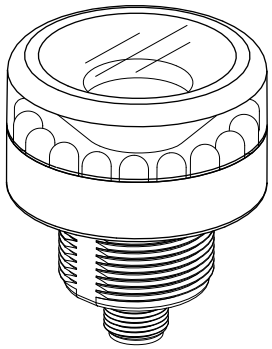
EZ-LIGHT® K50 Rotating and Strobing Beacon

Datasheet

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
- Bright, even light
- 12 to 30 V dc operation
- 12 V dc operation useful for applications on mobile vehicles

Models

Model	Function	Connection	LED Color	Input Voltage
K50BLR1XGXPQ	Rotating	5-pin M12/Euro-style Quick Disconnect Connector	Green	12 to 30 V dc
K50BLR1XRXPQ			Red	
K50BLR1XYXPQ			Yellow	
K50BLR1XBXPQ			Blue	
K50BCLS1XGXPQ	Strobing		Green	
K50BCLS1XRXPQ			Red	
K50BCLS1XYXPQ			Yellow	
K50BCLS1XBXPQ			Blue	

- To order the 150 mm PVC pigtail with quick disconnect (QD) 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 QD requires a mating cable (refer to the Accessories list).

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.

Specifications

Supply Voltage and Current
12-30 V dc
Rotating models: 140 mA max. @ 12 V dc, 70 mA max. @ 30 V dc
Strobing models: 160 mA max. @ 12 V dc, 100 mA max. @ 30 V dc

Supply Protection Circuitry
Protected against reverse polarity and transient voltages

Indicators
LED function depends on the model and wiring (see *Wiring* on page 3)

Indicator Power-Up Response Time
ON: 250 ms

Environmental Rating
Rated IEC IP67 and IP69K, per DIN 40050

Construction
Base and covers: polycarbonate

Connections
Integral 5-pin M12/Euro-style QD or 2 m (6.5 ft) integral cable, depending on model

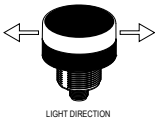
Operating Conditions
−40 °C to +50 °C (−40 °F to +122 °F)
90% @ 50 °C max. relative humidity (non-condensing)

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.

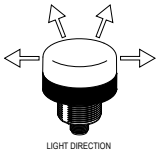
Certifications

Application Note
Light emits 360° from housing sides and from housing top, some models

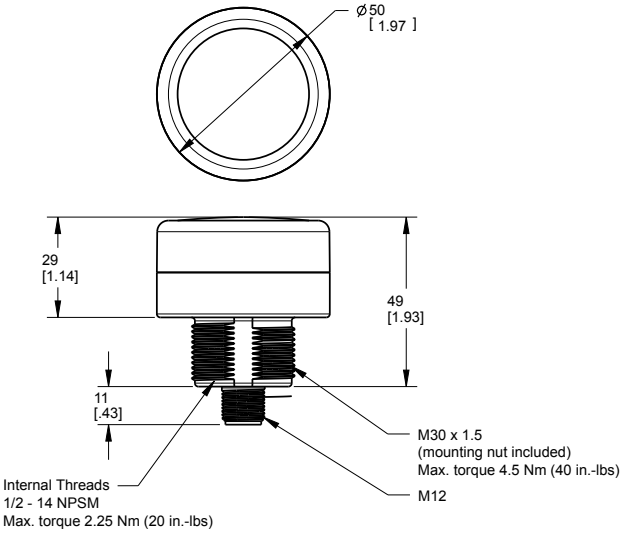
Rotating Models



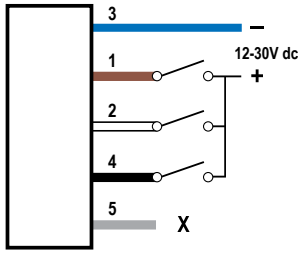
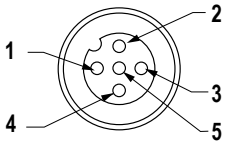
Strobing Models



Dimensions



Wiring

Sourcing (PNP) Input	Pinout	Wiring Key:
		1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray (Not Used)

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

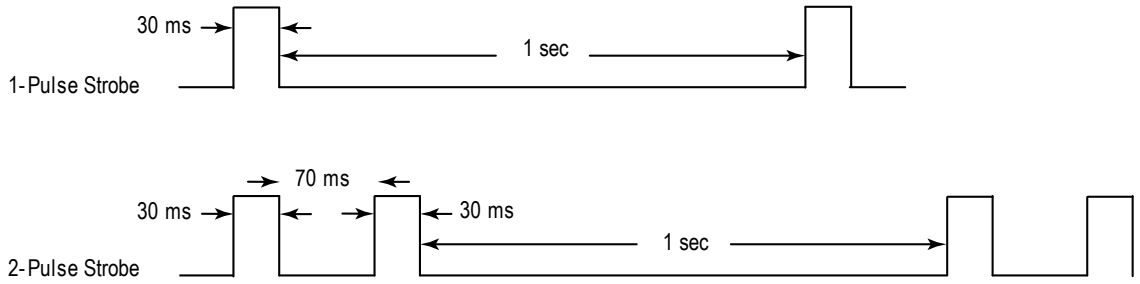
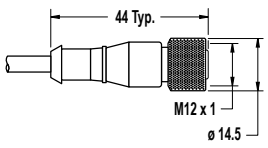
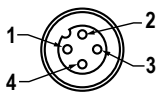
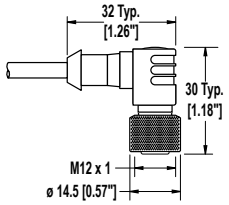


Figure 1. Timing diagram for 1 pulse or 2 pulses

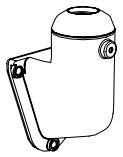
Accessories

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)			

4-Pin Threaded M12/Euro-Style Cordsets				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC-406RA	1.83 m (6 ft)	Right-Angle		
MQDC-415RA	4.57 m (15 ft)			
MQDC-430RA	9.14 m (30 ft)			
MQDC-450RA	15.2 m (50 ft)			

LMB Sealed Right-Angle Bracket

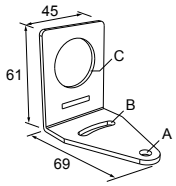
Model	Description	Construction	
LMB30RA	Direct-Mount Models: Bracket kit with base, 30 mm adapter, set screw, fasteners, o-rings, and gaskets	Black polycarbonate	
LMB30RAC		Gray polycarbonate	
LMBE12RA	Pipe-Mount Models: Bracket kit with base, ½-14 pipe adapter, set screw, fasteners, o-rings, and gaskets.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

Accessory Mounting Brackets

All measurements are in mm

SMB30A

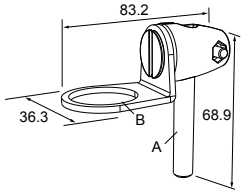
- Right-angle bracket with curved slot for versatile orientation
- Clearance for M6 (¼ in) hardware
- Mounting hole for 30 mm sensor
- 12-ga. stainless steel



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

SMB30FA

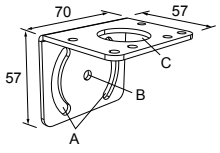
- Swivel bracket with tilt and pan movement for precise adjustment
- Mounting hole for 30 mm sensor
- 12-ga. 304 stainless steel
- Easy sensor mounting to extrude rail T-slot
- Metric and inch size bolt available



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

SMB30MM

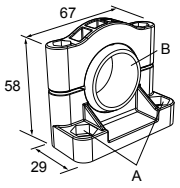
- 12-ga. stainless steel bracket with curved mounting slots for versatile orientation
- Clearance for M6 (¼ in) hardware
- Mounting hole for 30 mm sensor



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

Elevated Mount System

<table>
<tr><th colspan="3">Model</th><th>Features</th><th>Components</th></tr>
<tr><td colspan="3">SA-M30TE12 - Black Acetal</td><td rowspan="2">• 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</td><td rowspan="2"></td></tr>
<tr><td colspan="3">SA-M30TE12C - White UHMW</td></tr>
<tr><td>Polished 304 Stainless Steel</td><td>Black Anodized Aluminum</td><td>Clear Anodized Aluminum</td><td rowspan="4">• 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
• Compatible with most industrial environments</td><td rowspan="4"></td></tr>
<tr><td>SOP-E12-150SS
150 mm (6 in) long</td><td>SOP-E12-150A
150 mm (6 in) long</td><td>SOP-E12-150AC
150 mm (6 in) long</td></tr>
<tr><td>SOP-E12-300SS
300 mm (12 in) long</td><td>SOP-E12-300A
300 mm (12 in) long</td><td>SOP-E12-300AC
300 mm (12 in) long</td></tr>
<tr><td>SOP-E12-900SS
900 mm (36 in) long</td><td>SOP-E12-900A
900 mm (36 in) long</td><td>SOP-E12-900AC
900 mm (36 in) long</td></tr>
<tr><td colspan="3">SA-E12M30 - Black Acetal</td><td rowspan="2">• 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</td><td rowspan="2"></td></tr>
<tr><td colspan="3">SA-E12M30C - White UHMW</td></tr>
</table>

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