EZ-LIGHT® Touch K30 Series Illuminated Multipurpose Buttons



Datasheet

General purpose multicolor indicator with independent momentary touch button output

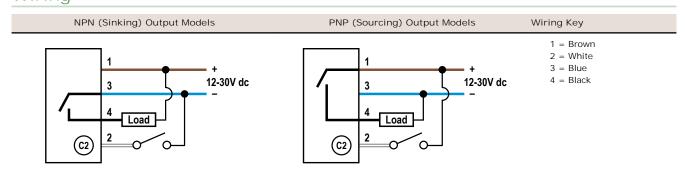


- Rugged, cost-effective, and easy-to-install multicolor indicator with touch button
- Waterproof IP69K construction for washdown environments
- Two independent colors in one unit—Color 2 overrides Color 1
- Available with PNP and NPN inputs/outputs, depending on model
- Ergonomically designed to eliminate 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 dc to 30 V dc operation

Models

Model ¹	I/O Type	Output State	Light Color 1 (Power Applied)	Light Color 2 (Input Active)	Connection
K30APTXRF2Q	PNP	- N.O.	-	Red	Integral 4-pin M12/Euro- style male quick disconnect (QD)
K30APTXGF2Q			-	Green	
K30APTGRF2Q			Green	Red	
K30APTRGF2Q			Red	Green	
K30ANTXRF2Q	NPN		-	Red	
K30ANTXGF2Q			-	Green	
K30ANTGRF2Q			Green	Red	
K30ANTRGF2Q			Red	Green	

Wiring



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



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¹ Integral QD models only are listed.

[•] To order the 4-pin 150 mm (5.9 in) Euro-style PVC pigtail models, replace suffix Q with QP in the model number (example, K30APTXRF2QP).

[•] To order the 2 m (6.5 ft) cable models, omit suffix Q from the model number (example, K30APTXRF2).

A model with a QD requires a mating cable (see Cordsets).

Specifications

Supply Voltage

12 V dc to 30 V dc

Supply Current

55 mA max current (exclusive of load)

Supply/Output 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

Environmental Rating

IEC IP67, IP69K per DIN 40050-9.

Cabled models also meet IP69K if the cable and cable entrance are protected from high-pressure spray.

Enclosure Type 4X, 13

Operating Conditions

Temperature: -40 °C to +50 °C (-40 °F to +122 °F)

Humidity: 90% at +50 $^{\circ}\text{C}$ maximum relative humidity (noncondensing)

Storage Temperature

-40 °C to +70 °C (-40 °F to +158 °F)

Vibration and Mechanical Shock

All models meet Mil. Std. 202F requirements method 201A (vibration: 10 Hz to 60 Hz max., double amplitude 0.06 in. maximum acceleration 10G). Also meets IEC 947-5-2; 30G 11 ms duration, half sine wave.

Certifications





Output Response Time

150 milliseconds On and Off

Power-Up Delay

300 milliseconds

Connections

Integral 4-pin M12/Euro-style male quick disconnect (QD); 2 m (6.5 ft) PVC integral cable; 150 mm (6 in) PVC cable with a 4-pin M12/Euro-style

male quick disconnect (QD)

Construction

Housing: polycarbonate

Translucent dome: polycarbonate

Mounting nut: PBT

Mounting

M22 x 1.5 Threaded base, max torque 2.25 N·m (20 in-lbf)

Required Overcurrent Protection



WARNI NG: 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.

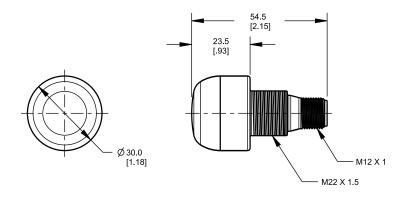
Supply wiring leads < 24 AWG shall not be spliced.

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.



Accessories

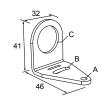
Cordsets

4-Pin Threaded M12/Euro-Style Cordsets							
Model	Length	Style	Dimensions	Pinout (Female)			
MQDC-406	1.83 m (6 ft)						
MQDC-415	4.57 m (15 ft)						
MQDC-430	9.14 m (30 ft)	Straight					
MQDC-450	15.2 m (50 ft)		M12 x 1 → ø 14.5 →	12			
MQDC-406RA	1.83 m (6 ft)		32 Typ. [1.26"] 30 Typ.	1 = Brown 2 = White			
MQDC-415RA	4.57 m (15 ft)						
MQDC-430RA	9.14 m (30 ft)						
MQDC-450RA	15.2 m (50 ft)	Right-Angle	M12 x 1	3 = Blue 4 = Black			

Brackets

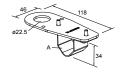
SMB22A

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



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

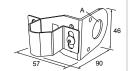


Hole center spacing: A to B = 26.0 Hole size: A = \emptyset 22.5 Hole size: A = \emptyset 4.6, B = 4.6 x 16.9, C = 22.2

SMB22RAVK

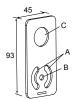
- V-clamp, right-angle bracket and fasteners for mounting to pipe or extensions
- Clamp accommodates 28 mm diameter tubing or 1 in. square extrusions
- 22 mm hole for mounting sensor

Hole size: $A = \emptyset 22.5$



SMBAMS22P

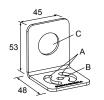
- Flat SMBAMS series bracket with 22 mm hole for mounting sensors
- Articulation slots for 90+° rotation
- 12-ga. (2.6 mm) cold-rolled steel



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

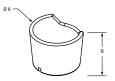
SMBAMS22RA

- Right-angle SMBAMS series bracket with 22 mm hole for mounting sensors
- $\bullet \quad \text{Articulation slots for 90+} \, ^{\circ} \, \, \text{rotation} \\$
- 12-ga. (2.6 mm) cold-rolled steel



TC-K30-CL

Touch cover



Diameter: A = 40.7 Height: B = 31

Hole center spacing: A = 26.0, A to B = 13.0Hole size: $A = 26.8 \times 7.0$, $B = \emptyset 6.5$, $C = \emptyset 22.5$

All measurements are listed in millimeters, unless noted otherwise.

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