

Heavy Industrial Line — Momentary Touch Buttons



Heavy Industrial
Cat. No. 800Z-HF1



Heavy Industrial
Cat. No. 800Z-HL1Y

Table with 6 columns: Button Type, Input Voltage, Output Type, Electrical Connection, No Guard Cat. No., Yellow Guard Cat. No.

Use the configurator below to build a Bulletin 800Z touch button to suit your application.

800Z - H L 1 Y
a b c

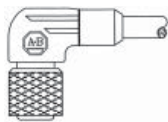
Three configuration tables: Voltage (a), Mounting Type (b), and Guard Option (c).

* Heavy industrial devices have an 8-position terminal block connection. See wiring diagrams on page 4-53 for details.
* Safety relays should be used in conjunction with two relay output type Zero-Force Touch Buttons in 2-hand control applications. Order separately, safety relay 440R-D23171 for 24V, 440R-D23169 for 120V, 440R-D23168 for 240V.

Quick Disconnect Cables



PD



PD

889 D - F 4A C-2
a b c d

Three configuration tables: Mounting Hole Size (a), QD Type (b), Cable Length/Type (d), and Pin Style (c).

‡ No right angle QD cable (micro) for 5-pin (Cat. No. 889D-R5A_).

General Purpose
Cat. No. 800Z-GF2Q5



General Purpose
Cat. No. 800Z-GL3Q5B

Mounting Hole Size	Input Voltage	Output Type	Electrical Connection	No Guard	Black Guard
				Cat. No.	Cat. No.
30.5 mm	100...240V AC	Relay Output	5-Pin QD	800Z-GF3Q5	800Z-GF3Q5B
			6 ft Cabled — 5-Wire	800Z-GF3065	800Z-GF3065B
	10...40V DC and 20...30V AC	Relay Output	5-Pin QD	800Z-GL3Q5	800Z-GL3Q5B
			6 ft Cabled — 5-Wire	800Z-GL3065	800Z-GL3065B
22.5 mm	100...240V AC	Relay Output	5-Pin QD	800Z-GF2Q5	800Z-GF2Q5B
			6 ft Cabled — 5-Wire	800Z-GF2065	800Z-GF2065B
	10...40V DC and 20...30V AC	Relay Output	5-Pin QD	800Z-GL2Q5	800Z-GL2Q5B
			6 ft Cabled — 5-Wire	800Z-GL2065	800Z-GL2065B

Use the configurator below to build a Bulletin 800Z touch button to suit your application.

$$800Z - G \quad \frac{L}{a} \quad \frac{3}{b} \quad \frac{065}{c} \quad \frac{B}{d}$$

Input Voltage and Output Type ‡	
Code	Description
Relay Output	
L	Input: 10...40V DC and 20...30V AC Output: relay
F	Input: 100...240V AC Output: relay
Transistor Output	
P	10...30V DC PNP (sourcing) output

Electrical Connection	
Code	Description
Sourcing Output *	
Q4	4-pin QD
064	6 ft (1.8 m) cabled
244	24 ft (7.2 m) cabled
Relay Output *	
Q5	5-pin QD
065	6 ft (1.8 m) cabled
245	24 ft (7.2 m) cabled

Guard Option	
Code	Description
Blank	No guard
B	Black guard
Y	Yellow guard

Mounting Hole Size $\S$	
Code	Description
2	22.5 mm
3	30.5 mm

* These devices are transistor outputs.

- ⚡ These devices have separate N.O. and N.C. output relays with a shared common.

† Safety relays should be used in conjunction with two relay output type Zero-Force Touch Buttons™ in 2-hand control applications. Order separately, safety relay 440R-D23171 for 24V, 440R-D23169 for 120V, 440R-D23168 for 240V.

22.5 mm touch buttons use micro connector, 30.5 mm touch buttons use mini connector.

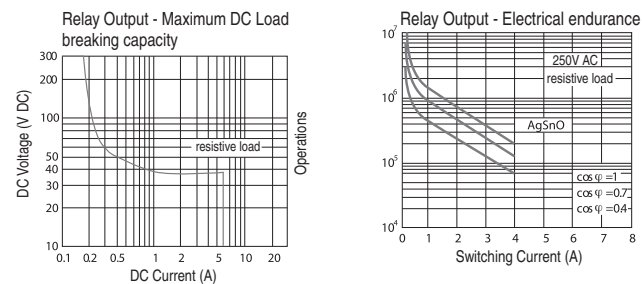
	Bulletin 800Z — Zero-Force Touch Buttons™ Bulletin 800Z Zero-Force Touch Buttons are ideally suited for use in two-hand machine control systems and highly repetitive applications. Ergonomic Design — The contour shape fits the palm of the hand for ease of operation and helps deter attempts to defeat two-hand control. Zero Force to Operate — The electronic design with two interlinked capacitive sensors in offset planes provides increased sensitivity and good ability for distinguishing between a person's hand, even through most industrial gloves, versus most foreign objects.	Table of Contents Specifications..... this page General Purpose Line 10-215 Heavy Industrial Line 10-216 Quick Disconnect Cables 10-216 Accessories..... 10-217 Wiring Diagram 10-219 Approximate Dimensions..... 10-220
	 ATTENTION: Not recommended for use in applications where there is high probability for exposure to liquid (e.g., cutting fluid) on the sensing surface area.	

Specifications

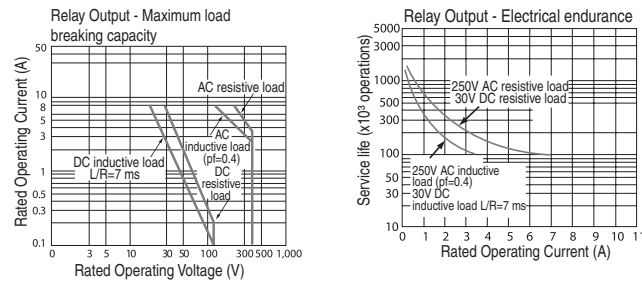
Mechanical Ratings

Description	General Purpose Line (800Z-G)	Heavy Industrial Line (800Z-H)
Mechanical Ratings		
Vibration Endurance	Tested @ 10 G, 1.52 mm displacement	
Mechanical Shock	Tested @ 100 G (mechanical durability)	
Degree of Protection	Type 4/4X/13 IP66 1200 psi Washdown	Type 4/13 IP66
Operating Force	Zero	
Electrical Ratings		
Input Voltage (Relay type)	Low Voltage: 10...40V DC, 20...30V AC Full Voltage (800Z-GF): 100...240V AC (+10%, -15%)	
Input Voltage (Solid-State type)	Low Voltage (800Z-GN/GP): 10...30V DC	
Electrical Design Life (Relay type)	Relay output 200 000 Operations @ 2 A inductive 4 A resistive	Relay output 150 000 Operations @ 5 A inductive 2.5 A resistive
Degree of Protection	—	IP2X
Wire Range		#22...12 AWG (0.5...4 mm²)
Tightening Torque		9 lb•in (1 N•m)
On-delay/Off-delay	Off 60 ms max. On 76 ms max.	
Current Draw (Solid-State type)	100 mA at 24V DC = 2.23 W (no external load)	
Environmental		
Temperature Range (Operating)	-25...+55 °C (-13...+131 °F)	
Temperature Range (Storage)	-40...+85 °C (-40...+185 °F)	
Humidity	95% RH from 25...50 °C (77...122 °F) (full operation)	
Materials		
Housing/Guard	Valox 357	
Gasket	BUNA-N	1/16 in. Cork-BUNA-N
Connector	Insulator material (micro connector) = nylon Insulator material (mini connector) = PVC	
Standards and Certifications		
Certifications	cULus, CE, C-TICK, CSA	
Standards Conformity	UL 508, CSA 22.2 No. 14, EN/IEC 60947-5-1, EN50081-2, EN61000-6-2, EN60954-1, EN60204-1	

Load Life Curves for General Purpose Product Line



Load Life Curves for Heavy Industrial Line



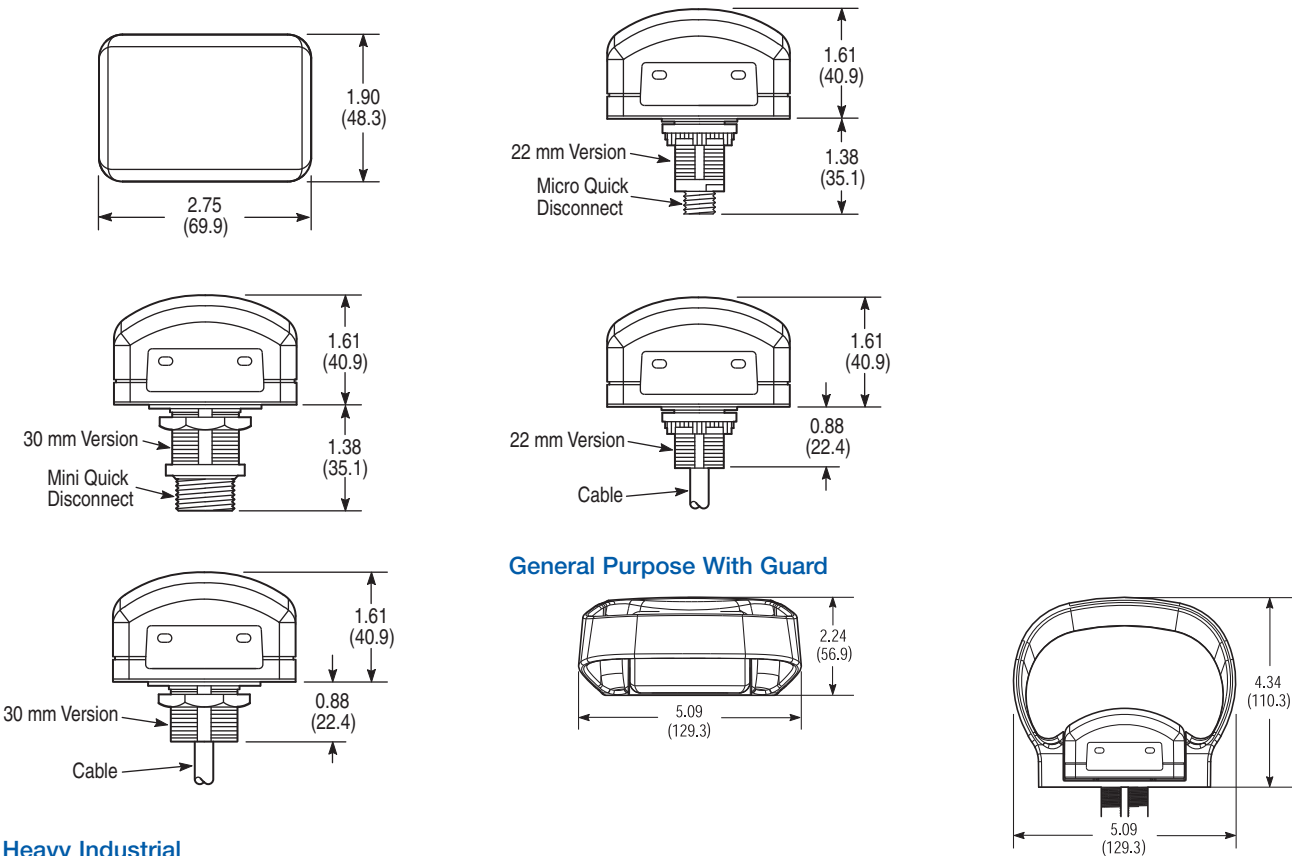
Applications Detail

LED Blink Rate	Diagnostic	Description
** ** *	Power Up	Device touched during power up. Device will resume 10 seconds after removal of hand.
*** ** *	Noise Detection	Device detected an unacceptable level of noise (>20 V/m). Device will resume once noise subsides.
**** ** *	Margin Detection	A conductive film is building up on the sensing surface. Device will resume once cleared.

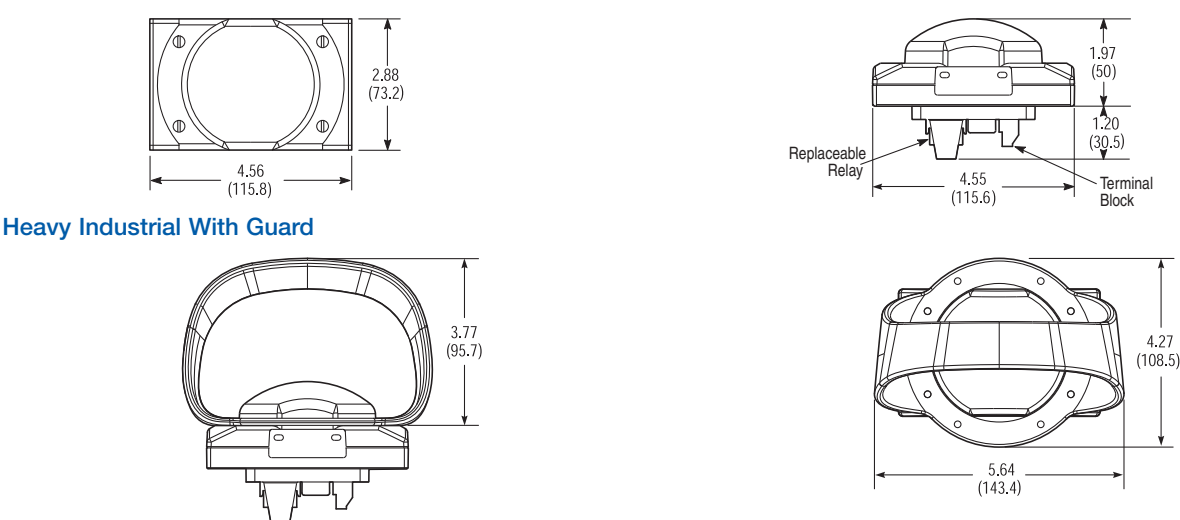
Approximate Dimensions

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

General Purpose



Heavy Industrial



Cutout and Mounting Screw Locations for a Flush Mounted Cover

