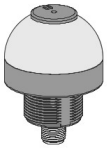
EZ-LIGHT® K50L and K80L Audible Indicator Lights Datasheet

Features

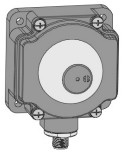
DC-Operated Indicators with Steady or Pulsed Sound Indication

To view or download the latest technical information about this product, including specifications, dimensions, accessories, and wiring, go to www.bannerengineering.com.

K50L



K80L



- Rugged, cost-effective, and easy-to-install indicators available in K50 or K80 housing style
- Steady or pulsed sound indication
- Illuminated dome provides a big, easy-to-see green, red, or yellow job light
- Compact devices are completely self-contained, no controller needed
- Choose NPN or PNP input, depending on model
- Immune to EMI and RFI interference
- 18 V DC to 30 V DC operation
- Three color LED function: green, red, and yellow

WARNING:

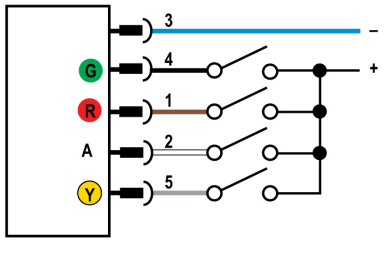
- **Do not use this device for personnel protection**
- Using this device for personnel protection could result in serious injury or death.
- This device does not include the self-checking redundant circuitry necessary to allow its use in personnel safety applications. A device failure or malfunction can cause either an energized (on) or de-energized (off) output condition.

Models

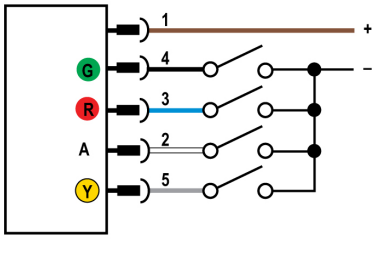
Model[1]	Construction	Audible Tone[2]	Input
K50LGRA1YPQ	50 mm dome/30 mm mount polycarbonate	Steady (75 dB)	PNP
K50LGRA1YNQ			NPN
K50LGRA2YPQ		Pulsed (75 dB)	PNP
K50LGRA2YNQ			NPN
K50LGRAL1YPQ		Loud Steady (95 dB)	PNP
K50LGRAL1YNQ			NPN
K80LGRA1YPQ	50 mm dome/Flat or DIN-mount polycarbonate, nylon	Steady (75 dB)	PNP
K80LGRA1YNQ			NPN
K80LGRA2YPQ		Pulsed (75 dB)	PNP
K80LGRA2YNQ			NPN
K80LGRAL1YPQ		Loud Steady (95 dB)	PNP
K80LGRAL1YNQ			NPN

Wiring Diagrams

PNP



NPN



Key:

1 = Brown
2 = White
3 = Blue
4 = Black
5 = Gray
G = Green light
R = Red light
Y = Yellow light
A = Alarm

(1) Integral quick disconnect models are listed.

- To order the 150 mm (6 in) PVC cable model, replace the suffix "Q" with "QP" in the model number. For example, K50LGRA1YPQP.
- K50L Models: To order the 2 m (6.5 ft) PVC cable model, omit the suffix "Q" in the model number. For example, K50LGRA1YP.
- K80L Models: To order the terminal-wired model, omit the suffix "Q" in the model number. For example, K80LGRA2YP.
- Models with a quick disconnect require a mating cordset.
- Contact Banner Engineering for other colors and color combinations.

(2) Typical decibel level is at a distance of 1 m.

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Specifications

Supply Voltage and Current

18 V DC to 30 V DC at 40 mA maximum, per LED color (alarm)

Input Response Time

Indicator ON/OFF: 10 ms maximum

Oscillation Frequency

A1 models: 3 kHz ± 500 Hz
A2 models: 3 kHz ± 500 Hz; pulse rate 3 Hz ± 20%
AL1 models: 2.7 kHz ± 500 Hz

Operating Conditions

–20 °C to +50 °C (–4 °F to +122 °F)

Environmental Rating

IP50
K50L models only: NEMA/UL Type 4X, 13

Indicators

LEDs or audible independently selected: green, red, yellow

Certifications

Banner Engineering BV
Park Lane, Culliganlaan 2F bus 3
1831 Diegem, BELGIUM

Turck Banner LTD Blenheim House
Blenheim Court
Wickford, Essex SS11 8YT
GREAT BRITAIN

(K50L models only)

(K50L models only)

Connections

Integral 5-pin M12 male quick-disconnect connector, or 150 mm (6 in) PVC-jacketed cable with a 5-pin M12 male quick-disconnect connector, or 2 m (6.5 ft) unterminated 5-wire PVC-jacketed cable, depending on model
K80L Models: Terminal-wired models for use with bulk cable available

Required Overcurrent Protection

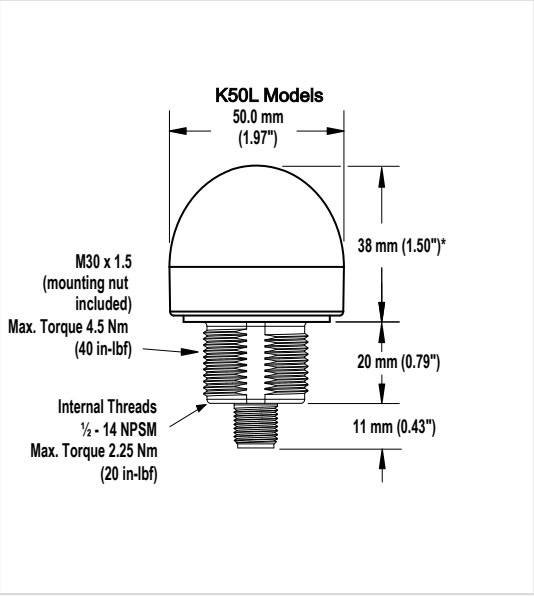
WARNING: Electrical connections must be made by qualified personnel in accordance with local and national electrical codes and regulations.

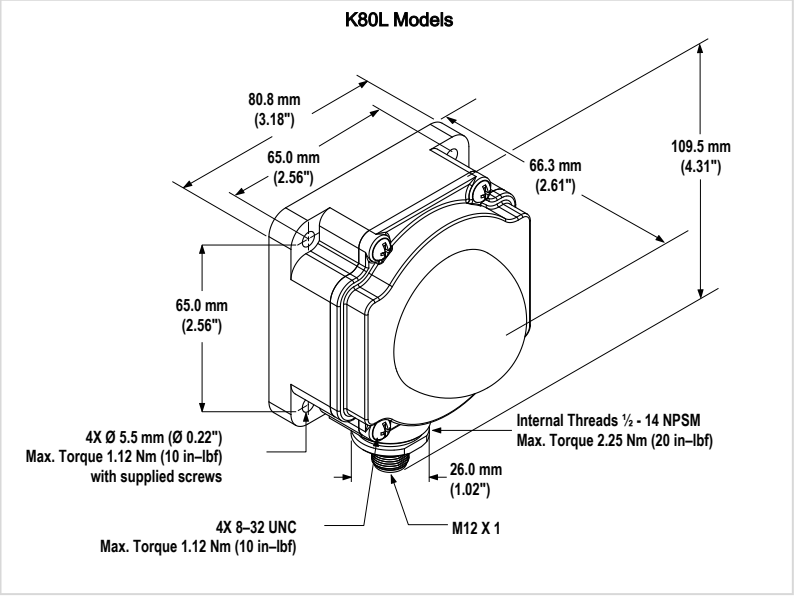
Overcurrent protection is required to be provided by end product application per the supplied table.
Overcurrent protection may be provided with external fusing or via Current Limiting, Class 2 Power Supply.
Supply wiring leads < 24 AWG shall not be spliced.
For additional product support, go to www.bannerengineering.com.

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

Dimensions

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





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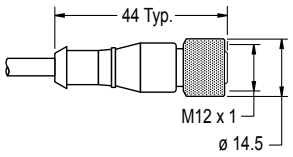
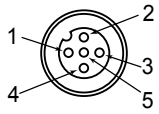
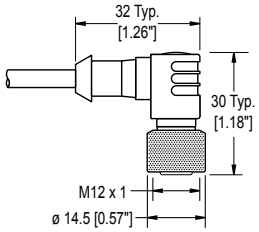
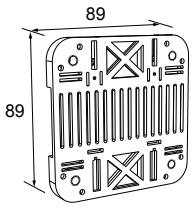
Accessories

Cordsets

5-Pin Threaded M12 Cordsets—Single Ended				
Model	**Length**	**Style**	**Dimensions**	**Pinout (Female)**
MQDC1-501.5	0.5 m (1.5 ft)	Straight		 1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray
MQDC1-503	0.9 m (2.9 ft)			
MQDC1-506	2 m (6.5 ft)			
MQDC1-515	5 m (16.4 ft)			
MQDC1-530	9 m (29.5 ft)			
MQDC1-560	18 m (59 ft)			
MQDC1-5100	31 m (101.7 ft)			
MQDC1-506RA	2 m (6.5 ft)	Right-Angle		
MQDC1-515RA	5 m (16.4 ft)			
MQDC1-530RA	9 m (29.5 ft)			
MQDC1-560RA	19 m (62.3 ft)			

Brackets

K80L Bracket

SMBDX80DIN • Black reinforced thermoplastic • Bracket for mounting on a 35 mm DIN rail	

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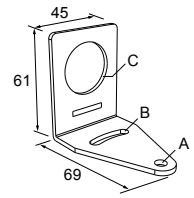
K50L Brackets

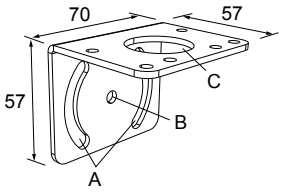
SMB30A
- Right-angle bracket with curved slot for versatile orientation
- Clearance for M6 (¼ in) hardware
- Mounting hole for 30 mm sensor
- 12-gauge stainless steel

Hole center spacing: A to B=40
Hole size: A=ø 6.3, B= 27.1 × 6.3, C=ø 30.5



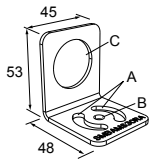
SMB30MM
- 12-gauge stainless steel bracket with curved mounting slots for versatile orientation
- Clearance for M6 (¼ in) hardware
- Mounting hole for 30 mm sensor

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



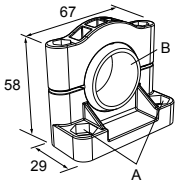
SMBAMS30RA
- Right-angle SMBAMS series bracket
- 30 mm hole for mounting sensors
- Articulation slots for 90°+ rotation
- 12-gauge (2.6 mm) cold-rolled steel

Hole center spacing: A=26.0, A to B=13.0
Hole size: A=26.8 × 7.0, B=ø 6.5, C=ø 31.0



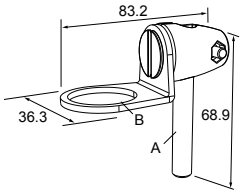
SMB30SC
- Swivel bracket with 30 mm mounting hole for sensor
- Black reinforced thermoplastic polyester
- Stainless steel mounting and swivel locking hardware included

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



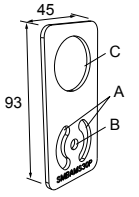
SMB30FA
- Swivel bracket with tilt and pan movement for precise adjustment
- Mounting hole for 30 mm sensor
- 12-gauge 304 stainless steel
- Easy sensor mounting to extrude rail T-slot
- Metric- and inch-size bolt available

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



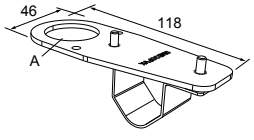
SMBAMS30P
- Flat SMBAMS series bracket
- 30 mm hole for mounting sensors
- Articulation slots for 90°+ rotation
- 12-gauge 300 series stainless steel

Hole center spacing: A=26.0, A to B=13.0
Hole size: A=26.8 × 7.0, B=ø 6.5, C=ø 31.0



SMB30FVK
- V-clamp, flat bracket and fasteners for mounting to pipe or extensions
- Clamp accommodates 28 mm dia. tubing or 1 in. square extrusions
- 30 mm hole for mounting sensors

Hole size: A= ø 31



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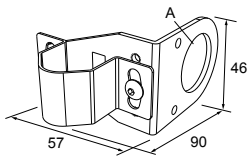
SMB30RAVK

- V-clamp, right-angle bracket and fasteners for mounting sensors to pipe or extrusion
- Clamp accommodates 28 mm dia. tubing or 1 in. square extrusions
- 30 mm hole for mounting sensors

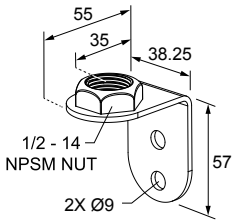
Hole size: A = ø 30.5



LMBE12RA35

- Direct mounting of stand-off pipe, with common bracket type
- Zinc-plated steel
- 1/2-14 NPSM nut
- Mounting distance from the wall to the center of the 1/2-14 NPSM nut is 35 mm

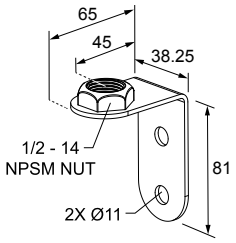
Hole center spacing: 20.0



LMBE12RA45

- Direct mounting of stand-off pipe, with common bracket type
- Zinc-plated steel
- 1/2-14 NPSM nut
- Mounting distance from the wall to the center of the 1/2-14 NPSM nut is 45 mm

Hole center spacing: 35.0



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Original Instructions
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