

# 800B 16 mm Push Buttons



World Class Design for Light Industrial  
and Instrumentation Applications



LISTEN.  
THINK.  
SOLVE.®

# Superior Design

The Allen-Bradley® Bulletin 800B 16 mm Push Button line can meet your light industrial and instrumentation application needs with its highly configurable and flexible design. Excellent for applications with limited panel space or a small footprint, this bold and bright line of Push Buttons is a smart choice for you.

## Worldwide Solutions

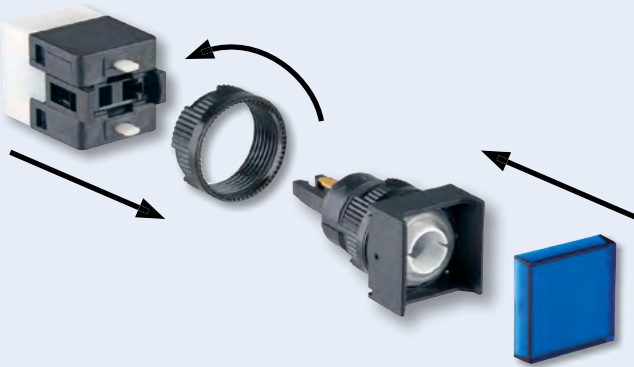
- Designed to worldwide standards



## Durable Materials

- Bulletin 800B operators are made of corrosion-proof plastic to ensure long push button life
- Consistent coloring and illumination make these easy to identify for the life of the operator

## Ease of Installation

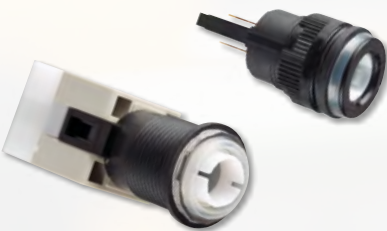


## Ergonomic Design

- Bright, bold, consistent operators are easy to see
- Contoured button surface for comfort
- Operator diffusers available with custom markings

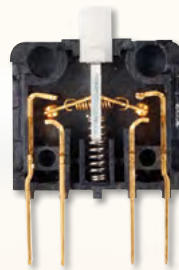


## Dependable Sealing



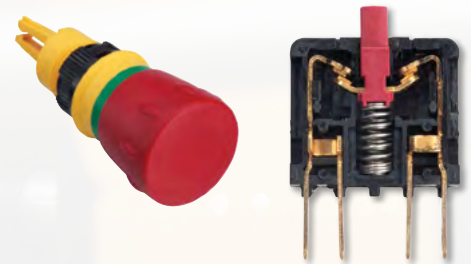
- IP66 and Type 4/13
- Diaphragm seals
  - Linear travel devices
  - Pilot Lights
- V-seals
  - Selector Switches
  - High pressure sealing
- K-seals
  - Emergency Stops
  - Dual wiping action

## Reliable Low Voltage Switching



- Gold-plated snap action contacts
- Reliability operation in applications below 24V DC, 5 mA down to 5V DC, 1 mA

## Enhanced E-Stop Functionality



- Anti-tease feature standard
  - Trigger-action design
- EN13850 and EN 60947-5-5 compliant
- Direct Drive mechanism
  - Positive actuation
- Slow make/break







For more information on our complete family of 16 mm and other push button products, please visit:  
<http://ab.rockwellautomation.com/Push-Buttons-and-Signaling-Devices>

# Push Button Operators





## Momentary Push Button/Pilot Light Operators



		Extended	Flush
	ROUND	800B-EPA	800B-FPA
	SQUARE	800B-EPB	800B-FPB
	RECTANGLE	800B-EPC	800B-FPC
	LARGE SQUARE	800B-EPD	-





## Maintained Push Button Operators



		Extended	Flush
	ROUND	800B-EAA	-
	SQUARE	800B-EAB	-
	RECTANGLE	800B-EAC	-
	LARGE SQUARE	800B-EAD	-





## 2-Position Selector Switch Operators



	MAINTAINED	800B-SM2A
	RETURN FROM RIGHT	800B-SR2A
	KEYED, MAINTAINED	800B-KM2A
	KEYED, RETURN FROM RIGHT	800B-KR2A

## 3-Position Selector Switch Operators



	MAINTAINED	800B-SM3A
	RETURN FROM BOTH	800B-SB3A
	KEYED, MAINTAINED	800B-KM3A
	KEYED, RETURN FROM BOTH	800B-KB3A

## Emergency Stop Operators



	NON-ILLUMINATED	800B-MT
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# Lens Cap with Diffuser

Green



Red



Yellow



Blue



White



# Bezel for Round Operators

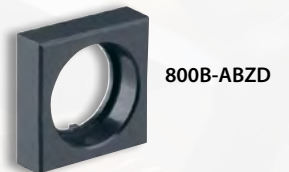
Square



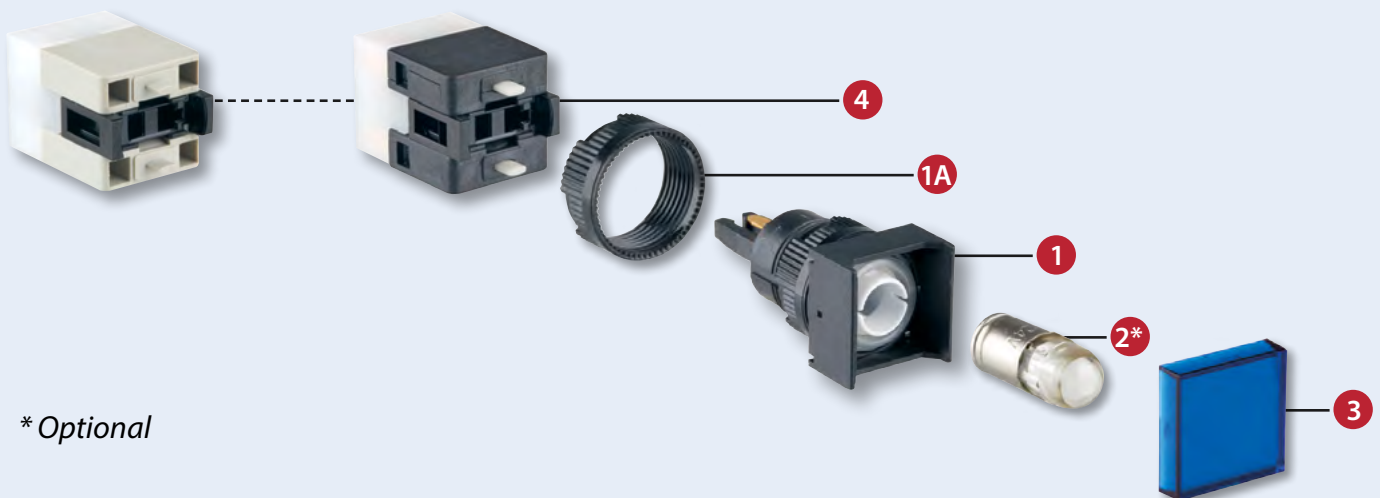
Rectangle



Large Square



# Operator Assembly Sequence

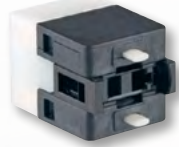


# Contact Block/Latch Module

## Push Button/Selector Switch



1 N.O./1 N.C. Snap Action	<b>800B-PS11</b>
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1 N.O./1 N.C. Snap Action	<b>800B-PS22</b>
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## Pilot Light



Dummy Block	<b>800B-PL</b>
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## Emergency Stop/Push Button/Selector Switch



1 N.C. Slow Make/Break	<b>800B-PT01</b>
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2 N.C. Slow Make/Break	<b>800B-PT02</b>
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1 N.C./N.O. Slow Make/Break	<b>800B-PT11</b>
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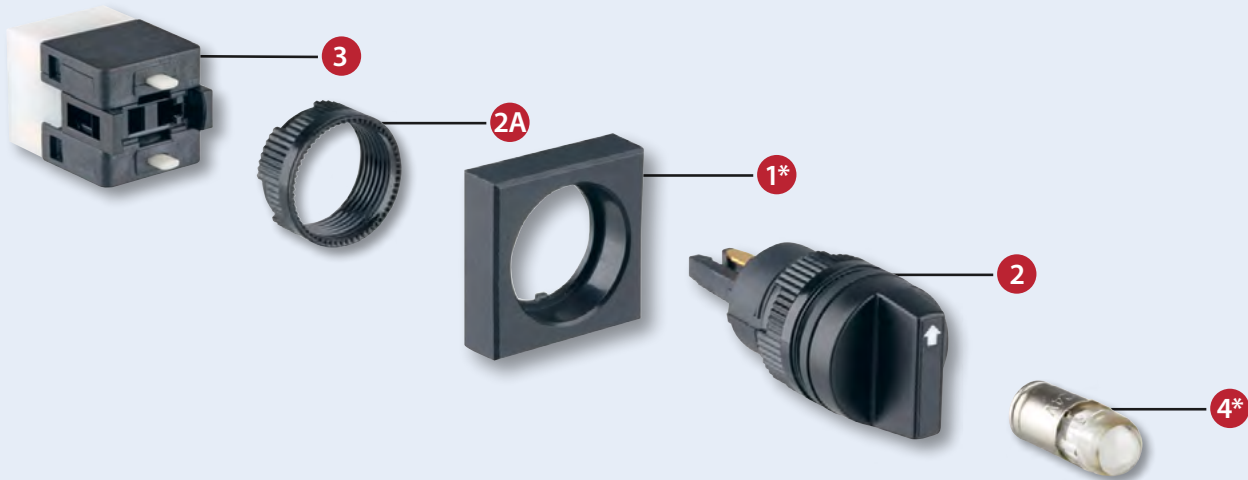
# Illumination



LED Bulb	6V AC/DC	12V AC/DC	24V AC/DC	120V AC
●	N/A	800B-N3G		800B-NSG
●	N/A	800B-N3R		800B-NSR
○	N/A	800B-N3W		800B-NSW



Incandescent Bulb	6V AC/DC	12V AC/DC	24V AC/DC	120V AC
○	800B-N1C	800B-N2C	800B-N3C	N/A



# Accessories

Replacement Mounting Ring



800B-ARP

Mounting Ring Wrench



800B-AW2

Bulb Removal Tool



800B-ALR1

Locking Washer (Anti-rotation)



800B-ALW1

Lens Removal Tool



800B-ALR2

Emergency Stop Legend Plate



800B-15YE112



800B-15Y

Stab Connector (Insulated)



800B-ATK

Hole Plug



800B-N2

Replacement Key



800B-AK1



Printed Circuit Board Pin Socket



800B-APCB

Engraved Diffuser

800B-AD a b (Example: 800B-ADBCE100J)

a	b		
	CE100H	CE100J	CU100
A			
B			
C			
D			

# Specifications

## Mechanical Ratings – Operator

Vibration (assembled to panel)	Tested at 10...2000 Hz, 1.52 mm displacement (peak-to-peak) max./10 G max. for 6 hr duration, no damage	
Shock	Tested at 1/2 cycle sine wave for 11 ms; no damage at 100 G	
Degree of protection	IP66, Type 4/4X/13	
Mechanical durability per EN 60947-5-1 (Annex C)	Push buttons – momentary Push buttons – maintained Selector switch Key selector switch Twist-to-release E-stop	2000000 1000000 250000 200000 100000
Operating forces (typical with one contact block)	Extended E-Stop	5...8 N 20 N
Operating torque (typical application with one contact block)	Selector switch = 0.06 N·m (0.5 lb·in)	
Mounting torque	1.1 N·m (10 lb·in)	


## Environmental

Temperature range (operating)	UL Recognition: Illuminated operators -25...+50 °C (-13...131 °F) with LED bulbs Pilot lights -25...+50 °C with incandescent bulbs -25...+70 °C (-13...158 °F) with LED bulbs
Temperature range (short term storage)	-40...+70 °C (-40...158 °F)
Humidity	50...95% RH from 25...60 °C (77...140 °F)

## Product Certifications

Certifications	UR/UL, CSA, CCC, CE
Standards compliance	UL 508, EN ISO 13850, EN 60947-1, EN 60947-5-1, EN 60947-5-5
Terminal identification	EN/IEC 60947-1
RoHS Compliant	Yes

## Mechanical Ratings – Contact Block

Vibration (assembled to panel)	Tested at 10...2000 Hz, 1.52 mm displacement (peak-to-peak) max./10 G max. 6 hr	
Shock	Tested at 1/2 cycle sine wave for 11 ms and no damage at 100 G max.	
Contact durability per EN 60947-5-1 (Annex C)	200000 cycles	
Contact operation	N.O./N.C. N.C. N.O.	Snap action Slow make/break positive opening  Slow make/break
Push button travel to change electrical state	1.4 mm (0.06 in.)	
Operating forces (typical)	1 contact block 2 contact blocks	3 N 6 N

## Electrical Ratings – Contact Block

Standard contact block ratings	AC 15, B300, 1.5 A/240V AC, 3 A/120V AC DC 13, R300, 0.1 A/250V DC, 0.22 A/125V DC		
LED module ratings	<b>Nominal Voltage</b> 12...24V AC 12...24V AC 120V AC	<b>Current</b> 11 mA 11 mA 7 mA/8 mA	<b>Frequency</b> 50/60 Hz DC 50/60 Hz
Thermal current	$I_{th} = 5 \text{ A (AC)}, I_{th} = 1 \text{ A (DC)}$		
Insulation voltage ( $U_i$ )	300V		
Stab termination	2.8 x 0.5 mm		
Dielectric strength (minimum)	1500V 1 min.		
External short circuit protection – standard blocks	5 A type gL/gG cartridge fuse to EN 60269-2-1 or gN (Class J to UL 248-8 or Class C to UL 248-4)		
Electrical shock protection	Finger-safe conforming to IP2X		

## Illumination

LED Dominant wavelength	Green Red White	525 nm 624 nm –
LED Luminous intensity	Green Red White	500 mcd 400 mcd 1000 mcd
Incandescent maximum wattage	1.2 W	

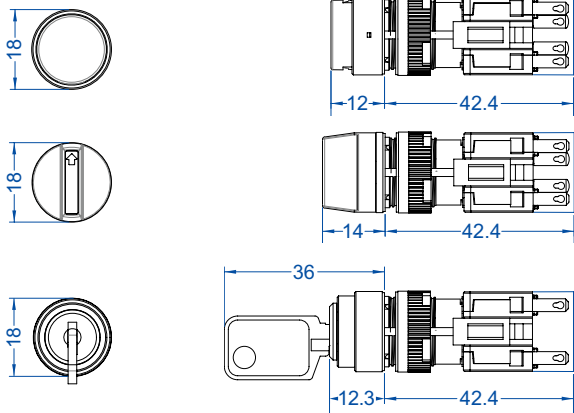
## Materials

Springs	Stainless steel and high-carbon steel – music wire
Electrical contacts	Gold-plated silver
Stab terminals	Phosphor bronze with gold or tin plating
Lenses	Acrylic

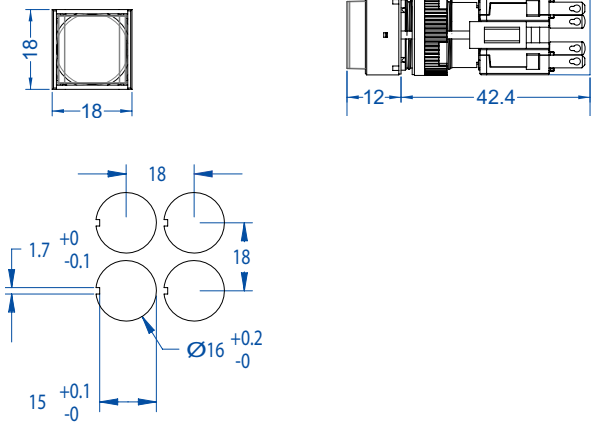


# Approximate Dimensions

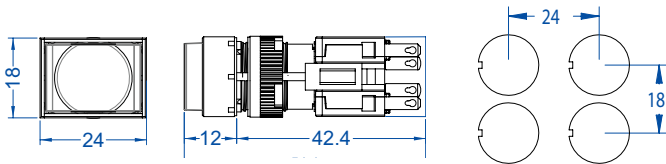
## Round



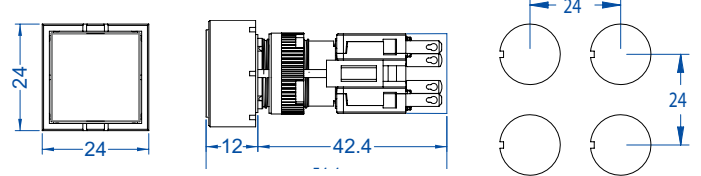
## Square



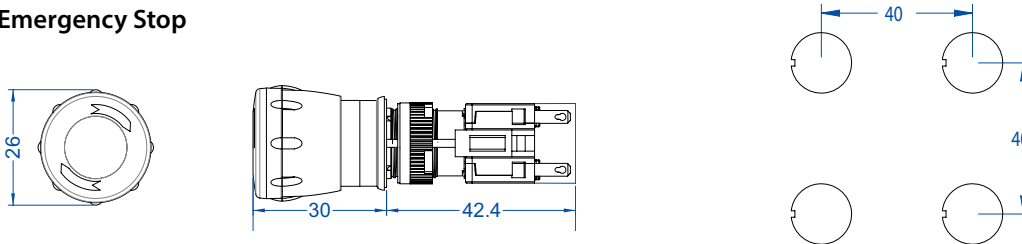
## Rectangle



## Large Square



## Emergency Stop



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