EZ-LIGHT® Touch Gen 2 K50 FDA-Grade Illuminated Buttons

Features

Lighted Touch Button with Bipolar Outputs



- FDA-grade materials; rated to IP67, IP68, and IP69K
- Laser-marked information withstands aggressive cleaning procedures
- 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; requires no physical force to operate
- Can be actuated with bare hands or gloves
- 12 V DC to 30 V DC operation

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
K50ALBT2FXGHQP	Latching	Bipolar, N.O.	-	Green	150 mm (6 in) PVC-jacketed cable with a 5-pin M12 male, stainless steel quick-disconnect connector
K50RLBT2FXGHQP		Bipolar, N.C.			
K50ABT2FXGHQP	Momentary	Bipolar, N.O.			
K50RBT2FXGHQP		Bipolar, N.C.			
K50ALBT2FGGHQP	Latching	Bipolar, N.O.	Green	Green	
K50RLBT2FGGHQP		Bipolar, N.C.			
K50ABT2FGGHQP	Momentary	Bipolar, N.O.			
K50RBT2FGGHQP		Bipolar, N.C.			
K50ALBT2FRGHQP	Latching	Bipolar, N.O.	Red	Green	
K50RLBT2FRGHQP		Bipolar, N.C.			
K50ABT2FRGHQP	Momentary	Bipolar, N.O.			
K50RBT2FRGHQP		Bipolar, N.C.			

Wiring Diagrams

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

(1)

- To order the 2 m (6.5 ft) PVC cable model, omit the suffix "QP" in the model number. For example, K50ALBT2FXGH.
- Models with a quick disconnect require a mating cordset.

Original Instructions
10-Jun-25

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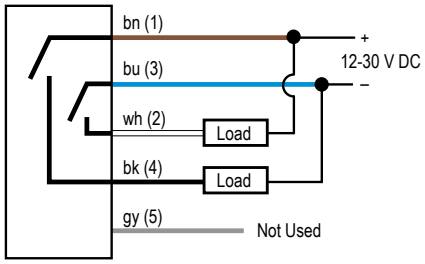
p/n: 189836 Rev. D

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

Operating Conditions
Temperature: –40 °C to +50 °C (–40 °F to +122 °F)
Humidity: 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

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

Connections
150 mm (6 in) PVC-jacketed cable with a 5-pin M12 male, stainless steel quick-disconnect connector or 2 m (6.5 ft) unterminated 3-wire PVC-jacketed cable

Construction
Base, dome, and nut: FDA-grade polycarbonate

Mounting
M30 × 1.5 threaded base max. torque 4.5 N·m (40 in·lbf)

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

Indicator Lumens

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

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	1.0	30	0.5

Certifications

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

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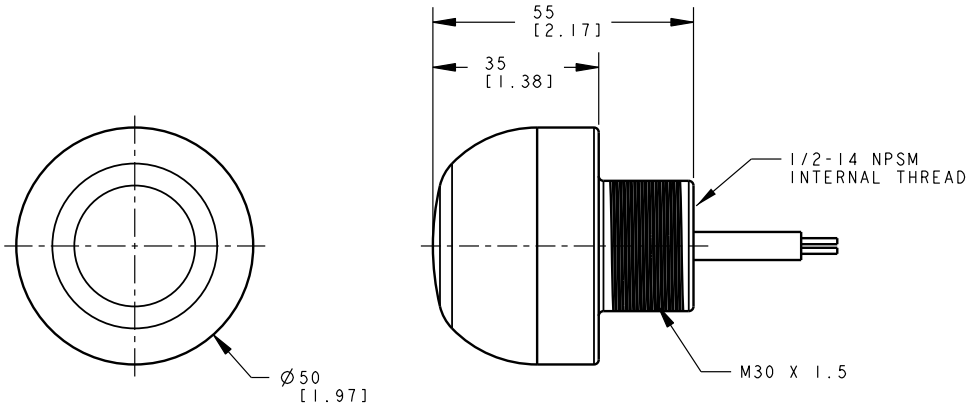
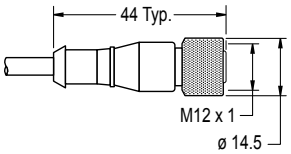
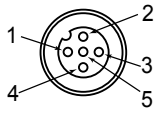
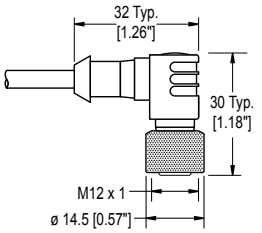
Dimensions

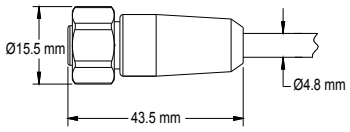
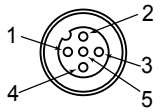
All measurements are listed in millimeters [inches], unless noted otherwise. The measurements provided are subject to change.



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		
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		1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray
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		
MQDC-WDSS-0515	5 m (16.4 ft)			
MQDC-WDSS-0530	9 m (29.5 ft)			1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray

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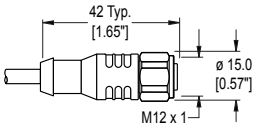
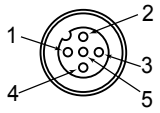
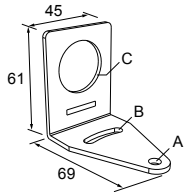
5-Pin Single-Ended M12 Female Washdown, Shielded Cordsets				
Model	**Length**	**Style**	**Dimensions**	**Pinout (Female)**
MQDCWD-506	2 m (6.56 ft)	Straight		 1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray
MQDCWD-530	9 m (29.5 ft)			

Brackets

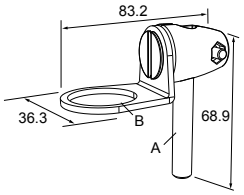
SMB30A
- Right-angle bracket with curved slot for versatile orientation
- Clearance for M6 (¼ in) hardware
- Mounting hole for 30 mm sensor
- 12-gauge stainless steel

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



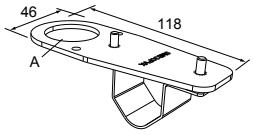
SMB30FA
- Swivel bracket with tilt and pan movement for precise adjustment
- Mounting hole for 30 mm sensor
- 12-gauge 304 stainless steel
- Easy sensor mounting to extrude rail T-slot
- Metric- and inch-size bolt available

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



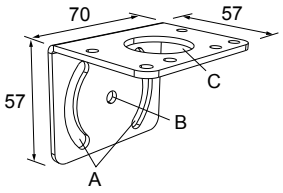
SMB30FVK
- V-clamp, flat bracket and fasteners for mounting to pipe or extensions
- Clamp accommodates 28 mm dia. tubing or 1 in. square extrusions
- 30 mm hole for mounting sensors

Hole size: A= ø 31



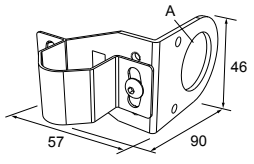
SMB30MM
- 12-gauge stainless steel bracket with curved mounting slots for versatile orientation
- Clearance for M6 (¼ in) hardware
- Mounting hole for 30 mm sensor

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



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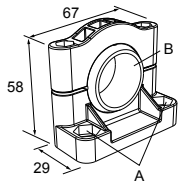
SMB30SC

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

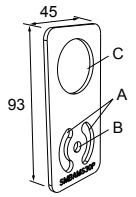
Hole center spacing: A=ø 50.8
Hole size: A=ø 7.0, B=ø 30.0



SMBAMS30P

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

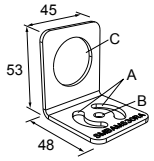
Hole center spacing: A=26.0, A to B=13.0
Hole size: A=26.8 × 7.0, B=ø 6.5, C=ø 31.0



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

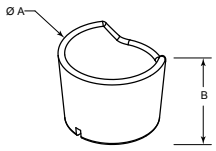
Hole center spacing: A=26.0, A to B=13.0
Hole size: A=26.8 × 7.0, B=ø 6.5, C=ø 31.0



TC-K50-CL

- Touch cover

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



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