

Features

General Purpose Multicolor Indicator with Independent Momentary Touch Button Output



- 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 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 the model
- 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

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 3-wire PVC-jacketed cable or 150 mm (6 in) PVC-jacketed cable with a 5-pin M12 male, stainless steel quick-disconnect connector
K30APT2FXGF2QP			-	Green	
K30APT2FGRF2QP			Green	Red	
K30APT2FRGF2QP			Red	Green	
K30ANT2FXRF2QP	NPN	N.O.	-	Red	2 m (6.5 ft) unterminated 3-wire PVC-jacketed cable or 150 mm (6 in) PVC-jacketed cable with a 5-pin M12 male, stainless steel quick-disconnect connector
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 3-wire PVC-jacketed cable or 150 mm 8-pin M12 male, stainless steel, quick-disconnect connector

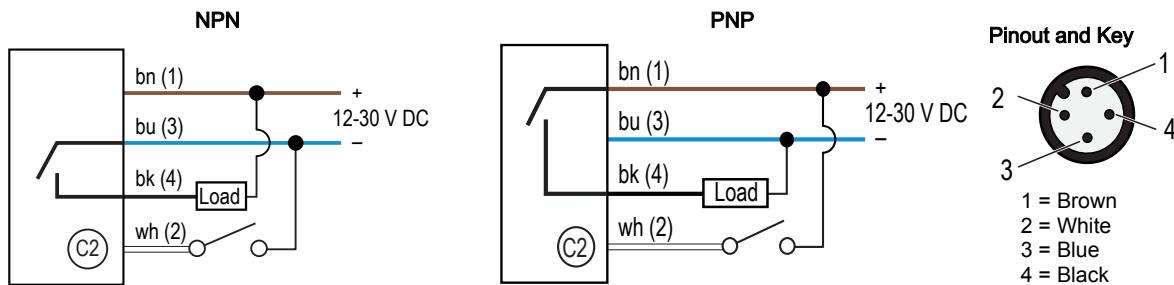
(1)

- 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 connector require a mating cordset.

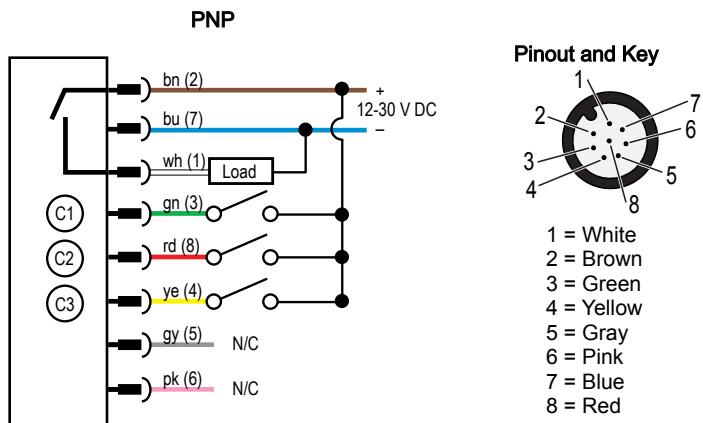


Wiring

1 and 2 Color Models



3 Color Model



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 μ A at 30 V DC

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

150 milliseconds On and Off

Power-Up Delay

300 milliseconds

Connections

2 m (6.5 ft) integral PVC-jacketed cable or 150 mm (6 inch) PVC-jacketed cable with a 5-pin or 8-pin M12 male, stainless steel, quick-disconnect connector

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.

Environmental Rating

IP67, IP69K per ISO 20653

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)

Construction

Base, dome, and nut: FDA-grade copolyester

Mounting

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

Certifications



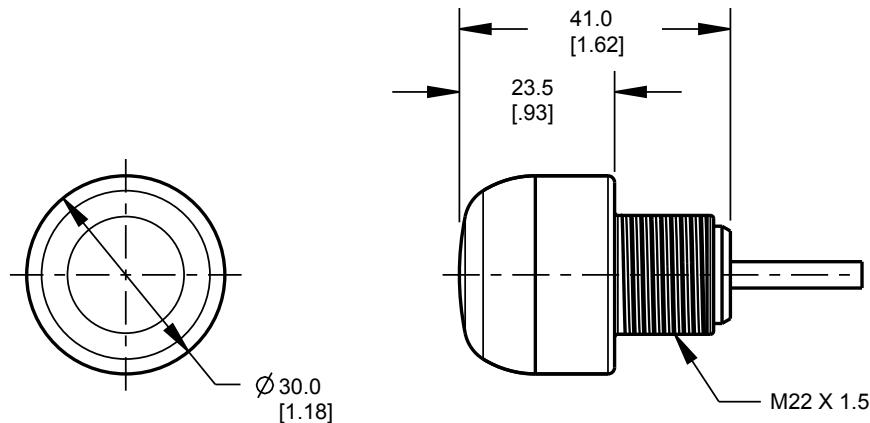
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Supply Wiring (AWG)	Required Overcurrent Protection (A)	Supply Wiring (AWG)	Required Overcurrent Protection (A)
20	5.0	26	1.0
22	3.0	28	0.8
24	2.0	30	0.5

Dimensions

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



Accessories

Cordsets for 2 Color Models

4-Pin Single-Ended M12 Female Cordsets				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC-406	2 m (6.56 ft)	Straight		
MQDC-415	5 m (16.4 ft)			
MQDC-430	9 m (29.5 ft)			
MQDC-450	15 m (49.2 ft)	Right-Angle		
MQDC-406RA	2 m (6.56 ft)			
MQDC-415RA	5 m (16.4 ft)			
MQDC-430RA	9 m (29.5 ft)			
MQDC-450RA	15 m (49.2 ft)			

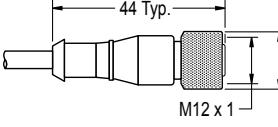
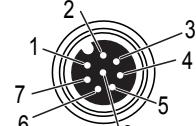
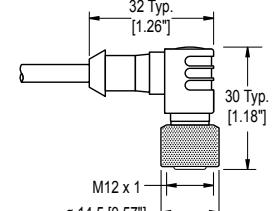
1 = Brown
2 = White
3 = Blue
4 = Black
5 = Not used

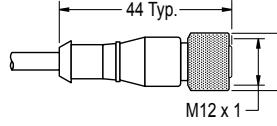
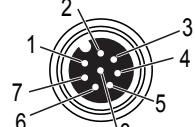


4-Pin Single-Ended M12 Female Washdown, Stainless Steel Cordsets				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC-WDSS-0406	2 m (6.56 ft)	Straight		
MQDC-WDSS-0415	5 m (16.4 ft)			
MQDC-WDSS-0430	9 m (29.5 ft)			

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

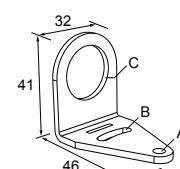
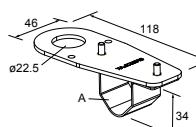
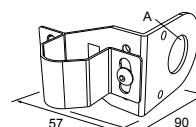
Cordsets for 3 Color Models

8-Pin Single-Ended M12 Female Open-Shielded Cordsets				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC2S-806	2.04 m (6.7 ft)	Straight		 1 = White 2 = Brown 3 = Green 4 = Yellow 5 = Gray 6 = Pink 7 = Blue 8 = Red
MQDC2S-815	5.04 m (16.54 ft)			
MQDC2S-830	10.04 m (32.95 ft)			
MQDC2S-850	16 m (52.49 ft)	Right-Angle		 1 = White 2 = Brown 3 = Green 4 = Yellow 5 = Gray 6 = Pink 7 = Blue 8 = Red
MQDC2S-806RA	2 m (6.56 ft)			
MQDC2S-815RA	5 m (16.4 ft)			
MQDC2S-830RA	10 m (32.81 ft)			
MQDC2S-850RA	16 m (52.49 ft)			

8-Pin Single-Ended M12 Female Open-Shielded, Washdown, Stainless Steel Cordsets				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC-WDSS-0806	2 m (6.56 ft)	Straight		 1 = White 2 = Brown 3 = Green 4 = Yellow 5 = Gray 6 = Pink 7 = Blue 8 = Red
MQDC-WDSS-0815	5 m (16.4 ft)			
MQDC-WDSS-0830	9 m (29.53 ft)			

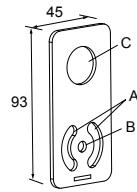
Brackets

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

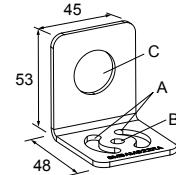
SMB22A <ul style="list-style-type: none"> Right-angle bracket with curved slot for versatile orientation 12-ga. stainless steel Mounting hole for 22 mm sensor <p>Hole center spacing: A to B = 26.0 Hole size: A = Ø 4.6, B = 4.6 x 16.9, C = 22.2</p>	
SMB22FVK <ul style="list-style-type: none"> V-clamp, 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 <p>Hole size: A = Ø 22.5</p>	
SMB22RAVK <ul style="list-style-type: none"> 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 <p>Hole size: A = Ø 22.5</p>	

SMBAMS22P

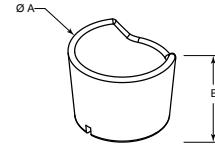
- Flat SMBAMS series bracket with 22 mm hole for mounting sensors
- Articulation slots for 90+° rotation
- 12-ga. (2.6 mm) cold-rolled steel

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 mm**Height:** B = 31 mm

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