



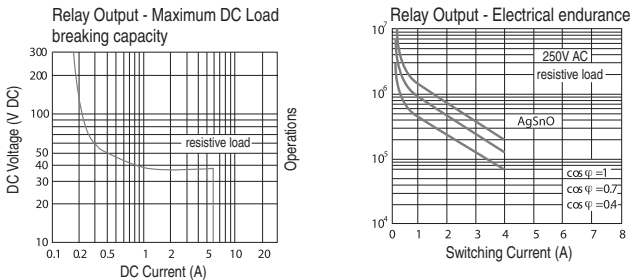
Bulletin 800Z — Zero-Force Touch Buttons™
Bulletin 800Z Zero-Force Touch Buttons are ideally suited for use in two-hand machine control systems and highly repetitive applications.
Ergonomic Design — The contour shape fits the palm of the hand for ease of operation and helps deter attempts to defeat two-hand 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.
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.

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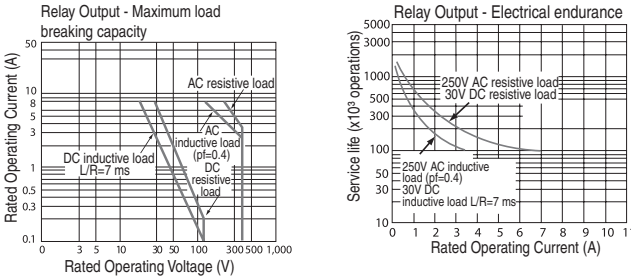
Specifications
Mechanical Ratings

Table with 3 columns: Description, General Purpose Line (800Z-G), and Heavy Industrial Line (800Z-H). Rows include Mechanical Ratings (Vibration Endurance, Mechanical Shock, Degree of Protection, Operating Force), Electrical Ratings (Input Voltage, Input Voltage (Solid-State type), Electrical Design Life, Degree of Protection, Wire Range, Tightening Torque, On-delay/Off-delay, Current Draw), Environmental (Temperature Range, Humidity), Materials (Housing/Guard, Gasket, Connector), and Standards and Certifications (Certifications, Standards Conformity).

Load Life Curves for General Purpose Product Line



Load Life Curves for Heavy Industrial Line



Applications Detail

Table with 3 columns: LED Blink Rate, Diagnostic, and Description. Rows include Power Up, Noise Detection, and Margin Detection.

General Purpose Line — Momentary Touch Buttons



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-GF3Q65	800Z-GF3Q65B
	10...40V DC and 20...30V AC	Relay Output	5-Pin QD	800Z-GL3Q5	800Z-GL3Q5B
			6 ft Cabled — 5-Wire	800Z-GL3Q65	800Z-GL3Q65B
22.5 mm	100...240V AC	Relay Output	5-Pin QD	800Z-GF2Q5	800Z-GF2Q5B
			6 ft Cabled — 5-Wire	800Z-GF2Q65	800Z-GF2Q65B
	10...40V DC and 20...30V AC	Relay Output	5-Pin QD	800Z-GL2Q5	800Z-GL2Q5B
			6 ft Cabled — 5-Wire	800Z-GL2Q65	800Z-GL2Q65B

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

800Z - G L 3 065 B
 a b c d

a

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

c

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

d

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

b

Mounting Hole Size §	
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.

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. Rows include Flush Mount with input voltage ranges and terminal block connections.

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

800Z - H L 1 Y
a b c

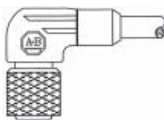
Configurator tables for Voltage (a), Mounting Type (b), and Guard Option (c). Includes codes L, F, 1, and Y with their respective descriptions.

* 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

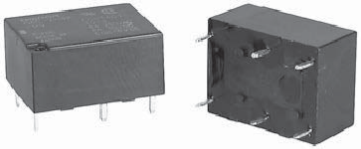
Configurator tables for Mounting Hole Size (a), QD Type (b), Pin Style (c), and Cable Length/Type (d). Includes codes D, N, F, R, 4A, 5A, C-2, C-5, C-10, E-6F, E-12F, E-20F with their respective descriptions.

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

Accessories — General Purpose

		Description		Cat. No.
 Cat. No. 800Z-G3AG1 Cat. No. 800Z-G3AG2		Guards These guards help protect against accidental activation of the touch button surface and protect it from damage. Can be used for both the 22.5 mm and 30.5 mm mounted products.	Yellow Plastic	800Z-G3AG1
			Black Plastic	800Z-G3AG2
 <i>Plastic Mounting Kit</i> Cat. No. 800Z-G2AH1		Mounting Ring Nut for 22.5 mm Holes Used on 22.5 mm devices.		800Z-G2AH1
 <i>Plastic Mounting Kit</i> Cat. No. 800Z-G3AH1		Mounting Ring Nut for 30.5 mm Hole Used on 30.5 mm devices.		800Z-G3AH1
 <i>Swivel Assembly</i> Cat. No. 60-2439		30.5 mm Swivel/Tilt Mounting Assembly This bracket allows you to orient the touch button in any position. It can be mounted on any vertical or horizontal surface. Compatible with 30.5 mm mounting only.	2.25 in. (57 mm)	60-2681
			1.15 in. (29 mm)	60-2439
 Cat. No. 800E-AHA1		30.5 mm to 22.5 mm Hole Size Adapter This adapter allows a 22.5 mm push button operator to be installed in a panel with existing 30.5 mm mounting holes.	Metal	800F-AHA1
			Black Metal	800E-AHA2

Accessories — Heavy Industrial

	Description		Cat. No.
 Cat. No. 800Z-HAG1	Guard This guard helps protect against accidental activation of the touch surface and protects it from damage. Mounting screws are included.	Yellow Plastic	800Z-HAG1
 <i>Single Hub Base</i> Cat. No. 800P-B1 <i>Double Hub Base</i> Cat. No. 800P-B2	Mounting Bases The heavy industrial line products mount directly on these bases. The conduit hub(s) come with a 3/4 inch opening.	1 2	800P-B1 800P-B2
 Cat. No. 800P-N150	Adapter This adapter is used if mounting touch button onto a 4-1/2 in. x 2-3/8 in. (114.3 x 60.3 mm) enclosure pattern.		800P-N150
 Cat. No. 800Z-N12	Replacement Relay Note: Package quantity of 2.	10...264V	800Z-N12
 Cat. No. 800Z-HAH1	Replacement Screws	Guard-to-Base Mounting Note: package quantity of 4 Base Mounting Note: package quantity of 4	800Z-HAH1 800Z-HAH2

Wiring Diagrams — Touch Button Terminations

General Purpose Line

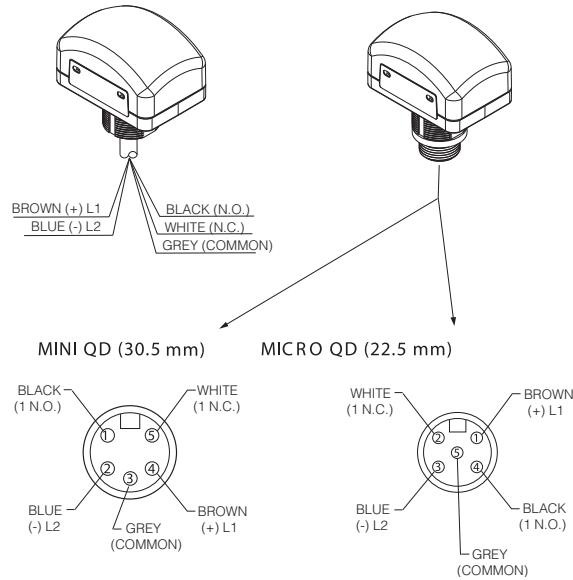
Electrical Connections: 10...40V DC and 20...30V AC Input Voltage (Relay Output); 100...240V AC Input Voltage (Relay Output)

Note: Separate N.O. and N.C. output relays with shared common.

5-Conductor Cabled (Relay Output)

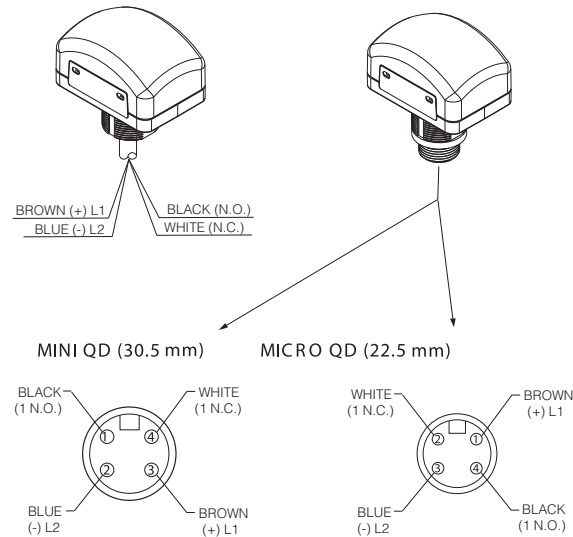
For 800Z-GL _ _ _

For 800Z-GF _ _ _

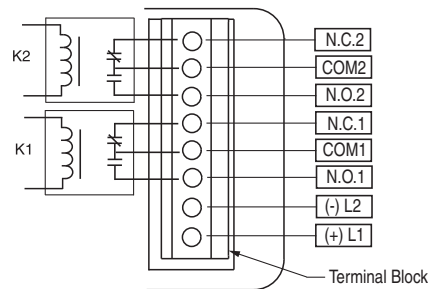


Electrical Connections: 10...30V DC Input Voltage (Transistor Output); 150 mA Max. per Circuit Output

4-Conductor Cabled



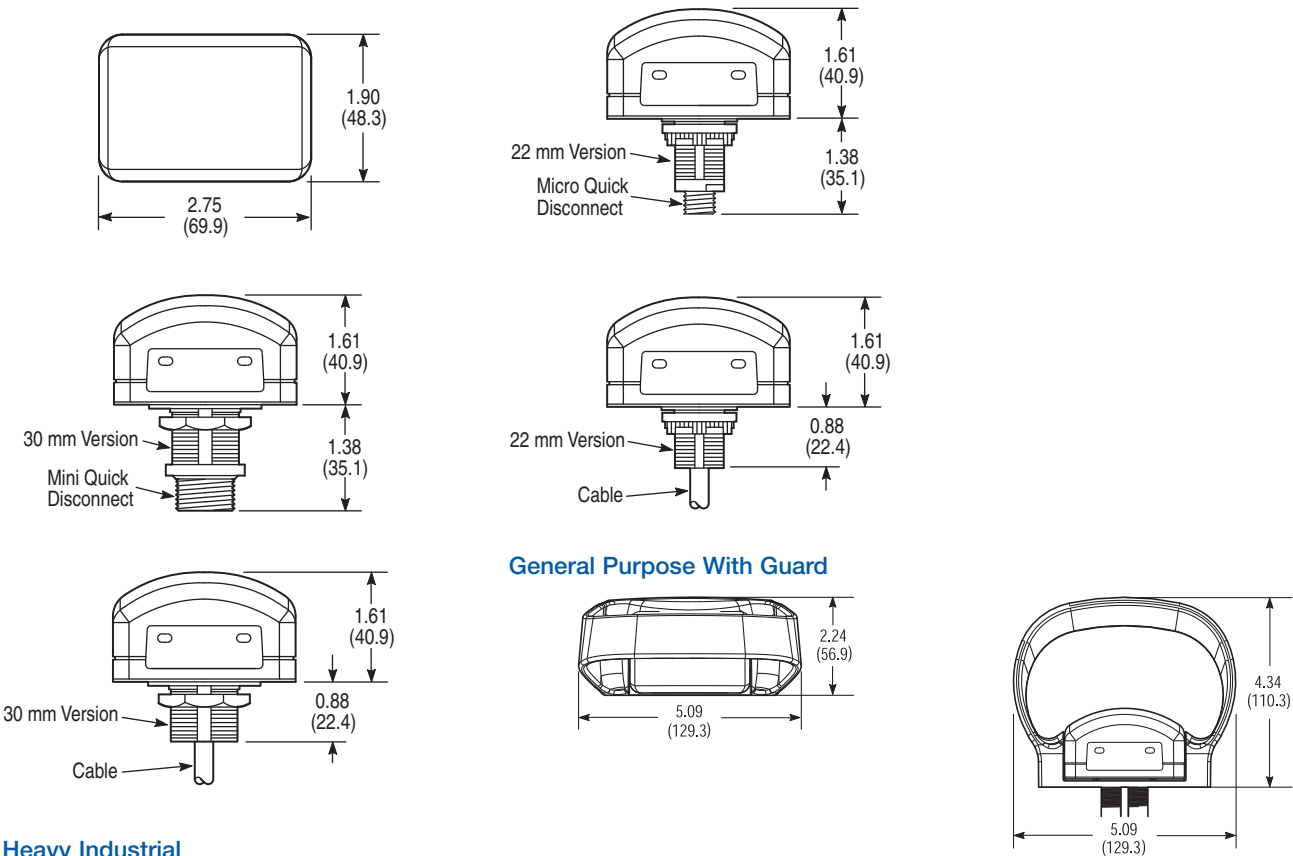
Heavy Industrial Line



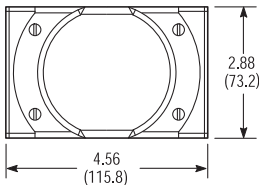
Approximate Dimensions

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

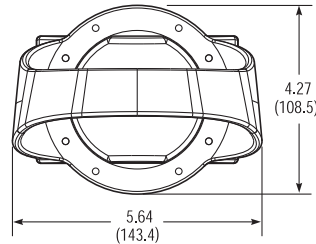
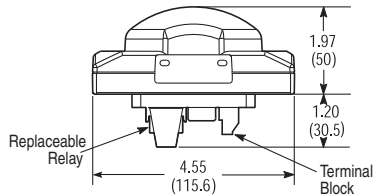
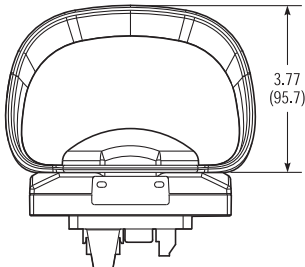
General Purpose



Heavy Industrial



Heavy Industrial With Guard



Cutout and Mounting Screw Locations for a Flush Mounted Cover

