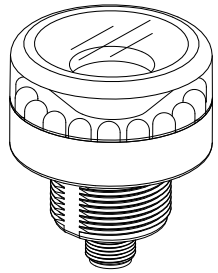
# EZ-LIGHT® K50 Beacon

## 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; 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 30 V dc or 85 to 130 V ac (75 to 120 V dc) or 100 to 250 V ac (90 to 240 V 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 30 V 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 130 V ac or 75 to 120 V dc |
| K50BLRA120Q | K50BCLRA120Q | | Red | |
| K50BLYA120Q | K50BCLYA120Q | | Yellow | |
| K50BLWA120Q | N.A. | | White | |
| K50BLBA120Q | K50BCLBA120Q | | Blue | |
| K50BLGA230Q | K50BCLGA230Q | | Green | 100 to 250 V ac or 90 to 240 V dc |
| K50BLRA230Q | K50BCLRA230Q | | Red | |
| K50BLYA230Q | K50BCLYA230Q | | Yellow | |
| K50BLBA230Q | K50BCLBA230Q | | Blue | |

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

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

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

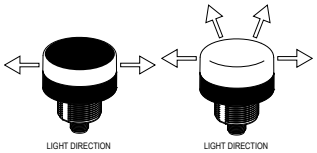
Connections
Integral 4-pin M12/Euro-style (dc models) QD, 3-pin Micro-style (ac models) QD, or 2 m (6.5 ft) integral cable, depending on model

Operating Conditions
−40 °C to +50 °C (−40 °F to +122 °F)
90% at +50 °C maximum 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.

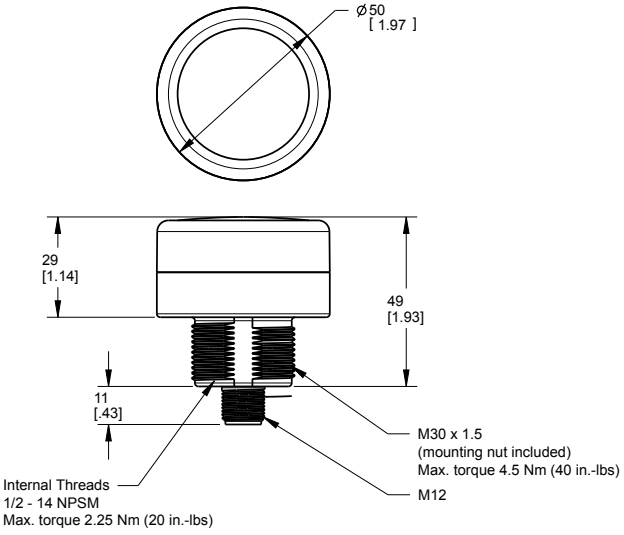
Indicator Power-up Response Time
DC models
ON: 10 ms; OFF: 7 ms
AC models
ON/OFF: 500 µs

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

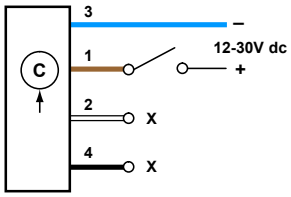
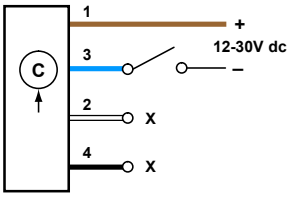
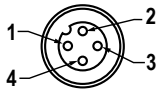


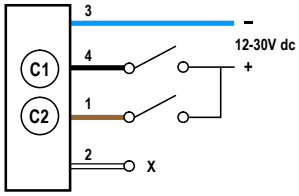
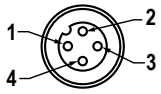

Certifications
(dc models only)

## Dimensions

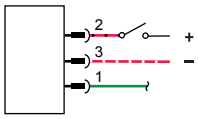
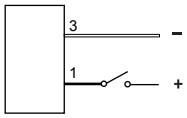
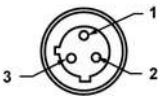


## Wiring — DC Models

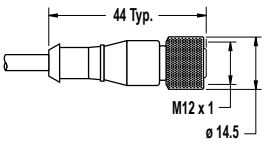
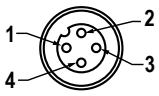
| 1-Color Models (PNP/NPN Selectable) | | | |
|---|---|---|---|
| Sourcing (PNP) Input | Sinking (NPN) Input | Pinout | Wiring Key: |
|  |  |  | 1 = Brown<br>2 = White<br>3 = Blue<br>4 = Black<br>C = Indicator color<br>X = Not used |

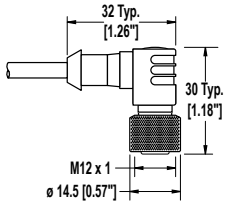
| 2-Color Models | | |
|---|---|---|
| Sourcing (PNP) Input | Pinout | Wiring Key: |
|  |  | 1 = Brown<br>2 = White<br>3 = Blue<br>4 = Black<br>C1 = Indicator color 1<br>C2 = Indicator color 2<br>X = Not used |

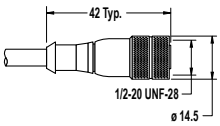
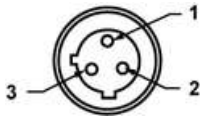
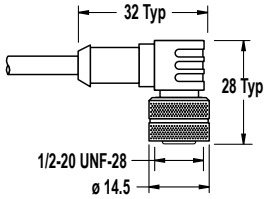
## Wiring — AC Models

| Quick-Disconnect (QD) Models | Cabled Models |
|---|---|
| <br>**Wiring Key:**<br>1 = Green (not used)<br>2 = Red/Black<br>3 = Red/White | <br>**Wiring Key:**<br>1 = Black<br>3 = White |
| Pinout  | |

## Accessory Cordsets

| 4-Pin Threaded M12/Euro-Style Cordsets | | | | |
|---|---|---|---|---|
| Model | Length | Style | Dimensions | Pinout (Female) |
| MQDC-406 | 1.83 m (6 ft) | Straight |  | <br>1 = Brown<br>2 = White<br>3 = Blue<br>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) | | | |

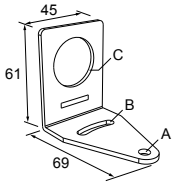
| 3-Pin Micro-Style Cordsets | | | | |
|---|---|---|---|---|
| Model | Length | Style | Dimensions | Pinout (Female) |
| MQDC-306 | 1.83 m (6 ft) | Straight |  | <br>1 = Green<br>2 = Red/Black<br>3 = Red/White |
| MQDC-315 | 4.57 m (15 ft) | | | |
| MQDC-330 | 9.14 m (30 ft) | | | |
| MQDC-306RA | 1.83 m (6 ft) | Right-Angle |  | |
| MQDC-315RA | 4.57 m (15 ft) | | | |
| MQDC-330RA | 9.14 m (30 ft) | | | |

## Accessory Mounting Brackets

All measurements are in mm

SMB30A

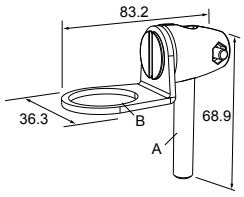
- Right-angle bracket with curved slot for versatile orientation
- Clearance for M6 (¼ in) hardware
- Mounting hole for 30 mm sensor
- 12-ga. stainless steel




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

SMB30FA

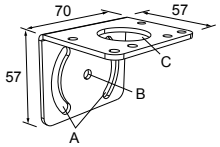
- Swivel bracket with tilt and pan movement for precise adjustment
- Mounting hole for 30 mm sensor
- 12-ga. 304 stainless steel
- Easy sensor mounting to extrude rail T-slot
- Metric and inch size bolt available




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

SMB30MM

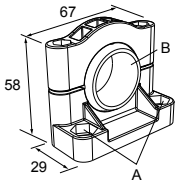
- 12-ga. stainless steel bracket with curved mounting slots for versatile orientation
- Clearance for M6 (¼ in) hardware
- Mounting hole for 30 mm sensor




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-M30E12 - Black Acetal</td><td>• Streamlined black acetal stand-off pipe adapter/cover<br>• Connects between 30 mm light base and ½ in. NPSM/DN15 pipe<br>• Mounting hardware included</td><td></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)<br>• Polished 304 stainless steel, black anodized aluminum, or clear anodized aluminum surface<br>• ½ in. NPT thread at both ends<br>• 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>• Streamlined black acetal mounting base adapter/cover<br>• Connects between ½ in. NPSM/DN15 pipe and 30 mm (1-3/16 in) drilled hole<br>• Mounting hardware included</td><td></td></tr>
</table>

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