EZ-LIGHT® K50 Rotating and Strobing Beacon

Features

Daylight-visible, general-purpose indicators for indoor or outdoor use

- Intense levels of light output for areas with high ambient light - even outdoors
- Viewable around entire perimeter; strobing models also emit light from top
- Rotating and strobing models
- Rugged, sealed thermoplastic housing rated for IP67 and IP69K per DIN 40050-9
- Bright, even light
- 12 V DC to 30 V DC operation
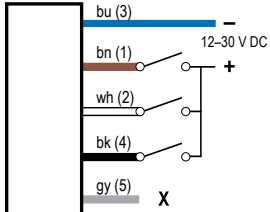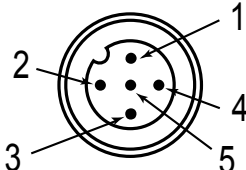- 12 V DC operation useful for applications on mobile vehicles

> **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]	Function	Connection	LED Color	Input Voltage
K50BLR1XGXPQ	Rotating	Integral 5-pin M12 male quick-disconnect connector	Green	12 V DC to 30 V DC
K50BLR1XRXPQ			Red	
K50BLR1XYXPQ			Yellow	
K50BLR1XBXPQ			Blue	
K50BCLS1XGXPQ	Strobing		Green	
K50BCLS1XRXPQ			Red	
K50BCLS1XYXPQ			Yellow	
K50BCLS1XBXPQ			Blue	

Wiring

Wire Color		Function for Rotating Models	Function for Strobing Models
Blue (3)	0 V DC	Common	Common
Black (4)	+V DC	ON continuous	ON continuous
Brown (1)	+V DC	Rotating at 90 rpm	Single pulse strobe at 1 Hz
White (2)	+V DC	Rotating at 180 rpm	Double pulse strobe at 1 Hz

PNP Input	Integral 5-pin M12 male quick-disconnect connector	Wiring Key
bu (3) − bn (1) 12–30 V DC + wh (2) bk (4) gy (5) X	1 2 3 4 5	1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray (Not Used)

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[1]
- To order the 150 mm (6 in) PVC-jacketed cable with a 5-pin M12 male quick-disconnect connector model, replace **Q** with **QP** in model number (example, **K50BLR1XGXPQP**).
- To order the 2 m (6.5 ft) cable model, omit suffix **Q** from model number (example, **K50BLR1XGXP**).
- Models with a quick-disconnect connector require a mating cable (refer to the Accessories list).

Timing diagram for 1 pulse or 2 pulses
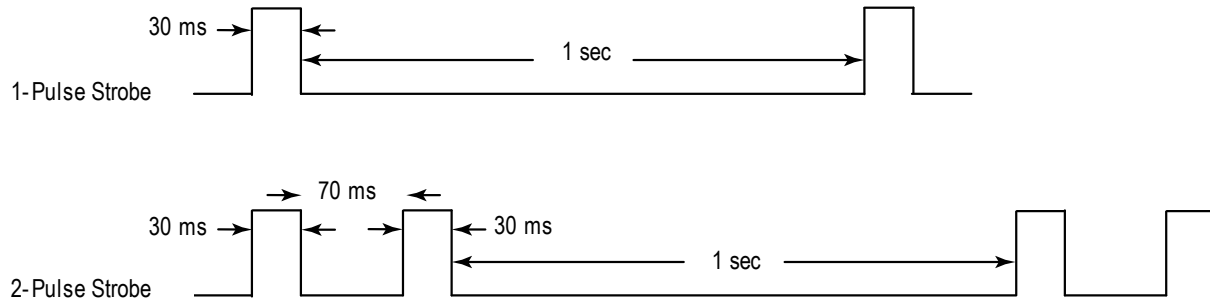
Specifications

Supply Voltage and Current

12 V DC to 30 V DC

Rotating models: 140 mA maximum at 12 V DC, 70 mA maximum at 30 V DC

Strobing models: 160 mA maximum at 12 V DC, 100 mA maximum at 30 V DC

Supply Protection Circuitry

Protected against reverse polarity and transient voltages

Indicators

LED function depends on the model and wiring (see)

Indicator Power-Up Response Time

ON: 250 ms

Construction

Base and covers: polycarbonate

Connections

Integral 5-pin M12 male quick-disconnect connector, 150 mm (6 in) PVC-jacketed cable with a 5-pin M12 male quick-disconnect connector, or 2 m (6.5 ft) integral cable, depending on model

Operating Conditions

–40 °C to +50 °C (–40 °F to +122 °F)

90% at +50 °C maximum relative humidity (non-condensing)

Environmental Rating

Rated IP67 and IP69K per DIN 40050

Application Note

Light emits 360° from housing sides and from housing top, some models
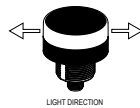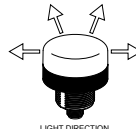
Vibration and Mechanical Shock

All models meet Mil. Std. 202F requirements method 201A (vibration: 10 to 60 Hz max., double amplitude 0.06", maximum acceleration 10G). Also meets IEC 947-5-2; 30G 11 ms duration, half sine wave.

Certifications

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

Required Overcurrent Protection

WARNING: Electrical connections must be made by qualified personnel in accordance with local and national electrical codes and regulations.
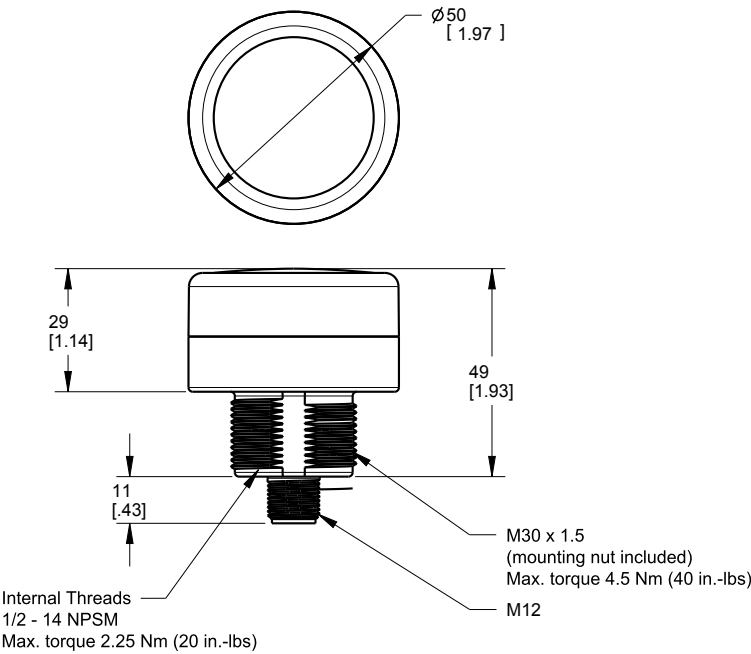
Overcurrent protection is required to be provided by end product application per the supplied table.

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.

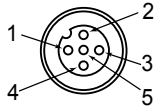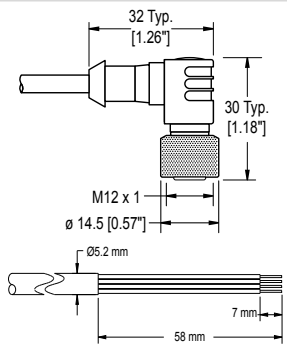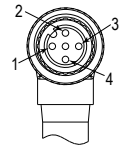| Supply Wiring (AWG)	Required Overcurrent Protection (A)	Supply Wiring (AWG)	Required Overcurrent Protection (A)
20	5.0	26	1.0
22	3.0	28	0.8
24	1.0	30	0.5

30-Jun-25
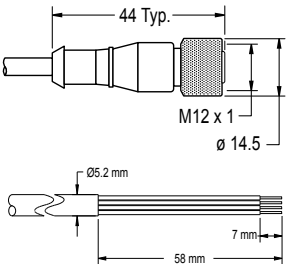
Dimensions

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

Ø 50
[1.97]

29
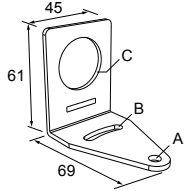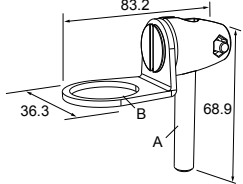[1.14]

49
[1.93]

11
[.43]

M30 x 1.5
(mounting nut included)
Max. torque 4.5 Nm (40 in.-lbs)

M12

Internal Threads
1/2 - 14 NPSM
Max. torque 2.25 Nm (20 in.-lbs)

Accessories
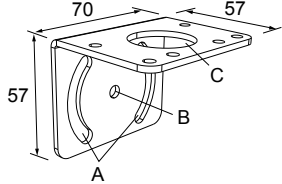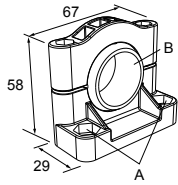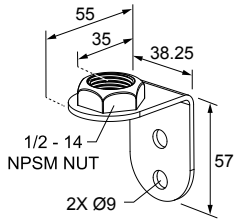
Cordsets

4-Pin Single-Ended M12 Female Cordsets					
Model	Length	Style	Dimensions	Pinout (Female)	
MQDC-406	2 m (6.56 ft)	Straight	44 Typ. M12 x 1 ø 14.5 Ø5.2 mm 7 mm 58 mm	1 = Brown 2 = White 3 = Blue 4 = Black 5 = Not used	
MQDC-415	5 m (16.4 ft)				
MQDC-430	9 m (29.5 ft)				
MQDC-450	15 m (49.2 ft)				
MQDC-406RA	2 m (6.56 ft)	Right-Angle	32 Typ. [1.26"] 30 Typ. [1.18"] M12 x 1 ø 14.5 [0.57"] Ø5.2 mm 7 mm 58 mm		
MQDC-415RA	5 m (16.4 ft)				
MQDC-430RA	9 m (29.5 ft)				
MQDC-450RA	15 m (49.2 ft)				

LMB Sealed Right-Angle Bracket

Model	Description	
LMB30RA - Black polycarbonate **LMB30RAC** - Gray polycarbonate	• **Direct-Mount Models** • Bracket kit with base, 30 mm adapter, set screw, fasteners, O-rings, and gaskets.	
LMBE12RA - Black polycarbonate **LMBE12RAC** - Gray polycarbonate	• **Pipe-Mount Models** • Bracket kit with base, ½-14 pipe adapter, set screw, fasteners, O-rings, and gaskets • For use with stand-off pipe (listed and sold separately)	

Mounting Brackets

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

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

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

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

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

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
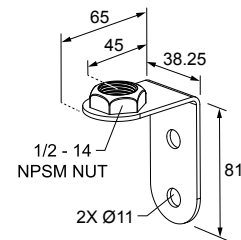
Elevated Mount System

Model			Description	Components
SA-M30TE12 - Black Acetal			• Streamlined black acetal or white UHMW stand-off pipe adapter/cover • Connects between 30 mm light base and ½ in. NPSM/DN15 pipe • Mounting hardware included	
SA-M30TE12C - White UHMW				
Polished 304 Stainless Steel	**Black Anodized Aluminum**	**Clear Anodized Aluminum**	• Elevated-use stand-off pipe (½ in. NPSM/DN15) • Polished 304 stainless steel, black anodized aluminum, or clear anodized aluminum surface • ½ in. NPT thread at both ends: one end screws into the internal threads of the light's base, and one end screws into the mounting base adapter/cover • Compatible with most industrial environments	
SOP-E12-150SS 150 mm (6 in) long	SOP-E12-150A 150 mm (6 in) long	SOP-E12-150AC 150 mm (6 in) long		
SOP-E12-300SS 300 mm (12 in) long	SOP-E12-300A 300 mm (12 in) long	SOP-E12-300AC 300 mm (12 in) long		
SOP-E12-900SS 900 mm (36 in) long	SOP-E12-900A 900 mm (36 in) long	SOP-E12-900AC 900 mm (36 in) long		
SA-E12M30 - Black Acetal			• Streamlined black acetal or white UHMW mounting base adapter/cover • Connects between ½ in. NPSM/DN15 pipe and 30 mm (1-3/16 in) drilled hole • Mounting hardware included	
SA-E12M30C - White UHMW				

Banner Engineering Corp Limited Warranty