EZ-LIGHT® Touch Gen 2 K30 Series Illuminated Buttons

Features

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
- 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
- Terminal connection models available for panel wiring applications

Models

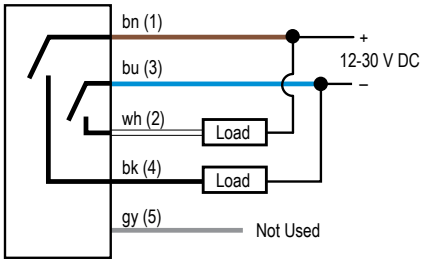
Family	Output State	Output Function	Output Type	Activation Method	Color 1: Not Activated	Color 2: Activated	Function	Connection[1]
K30	A	L	B	T2	G	R	H	Q
	A = Normally open R = Normally closed	Blank = Momentary L = Latching	B = Bipolar output (NPN and PNP)	T2 = Touch	G = Green R = Red Y = Yellow B = Blue W = White X = Not used		H = Power activates Color 1. Touch changes bipolar output state and activates Color 2.	Blank = 2 m (6.5 ft) integral PVC-jacketed cable Q = Integral 5-pin M12 male quick-disconnect connector QP = 150 mm (6 in) PVC-jacketed cable with a 5-pin M12 male quick-disconnect connector T = Terminal screws

Sample Model	Description
K30ALBT2GRH	Normally open output state, with a latching output function, bipolar output, and two-touch activation method. Color 1: Green (not activated), Color 2: Red (activated). Power activates color 1. Touch changes bipolar output state and activates Color 2. 2 m (6.5 ft) integral PVC-jacketed cable.
K30ABT2XGHT	Normally open output state, with a momentary output function and bipolar output. Color 1: None, Color 2: Green (activated). Touch changes bipolar output state and activates Color 2. Terminal screws.
K30RBT2RGHQ	Normally closed output state, with a momentary output function and bipolar output. Color 1: Red (not activated), Color 2: Green (activated). Touch changes bipolar output state and activates Color 2. Integral 5-pin M12 male quick-disconnect connector.

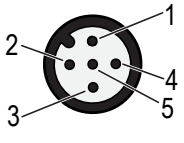
Wiring

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

Diagram



Pinout



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

[1] Models with a quick-disconnect connector require a mating cordset.

Original Instructions
01-Oct-25

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p/n: 189826 Rev. F

ПРОМЭЛЕКТРОНИКА/ sales@prom-elec.com

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.

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

Rated IP67 and IP69K per ISO 20653

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

Screw connection points meet 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 peak-to-peak amplitude per IEC 60068-2-6

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

Construction

Housing: polycarbonate

Translucent dome: polycarbonate

Mounting nut: PBT

Indicator Characteristics

Color	Dominant Wavelength (nm) or Color Temperature (CCT)	Lumen Output (Typical at 25 °C)
Green	520 nm to 535 nm	4.4
Red	620 nm to 630 nm	1.7
Yellow	585 nm to 595 nm	4.4
Blue	465 nm to 475 nm	1
White	5665K to 9000K	5

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

Banner Engineering BV
Park Lane, Culliganlaan 2F bus 3
1831 Diegem, BELGIUM

FCC Part 15 Class B for Unintentional Radiators

(Part 15.105(b)) 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. 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 dealer or an experienced radio/TV technician for help.

(Part 15.21) Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Industry Canada ICES-003(B)

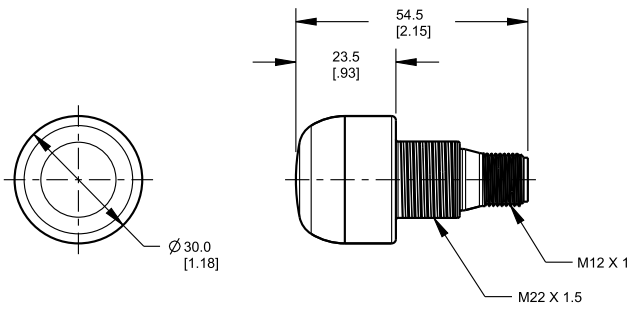
This device complies with CAN ICES-3 (B)/NMB-3(B). Operation is subject to the following two conditions: 1) This device may not cause harmful interference; and 2) This device must accept any interference received, including interference that may cause undesired operation.

Cet appareil est conforme à la norme NMB-3(B). Le fonctionnement est soumis aux deux conditions suivantes : (1) ce dispositif ne peut pas occasionner d'interférences, et (2) il doit tolérer toute interférence, y compris celles susceptibles de provoquer un fonctionnement non souhaité du dispositif.

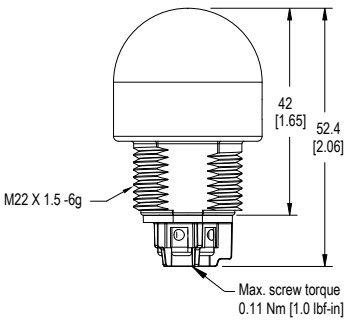
Dimensions

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

Quick-Disconnect Models



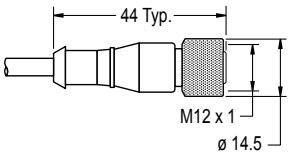
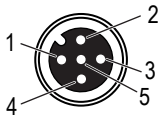
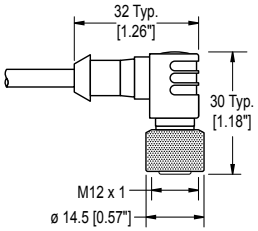
Terminal Models

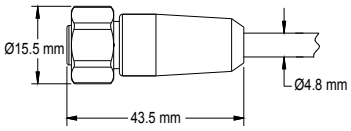
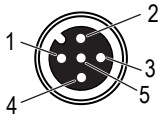


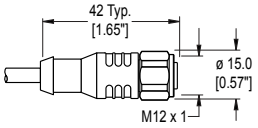
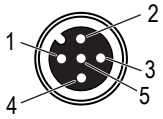
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Accessories

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)			

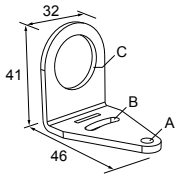
Brackets

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

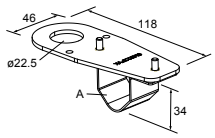


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SMB22FVK

- 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

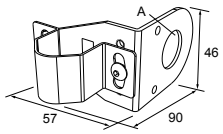
Hole size: A = ø 22.5



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

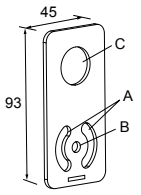
Hole size: A = ø 22.5



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

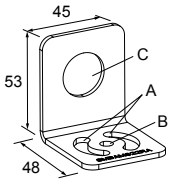
Hole center spacing: A = 26.0, A to B = 13.0
Hole size: A = 26.8 x 7.0, B = ø 6.5, C = ø 22.5



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

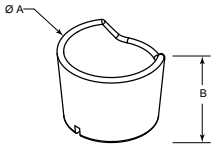
Hole center spacing: A = 26.0, A to B = 13.0
Hole size: A = 26.8 x 7.0, B = ø 6.5, C = ø 22.5



TC-K30-CL

- Touch cover

Diameter: A = 40.7 mm
Height: B = 31 mm



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