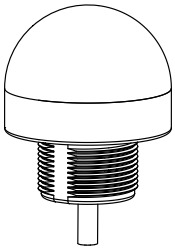
EZ-LIGHT K50L2 **Multicolor** RGB Indicator

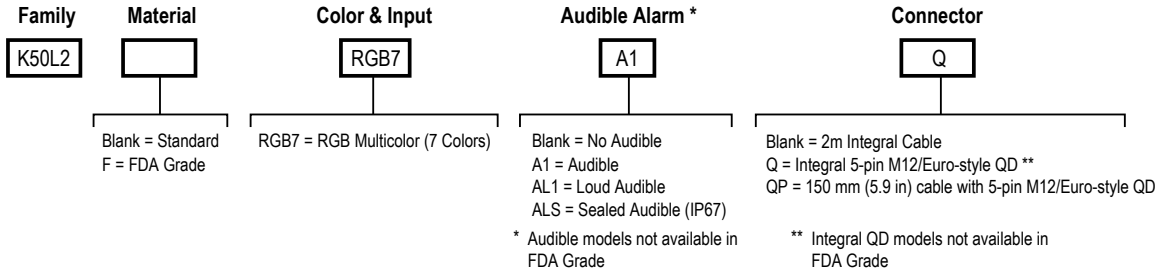
Datasheet

Medium Sized, Seven Color Indicator with Audible Models and an Optional Flashing Input Control



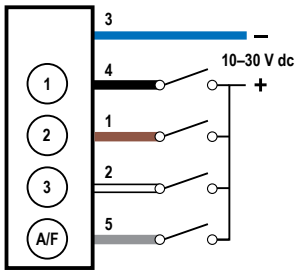
- Bright, uniform indicator light
- Seven colors in one device (Red, Yellow, Green, Cyan, Blue, Magenta, White)
- 30 mm threaded polycarbonate base
- Translucent polycarbonate dome
- Rugged IP66, IP67 and IP69K design
- Bimodal inputs (PNP/NPN, depending on source wiring)
- Models with integrated audible alarm available
- Variety of connector options
- Models constructed from FDA-grade materials available

Models

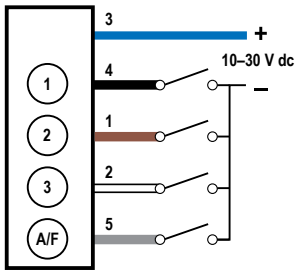


Wiring Diagrams

PNP



NPN



Key

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

Gray Wire (Audible or Flash Input, depending on model)

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
- 220 mA Max. at 10 V dc
- 190 mA Max. at 12 V dc
- 115 mA Max. at 24 V dc
- 100 mA Max. at 30 V dc

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

Input Response Time
250 ms maximum

Flash
1.5 Hz flash rate using flash input wire (not available on audible models)

Audible Alarm
All models have a Steady tone
A1 Model: 75 dB at 1 m (typical), 3 kHz ± 500 Hz
AL1 Model: 95 dB at 1 m (typical), 2.7 kHz ± 500 Hz
ALS Model: 94 dB at 1 m (typical), 2.9 kHz ± 250 Hz

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

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

Mounting
M30 by 1.5 threaded base Max. Torque 4.5 Mn (40 in-ibf)(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	530 nm	0.170	0.711	21.4
Red	625 nm	0.688	0.310	6.3
Blue	470 nm	0.133	0.072	4.7
White	5700 K	0.311	0.328	21.3
Yellow	–	0.457	0.485	17.2
Cyan	–	0.154	0.321	25.1
Magenta	–	0.365	0.176	8.5

Environmental **Rating**
Non-Audible Models: IEC IP66, IEC IP67, IEC IP69K per DIN 40050-9
A1 and AL1 Models: IEC IP50
ALS Models: IEC IP66, IEC IP67, IEC IP69K

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.

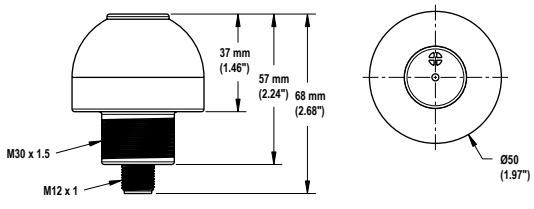
Overcurrent protection is required to be provided by end product application per the supplied table.
Overcurrent protection may be provided with external fusing or via Current Limiting, Class 2 Power Supply.
Supply wiring leads < 24 AWG shall not be spliced.
For additional product support, go to *www.bannerengineering.com*.

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

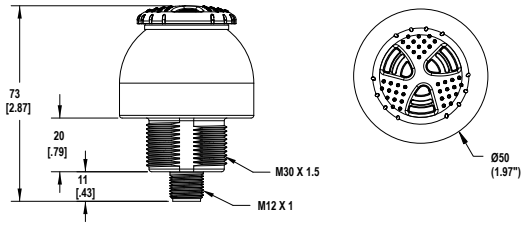
Certifications

Dimensions

A1 and AL1 Audible Models

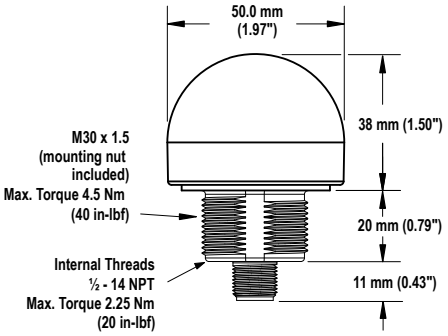


ALS Audible Model



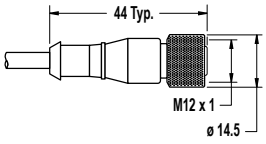
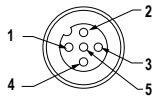
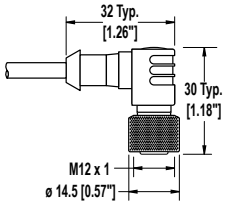
[1] Refer to CIE 1931 chromaticity diagram or color chart, to show equivalent color with indicated color coordinates.

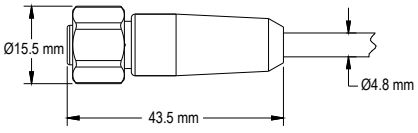
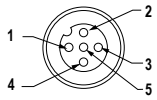
Non-Audible Model



Accessories

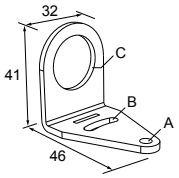
Cordsets

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 Stainless Steel				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC-WDSS-0506	1.83 m (6 ft)	Straight		 1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray
MQDC-WDSS-0515	4.57 m (15 ft)			
MQDC-WDSS-0530	9.14 m (30 ft)			

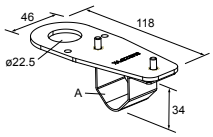
Brackets

SMB22A
- Right-angle bracket with curved slot for versatile orientation
- 12-ga. stainless steel
- Mounting hole for 22 mm sensor



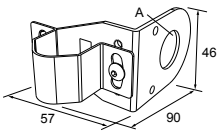
Hole center spacing: A to B = 26.0
Hole size: A = ø 4.6, B = 4.6 x 16.9, C = 22.2

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



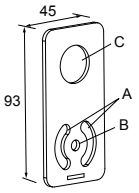
Hole size: A = ø 22.5

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



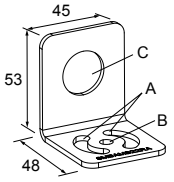
Hole size: A = ø 22.5

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



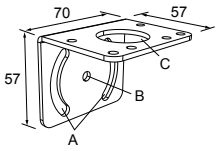
Hole center spacing: A = 26.0, A to B = 13.0
Hole size: A = 26.8 x 7.0, B = ø 6.5, C = ø 22.5

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



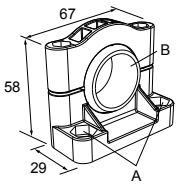
Hole center spacing: A = 26.0, A to B = 13.0
Hole size: A = 26.8 x 7.0, B = ø 6.5, C = ø 22.5

SMB30MM
- 12-ga. stainless steel bracket with curved mounting slots for versatile orientation
- Clearance for M6 (¼ in) hardware
- Mounting hole for 30 mm sensor



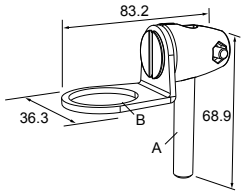
Hole center spacing: A = 51, A to B = 25.4
Hole size: A = 42.6 x 7, B = ø 6.4, C = ø 30.1

SMB30SC
- Swivel bracket with 30 mm mounting hole for sensor
- Black reinforced thermoplastic polyester
- Stainless steel mounting and swivel locking hardware included



Hole center spacing: A=ø 50.8
Hole size: A=ø 7.0, B=ø 30.0

SMB30FA
- Swivel bracket with tilt and pan movement for precise adjustment
- Mounting hole for 30 mm sensor
- 12-ga. 304 stainless steel
- Easy sensor mounting to extrude rail T-slot
- Metric and inch size bolt available



Bolt thread: SMB30FA, A= 3/8 - 16 x 2 in; SMB30FAM10, A= M10 - 1.5 x 50
Hole size: B= ø 30.1

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