

Piezo Push Buttons

Bulletin 800K



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What's Inside

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Summary of Changes

This publication contains new and updated information as indicated in the following table.

Topic	Page
Added blue and yellow options to Table c of Catalog Number Explanation.	3
Add catalog number of blue and yellow operators to Product Selection table.	4
Added specifications for blue and yellow to Illumination table.	6

Product Selection

Hole Size	Operator Type	Color	Voltage	Contact Type	Termination Type	Engraving	Cat. No.				
22.5 mm	Momentary	Non-Illuminated	24V DC	N.O.	Screw	Blank	800K-22FMN24X10				
		Green		N.O.			800K-22FMG24X10				
		Red		N.C.			800K-22FMR24X01				
		White		N.O.			800K-22FMW24X10				
		Blue		N.O.			800K-22FMB24X10				
		Yellow		N.O.			800K-22FMY24X10				
		Non-Illuminated		N.O.		Custom Text	800K-22FMN24X10E100 ⁽¹⁾				
		Green		N.O.			800K-22FMG24X10E100 ⁽¹⁾				
		Red		N.C.			800K-22FMR24X01E100 ⁽¹⁾				
		White		N.O.			800K-22FMW24X10E100 ⁽¹⁾				
		Blue		N.O.			800K-22FMB24X10E100 ⁽¹⁾				
		Yellow		N.O.			800K-22FMY24X10E100 ⁽¹⁾				
		Non-Illuminated		N.O.		Custom Symbol	800K-22FMN24X10U100 ⁽¹⁾				
		Green		N.O.			800K-22FMG24X10U100 ⁽¹⁾				
		Red		N.C.			800K-22FMR24X01U100 ⁽¹⁾				
		White		N.O.			800K-22FMW24X10U100 ⁽¹⁾				
		Blue		N.O.			800K-22FMB24X10U100 ⁽¹⁾				
		Yellow		N.O.			800K-22FMY24X10U100 ⁽¹⁾				
		30.5 mm		Momentary		Non-Illuminated	24V DC	N.O.	Screw	Blank	800K-30FMN24X10
						Green		N.O.			800K-30FMG24X10
						Red		N.C.			800K-30FMR24X01
						White		N.O.			800K-30FMW24X10
						Blue		N.O.			800K-30FMB24X10
						Yellow		N.O.			800K-30FMY24X10
Non-Illuminated	N.O.		Custom Text		800K-30FMN24X10E100 ⁽¹⁾						
Green	N.O.				800K-30FMG24X10E100 ⁽¹⁾						
Red	N.C.				800K-30FMR24X01E100 ⁽¹⁾						
White	N.O.				800K-30FMW24X10E100 ⁽¹⁾						
Blue	N.O.				800K-30FMB24X10E100 ⁽¹⁾						
Yellow	N.O.				800K-30FMY24X10E100 ⁽¹⁾						
Non-Illuminated	N.O.		Custom Symbol		800K-30FMN24X10U100 ⁽¹⁾						
Green	N.O.				800K-30FMG24X10U100 ⁽¹⁾						
Red	N.C.				800K-30FMR24X01U100 ⁽¹⁾						
White	N.O.				800K-30FMW24X10U100 ⁽¹⁾						
Blue	N.O.				800K-30FMB24X10U100 ⁽¹⁾						
Yellow	N.O.				800K-30FMY24X10U100 ⁽¹⁾						

(1) Font code must be added to complete catalog number (G=12pt, H=16pt, or J=20pt). Example: Order Catalog Number 800K-22FMN24X10E100G for 12pt font. See [Text Lines/Character Chart on page 5](#) for the number of text lines and characters per line. Text or graphic file must be supplied at time of order entry.

Text Lines/Character Chart

Hole Size	Font Code	Non-Illuminated		Illuminated	
		No. of Lines	Characters per Line	No. of Lines	Characters per Line
22 mm	G 12 pt	1	8	1	6
		2	8/8	2	5...6/5...6
		3	7/8/7	3	4/6/4
	H 16 pt	1	6...7	1	5
		2	6/6	2	4/4
		3	4/6/4	—	—
	J 20 pt	1	5	1	1...4
		2	5/5	—	—
	30 mm	H 16 pt	1	9	1
2			8/8	2	6/6
3			7/9/7	3	4/6/4
J 20 pt		1	7	1	5
		2	6...7/6...7	2	5/5
		3	6/7/6	—	—

Specifications

Mechanical Ratings

Attribute	Bulletin 800K	
Vibration (assembled to panel)	Mechanical vibration (per 40001-843, Cat I) <ul style="list-style-type: none"> • Axis definitions – 3 mutually perpendicular axes • Frequency – 10...2000 Hz • Duration - 2 hours each axis • Peak acceleration: 10G with no damage 	Tested at 10...2000 Hz, 1.52 mm displacement (peak-to-peak) max./ 10 G max. 6 hr, no damage
Shock	Mechanical Shock (per 40001-843, Cat I) <ul style="list-style-type: none"> • Wave shape - 1/2 cycle sine wave • Duration - 11 ms • Frequency - 3 times in each axis • Shock pulse peak acceleration: 100G with no damage 	Tested at 1/2 cycle sine wave for 11 ms; no damage at 100 G
Degree of protection	UL Type 4/4X/13; IP68, IP69K	
Life expectancy	50,000,000 cycles	Momentary push buttons
Operating forces (typical)	5...9 N (1...2 lb)	
Mounting torque	3.4 N•m (30 lb•in)	

Environmental

Attribute		Bulletin 800K
Temperature range	Operating	UL: -25...+50 °C (-13...+122 °F) ⁽¹⁾ -25...+70 °C (-13...+158 °F)
	Short-term Storage	-40...+85 °C (-40...+185 °F)
Humidity		50...95% RH from 25...60 °C (77...140 °F)
Pollution Degree		3
Chemical resistance (ECOLAB)		Passed 15 day immersion with 10 ECOLAB supplied chemicals

(1) Operating temperatures below 0 °C (32 °F) are based on the absence of freezing moisture and liquids. UL listed to 50 °C maximum ambient.

Electrical Ratings

Attribute	Bulletin 800K
Switch Ratings	UL 508, General Use EN / IEC 60947-5-1: AC-12 SG, DC-12 SU 24V DC 100 mA (N.C.), 200mA (N.O. pulse)
Insulation Voltage (U _i)	60V
Wire Capacity	#26...14 AWG (0.2...1.5 mm ²)
Dielectric Strength (Min)	1000V for one minute
External Short Circuit Protection	Fast-acting fuse
Electrical Shock Protection	Finger-safe terminals conforming to IP2X
Terminal Tightening Torque	0.45 N•m (4 lb•in)

Illumination

Attribute	Bulletin 800K	
Lamp Ratings	Nominal Voltage	Current Draw
LED	24V DC	19 mA 3 mA leakage current resistance
LED Dominant Wavelength	Green Red White Blue Yellow	525 nm 628 nm — 465 nm —
LED Luminous Intensity	Green Red White Blue Yellow	110 mcd (min), 300 mcd (typical) 70 mcd (min), 200 mcd (typical) 110 mcd (min), 300 mcd (typical) 90 mcd (min), 150 mcd (typical) 110 mcd (min), 300 mcd (typical)

Material Listing

Component	Material Used
Panel Gasket	Nitrile
Lens (Illuminated Operator)	Polyamide
Bushing, Button Cap	Stainless Steel
Mounting Ring	Brass with nickel plating
Terminal Housing	Polyamide

Component	Material Used
Terminal	Brass with tin plating
Wire Pressure Plate	Stainless steel
Screw	Stainless steel
Anti-rotation Washer	Stainless steel

Notes:

Rockwell Automation Support

Use the following resources to access support information.

Technical Support Center	Knowledgebase Articles, How-to Videos, FAQs, Chat, User Forums, and Product Notification Updates.	www.rockwellautomation.com/knowledgebase
Local Technical Support Phone Numbers	Locate the phone number for your country.	www.rockwellautomation.com/global/support/get-support-now.page
Direct Dial Codes	Find the Direct Dial Code for your product. Use the code to route your call directly to a technical support engineer.	www.rockwellautomation.com/global/support/direct-dial.page
Literature Library	Installation Instructions, Manuals, Brochures, and Technical Data.	www.rockwellautomation.com/literature
Product Compatibility and Download Center (PCDC)	Get help determining how products interact, check features and capabilities, and find associated firmware.	www.rockwellautomation.com/global/support/pcdc.page

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