EZ-LIGHT® K50 Beacon

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

BANNER®
more sensors, more solutions

⚠️ **WARNING: Not To Be Used for Personnel Protection**

Never use this product as a sensing device for personnel protection. Doing so could lead to serious injury or death. This product 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.

Features
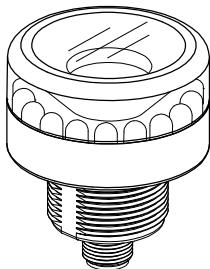
- Intense levels of light output for areas with high ambient light - even outdoors
- Viewable around entire perimeter; some models also emit light from top
- 1- or 2-color models available
- Rugged, sealed thermoplastic housing rated for IP67 and IP69K
- Bright, even light
- 12 to 30V dc or 85 to 130V ac (75 to 120V dc) or 100 to 250V ac (90 to 240V dc) operation, depending on model
- 12V dc operation useful for applications on mobile vehicles
- Consult factory for models with strobing capability

Models

Model		Connection[1]	LED Color(s)	Input Voltage
Perimeter View Only	Perimeter + Top View			
K50BLXGXPQ	K50BCLXGXPQ	4-pin Euro integral QD connector	Green	12 to 30V dc
K50BLXRXPQ	K50BCLXRXPQ		Red	
K50BLXYXPQ	K50BCLXYXPQ		Yellow	
K50BLXBXPQ	K50BCLXBXPQ		Blue	
K50BLXWXPQ	K50BCLXWXPQ		White	
K50BLGRXPQ	K50BCLGRXPQ		Green / Red	
K50BLGA120Q	K50BCLGA120Q	3-pin Micro integral QD connector	Green	85 to 130V ac or 75 to 120V dc
K50BLRA120Q	K50BCLRA120Q		Red	
K50BLYA120Q	K50BCLYA120Q		Yellow	
K50BLWA120Q	N.A.		White	
K50BLBA120Q	K50BCLBA120Q		Blue	
K50BLGA230Q	K50BCLGA230Q		Green	100 to 250V ac or 90 to 240 dc
K50BLRA230Q	K50BCLRA230Q		Red	
K50BLYA230Q	K50BCLYA230Q		Yellow	
K50BLBA230Q	K50BCLBA230Q		Blue	

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[1] **Integral QD models only are listed.**
- **For 150 mm PVC pigtail with QD, replace Q with QP in model number (example, K50BLXGXPQP).**
- **For 2 m (6.5') cable, omit suffix Q from model number (example, K50BLXGXP).**
- **A model with a QD requires a mating cable (see *Accessory Cordsets*).**

Specifications

Supply Voltage and Current - 12-30V dc models
K50BL 1-color models: 140 mA max. at 12V dc, 70 mA max. at 30V dc
K50BCL 1-color models: 160 mA max. at 12V dc, 80 mA max. at 30V dc
K50BL 2-color models, per color: 75 mA max. at 12V dc, 40 mA max. at 30V dc
K50BCL 2-color models, per color: 95 mA max. at 12V dc, 40 mA max. at 30V dc

Supply Voltage and Current - 120V ac models
K50BL models: 85 to 130V ac or 75 to 120V dc at 16 mA max. 50/60 Hz
K50BCL models: 85 to 130V ac or 75 to 120V dc at 60 mA max. 50/60 Hz

Supply Voltage and Current - 230V ac models
K50BL models: 100 to 250V ac or 90 to 240V dc at 20 mA max. 50/60 Hz
K50BCL models: 100 to 250V ac or 90 to 240V dc at 25 mA max. 50/60 Hz

Supply Protection Circuitry
Protected against reverse polarity and transient voltages

Indicators
LED colors are independently selected, depending on model

Environmental Rating
Rated IEC IP67 and IP69K, per DIN 40050

Construction
Base and covers: polycarbonate

Connections
Integral 4-pin Euro-style (dc models) 3-pin Micro-style (ac models) QD or 2 m (6.5 ft) integral cable, depending on model

Operating Conditions
−40° to +50° C (−40° to +122° F)
90% at 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 in, maximum acceleration 10G). Also meets IEC 947-5-2; 30G 11 ms duration, half sine wave.

Certifications
Approvals are pending

**Indicator Power-up Response Time**
DC models
ON: 10 ms; OFF: 7 ms
AC models
ON/OFF: 500 µs

Application Note
Light emits 360° from housing sides in K50BL models and housing sides and tops in K50BCL models.

LIGHT DIRECTION   LIGHT DIRECTION

Dimensions

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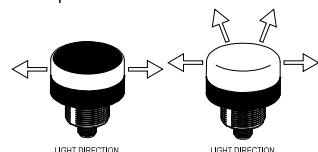
Internal Threads 1/2 - 14 NPSM Max. torque 2.25 Nm (20 in.-lbs)
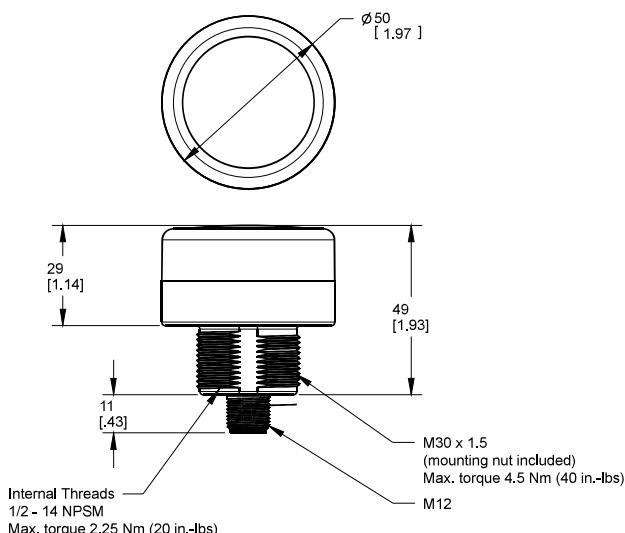
Wiring — DC Models

1-Color Models (PNP/NPN Selectable)			
Sourcing (PNP) Input	**Sinking (NPN) Input**	**Pinout**	**Wiring Key:**
3 — 12-30V dc 1 — + 2 — X 4 — X C	1 — + 12-30V dc 3 — − 2 — X 4 — X C	1 2 3 4	1 = Brown 2 = White 3 = Blue 4 = Black C = Indicator color X = Not used
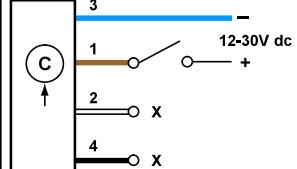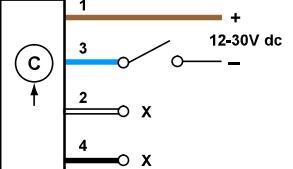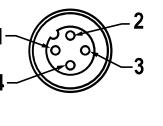
2-Color Models		
Sourcing (PNP) Input	**Pinout**	**Wiring Key:**
3 — − 12-30V dc 4 — + 1 — 2 — X C1 C2	1 2 3 4	1 = Brown 2 = White 3 = Blue 4 = Black C1 = Indicator color 1 C2 = Indicator color 2 X = Not used
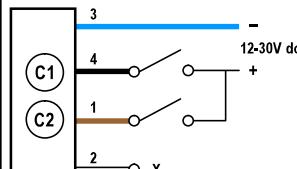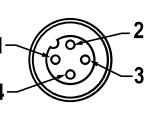
Wiring — AC Models

Quick-Disconnect (QD) Models	Cabled Models
2 — + 3 — − 1 — **Wiring Key:** 1 = Green (not used) 2 = Red/Black 3 = Red/White	3 — − 1 — + **Wiring Key:** 1 = Black 3 = White
Pinout 1 2 3	
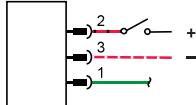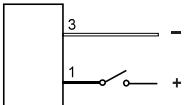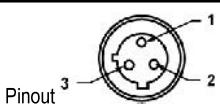
Accessory Cordsets

4-Pin Threaded M12/Euro-Style Cordsets				
Model	**Length**	**Style**	**Dimensions**	**Pinout**
MQDC-406	1.83 m (6 ft)	Straight	ø 15 mm (0.6") 44 mm max. (1.7") M12 x 1	1 2 3 4 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)			
MQDC-406RA	1.83 m (6 ft)	Right-Angle	32 Typ. [1.26"] 30 Typ. [1.18"] M12 x 1 ø 14.5 [0.57"]	
MQDC-415RA	4.57 m (15 ft)			
MQDC-430RA	9.14 m (30 ft)			
MQDC-450RA	15.2 m (50 ft)			
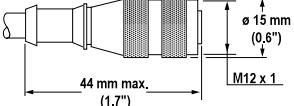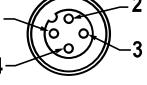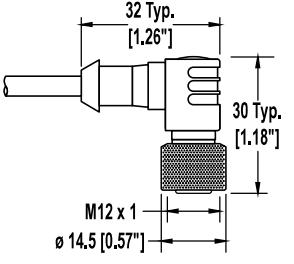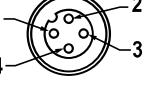
3-Pin Micro-Style Cordsets				
Model	**Length**	**Style**	**Dimensions**	**Pinout**
MQDC-306	1.83 m (6 ft)	Straight	42 Typ. 1/2-20 UNF-28 ø 14.5	 1 = Green 2 = Red/Black 3 = Red/White
MQDC-315	4.57 m (15 ft)			
MQDC-330	9.14 m (30 ft)			
MQDC-330	1.83 m (6 ft)	Right-Angle	32 Typ 28 Typ 1/2-20 UNF-28 ø 14.5	
MQDC-315RA	4.57 m (15 ft)			
MQDC-330RA	9.14 m (30 ft)			

Accessory Mounting Brackets

All measurements 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
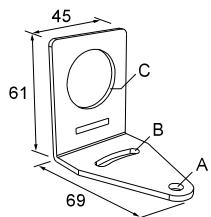
Hole center spacing: A to B=40

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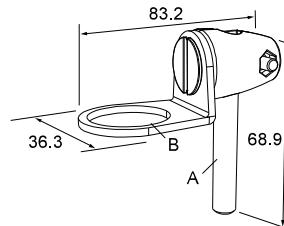
Bolt thread: SMB30FA, A= 3/8 - 16 x 2 in; SMB30FAM10, A= M10 - 1.5 x 50

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
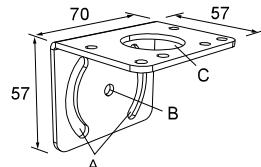
Hole center spacing: A = 51, A to B = 25.4

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
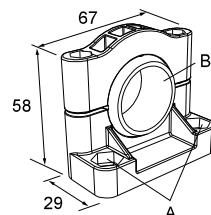
Hole center spacing: A=ø 50.8

Hole size: A=ø 7.0, B=ø 30.0

Elevated Mount System

Model			Features	Components
SA-M30E12 - Black Acetal			• Streamlined black acetal stand-off pipe adapter/cover • Connects between 30 mm light base and ½ in. NPSM/DN15 pipe • Mounting hardware included	
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 • 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 mounting base adapter/cover • Connects between ½ in. NPSM/DN15 pipe and 30 mm (1-3/16 in) drilled hole • Mounting hardware included	
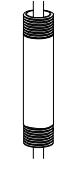
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