

2-Function Momentary Multi-Operator, Illuminated\*

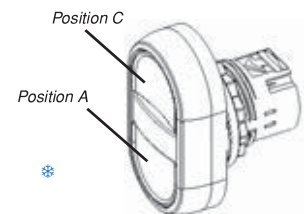


**2-Function Momentary Multi-Operator Illuminated**  
 Cat. No. 800FP-LU2E2E1

Position A			Position B	Position C			Pkg. Quantity	Plastic
Color	Type	Text	Type	Color	Type	Text		Cat. No.
Red	Extended	Blank	White Pilot Light	Green	Flush	Blank	1	800FP-LU2E4F3
		O				I		800FP-LU2EFFE
		STOP				START		800FP-LU2EBFA

800F P – LU2 E 4 F 3 (with button caps)  
           a       b       c       d       e       f

800F P – LU2 X (without button caps)  
           a       b       c



**a**

Operator Construction	
Code	Description
P	Plastic operator (IP66, Type 4/4X)
M	Metal operator (IP66, Type 4)

**b**

Operator Type*	
Code	Description
LU2	Two-function Illuminated

**c**

Operator Type — Position A*	
Code	Description
F	Flush
E	Extended
X	No caps (all positions)‡

**d**

Operator Color Cap/Text — Position A§	
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*	
Code	Description
F	Flush
E	Extended

**f**

Operator Color Cap/Text — Position C§	
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

\* LED module required for illumination, can not use incandescent module.

\* 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.

‡ For custom-engraved caps, order "no caps" option plus custom engraved caps on page 10-115.

§ Valid color cap/legend text codes include:

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

3-Function Momentary Multi-Operator, Non-Illuminated

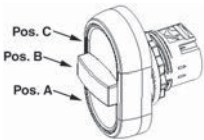


3-Function Momentary Multi-Operator Non-Illuminated  
Cat. No. 800FP-U3E4F34

Position A			Position B			Position C			Pkg. Quantity	Plastic
Color	Type	Text	Color	Type	Text	Color	Type	Text		Cat. No.
Green	Flush	Blank	Red	Extended	Blank	Green	Flush	Blank	1	800FP-U3F3F34

800F   P – U3   E   4   F   3   4   (with button caps)  
          a        b        c        d        e        f        g

800F   P – U3   X   (without button caps)  
          a        b        c



**a**

Operator Construction	
Code	Description
P	Plastic operator (IP66, Type 4/4X)
M	Metal operator (IP66, Type 4)

**b**

Operator Type	
Code	Description
U3	Three-function

**c**

Operator Type — Position A*	
Code	Description
F	Flush
E	Extended
X	No caps (all positions)*‡

**d**

Operator Color Cap/Text — Position A§	
Code	Description
1	White
2	Black
3	Green
4	Red
5	Yellow
6	Blue

**d (cont'd)**

Operator Color Cap/Text — Position A§	
Code	Description
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*	
Code	Description
F	Flush
E	Extended

**f**

Operator Color Cap/Text — Position C§	
Code	Description
1	White
2	Black
3	Green
4	Red
5	Yellow
6	Blue

**f (cont'd)**

Operator Color Cap/Text — Position C§	
Code	Description
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

**g**

Operator Color Cap/Text — Position B*‡	
Code	Description
4	Red
B	Red with "Stop" text
F	Red with "O" text

\* 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) corresponds to position B of the operator.

‡ For custom-engraved caps, order "no caps" option plus custom engraved caps on page 10-115.

‡ For "no caps" option, (position B) center cap available as red, no text only.

§ Valid color cap/legend text codes include:

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

## Reset Operators — Mechanical and/or Electrical Reset



**Reset Operator**  
 Cat. No. 800FP-R611

Button Color	Legend Text	Pkg. Quantity	Flush — Round	
			Plastic	Metal
			Cat. No.	Cat. No.
Blue	R	1	<b>800FP-R611</b>	<b>800FM-R611</b>
	No Legend		<b>800FP-R6</b>	<b>800FM-R6</b>

800F   M   —   R   6   11  
           *a*        *b*            *c*        *d*

*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	Type
R	Reset*§

*c*

Color Cap	
Code	Color
1	White
2	Black
6	Blue

\* Will accept latch and up to four single circuit contact blocks or two dual circuit contact blocks; no contacts allowed in center position.  
 § 11 mm reset stroke length.

*d*

Legend Text	
Code	Text
Blank	No text
11	R

## Threaded Reset Rod Reset Operators



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

Rod Length [mm]‡	Rod Length Adjustability [mm]	Pkg. Quantity	Threaded Reset Rod	
			10 mm Pusher	35 mm Pusher
			Cat. No.	Cat. No.
40	34...52	1	<b>800F-ATR01</b>	800F-ATR01L
55	50...67		800F-ATR02	800F-ATR02L
85	80...98		<b>800F-ATR04</b>	800F-ATR04L
115	110...128		800F-ATR06	800F-ATR06L
145	141...159		<b>800F-ATR08</b>	800F-ATR08L
315	34...326		§ <b>800F-ATR19</b>	§ 800F-ATR19L

‡ 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.  
 § Rod is threaded along its entire length for ease of cutting to desired length.

Single Turn Potentiometer Assembly⌘†§



Series B



Series A

Resistive Element	Series B Cat. No.	Series A Cat. No.⌘
None (Operator Only)*	800FP-POT	800FP-POTA
150 Ω	800FP-POT1	800FP-POT1A
500 Ω	800FP-POT2	800FP-POT2A
1000 Ω	800FP-POT3	800FP-POT3A
2500 Ω	800FP-POT4	800FP-POT4A
5000 Ω	800FP-POT5	800FP-POT5A
10000 Ω	800FP-POT6	800FP-POT6A

\* The Cat. No. 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.

⌘ Rated 300V AC/DC, 2 W max.

† A latch is not needed.

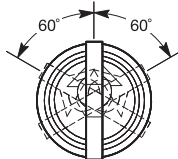
§ Additional hole spacing required for potentiometers. See page 10-125 for panel hole spacing requirements.

⌘ Not stocked. Longer lead-time.

Key Operated Selector Switch - SensEject™  
Patented Spring-Loaded Key Ejection System



2-Position  
Switching Angle



3-Position  
Switching Angle

Operator Construction	Operator Type	Key Eject Position	Key Option§	Spare Keys	Contact Blocks	Cat. No.➤
Round Metal Operator — SensEject is IP6X (dust-tight) Type 1	2-Position Maintained	 Left with Key Eject	Zadi Key 06Z	800F-AKE006	None	800FM-KEM2106Z
					1 N.O.; 1 N.C.	800FM-KEM2106ZMX11
	3-Position Spring Return from Both	 Center with Key Eject	Zadi Key 01Z	800F-AKE001	None	800FM-KEB3401Z
					2 N.O.; 3 N.C.	800FM-KEB3401ZMX23

§ 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.



➤ Includes latch and spacer block.

Selector Push Button Operators\*






**Selector Jog Operator**  
 Cat. No. 800FM-SJ23

Target Table and Operator Position (2-Position)

Contact Type*	Position on Mounting Latch				
		Selector Left Free	Selector Left Depressed	Selector Right Free	Selector Right Depressed
N.O.	Left	O	X	O	O
N.O.	Right	O	O	O	X
N.O.	Center	O	X	O	X
N.C.	Left	X	O	X	X
N.C.	Right	X	X	X	O
N.C.	Center	X	O	X	O

Note: X = Closed/O = Open

Target Table and Operator Position (3-Position)

Contact Type*	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	O	X	O	X	O	O
N.O.	Right	O	O	O	X	O	X
N.O.	Center	O	X	O	X	O	X
N.C.	Left	X	O	X	O	X	X
N.C.	Right	X	X	X	O	X	O
N.C.	Center	X	O	X	O	X	O

Note: X = Closed/O = Open

\* Contact selection is limited to the following options; consult your local Rockwell Automation sales office or Allen-Bradley distributor for other options.

800F   P   -   SJ   2   2  
                   a                  b                  c                  d

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
SJ	Selector jog

c

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

d

Color Cap	
Code	Description
2	Black
3	Green

\* Buttons cannot be engraved.

Toggle Switch Operators\*



Toggle Switch Operator  
Cat. No. 800FM-JM2

Target Table and Operator Position (2-Position)				
Contact Type§	Position on Mounting Latch			
		Toggle Left	Center	Toggle Right
N.O.	Left	O	O	X
N.O.	Right	X	O	O
N.O.	Center	X	O	X
N.C.	Left	X	X	O
N.C.	Right	O	X	X
N.C.	Center	O	X	O

Note: X = Closed/O = Open

Target Table and Operator Position (4-Position)‡						
Contact Type§	Position on Mounting Latch					
		Toggle Up	Toggle Left	Center	Toggle Right	Toggle Down
N.O.	Left	X	O	O	O	O
N.O.	Right	O	X	O	O	O
N.O.	Center	X	X	O	O	O
N.C.L.B.	Left	O	X	X	X	X
N.C.L.B.	Right	X	O	X	X	X
N.C.L.B.	Center	O	O	X	X	X
N.C.E.B.	Left	O	O	O	O	X
N.C.E.B.	Right	O	O	O	X	O

Note: X = Closed/O = Open

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

800F      M        J        M2    
          a            b            c

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

Operator Type	
Code	Description
J	Toggle switch

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

\* Use legend plates 800F-34\_ and 800F-35\_.  
\* Silicone boot comes standard with toggle switch, please see page 10-108 for replacement boots.  
‡ 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.

## 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

**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.

**b**

Contact Block(s) Termination Style*	
Code	Description
X	Screw termination
Q	Spring-clamp termination

**e**

Specialty Contact Block(s)	
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

\* 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

**c**

Voltage	
Code	Description
0	No bulb♣
1	6V AC/DC♣
2	12V AC/DC♣
3	24V AC/DC
4	48V AC/DC♣
5	120V AC
7	240V AC➤

**d**

Lamp Color⚡	
Code	Description
C	Incandescent
R	Red LED
G	Green LED
Y	Amber LED
W	White LED
B	Blue LED

**b**

Power Module Type‡§	
Code	Description
D	Incandescent module, screw termination
N	Integrated LED module, screw termination
Q	Integrated LED module, spring-clamp termination

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

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

♣ Only available for incandescent module.

➤ Only available for integrated LED module.

⚡ For best illumination results, LED color should match lens color. For yellow operator, select a white LED.

## Overview, Continued

### 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

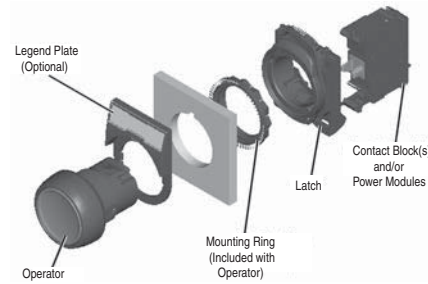


Plastic Latch with Contact Block



Metal Latch with Contact Block

### Assembly Overview



## Specifications\*

### Front-of-Panel (Operators)

Mechanical Ratings		
Description	Plastic (Bulletin 800FP)	Metal (Bulletin 800FM)
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*	IP65/66 (Type 3/3R/4/4X/12/13)	IP65/66 (Type 3/3R/4/12/13)
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‡
	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 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)
Environmental		
Temperature range (operating)	-25...+70 °C (-13...+158 °F)§	
Temperature range (short term storage)	-40...+85 °C (-40...+185 °F)	
Humidity	50...95% RH from 25...60 °C (77...140 °F)	

\* Performance Data — see page Important-3 of the Industrial Controls catalog.

‡ Momentary mushroom operators are IP65. Plastic keyed operators are IP66, Type 4/13; not Type 4X.

‡ Limit of four contact blocks max. for these devices.

§ 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).

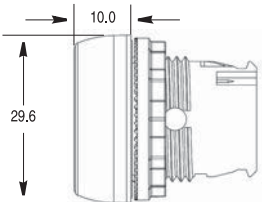
## Product Certifications

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	✓

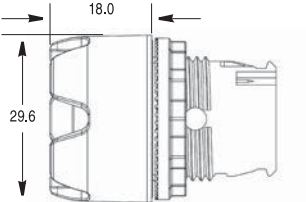
Approximate Dimensions

Dimensions in millimeters. Dimensions are not intended to be used for manufacturing purposes. Refer to RAISE software for additional dimensional information.

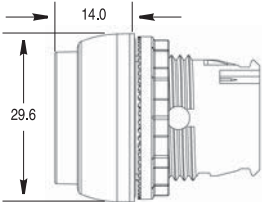
Non-Illuminated and Illuminated Momentary Flush Push Button Operators



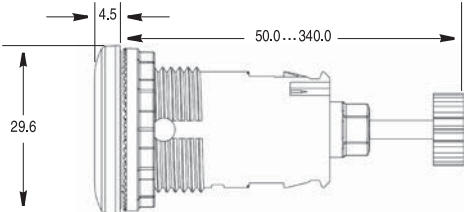
Illuminated Momentary Guarded Push Button Operators



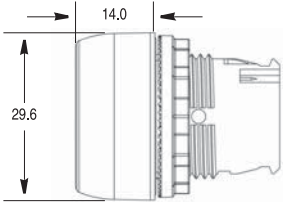
Illuminated and Non-Illuminated Momentary Extended Push Button Operators



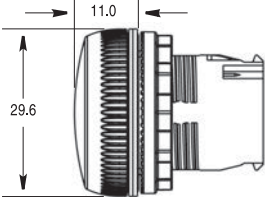
Reset Operators with Reset Rod



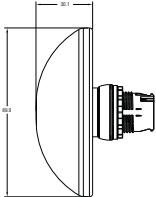
Non-Illuminated Guarded, Illuminated and Non-Illuminated Alternate Action Push Button Operators



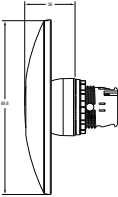
Pilot Light Operators



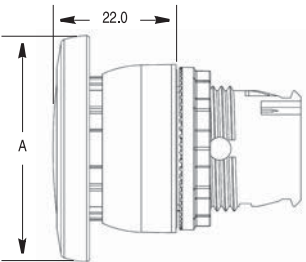
90 mm Half Dome



90 mm Mushroom

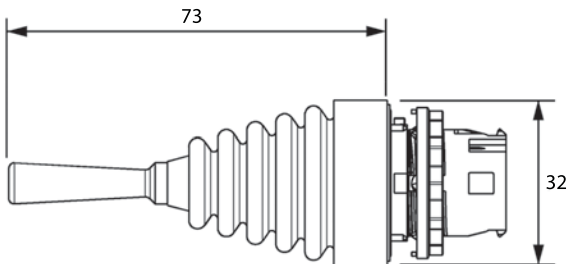


Illuminated and Non-Illuminated Momentary Mushroom Operators 40 mm and 60 mm

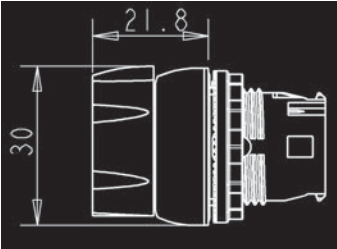


Operator	A
40 mm	39.8
60 mm	59.8

Toggle Switch Operators

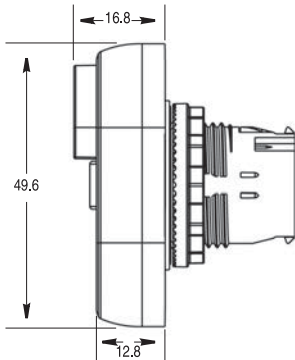


Selector Jog Operators

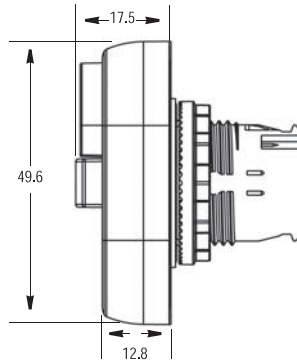


Dimensions in millimeters. Dimensions are not intended to be used for manufacturing purposes.

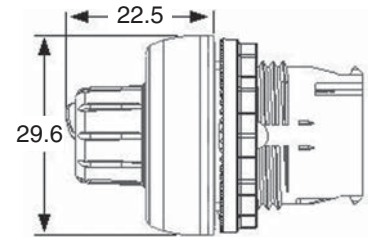
**Illuminated and Non-Illuminated  
2-Position Multi-Function Operators**



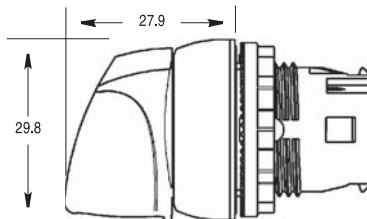
**Non-Illuminated 3-Position  
Multi-Function Operators**



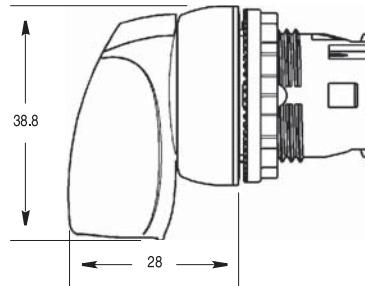
**Potentiometer Operator**



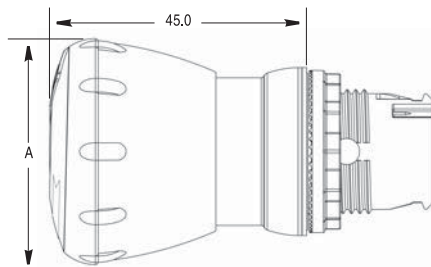
**Illuminated and Non-Illuminated Knob  
Selector Switch Operators**



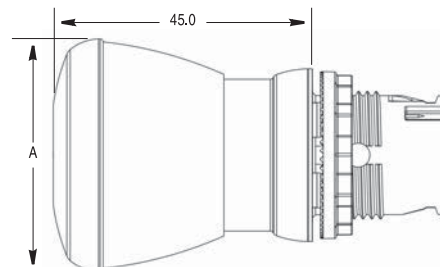
**Non-Illuminated Knob Lever Selector  
Switch Operators**



**Illuminated and Non-Illuminated  
Twist-to-Release Operators  
30 mm, 40 mm, and 60 mm**

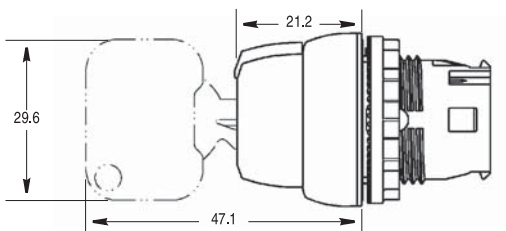


**Illuminated and Non-Illuminated  
Push-Pull Mushroom Operators  
30 mm, 40 mm, and 60 mm**

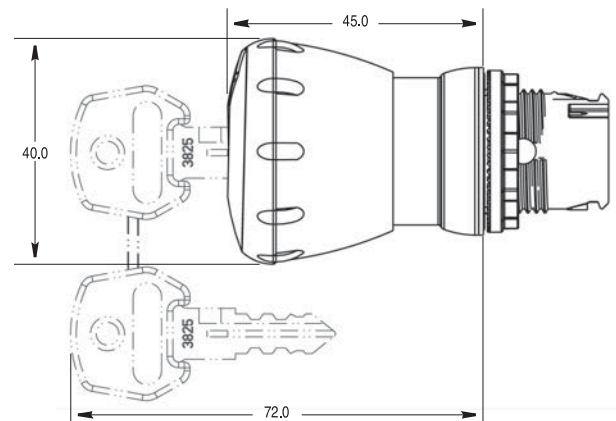


Operator	A
30 mm	30.0
40 mm	40.0
60 mm	60.0

**Key Selector Switch and Key Ejected  
SensEject Operators**

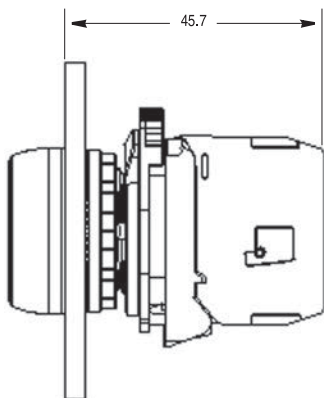
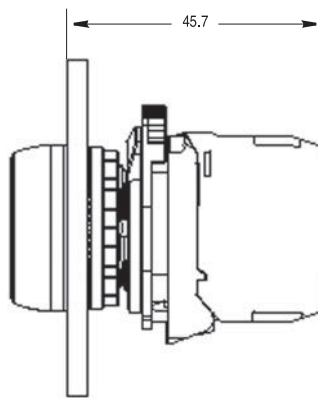
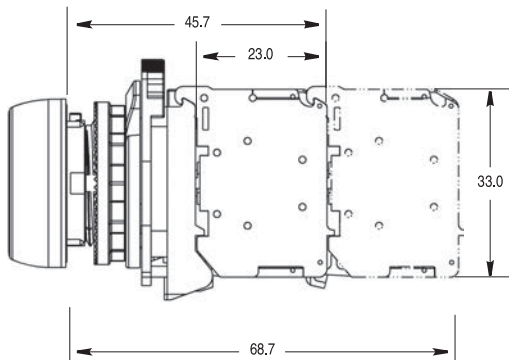
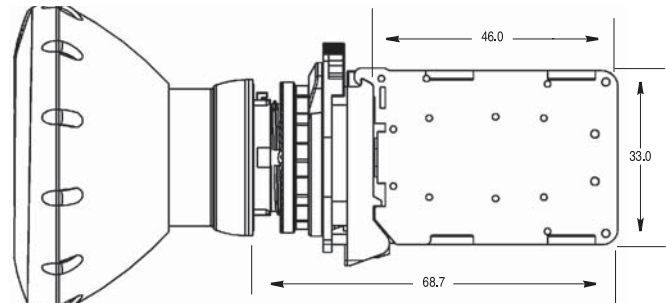
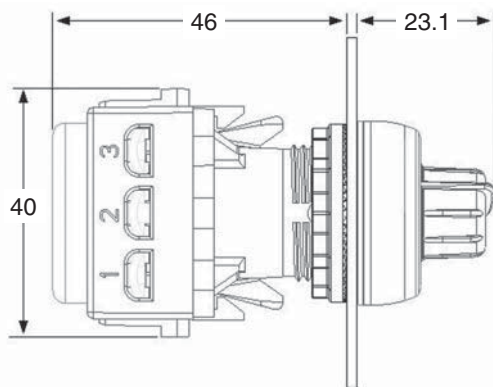
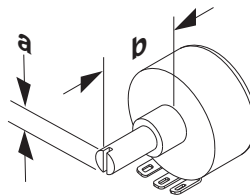


**Mushroom Key Release Operator 40 mm**



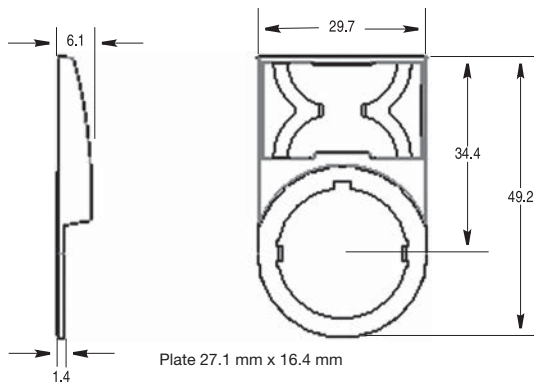
**22.5 mm Push Buttons****Approximate Dimensions**

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

**Back-of-Panel Components —  
Incandescent Module with Latch****Back-of-Panel Components —  
LED Module with Latch****Back-of-Panel Components —  
Contact Cartridges with Latch****Back-of-Panel Components —  
Dual Circuit Contact Block or  
Self Monitoring Contact Block  
(Max. of 1 Deep)****Potentiometer with Resistive Element****Customer Supplied Resistive Element**

	Max.		Min.
a (Ø Dia.)	6.4 (0.252)	5.9 (0.232)	5.7 (0.224)
b (Length)	24 (0.945)	32 (1.26)	14 (0.551)

Dimensions in millimeters (inches).

**30 x 50 mm Snap-In Legend Plate**

10

**30 x 40 mm Snap-In Legend Plate**