

EZ-LIGHT® Touch K30 Series Illuminated Buttons



Features

Lighted Touch Button with Bipolar Outputs



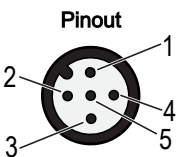
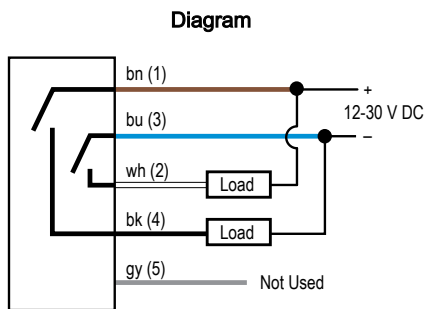
- Rugged, cost-effective, and easy-to-install touch button with multicolor light
- Momentary versions remain activated as long as touch is present
- Latching versions start-up not activated and toggle between activated and not activated on successive touches
- Waterproof construction for washdown environments
- Ergonomically designed to eliminate hand, wrist, and arm stresses associated with repeated switch operation; requires no physical force to operate
- Can be actuated with bare hands or gloves
- 12 V DC to 30 V DC operation
- Five color options available

Models

Model	Function	Output	Light (not activated)	Light (activated)	Connection ⁽¹⁾
K30ALBTXGHQ	Latching	Bipolar, N.O.	-	Green	Integral 5-pin M12 male quick-disconnect connector
K30RLBTXGHQ		Bipolar, N.C.			
K30ABTXGHQ	Momentary	Bipolar, N.O.			
K30RBTXGHQ		Bipolar, N.C.			
K30ALBTGGHQ	Latching	Bipolar, N.O.	Green	Green	
K30RLBTGGHQ		Bipolar, N.C.			
K30ABTGGHQ	Momentary	Bipolar, N.O.			
K30RBTGGHQ		Bipolar, N.C.			
K30ALBTRGHQ	Latching	Bipolar, N.O.	Red	Green	
K30RLBTRGHQ		Bipolar, N.C.			
K30ABTRGHQ	Momentary	Bipolar, N.O.			
K30RBTRGHQ		Bipolar, N.C.			

Wiring

Cabled wiring diagrams are shown. Quick disconnect wiring diagrams are functionally identical.



Specifications

Supply Voltage

12 V DC to 30 V DC

Supply Current

55 mA max current (exclusive of load)

Supply Protection Circuitry

Protected against reverse polarity and transient voltages

Touch Dwell Time (momentary models only)

If a touch dwells for longer than 60 seconds, the output and indicator color will revert back to the untouched state.

⁽¹⁾ Integral 5-pin M12 male quick-disconnect connector models are listed.

- To order the 150 mm (6 in) PVC cable model with a 5-pin M12 male quick-disconnect connector, replace the suffix "Q" with "QP" in the model number. For example, K30ALBTXGHQP.
- To order the 2 m (6.5 ft) PVC cable model, omit the suffix "Q" in the model number. For example, K30ALBTXGH.
- Models with a quick-disconnect connector require a mating cordset.



Output Response Time

150 milliseconds ON and OFF

Output Rating

Maximum Load: 150 mA
ON-state saturation voltage: < 2 V DC at 10 mA; < 2.5 V DC at 150 mA
OFF-state leakage current: < 10 µA at 30 V DC

Power-Up Delay

300 milliseconds
Latching models start up in a 'not activated' state

Mounting

M22 × 1.5 Threaded base, max torque 2.25 Nm (20 in-lbf)

Connections

Integral 5-pin M12 male quick-disconnect connector, 2 m (6.5 ft) integral PVC-jacketed cable, or 150 mm (6 in) PVC-jacketed cable with a 5-pin M12 male quick-disconnect connector

Environmental Rating

IP67, IP69K per ISO 20653
Cabled models also meet IP69K per ISO 20653 if the cable and cable entrance are protected from high-pressure spray.
Enclosure Type 4X, 13

Operating Conditions

−40 °C to +50 °C (−40 °F to +122 °F)
90% at +50 °C maximum relative humidity (non-condensing)

Storage

−40 °C to +70 °C (−40 °F to +158 °F)

Vibration and Mechanical Shock

All models meet MIL-STD-202F, Method 201A (Vibration: 10 Hz to 60 Hz maximum, 0.06 inch (1.52 mm) double amplitude, 10G maximum acceleration) requirements. Also meets IEC 60947-5-2 (Shock: 30G 11 ms duration, half sine wave) requirements.

Construction

Housing: polycarbonate
Translucent dome: polycarbonate
Mounting nut: PBT

Required Overcurrent Protection



WARNING: Electrical connections must be made by qualified personnel in accordance with local and national electrical codes and regulations.

Overcurrent protection is required to be provided by end product application per the supplied table. Overcurrent protection may be provided with external fusing or via Current Limiting, Class 2 Power Supply.

Supply wiring leads < 24 AWG shall not be spliced. For additional product support, go to www.bannerengineering.com.

Supply Wiring (AWG)	Required Overcurrent Protection (A)	Supply Wiring (AWG)	Required Overcurrent Protection (A)
20	5.0	26	1.0
22	3.0	28	0.8
24	2.0	30	0.5

Certifications

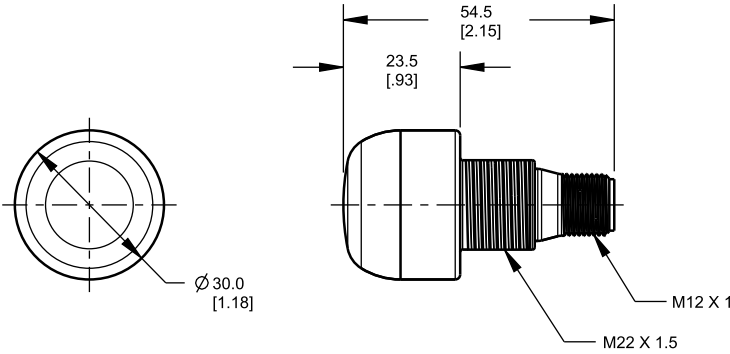


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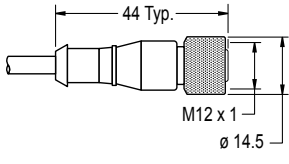
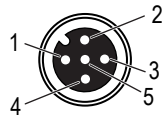
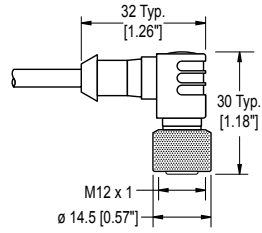
Dimensions

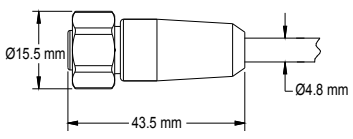
All measurements are listed in millimeters [inches], unless noted otherwise. The measurements provided are subject to change.

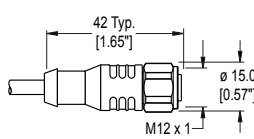
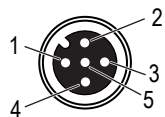


Accessories

Cordsets

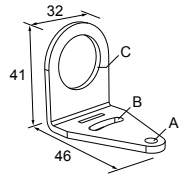
5-Pin Single-Ended M12 Female Cordsets				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC1-501.5	0.5 m (1.5 ft)	Straight		 1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray 
MQDC1-503	0.9 m (2.9 ft)			
MQDC1-506	2 m (6.5 ft)			
MQDC1-515	5 m (16.4 ft)			
MQDC1-530	9 m (29.5 ft)			
MQDC1-560	18 m (59 ft)			
MQDC1-5100	31 m (101.7 ft)			
MQDC1-506RA	2 m (6.5 ft)	Right-Angle		
MQDC1-515RA	5 m (16.4 ft)			
MQDC1-530RA	9 m (29.5 ft)			
MQDC1-560RA	19 m (62.3 ft)			

5-Pin Single-Ended M12 Female Stainless Steel Washdown Cordsets				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC-WDSS-0506	2 m (6.56 ft)	Straight		 1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray
MQDC-WDSS-0515	5 m (16.4 ft)			
MQDC-WDSS-0530	9 m (29.5 ft)			

5-Pin Single-Ended M12 Female Washdown, Shielded Cordsets				
Model	Length	Style	Dimensions	Pinout (Female)
MQDCWD-506	2 m (6.56 ft)	Straight		 1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray
MQDCWD-530	9 m (29.5 ft)			

Brackets

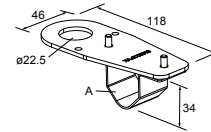
All measurements are listed in millimeters, unless noted otherwise. The measurements provided are subject to change.

SMB22A - Right-angle bracket with curved slot for versatile orientation 12-ga. stainless steel - Mounting hole for 22 mm sensor Hole center spacing: A to B = 26.0 Hole size: A = ø 4.6, B = 4.6 x 16.9, C = 22.2	
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SMB22FVK

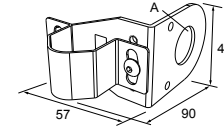
- V-clamp, flat bracket and fasteners for mounting to pipe or extensions
- Clamp accommodates 28 mm diameter tubing or 1 in. square extrusions
- 22 mm hole for mounting sensor

Hole size: A = $\varnothing$ 22.5

**SMB22RAVK**

- V-clamp, right-angle bracket and fasteners for mounting to pipe or extensions
- Clamp accommodates 28 mm diameter tubing or 1 in. square extrusions
- 22 mm hole for mounting sensor

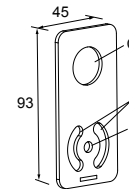
Hole size: A = $\varnothing$ 22.5

**SMBAMS22P**

- Flat SMBAMS series bracket with 22 mm hole for mounting sensors
- Articulation slots for 90+° rotation
- 12-ga. (2.6 mm) cold-rolled steel

Hole center spacing: A = 26.0, A to B = 13.0

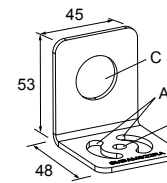
Hole size: A = 26.8 x 7.0, B = $\varnothing$ 6.5, C = $\varnothing$ 22.5

**SMBAMS22RA**

- Right-angle SMBAMS series bracket with 22 mm hole for mounting sensors
- Articulation slots for 90+° rotation
- 12-ga. (2.6 mm) cold-rolled steel

Hole center spacing: A = 26.0, A to B = 13.0

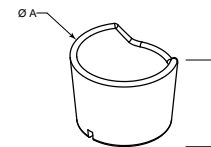
Hole size: A = 26.8 x 7.0, B = $\varnothing$ 6.5, C = $\varnothing$ 22.5

**TC-K30-CL**

- Touch cover

Diameter: A = 40.7 mm

Height: B = 31 mm



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