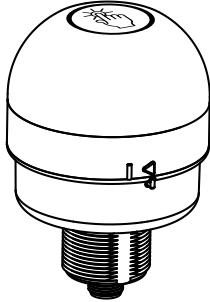


# EZ-LIGHT® Touch K70 Series Illuminated Buttons



## 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
- 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 in gloves
- 12 V to 30 V operation



**WARNING:** Not To Be Used for Personnel Protection

Never use this device as a sensing device for personnel protection. Doing so could lead to serious injury or death. This device does not include the self-checking redundant circuitry necessary to allow its use in personnel safety applications. A sensor failure or malfunction can cause either an energized or de-energized sensor output condition.

## Models

Model <sup>1</sup>	Function	Output	Light (not activated)	Light (activated)	Connection		
K70ALBT2XGHQ	Latching	Bipolar, N.O.	-	Green	Integral 5-pin M12/Euro-style male quick disconnect (QD)		
K70RLBT2XGHQ		Bipolar, N.C.					
K70ABT2XGHQ	Momentary	Bipolar, N.O.					
K70RBT2XGHQ		Bipolar, N.C.					
K70ALBT2GGHQ	Latching	Bipolar, N.O.				Green	Green
K70RLBT2GGHQ		Bipolar, N.C.					
K70ABT2GGHQ	Momentary	Bipolar, N.O.					
K70RBT2GGHQ		Bipolar, N.C.					
K70ALBT2RGHQ	Latching	Bipolar, N.O.	Red	Green			
K70RLBT2RGHQ		Bipolar, N.C.					
K70ABT2RGHQ	Momentary	Bipolar, N.O.					
K70RBT2RGHQ		Bipolar, N.C.					

<sup>1</sup> 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 PVC connector, replace the suffix "Q" with "QP" in the model number. For example K70ALBT2XGHQP.
- To order the 2 m (6.5 ft) PVC cable model, omit the suffix "Q" in the model number. For example, K70ALBT2XGH.
- Models with a quick disconnect require a mating cordset.



## Specifications

### Supply Voltage

12 V to 30 V dc

### Supply Current

< 220 mA maximum current at 12 V dc (exclusive of load)  
< 110 mA maximum current at 30 V dc (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 µA at 30 V dc

### Output Response Time:

Momentary models: 50 ms ON and OFF  
Latching models: 150 ms ON and OFF

### Construction

Housing and dome: Polycarbonate  
Mounting nut: PBT

### Environmental Rating

IEC IP65

### Storage

-40 °C to +70 °C (-40 °F to +158 °F)

### Operating Conditions

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

### 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

### Power-Up Delay

300 ms  
Latching models start up in a non-activated state

### Certifications



### Indicator Lumens

Color	Typical Wavelength	Typical Intensity (lm)
Green	525 nm	45
Red	625 nm	26

### Connections

Integral 5-pin M12/Euro-style male quick disconnect (QD); 2 m (6.5 ft) unterminated PVC-jacketed cable; or 150 mm (6 in) PVC cable with a 5-pin M12/Euro-style male quick disconnect (QD)

### Mounting

M30 × 1.5 threaded base; maximum torque 4.5 N·m (40 in-lbf)

### 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.

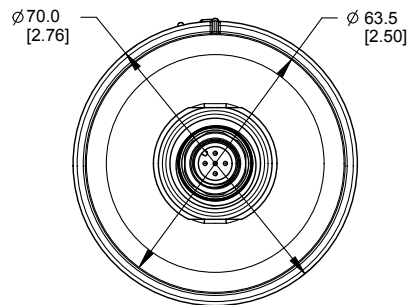
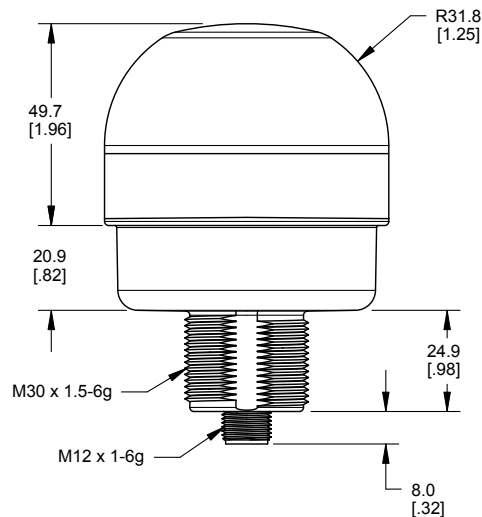
Overcurrent protection may be provided with external fusing or via Current Limiting, Class 2 Power Supply.

Supply wiring leads < 24 AWG shall not be spliced.

For additional product support, go to <http://www.bannerengineering.com>.

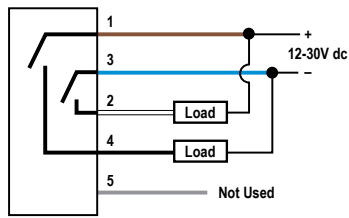
Supply Wiring (AWG)	Required Overcurrent Protection (Amps)
20	5.0
22	3.0
24	2.0
26	1.0
28	0.8
30	0.5

## Dimensions



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

## 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.

## 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		<ul style="list-style-type: none"> <li>1 = Brown</li> <li>2 = White</li> <li>3 = Blue</li> <li>4 = Black</li> <li>5 = Gray</li> </ul>
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)			

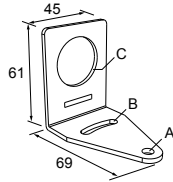
5-Pin Threaded M12/Euro-Style Cordsets—Washdown Stainless Steel				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC-WDSS-0506	1.83 m (6 ft)	Straight		<ul style="list-style-type: none"> <li>1 = Brown</li> <li>2 = White</li> <li>3 = Blue</li> <li>4 = Black</li> <li>5 = Gray</li> </ul>
MQDC-WDSS-0515	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		<p>1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray</p>
MQDCWD-530	9.14 m (30 ft)			

## Brackets

### SMB30A

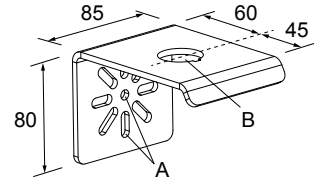
- Right-angle bracket with curved slot for versatile orientation
- Clearance for M6 (¼ in) hardware
- Mounting hole for 30 mm sensor
- 12-ga. stainless steel



Hole center spacing: A to B=40  
Hole size: A=ø 6.3, B= 27.1 x 6.3, C=ø 30.5

### SSA-MBK-EEC1

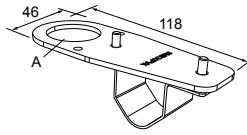
- Single 30 mm hole
- 8 gauge steel, black finish (powder coat)
- Front surface for customer applied labels



Hole size: A = ø 7 , B = ø 30

### SMB30FVK

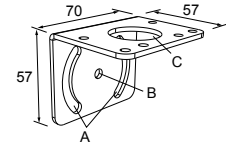
- V-clamp, flat bracket and fasteners for mounting to pipe or extensions
- Clamp accommodates 28 mm dia. tubing or 1 in. square extrusions
- 30 mm hole for mounting sensors



Hole size: A = ø 31

### SMB30MM

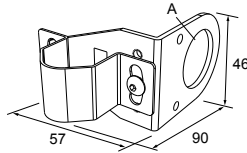
- 12-ga. stainless steel bracket with curved mounting slots for versatile orientation
- Clearance for M6 (¼ in) hardware
- Mounting hole for 30 mm sensor



Hole center spacing: A = 51, A to B = 25.4  
Hole size: A = 42.6 x 7, B = ø 6.4, C = ø 30.1

### SMB30RAVK

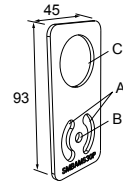
- V-clamp, right-angle bracket and fasteners for mounting sensors to pipe or extrusion
- Clamp accommodates 28 mm dia. tubing or 1 in. square extrusions
- 30 mm hole for mounting sensors



Hole size: A = ø 30.5

### SMBAMS30P

- Flat SMBAMS series bracket
- 30 mm hole for mounting sensors
- Articulation slots for 90° + rotation
- 12-ga. 300 series stainless steel



Hole center spacing: A=26.0, A to B=13.0  
Hole size: A=26.8 x 7.0, B=ø 6.5, C=ø 31.0

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