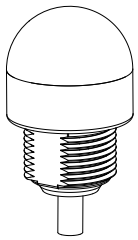
EZ-LIGHT K30L2 **Multicolor** RGB Indicator

Datasheet

Small Sized, Seven Color Indicator with Flashing Input Control



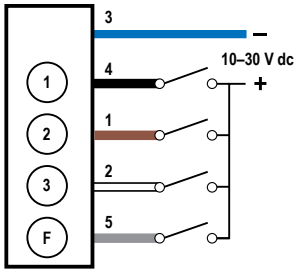
- Bright, uniform indicator light
- Seven colors in one device (Red, Yellow, Green, Cyan, Blue, Magenta, White)
- 22 mm threaded polycarbonate base
- Translucent polycarbonate dome
- Rugged IEC IP66, IEC IP67, IEC IP69K, and UL Type 4X, 13 design
- Bimodal inputs (PNP/NPN, depending on source wiring)
- All models have flashing input control
- Variety of connector options
- Models constructed from FDA-grade materials available
- Terminal connection models available for panel wiring applications

Models

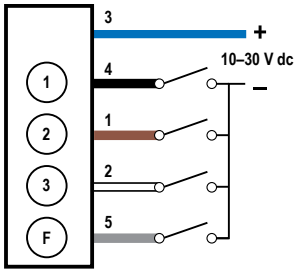
Family	Material	Color & Input	Connector
K30L2		RGB7	Q
	Blank = Standard F = FDA Grade	RGB7 = RGB Multicolor (7 Colors)	Blank = 2m Integral Cable Q = Integral 5-pin M12/Euro-style QD QP = 150 mm (5.9 in) cable with 5-pin M12/Euro-style QD T = Terminal screw* *Terminal screw model not available in FDA grade material

Wiring Diagrams

PNP



NPN



Key

1. Brown
2. White
3. Blue
4. Black
5. Gray

Gray wire (flashing input)

Table 1: Color Definition

	Red	Yellow	Green	Cyan	Blue	Magenta	White
Input 1	X	X				X	X
Input 2		X	X	X			X
Input 3				X	X	X	X

An "X" denotes an active input, for example when Input 1 and Input 3 are active, the indicator will show Magenta.

Specifications

Supply Voltage and Current
10 V dc to 30 V dc
- 60 mA Max at 10 V dc
- 50 mA Max. at 12 V dc
- 35 mA Max. at 24 V dc
- 30 mA Max. at 30 V dc

Supply **Protection**
Protected against reverse polarity and transient voltages

Input Response Time
250 ms maximum

Connections
Integral 5-pin M12/Euro-style quick disconnect, or 150 mm (6 in) PVC cable with quick disconnect, or 2 m (6.5 ft) cable, depending on model

Flash
1.5 Hz flash rate through flash input wire

Construction
Standard model base, dome, and nut: polycarbonate
FDA model base, dome, and nut: FDA grade polycarbonate

Mounting
M22 by 1.5 threaded base, max torque 2.25 Nm (20 in·lbf)
Mounting nut included

Indicators
7 colors
Only one color can be on at a time

Indicator **Characteristics**

Color	Dominant Wavelength (nm) or Color Temperature (CCT)	Color Coordinates[1]		Lumen Output (Typical at 25 °C)
		x	y	
Green	528 nm	0.184	0.707	4.6
Red	625 nm	0.693	0.305	3.2
Blue	470 nm	0.147	0.041	0.7
White	5700 K	0.319	0.333	6.9
Yellow	–	0.449	0.474	7.1
Cyan	–	0.194	0.331	5.3
Magenta	–	0.370	0.179	4.5

Environmental **Rating**
Standard models: IEC IP66, IEC IP67, IEC IP69K per DIN 40050-9. Cabled models also meet IEC IP69K if the cable and cable entrance are protected from high-pressure spray. Indicator side of terminal models meet IEC IP69K when installed in an enclosure. Screw connection points meet IEC IP00. Meets UL type 4X and 13, when used in a suitable enclosure.
FDA models: IEC IP66, IEC IP67, IEC IP69K per DIN 40050-6

Vibration and Mechanical Shock
All models meet Mil Std. 202F requirements. Method 201A (vibration: 10 Hz to 60 Hz max., double amplitude 0.06 inch, maximum acceleration 10G). Also meets IEC 60947-5-1 requirements: 15G 11 ms duration, half sine wave.

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.

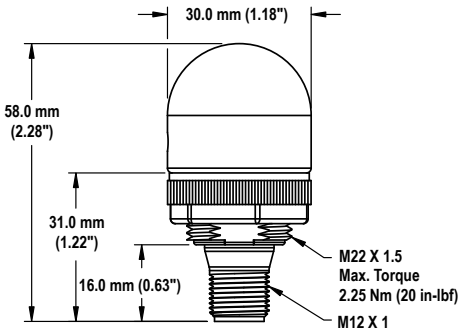
Overcurrent protection is required to be provided by end product application per the supplied table.
Overcurrent protection may be provided with external fusing or via Current Limiting, Class 2 Power Supply.
Supply wiring leads < 24 AWG shall not be spliced.
For additional product support, go to *www.bannerengineering.com*.

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

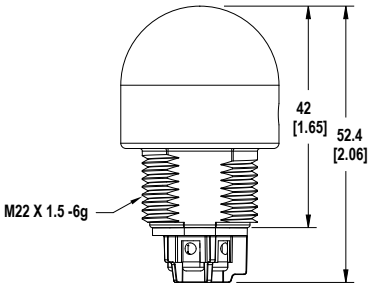
Certifications

Dimensions

Quick Disconnect Models



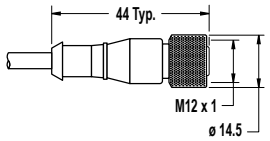
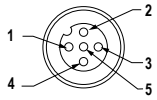
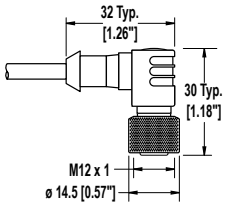
Terminal Models

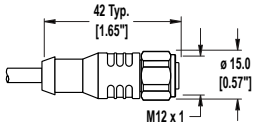
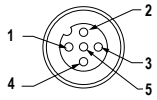


[1] Refer to CIE 1931 chromaticity diagram or color chart, to show equivalent color with indicated color coordinates.

Accessories

Cordsets

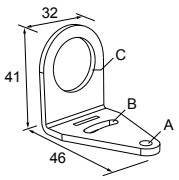
5-Pin Threaded M12/Euro-Style Cordsets—Single Ended				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC1-501.5	0.50 m (1.5 ft)	Straight		 1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray
MQDC1-506	1.83 m (6 ft)			
MQDC1-515	4.57 m (15 ft)			
MQDC1-530	9.14 m (30 ft)			
MQDC1-506RA	1.83 m (6 ft)	Right-Angle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

5-Pin Threaded M12/Euro-Style Cordsets—Washdown, with Shield				
Model	Length	Style	Dimensions	Pinout (Female)
MQDCWD-506	1.83 m (6 ft)	Straight		 1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray
MQDCWD-530	9.14 m (30 ft)			

Brackets

SMB22A

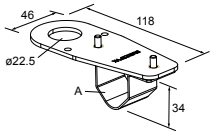
- Right-angle bracket with curved slot for versatile orientation
- 12-ga. stainless steel
- Mounting hole for 22 mm sensor



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

SMB22FVK

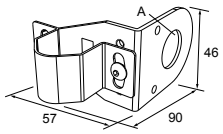
- V-clamp, flat bracket and fasteners for mounting to pipe or extensions
- Clamp accommodates 28 mm diameter tubing or 1 in. square extrusions
- 22 mm hole for mounting sensor



Hole size: A = ø 22.5

SMB22RAVK

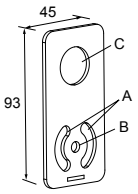
- V-clamp, right-angle bracket and fasteners for mounting to pipe or extensions
- Clamp accommodates 28 mm diameter tubing or 1 in. square extrusions
- 22 mm hole for mounting sensor



Hole size: A = ø 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

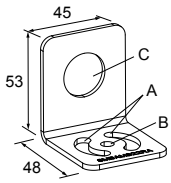


Hole center spacing: A = 26.0, A to B = 13.0

Hole size: A = 26.8 x 7.0, B = ø 6.5, C = ø 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 = ø 6.5, C = ø 22.5

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FCC Part 15 and CAN ICES-3 (B)/NMB-3(B)

This device complies with part 15 of the FCC Rules and CAN ICES-3 (B)/NMB-3(B). Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules and CAN ICES-3 (B)/NMB-3(B). These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the manufacturer.