

Bulletin 800K Piezoelectric Push Buttons

Designed for High-pressure Wash-down Environments

Features and Benefits

IP69K Rating

- Protected against close-range high pressure, high temperature caustic wash
- Ideal for food, beverage and similar application environments

316 Stainless-steel

- Corrosion resistant to caustic wash-down solutions

Smooth, Crevice-free Surface

- Easier to clean
- Minimizes areas on the button in which contaminants can potentially be lodged

No Moving Parts

- By using piezoelectric technology, moving seals and crevices can be eliminated from the push button, avoiding potential sources for failure

Potted Circuit

- Helps prevent fluids from corroding operator components
- Provides an additional barrier of protection

Certifications and Standards

- UL508
- CSA
- EN IEC 60947
- ECOLAB chemical resistance

Custom Laser Engraving

- Avoids potentially contaminate-trapping legend plates
- Provides flexibility to address a wide range of applications



Overview

Responding to the challenges of food, beverage and other industries where high-pressure, caustic wash-downs can challenge even the most robust push buttons, Rockwell Automation introduces the 800K push button line. Customers told us they need a solution that could:

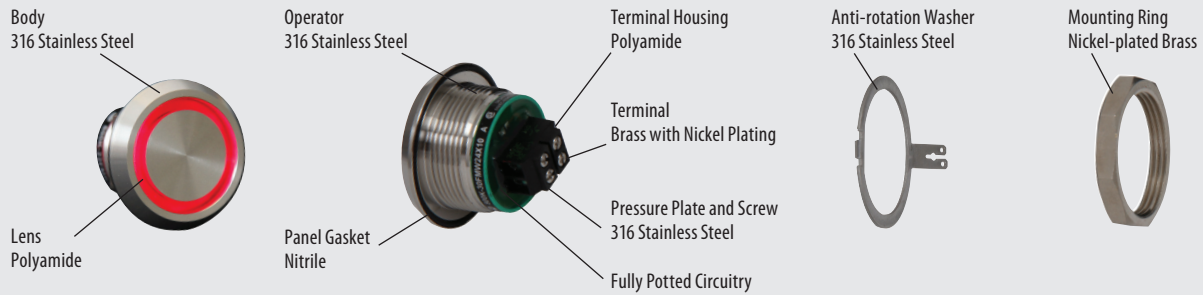
- Minimize production loss due to cleaning procedures
- Minimize frequent replacement due to corrosion
- Minimize bacteria growth potential from crevices
- UL Certified product for industrial panel

These 22.5 and 30.5 mm push buttons represent an innovative rethinking of push button technology and its industrial applications. They use a potted piezoelectric circuit in an SAE grade 316 stainless-steel body and achieve an IP69K rating. The piezoelectric circuit detects pressure on the surface of the button to provide a momentary actuation signal with no moving parts. A smooth, crevice-free button surface is the result.

Both sizes of 800K buttons are available in illuminated and non-illuminated versions. The illuminated buttons use a translucent light pipe to bring the red, green, white, blue or yellow LED illumination to a ring on the crevice-free operating surface. Red illuminated buttons have a single normally-closed circuit while all other models are provided with a single normally-open circuit. The momentary contacts can be directly connected to a programmable controller or with an appropriate interposing relay.

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Materials and Construction



Catalog Number Configuration

800K- 30 FM G 24 X 10 E100J
a b c d e f g

a

Operator Size	
Code	Description
22	22.5 mm
30	30.5 mm

b

Operator Type	
Code	Description
FM	Flush, Momentary

c

Color	
Code	Description
N	Non-illuminated
G	Green (illuminated)
R	Red (illuminated)
W	White (illuminated)
B	Blue (illuminated)
Y	Yellow (illuminated)

d

Voltage	
Code	Description
24	24V DC

e

Termination Style	
Code	Description
X	Screw termination

f

Contact Block	
Code	Color
10	1 N.O. *
01	1 N.C. §

g

Laser Engraving – Font Size ❖	
Code	Description
Blank	No engraving
E100G	Custom text – font size 12 pt
E100H	Custom text – font size 16 pt
E100J	Custom text – font size 20 pt
U100	Custom symbol

* N.O. contact only available with color codes N, G, W, B, Y.
 § N.C. contact only available with color code R.
 ❖ See Selection Guide for engraving details.

Specifications

Mechanical Ratings	
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)
Environmental	
Temperature Range (operating)	UL: -25...+50 °C (-13...+122 °F)* -25...+70 °C (-13...+158 °F)*
Pollution Degree	3
Electrical Ratings	
Switch Ratings	UL 508, General Use, EN / IEC 60947-5-1: AC-12 SG, DC-12 SU 24V DC, 100 mA (NC), 200 mA (NO pulse)
Insulation Voltage (Ui)	60V
Dielectric Strength (minimum)	1000V for one minute
External Short Circuit Protection	Fast-acting fuse
Electrical Shock Protection	Finger-safe terminals conforming to IP2X
Lamp Ratings	
LED	24V DC Nominal Voltage, 19 mA current draw, 3 mA leakage current, separate power circuit
LED Luminous Intensity	Green: 10 mcd (min), 300 mcd (typical) Red: 70 mcd (min), 200 mcd (typical) White: 110 mcd (min), 300 mcd (typical) Blue: 90 mcd (min), 150 mcd (typical) Yellow: 110 mcd (min), 300 mcd (typical)

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www.rockwellautomation.com

Power, Control and Information Solutions Headquarters

Americas: Rockwell Automation, 1201 South Second Street, Milwaukee, WI 53204-2496 USA, Tel: (1) 414.382.2000, Fax: (1) 414.382.4444
 Europe/Middle East/Africa: Rockwell Automation NV, Pegasus Park, De Kleetlaan 12a, 1831 Diegem, Belgium, Tel: (32) 2 663 0600, Fax: (32) 2 663 0640
 Asia Pacific: Rockwell Automation, Level 14, Core F, Cyberport 3, 100 Cyberport Road, Hong Kong, Tel: (852) 2887 4788, Fax: (852) 2508 1846