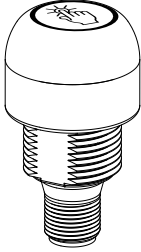


Datasheet

Lighted Touch Button with Bipolar Outputs

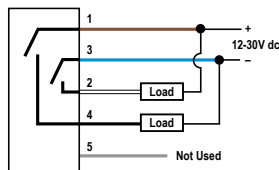


- Excellent immunity to false triggering by water spray, detergents, oils, and other foreign materials
- Rugged, cost-effective, and easy-to-install touch button with multicolor light
- Momentary versions remain activated as long as touch is present
- Latching versions start up not activated and toggle between activated and not activated on successive touches
- Waterproof IEC IP69K construction for washdown environments
- Ergonomically designed to eliminate hand, wrist, and arm stresses associated with repeated switch operation; require no physical force to operate
- Can be actuated with bare hands or gloves
- 12 V dc to 30 V dc operation
- Terminal connection models available for panel wiring applications

Models

Model	Function	Output	Light (not activated)	Light (activated)	Connection ¹
K30ALBT2XGHQ	Latching	Bipolar, N.O.	-	Green	Integral 5-pin M12/Euro-style male quick disconnect (QD)
K30RLBT2XGHQ		Bipolar, N.C.			
K30ABT2XGHQ	Momentary	Bipolar, N.O.	-	Green	
K30RBT2XGHQ		Bipolar, N.C.			
K30ALBT2GGHQ	Latching	Bipolar, N.O.	Green	Green	
K30RLBT2GGHQ		Bipolar, N.C.			
K30ABT2GGHQ	Momentary	Bipolar, N.O.	-	Green	
K30RBT2GGHQ		Bipolar, N.C.			
K30ALBT2RGHQ	Latching	Bipolar, N.O.	Red	Green	
K30RLBT2RGHQ		Bipolar, N.C.			
K30ABT2RGHQ	Momentary	Bipolar, N.O.	-	Green	
K30RBT2RGHQ		Bipolar, N.C.			

Wiring Diagrams



- Color Key
- 1 = Brown
 - 2 = White
 - 3 = Blue
 - 4 = Black
 - 5 = Gray



Note: Cabled wiring diagrams are shown. Quick disconnect (QD) wiring diagrams are functionally identical.

¹ Integral 5-pin M12/Euro-style quick disconnect models are listed.

- To order the 150 mm (6 in) PVC cable model with a 5-pin M12/Euro-style quick disconnect, replace the suffix "Q" with "QP" in the model number. For example, K30ALBT2XGHQP.
- To order the 2 m (6.5 ft) PVC cable model, omit the suffix "Q" in the model number. For example, K30ALBT2XGH.
- To order the terminal model, replace suffix "Q" with "T". For example, K30ALBT2XGHT.
- Models with a quick disconnect require a mating cordset.



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

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 μ A at 30 V dc

Mounting

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

Environmental Rating

Rated IEC IP67, and IP69L, per DIN 40050-9.

Cabled models also meet IEC IP69K if the cable and cable entrance are protected from high-pressure spray. Indicator side of terminal models meet IEC IP67, and IP69K when installed in an enclosure.

Screw connection points meet IEC IP00.

Meets UL type 4X and 13, when used in a suitable enclosure.

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

Vibration 10 Hz to 55 Hz 1.0 mm p-p amplitude per IEC 60068-2-6

Shock 30G 11 ms duration, half sine wave per IEC 60068-2-27

Certifications



Output Response Time

150 milliseconds ON and OFF

Power-Up Delay

300 milliseconds

Latching models start up in a 'not activated' state

Connections

5-pin integral M12/Euro-style QD, 2 m (6.5 ft) PVC integral cable, or 5-pin 150 mm (6 in) M12/Euro-style PVC cable QD

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.

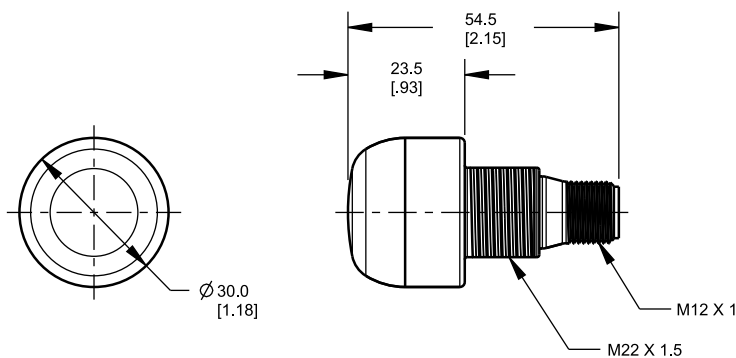
For additional product support, go to www.bannerengineering.com.

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

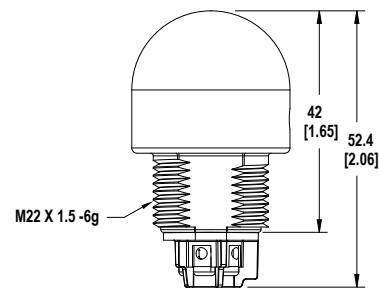
Dimensions

All measurements are listed in millimeters [inches], unless noted otherwise.

Quick-Disconnect Models



Terminal Models



Accessories

Cordsets

5-Pin Threaded M12/Euro-Style Cordsets—Single Ended				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC1-501.5	0.50 m (1.5 ft)	Straight		
MQDC1-506	1.83 m (6 ft)			
MQDC1-515	4.57 m (15 ft)			
MQDC1-530	9.14 m (30 ft)			
MQDC1-506RA	1.83 m (6 ft)	Right-Angle		
MQDC1-515RA	4.57 m (15 ft)			
MQDC1-530RA	9.14 m (30 ft)			

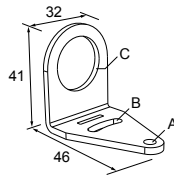
5-Pin Threaded M12/Euro-Style Cordsets—Washdown Stainless Steel				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC-WDSS-0506	1.83 m (6 ft)	Straight		
MQDC-WDSS-0515	4.57 m (15 ft)			
MQDC-WDSS-0530	9.14 m (30 ft)			

5-Pin Threaded M12/Euro-Style Cordsets—Washdown, with Shield				
Model	Length	Style	Dimensions	Pinout (Female)
MQDCWD-506	1.83 m (6 ft)	Straight		
MQDCWD-530	9.14 m (30 ft)			

Brackets

SMB22A

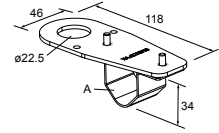
- Right-angle bracket with curved slot for versatile orientation
- 12-ga. stainless steel
- Mounting hole for 22 mm sensor



Hole center spacing: A to B = 26.0
Hole size: A = \varnothing 4.6, B = 4.6 x 16.9, C = 22.2

SMB22FVK

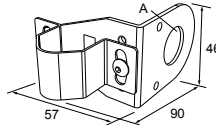
- V-clamp, flat bracket and fasteners for mounting to pipe or extensions
- Clamp accommodates 28 mm diameter tubing or 1 in. square extrusions
- 22 mm hole for mounting sensor



Hole size: A = \varnothing 22.5

SMB22RAVK

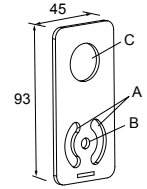
- V-clamp, right-angle bracket and fasteners for mounting to pipe or extensions
- Clamp accommodates 28 mm diameter tubing or 1 in. square extrusions
- 22 mm hole for mounting sensor



Hole size: A = \varnothing 22.5

SMBAMS22P

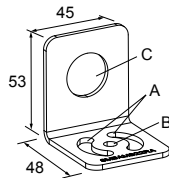
- Flat SMBAMS series bracket with 22 mm hole for mounting sensors
- Articulation slots for 90+° rotation
- 12-ga. (2.6 mm) cold-rolled steel



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

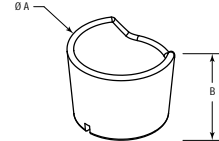
- Right-angle SMBAMS series bracket with 22 mm hole for mounting sensors
- Articulation slots for 90+° rotation
- 12-ga. (2.6 mm) cold-rolled steel



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
Height: B = 31

All measurements are listed in millimeters, unless noted otherwise.

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Banner Engineering Corp. warrants its products to be free from defects in material and workmanship for one year following the date of shipment. Banner Engineering Corp. will repair or replace, free of charge, any product of its manufacture which, at the time it is returned to the factory, is found to have been defective during the warranty period. This warranty does not cover damage or liability for misuse, abuse, or the improper application or installation of the Banner product.

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FCC Part 15 and CAN ICES-3 (B)/NMB-3(B)

This device complies with part 15 of the FCC Rules and CAN ICES-3 (B)/NMB-3(B). Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules and CAN ICES-3 (B)/NMB-3(B). These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the manufacturer.