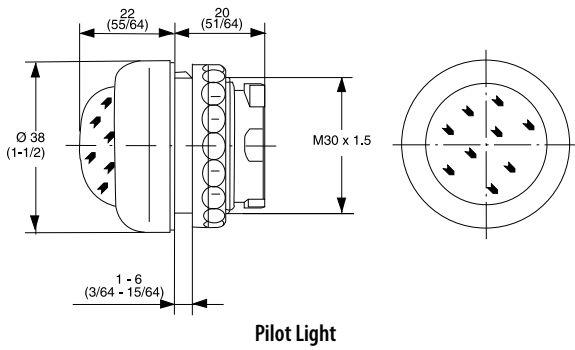
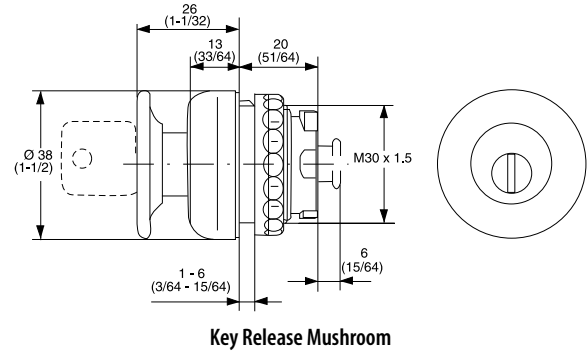
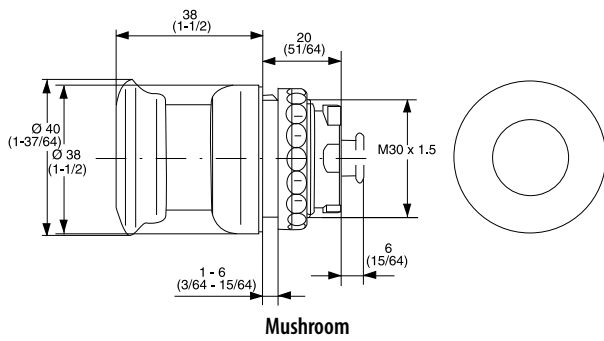
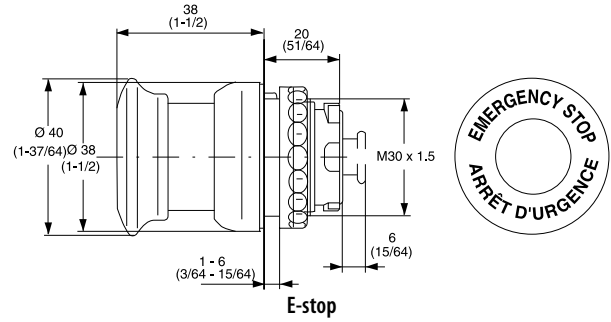
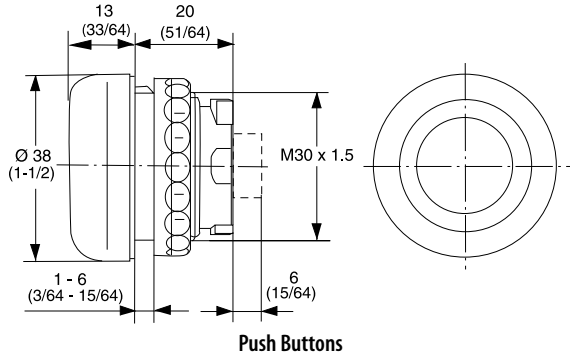
To order:

- Select desired font code table below (notes the max. characters and max. no. of lines).
- Specify desired text (reference table below for restriction on characters and number of lines).

Type of Legend	Size	Font Size	Font Code	Approximate Size	Max. Characters/Line	Max. Number of Lines	Example
Enclosure ID Label	50 x 15 mm	Standard	S	SAMPLE	25	3	800G-AELS MACHINE 1, L-R27
		Large	L	SAMPLE	19	2	800G-AELL MACH 1

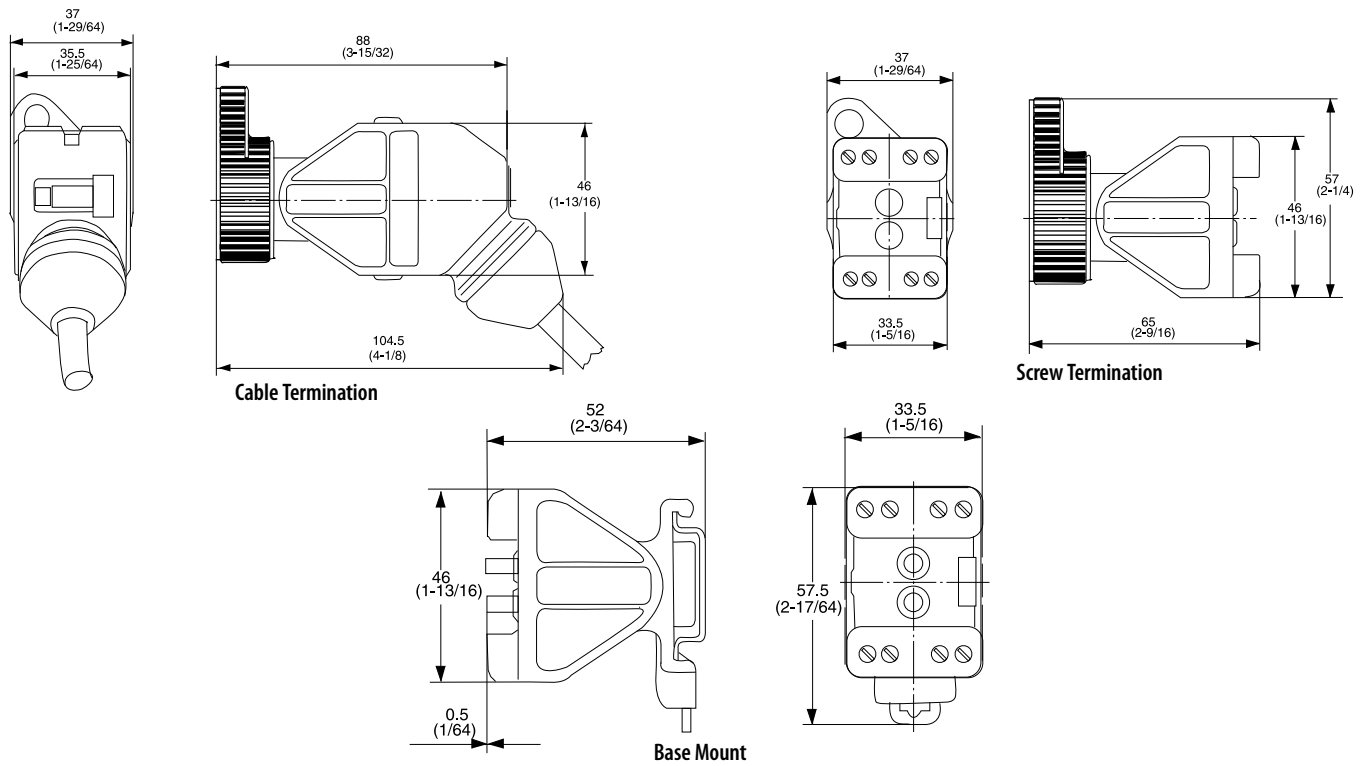
Approximate Dimensions (Bul. 800G)

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

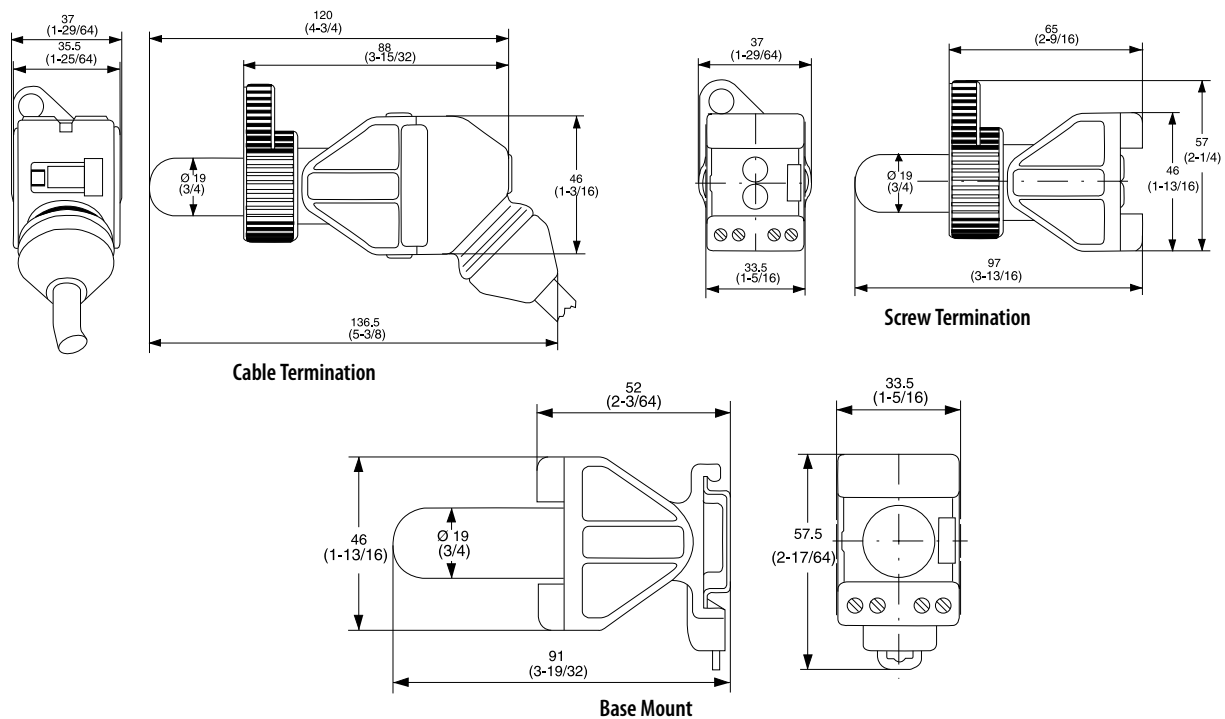


Dimensions in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.

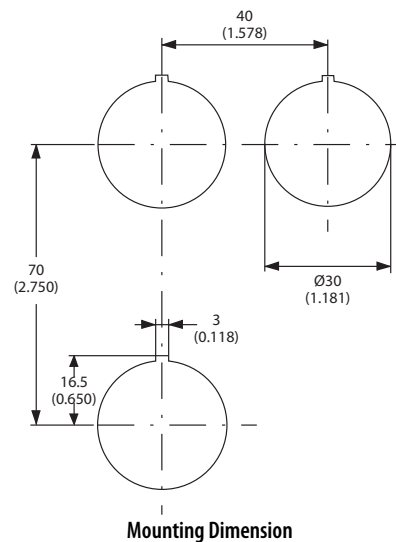
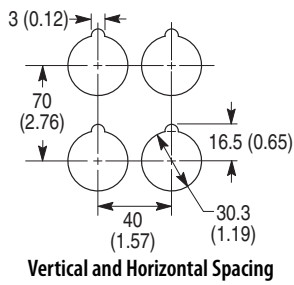
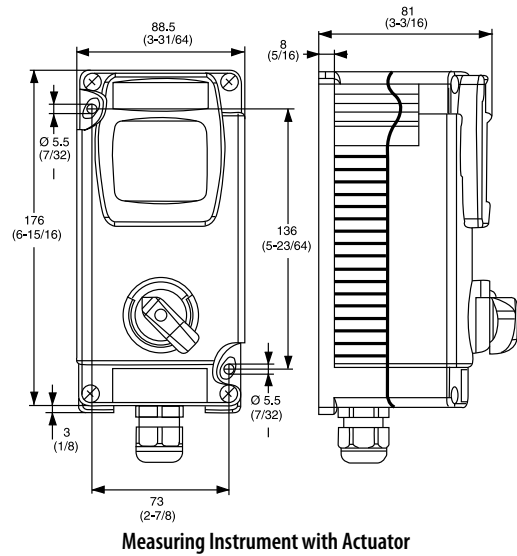
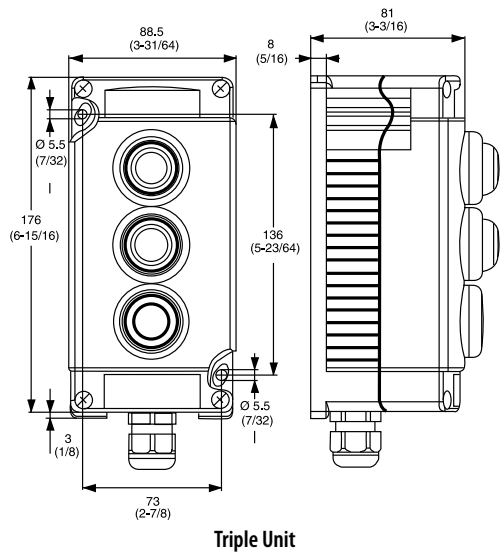
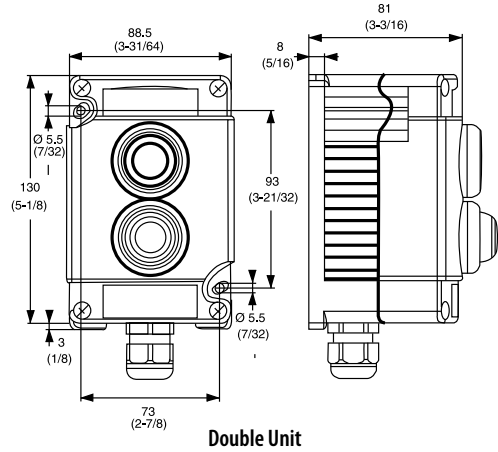
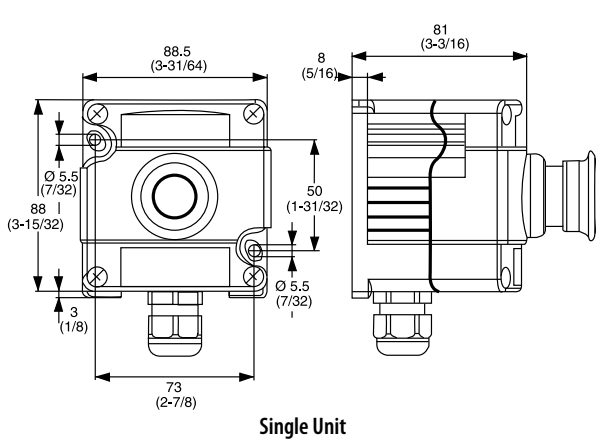
Contact Block



Power Module



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



Notes:

Rockwell Automation Support

Rockwell Automation provides technical information on the Web to assist you in using its products.

At <http://www.rockwellautomation.com/support> you can find technical and application notes, sample code, and links to software service packs. You can also visit our Support Center at <https://rockwellautomation.custhelp.com/> for software updates, support chats and forums, technical information, FAQs, and to sign up for product notification updates.

In addition, we offer multiple support programs for installation, configuration, and troubleshooting. For more information, contact your local distributor or Rockwell Automation representative, or visit <http://www.rockwellautomation.com/services/online-phone>.

Installation Assistance

If you experience a problem within the first 24 hours of installation, review the information that is contained in this manual. You can contact Customer Support for initial help in getting your product up and running.

United States or Canada	1.440.646.3434
Outside United States or Canada	Use the Worldwide Locator at http://www.rockwellautomation.com/rockwellautomation/support/overview.page , or contact your local Rockwell Automation representative.

New Product Satisfaction Return

Rockwell Automation tests all of its products to help ensure that they are fully operational when shipped from the manufacturing facility. However, if your product is not functioning and needs to be returned, follow these procedures.

United States	Contact your distributor. You must provide a Customer Support case number (call the phone number above to obtain one) to your distributor to complete the return process.
Outside United States	Please contact your local Rockwell Automation representative for the return procedure.

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Your comments will help us serve your documentation needs better. If you have any suggestions on how to improve this document, complete this form, publication [RA-DU002](#), available at <http://www.rockwellautomation.com/literature/>.

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