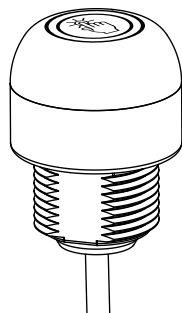


EZ-LIGHT® Touch Gen 2 K30 FDA-Grade Series Illuminated Multipurpose Buttons



Datasheet

General Purpose Multicolor Indicator with Independent Momentary Touch Button Output



- FDA-grade materials; rated to IEC 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 multicolor indicator with touch button
- Two or three independent colors in one unit: Color 3 overrides Colors 1 and 2, 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 gloves
- 12 V dc to 30 V dc operation

Models

2 Color Models

Model ¹	I/O Type	Output State	Light Color 1 (Power Applied)	Light Color 2 (Input Active)	Connection
K30APT2FXRF2QP	PNP	N.O.	-	Red	2 m (6.5 ft) unterminated PVC-jacketed cable or 150 mm (6 in) PVC cable with a 5-pin M12/ Euro-style, stainless steel quick disconnect
K30APT2FXGF2QP			-	Green	
K30APT2FGRF2QP			Green	Red	
K30APT2FRGF2QP			Red	Green	
K30ANT2FXRF2QP	NPN		-	Red	
K30ANT2FXGF2QP			-	Green	
K30ANT2FGRF2QP			Green	Red	
K30ANT2FRGF2QP			Red	Green	

3 Color Model

Model ¹	I/O Type	Output State	Color 1	Color 2	Color 3	Connection
K30APT2FGRYF2QP	PNP	N.O.	Green	Red	Yellow	2 m (6.5 ft) unterminated PVC-jacketed cable or 150 mm 8-pin M12/Euro-style male, stainless steel, quick disconnect (QD)

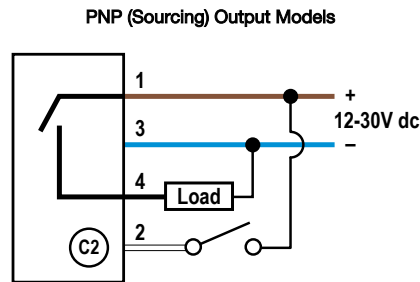
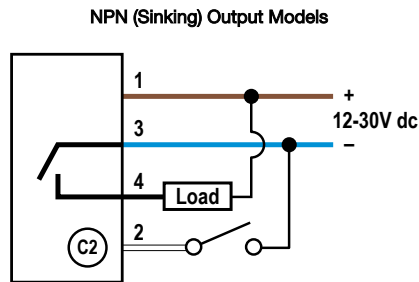
¹

- To order the 2 m (6.5 ft) PVC cable model, omit the suffix "QP" in the model number. For example, K30APT2FXRF2.
- Models with a quick disconnect require a mating cordset.



Wiring

2 Color Models

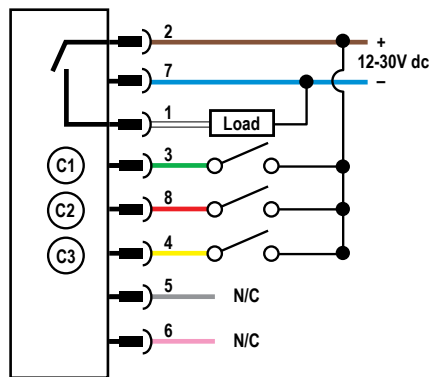


Wiring Key

- 1 = Brown
- 2 = White
- 3 = Blue
- 4 = Black

3 Color Model

PNP (Sourcing) Output Models



Wiring Key

- 1 = White
- 2 = Brown
- 3 = Green
- 4 = Yellow
- 5 = Gray
- 6 = Pink
- 7 = Blue
- 8 = Red



Note:

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

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

Output Response Time

150 milliseconds On and Off

Power-Up Delay

300 milliseconds

Connections

2 m (6.5 ft) PVC integral cable or 150 mm (6 inch) pigtail PVC cable with a 5-pin or 8-pin M12/Euro-style male, stainless steel, quick disconnect (QD)

Construction

Base, dome, and nut: FDA-grade copolyester

Mounting

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

Environmental Rating

IEC IP67, IP69K per DIN 40050-9.

Operating Conditions**Temperature:** -40 °C to +50 °C (-40 °F to +122 °F)**Humidity:** 90% at +50 °C maximum relative humidity (non-condensing)**Storage Temperature**

-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

Certifications**Required Overcurrent Protection**

WARNING: Electrical connections must be made by qualified personnel in accordance with local and national electrical codes and regulations.

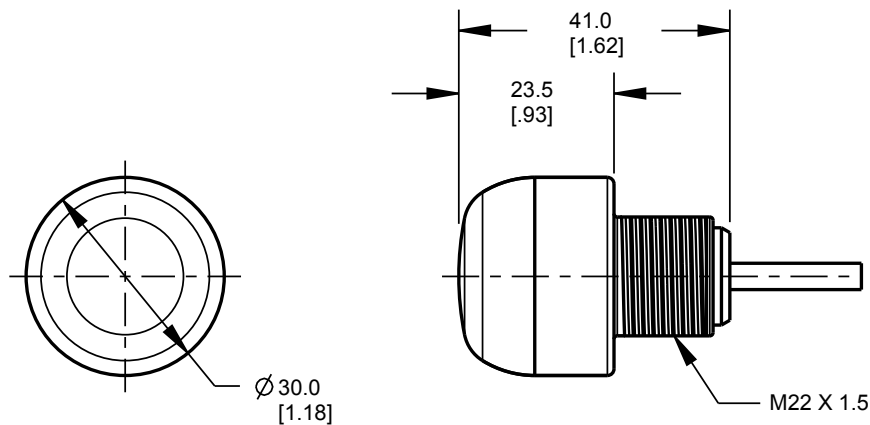
Overcurrent protection is required to be provided by end product application per the supplied table.

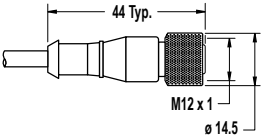
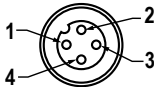
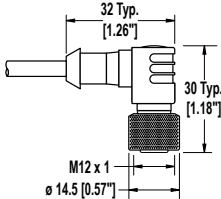
Overcurrent protection may be provided with external fusing or via Current Limiting, Class 2 Power Supply.

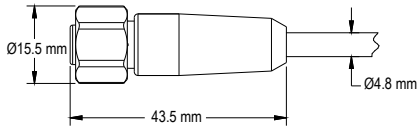
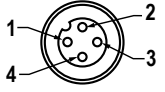
Supply wiring leads < 24 AWG shall not be spliced.

For additional product support, go to www.bannerengineering.com.

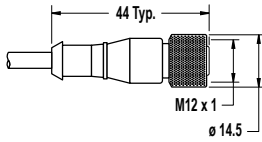
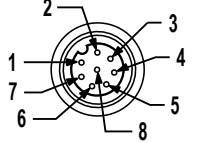
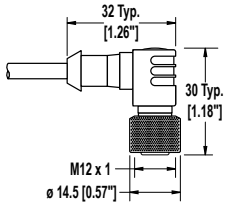
Supply Wiring (AWG)	Required Overcurrent Protection (Amps)
20	5.0
22	3.0
24	2.0
26	1.0
28	0.8
30	0.5

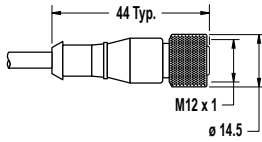
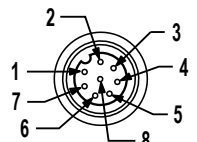
Dimensions**Accessories****Cordsets**

4-Pin Threaded M12/Euro-Style Cordsets				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC-406	1.83 m (6 ft)	Straight		 1 = Brown 2 = White 3 = Blue 4 = Black
MQDC-415	4.57 m (15 ft)			
MQDC-430	9.14 m (30 ft)			
MQDC-450	15.2 m (50 ft)			
MQDC-406RA	1.83 m (6 ft)	Right-Angle		
MQDC-415RA	4.57 m (15 ft)			
MQDC-430RA	9.14 m (30 ft)			
MQDC-450RA	15.2 m (50 ft)			

4-Pin Threaded M12/Euro-Style Cordsets—Washdown, Stainless Steel				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC-WDSS-0406	1.83 m (6 ft)	Straight		 1 = Brown 2 = White 3 = Blue 4 = Black
MQDC-WDSS-0415	4.57 m (15 ft)			
MQDC-WDSS-0430	9.14 m (30 ft)			

Cordsets

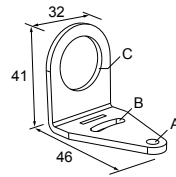
8-Pin Threaded M12/Euro-Style Cordsets with Open-Shield				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC2S-806	1.83 m (6 ft)	Straight		 1 = White 2 = Brown 3 = Green 4 = Yellow 5 = Gray 6 = Pink 7 = Blue 8 = Red
MQDC2S-815	4.57 m (15 ft)			
MQDC2S-830	9.14 m (30 ft)			
MQDC2S-850	15.2 m (50 ft)	Right-Angle		
MQDC2S-806RA	1.83 m (6 ft)			
MQDC2S-815RA	4.57 m (15 ft)			
MQDC2S-830RA	9.14 m (30 ft)			
MQDC2S-850RA	15.2 m (50 ft)			

8-Pin Threaded M12/Euro-Style Cordsets with Open-Shield—Washdown, Stainless Steel				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC-WDSS-0806	1.83 m (6 ft)	Straight		 1 = White 5 = Gray 2 = Brown 6 = Pink 3 = Green 7 = Blue 4 = Yellow 8 = Red
MQDC-WDSS-0815	4.57 m (15 ft)			
MQDC-WDSS-0830	9.14 m (30 ft)			

Brackets

SMB22A

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

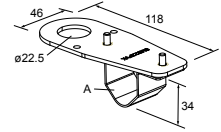


Hole center spacing: A to B = 26.0

Hole size: A = $\varnothing$ 4.6, B = 4.6 x 16.9, C = 22.2

SMB22FVK

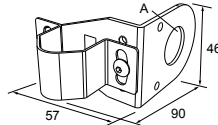
- V-clamp, flat bracket and fasteners for mounting to pipe or extensions
- Clamp accommodates 28 mm diameter tubing or 1 in. square extrusions
- 22 mm hole for mounting sensor



Hole size: A = $\varnothing$ 22.5

SMB22RAVK

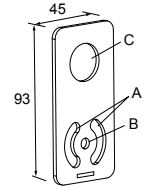
- V-clamp, right-angle bracket and fasteners for mounting to pipe or extensions
- Clamp accommodates 28 mm diameter tubing or 1 in. square extrusions
- 22 mm hole for mounting sensor



Hole size: A = $\varnothing$ 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

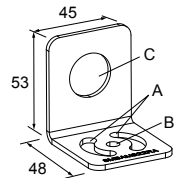


Hole center spacing: A = 26.0, A to B = 13.0

Hole size: A = 26.8 x 7.0, B = $\varnothing$ 6.5, C = $\varnothing$ 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

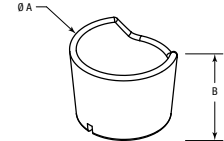


Hole center spacing: A = 26.0, A to B = 13.0

Hole size: A = 26.8 x 7.0, B = $\varnothing$ 6.5, C = $\varnothing$ 22.5

TC-K30-CL

- Touch cover



Diameter: A = 40.7

Height: B = 31

All measurements are listed in millimeters, unless noted otherwise.

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