EZ-LIGHT® Touch Gen 2 K50 Series Illuminated Buttons

Features

Lighted Touch Button with Bipolar Outputs



Standard Model



Compact Model

- 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 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
- Compact models available for lower profile applications

WARNING:

- **Do not use this device for personnel protection**
- Using this device for personnel protection could result in serious injury or death.
- This device does not include the self-checking redundant circuitry necessary to allow its use in personnel safety applications. A device failure or malfunction can cause either an energized (on) or de-energized (off) output condition.

Models

Model[1]	Function	Output	Light (not activated)	Light (activated)	Connection
K50ALBT2XGHQ	Latching	Bipolar, N.O.	-	Green	Integral 5-pin M12 male quick-disconnect connector
K50RLBT2XGHQ		Bipolar, N.C.			
K50ABT2XGHQ	Momentary	Bipolar, N.O.			
K50RBT2XGHQ		Bipolar, N.C.			
K50ALBT2GGHQ	Latching	Bipolar, N.O.	Green	Green	
K50RLBT2GGHQ		Bipolar, N.C.			
K50ABT2GGHQ	Momentary	Bipolar, N.O.			
K50RBT2GGHQ		Bipolar, N.C.			
K50ALBT2RGHQ	Latching	Bipolar, N.O.	Red	Green	
K50RLBT2RGHQ		Bipolar, N.C.			
K50ABT2RGHQ	Momentary	Bipolar, N.O.			
K50RBT2RGHQ		Bipolar, N.C.			

Wiring Diagrams

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

(1)

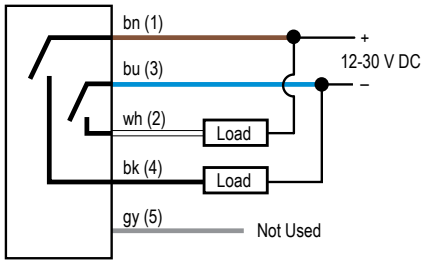
- To order the 150 mm (6 in) PVC cable model with a 5-pin M12 quick disconnect, replace the suffix "Q" with "QP" in the model number. For example, K50ALBT2XGHQP.
- To order the 2 m (6.5 ft) PVC cable model, omit the suffix "Q" in the model number. For example K50ALBT2XGH.
- To order a compact model, add suffix "C" after K50 in model number. For example, K50CALBT2XGHQ.
- Models with a quick disconnect require a mating cordset.

Original Instructions
30-Jun-25

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p/n: 189829 Rev. F

ПРОМЭЛЕКТРОНИКА/ sales@prom-elec.com



Specifications

Supply Voltage

12 V DC to 30 V DC

Supply Current

< 75 mA max current at 12 V DC (exclusive of load)

< 50 mA max 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

Indicator Lumens

Color	Typical Wavelength	Typical Intensity (lm)
Green	525 nm	29
Red	625 nm	13

Construction

Housing: polycarbonate

Translucent dome: polycarbonate

Mounting nut: PBT

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)

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.

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

Output Response Time

Momentary models: 50 milliseconds On and Off

Latching models: 150 milliseconds On and Off

Power-Up Delay

300 milliseconds

Latching models start up in a 'not activated' state

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 5-pin M12 male quick-disconnect connector

Certifications

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

Turck Banner LTD Blenheim House
Blenheim Court
Wickford, Essex SS11 8YT
GREAT BRITAIN

Mounting

M30 × 1.5 threaded base max. 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 Key definition for "URL" not found in the DITA map..

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	1.0	30	0.5

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.

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- 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)

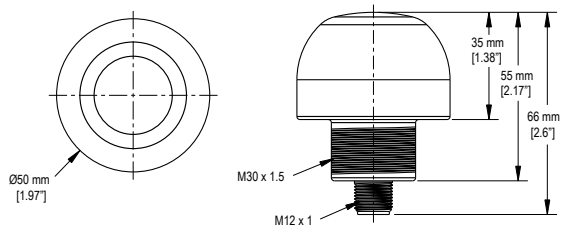
This device complies with CAN ICES-3 (B)/NMB-3(B). Operation is subject to the following two conditions: 1) This device may not cause harmful interference; and 2) This device must accept any interference received, including interference that may cause undesired operation.

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.

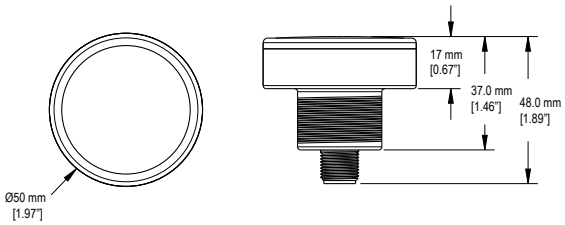
Dimensions

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

Standard Models

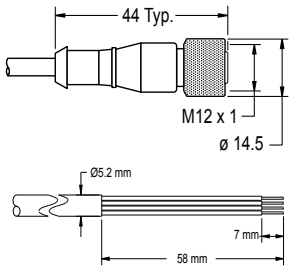
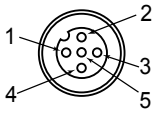
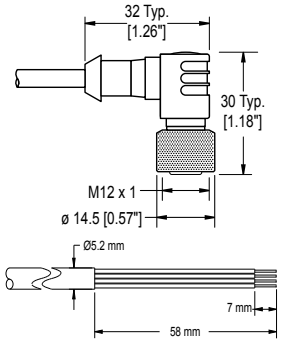
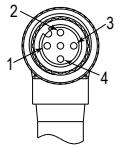


Compact Models

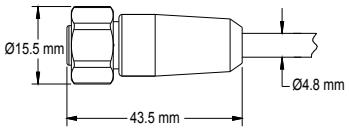
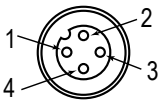


Accessories

Cordsets

4-Pin Single-Ended M12 Female Cordsets					
Model	**Length**	**Style**	**Dimensions**	**Pinout (Female)**	
MQDC-406	2 m (6.56 ft)	Straight			1 = Brown 2 = White 3 = Blue 4 = Black 5 = Not used
MQDC-415	5 m (16.4 ft)				
MQDC-430	9 m (29.5 ft)				
MQDC-450	15 m (49.2 ft)				
MQDC-406RA	2 m (6.56 ft)	Right-Angle			
MQDC-415RA	5 m (16.4 ft)				
MQDC-430RA	9 m (29.5 ft)				
MQDC-450RA	15 m (49.2 ft)				

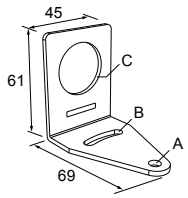
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4-Pin Single-Ended M12 Female Washdown, Stainless Steel Cordsets				
Model	**Length**	**Style**	**Dimensions**	**Pinout (Female)**
MQDC-WDSS-0406	2 m (6.56 ft)	Straight		 1 = Brown 2 = White 3 = Blue 4 = Black
MQDC-WDSS-0415	5 m (16.4 ft)			
MQDC-WDSS-0430	9 m (29.5 ft)			

Brackets

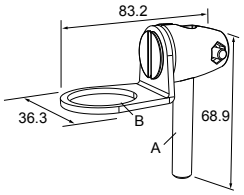
SMB30A
- Right-angle bracket with curved slot for versatile orientation
- Clearance for M6 (¼ in) hardware
- Mounting hole for 30 mm sensor
- 12-gauge stainless steel

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



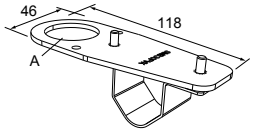
SMB30FA
- Swivel bracket with tilt and pan movement for precise adjustment
- Mounting hole for 30 mm sensor
- 12-gauge 304 stainless steel
- Easy sensor mounting to extrude rail T-slot
- Metric- and inch-size bolt available

Bolt thread: SMB30FA, A= 3/8 - 16 × 2 in; SMB30FAM10, A= M10 - 1.5 × 50
Hole size: B= ø 30.1



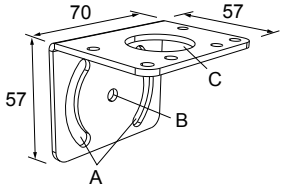
SMB30FVK
- V-clamp, flat bracket and fasteners for mounting to pipe or extensions
- Clamp accommodates 28 mm dia. tubing or 1 in. square extrusions
- 30 mm hole for mounting sensors

Hole size: A= ø 31



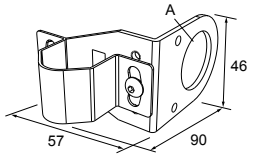
SMB30MM
- 12-gauge stainless steel bracket with curved mounting slots for versatile orientation
- Clearance for M6 (¼ in) hardware
- Mounting hole for 30 mm sensor

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



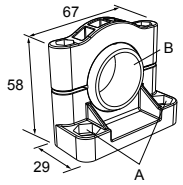
SMB30RAVK
- V-clamp, right-angle bracket and fasteners for mounting sensors to pipe or extrusion
- Clamp accommodates 28 mm dia. tubing or 1 in. square extrusions
- 30 mm hole for mounting sensors

Hole size: A = ø 30.5



SMB30SC
- Swivel bracket with 30 mm mounting hole for sensor
- Black reinforced thermoplastic polyester
- Stainless steel mounting and swivel locking hardware included

Hole center spacing: A=ø 50.8
Hole size: A=ø 7.0, B=ø 30.0

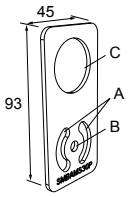


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SMBAMS30P

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

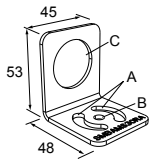
Hole center spacing: A=26.0, A to B=13.0
Hole size: A=26.8 × 7.0, B=ø 6.5, C=ø 31.0



SMBAMS30RA

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

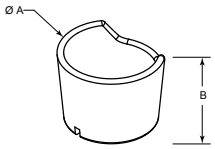
Hole center spacing: A=26.0, A to B=13.0
Hole size: A=26.8 × 7.0, B=ø 6.5, C=ø 31.0



TC-K50-CL

- Touch cover

Diameter: A = 67 mm
Height: B = 42.5 mm



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