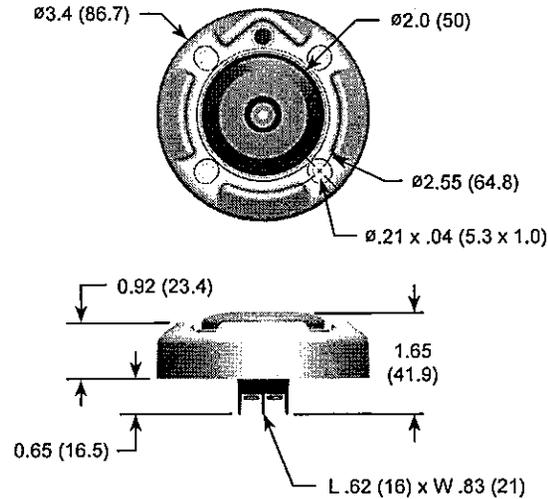
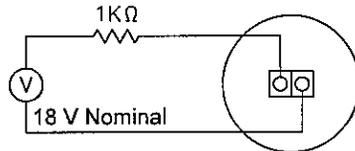


BDL3 - Bulldog III Series Vandal Resistant ADA Push Button



Suggested Test Circuit
(Momentary Mode Only)



BDL3-Y model shown.
Dimensions are in inches (millimeters).

This button is a highly vandal resistant button with essentially no moving parts. It is pressure activated, but can withstand an impact from a baseball bat or hammer. When the switch activates, you hear a beep and the LED either flashes (Momentary mode) or lights and stays on until the walk cycle (Latching Mode).

Body Material: Aluminum, Powder Coated

Button Material:

Standard: 316 Stainless Steel

Arrow Button: Anodized 6061 Aluminum, Nickel Plated

Black Powder Coat on area surrounding arrow

Piezo Driven Solid State Switch:

Operating Force: 2.0 lbs. Maximum

Operating Temperature: -30°F to 165°F (-34°C to 74°C)

Operating Voltage: 12-36 VDC, 9-25 VAC RMA (18 VDC Typ.)

MTBF: 8,800,000 hours Typ.

Switch Operating Life: Greater than 300 million operations.

"Off" Current: 15µA Typ.

"On" Resistance: 85Ω Typ. (Momentary)

Maximum "On" Current: 250 mA (over-current protection) Typ.

Maximum "On" Time: 11 sec. Typ.

Debounce Time: 85 ms. Typ.

LED Operating Modes:

Momentary: Approx 0.025 sec. LED flash each time button is pressed.

Latching: LED activates only during non-walk phases and stays on until the beginning of the walk phase.

LED Specifications:

Luminous Intensity: 0.3 Lux @ 1 meter Minimum (Red)

Viewing Angle: 155° Typical

Beeper:

Volume: 68dB @ 1 meter Typ.

Beep on Press: 2.6kHz

Beep on Release: 2.3kHz

Beep Length: 50ms Typ.

See page 2 for additional design compliance and accessory information.

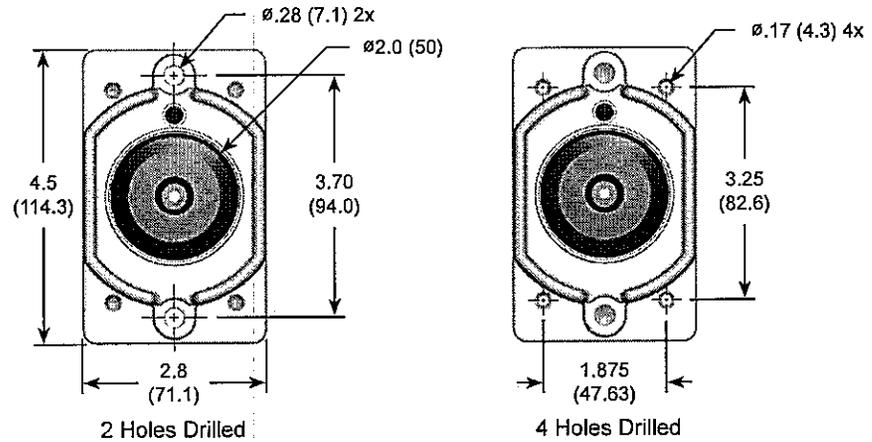
Red push button spec (combined)

Design Compliance

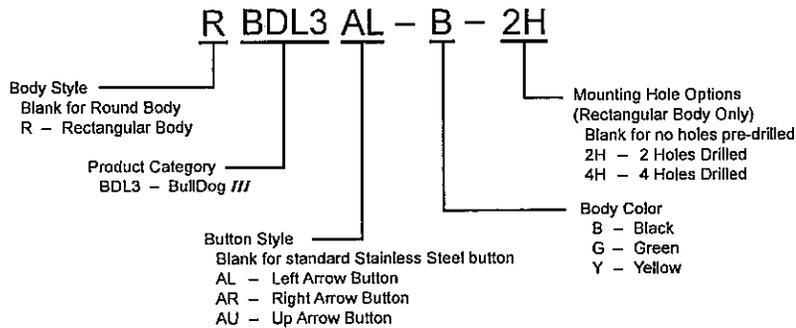
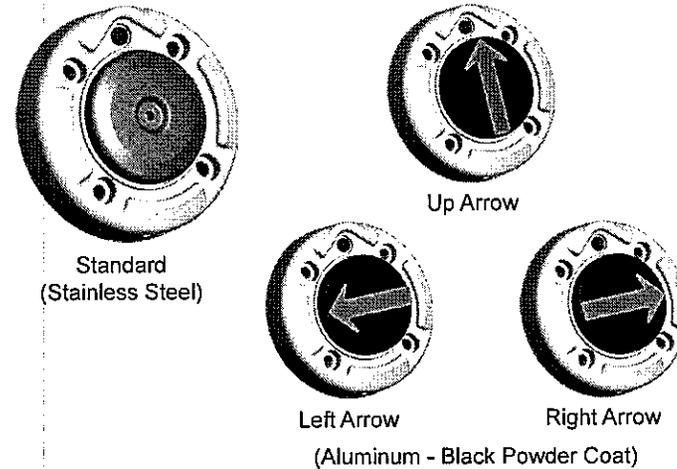
Test Type	Compliance
Activation Force	MUTCD 2009 - 4E
Temperature and Humidity	NEMA TS 2
Transient Voltage Protection	NEMA TS 2
Transient Suppression	IEC 61000-4-4, IEC 61000-4-5
Lightning and Power Protection	GR-1089-CORE, Extended to 6000V-400A, 25 reps, 120VAC-15 mins.
Electronic Noise	FCC Title 47, Part 15, Class A
Mechanical Shock and Vibration	NEMA TS 2
Ingress of Water	NEMA 250 - 6P, Rain, Snow, etc...
Ingress of Water	NEMA 250 - 6P, Submersion
Salt Spray and Corrosion	NEMA 250 - 6P
Ingress of Foreign Objects	NEMA 250 - 6P
Electrical Reliability	NEMA TS 4

Note: Applicable sections only of reference standards. All specifications are subject to change without notice.

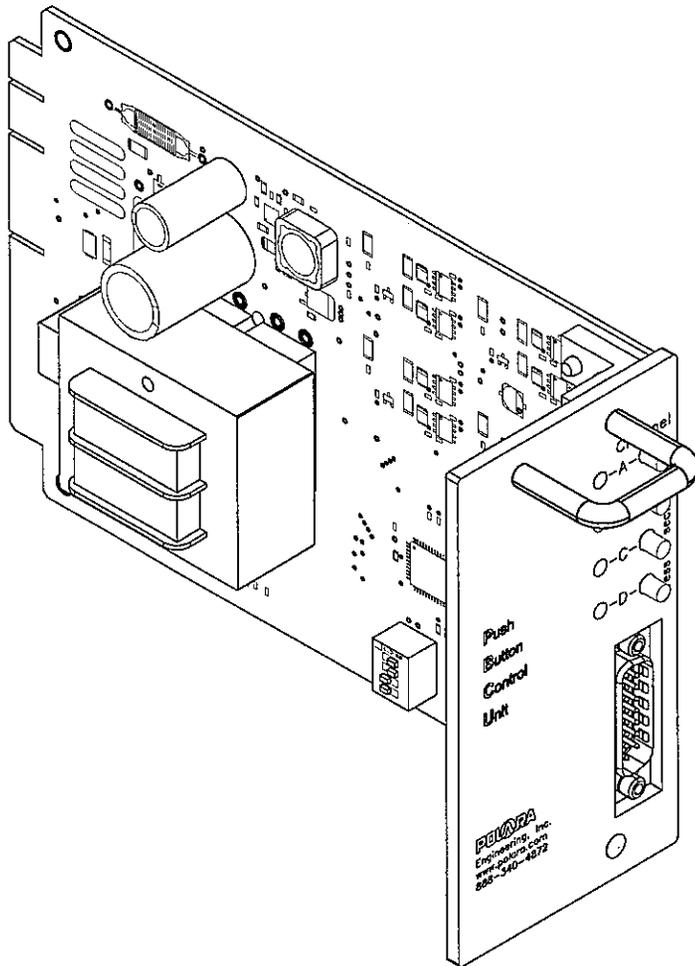
**Mounting Hole Options
(Rectangular Body Only)**



Button Style



PBCU: PUSH BUTTON CONTROL UNIT FOR BULLDOG BUTTONS



The Polara Push Button Control Unit (PBCU) is an interface device for Polara Bulldog pedestrian push buttons, designed especially for the BDL3 which can operate in either momentary or latching LED mode. It also powers down all BDL3 buttons when an intersection is in flash so buttons do not provide any indication when pushed. It is designed as a double width plug-in module that supports 4 PED PHASES and up to 4 buttons per phase. It can be used in place of two Type 242 Isolators in a typical Cal-Trans style traffic signal cabinet, or, it can plug into a standard detector input in a NEMA style cabinet. If plug-in slots are not available, it can plug into an optional base station* and operate as a standalone system like its predecessor the LPBCU. It is intended only for use with Polara Bulldog buttons and is compatible with all models of BDLM2** and BDLL2. The PBCU is fully compliant with MUTCD 2009 Section 4E.08 for latching Push Buttons. See Installation and Operation Manual for detailed list of features, functions and specifications.

SPECIFICATIONS:

Mechanical

Height: 4.50 inches

Width: 2.34 inches

Length: 7.00 inches excluding pull handle

Electrical

AC Power Input: 115 volts nominal (89 to 135)

DC Power Input: 24 volts nominal (20 to 28)

AC Walk / Don't Walk Inputs: 80 to 150 volts AC

Logic Inputs: Low (true) less than 8 volts DC; High (false) greater than 12 volts DC

Voltage supplied to field buttons: 18 volts DC regulated

Environmental

Specified operation from -34°C to 74°C

Operation from 0% RH to 95% RH non-condensing

Operation to 10,000 ft. altitude

*Optional base station sold separately as part number PBCU-EB.

**BDLM2-X buttons will beep & flash until capacitors discharge if intersection is in flash.