

# **IEC Push Button Specifications**

Bulletin Numbers 598, 800F, 800FC, 800FD, 800B, 800MB, and 800MR

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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, <a href="http://www.ab.com">http://www.ab.com</a>	Provides declarations of conformity, certificates, and other certification details.

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







# **Bulletin 800FP Plastic Operators**

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



Bul. 800FP Plastic Operators

# **Bulletin 800FM Metal Operators**

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



Bul. 800FM Die-Cast Metal Operators

# 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

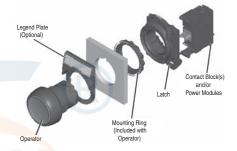


Plastic Latch with Contact Block



Metal Latch with Contact Block

# **Assembly Overview**



#### **Specifications**

#### Front-of-Panel (Operators)★

Description Vibration (assembled to panel)		Plastic (Bulletin 800FP)	Metal (Bulletin 800FM)
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01 1		Tested at 102000 Hz, 1.52 mm displacement (peak-to-peak) max./10 G max. for 3 hr duration, no dan	
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)
10 000 000 Cycles		Momentary push buttons, momentary mushroom	
Mechanical durability per	1 000 000 Cycles	Multi-function, selector switch, key selector switch, selector jog, SensEject <sup>TM</sup> key selector switch	
	500 000 Cycles	Non-illuminated p	oush-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)	
Plastic		1.7 N∙m (15 lb•in)	
Mounting torque	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		5095% RH from 25	560 °C (77140 °F)

<sup>\*</sup> Performance Data — Performance data given in this publication is provided only as a guide for the user in determining suitability and do not constitute a performance warranty of any kind. Such data may represent the results of accelerated testing at elevated stress levels, and the user is responsible for correlating the data to actual application requirements. ALL WARRANTIES AS TO ACTUAL PERFORMANCE, WHETHER EXPRESS OR IMPLIED, ARE EXPRESSLY DISCLAIMED.

- ‡ 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).

#### **Standards Compliance and 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	✓		