
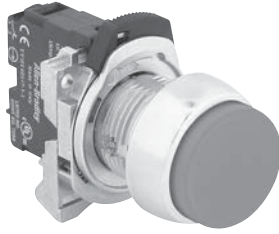




**Complete Devices\***

**Non-Illuminated Push Buttons, Momentary (Screw Terminal Connections)**

	Description	Type of Contact		Color	Construction	Pkg. Quantity	Cat. No.
		N.O.	N.C.				
 Cat. No. 800FP-F3PX10	Flush	1	—	Green	Plastic operator/plastic latch	1	800FP-F3PX10
				Black			800FP-F2PX10
				Green	Metal operator/metal latch		800FM-F3MX10
				Black			800FM-F2MX10
 Cat. No. 800FM-E4MX01	Extended	—	1	Red	Plastic operator/plastic latch	1	800FP-E4PX01
					Metal operator/metal latch		800FM-E4MX01
 Cat. No. 800FP-U2E4F3PX10	Multi-function (Flush/extended)	1	1	Green/Red	Plastic operator/plastic latch	1	800FP-U2E4F3PX11
					Metal operator/metal latch		800FM-U2E4F3MX11
				Green "1" / Red "0"	Plastic operator/plastic latch		800FP-U2EFFEPX11
					Metal operator/metal latch		800FM-U2EFFEMX11

**Non-Illuminated Selector Switches (Screw Terminal Connections)**

	Description	Type of Contact		Style	Construction	Pkg. Quantity	Cat. No.
		N.O.	N.C.				
 Cat. No. 800FP-SM22PX10	Standard lever, black	1	—	2-position maintained	Plastic operator/plastic latch	1	800FP-SM22PX10
		1	1	2-position maintained	Plastic operator/plastic latch		800FP-SM22PX11
		1	—	2-position maintained	Metal operator/metal latch		800FM-SM22MX10
		1	1	2-position maintained	Metal operator/metal latch		800FM-SM22MX11
		2	—	3-position maintained	Plastic operator/plastic latch		800FP-SM32PX20
		2	—	3-position maintained	Metal operator/metal latch		800FM-SM32MX20

\* For complete devices not listed and configuration assistance, see RAISE product selection software (<http://www.ab.com/raise>).

## 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

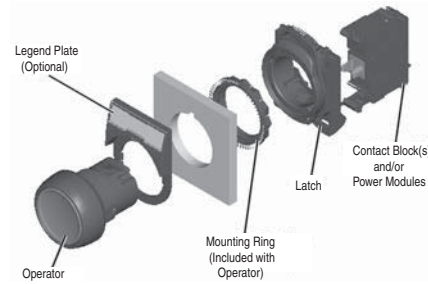


Plastic Latch with Contact Block



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.

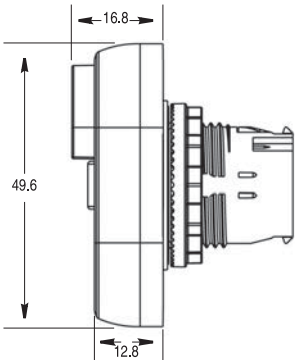
§ Operating temperatures below 0 °C (32 °F) are based on the absence of freezing moisture and liquids, UL Recognized to 55 °C (131 °F) - Incandescent module max. 40 °C (104 °F).

## Product Certifications

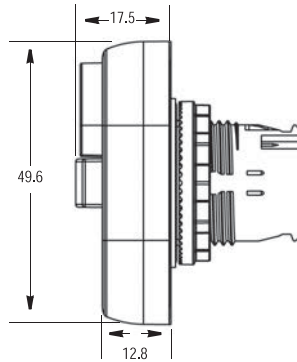
Certifications	UR/UL, CSA, CCC, CE
Standards Compliance — CE Marked	NEMA ICS-5; UL 508, EN ISO 13850, EN 60947-1, EN 60947-5-1, EN 60947-5-5
Terminal Identification	EN/IEC 60947-1
Shipping Approvals	ABS
RoHS	✓

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

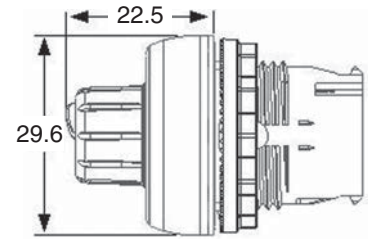
**Illuminated and Non-Illuminated  
2-Position Multi-Function Operators**



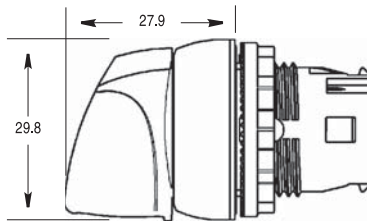
**Non-Illuminated 3-Position  
Multi-Function Operators**



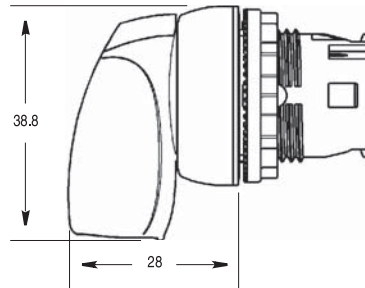
**Potentiometer Operator**



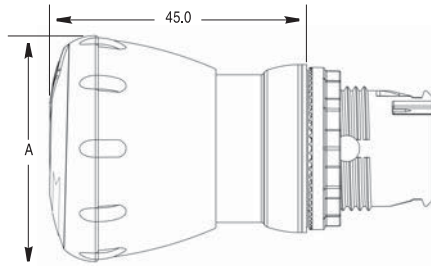
**Illuminated and Non-Illuminated Knob  
Selector Switch Operators**



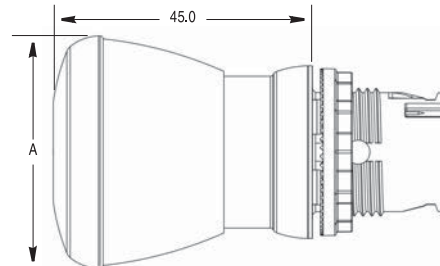
**Non-Illuminated Knob Lever Selector  
Switch Operators**



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

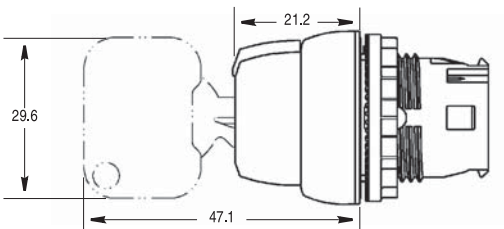


**Illuminated and Non-Illuminated  
Push-Pull Mushroom Operators  
30 mm, 40 mm, and 60 mm**



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**

