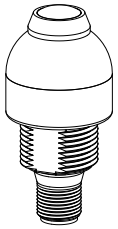
EZ-LIGHT® K30L Series With Independent Push Button Contact

Datasheet

Compact Indicator with One, Two, or Three Colors and a Momentary Push Button Output



- Rugged, cost-effective and easy-to-install multicolor indicator light with pushbutton
- Waterproof IP65 construction for washdown environments
- Excellent for panel mounting or as a stand-alone device
- Immune to EMI and RFI interference
- 10 to 30V dc operation
- Cabled and Quick Disconnect models available
- Up to 3 independent colors in one unit

WARNING: Not To Be Used for Personnel Protection

Never use this device as a sensing device for personnel protection. Doing so could lead to serious injury or death. This device does not include the self-checking redundant circuitry necessary to allow its use in personnel safety applications. A sensor failure or malfunction can cause either an energized or de-energized sensor output condition.

Models

Family	Color 1	Color 2	Color 3	Input	Output	Connector[1]
K30L	G	R	Y	P	PB2	Q
MODEL KEY	G = Green R = Red Y = Yellow B = Blue W = White	O = Orange T = Turquoise V = Violet M = Magenta X = No color in this position		P = PNP	PB2 = Momentary Push Button	Q = Integral M12/Euro-style QD Blank = 2 m (6.5 ft) PVC cable QP = 150 mm (6 in) PVC cable with M12/Euro-style QD

Example Model	# of LED Colors	LED Indicators	Connection
K30LGXXPPB2Q	1	Green	4-pin M12/Euro-style integral QD
K30LRXXPPB2Q		Red	
K30LGRXPPB2Q	2	Green, Red	5-pin M12/Euro-style integral QD
K30LGYXPPB2Q		Green, Yellow	
K30LGRYPPB2Q	3	Green, Red, Yellow	8-pin M12/Euro-style integral QD

Installation

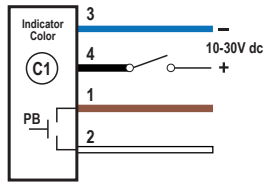
Install the K30 sensor at such a height and in a location that will be easy for the user and/or supervisor to see the indicator and comfortable for the user to press the push-button.

[1] Integral quick disconnect models are listed.
- To order the 2 m (6.5 ft) PVC cable model, omit the suffix "Q" in the model number. For example, K30LGXXPPB2
- To order the 150 mm (6 in) PVC cable model, replace the suffix "Q" with "QP" in the model number. For example, K30LGXXPPB2QP
- Models with a quick disconnect require a mating cordset.

Wiring

4-Pin Models

Sourcing (PNP) Input

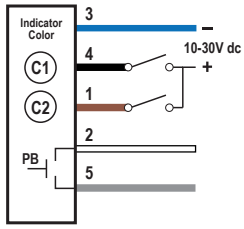


Key

1 = Brown
2 = White
3 = Blue
4 = Black
C1 = Color 1
PB = Push Button

5-Pin Models

Sourcing (PNP) Input

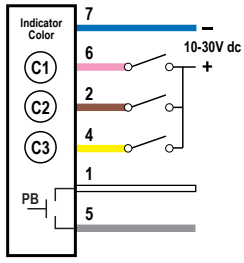


Key

1 = Brown
2 = White
3 = Blue
4 = Black
5 = Gray
C1 = Color 1
C2 = Color 2
PB = Push Button

8-Pin Models

Sourcing (PNP) Input



Key

1 = White
2 = Brown
3 = Green (not used)
4 = Yellow
5 = Gray
6 = Pink
7 = Blue
8 = Red (not used)
C1 = Color 1
C2 = Color 2
C3 = Color 3
PB = Push Button

Specifications

Supply Voltage and Current
10 V dc to 30 V dc at 40 mA maximum per LED color

Supply Protection Circuitry
Protected against reverse polarity and transient voltages

Indicator Response Time
ON/OFF: 1 ms maximum

Switch Contact Rating
150 mA at 30 V dc

Contact Bounce
10 ms max.

Environmental Rating
IEC IP65
Enclosure Type 13

Construction
Base: polycarbonate
Translucent dome: polycarbonate
Push button: thermoplastic

Mounting Torque
2.25 Nm (20 in·lbf) max.

Connections
Integral M12/Euro-style quick disconnect (QD), 2 m (6.5 ft) unterminated PVC-jacketed cable or 150 mm (6 in) PVC cable with a quick disconnect (QD) , depending on the model ordered

Operating Conditions
−40 °C to +50 °C (−40 °F to +122 °F)
90% at +50 °C maximum relative humidity (non-condensing)
Storage Temperature: −40 °C to +70 °C (−40 °F to +158 °F)

Required Overcurrent Protection

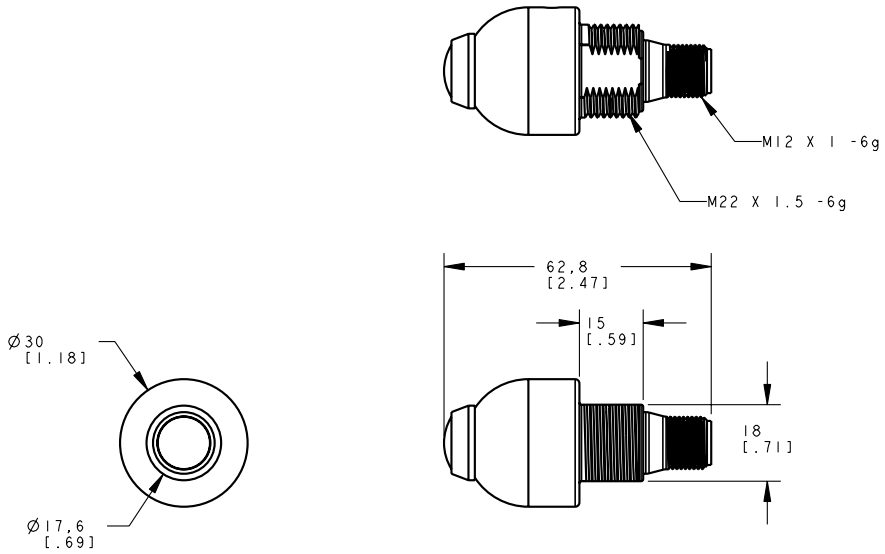
WARNING: Electrical connections must be made by qualified personnel in accordance with local and national electrical codes and regulations.

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

Certifications

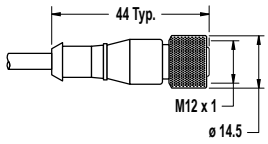
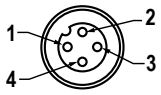
Dimensions

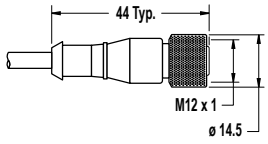
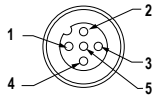
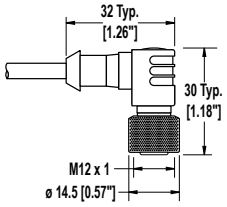


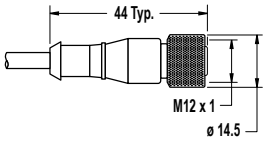
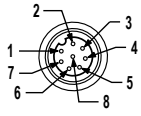
All measurements are listed in millimeters [inches], unless noted otherwise.

Accessories

Quick-Disconnect (QD) 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)			

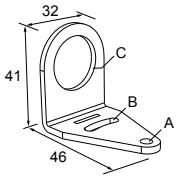
5-Pin Threaded M12/Euro-Style Cordsets—Single Ended				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC1-501.5	0.50 m (1.5 ft)	Straight		 1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray
MQDC1-506	1.83 m (6 ft)			
MQDC1-515	4.57 m (15 ft)			
MQDC1-530	9.14 m (30 ft)			
MQDC1-506RA	1.83 m (6 ft)	Right-Angle		
MQDC1-515RA	4.57 m (15 ft)			
MQDC1-530RA	9.14 m (30 ft)			

8-Pin Threaded M12/Euro-Style Cordsets with Shield					
Model	Length	Style	Dimensions	Pinout (Female)	
MQDC-806	1.83 m (6 ft)	Straight			
MQDC-815	4.57 m (15 ft)			1 = White 2 = Brown 3 = Green 4 = Yellow	5 = Gray 6 = Pink 7 = Blue 8 = Shield
MQDC-830	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 = ø 4.6, B = 4.6 x 16.9, C = 22.2

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