

EZ-LIGHT™ Indicators - Daylight Visible



Datasheet



- Intense levels of light output for outdoor applications
- Controlled field of view for signage and narrow lane use
- May also be used for low-cost vision sensor illumination
- Rugged, cost-effective, and easy to install
- Compact devices are completely self-contained, no controller needed
- Up to three colors in one housing
- Immune to ambient light, EMI, and RFI interference
- 50 mm (2 in) diameter with flat profile and 30 mm (1.2 in) mounting base
- PNP or NPN input type, depending on model
- 15 to 30 V dc operation



Contact Factory for more information

Note: Optional sun shield model K50DS is available for enhanced visibility in desert sun brightness levels (see [Sun Shield -- MASTER](#) on page 4).

| Model ¹ | LED Function ² | Inputs ³ | Model* | LED Function ² | Inputs ³ |
|--------------------|--------------------------------|---------------------|-------------|---------------------------|---------------------|
| K50LDGRYPQ | 3 Color: Green, Red, Yellow | PNP | K50LDXGXPQ | 1 Color: Green | PNP/NPN |
| K50LDGRYNQ | | NPN | K50LDXRXQPQ | 1 Color: Red | PNP/NPN |
| K50LDGRBPQ | 3 Color: Green, Red, Blue | PNP | K50LDXYXPQ | 1 Color: Yellow | PNP/NPN |
| K50LDGRBNQ | | NPN | K50LDXWXPQ | 1 Color: White | PNP/NPN |
| | | | K50LDXBXPQ | 1 Color: Blue | PNP/NPN |

Contact factory for other colors and color combinations.



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.

¹ Integral QD models only are listed.

- To order the 150 mm PVC pigtail with QD model, replace **Q** with **QP** in model number (example, **K50LDGRYPQP**).
- To order the 2 m (6.5 ft) cable model, omit suffix **Q** from model number (example, **K50LDGRYP**).
- A model with a QD requires a mating cable (see [Accessories](#) on page 3).

² 3-color models: 6 LEDs per color; 1-color models: 18 LEDs per color

³ 1-color models are PNP/NPN selectable, depending on hookup.



Specifications

Supply Voltage and Current

- 15 to 30 V dc at 120 mA maximum (1-color models)
- 15 to 30 V dc at 40 mA maximum per LED color (3-color models)
- 12 V dc minimum voltage to -20 °C for both models

Supply Protection Circuitry

Protected against reverse polarity and transient voltages

Indicators

LED colors are independently selected, depending on mode

Input Response Time

Indicator ON/OFF: 1 ms maximum

Environmental Rating

Fully encapsulated, rated IEC IP67

Construction

Base and covers: polycarbonate

Connections

Integral 4-pin M12/Euro-style quick disconnect fitting, 150 mm PVC pigtail with QD, or 2 m (6.5 ft) integral cable, depending on model

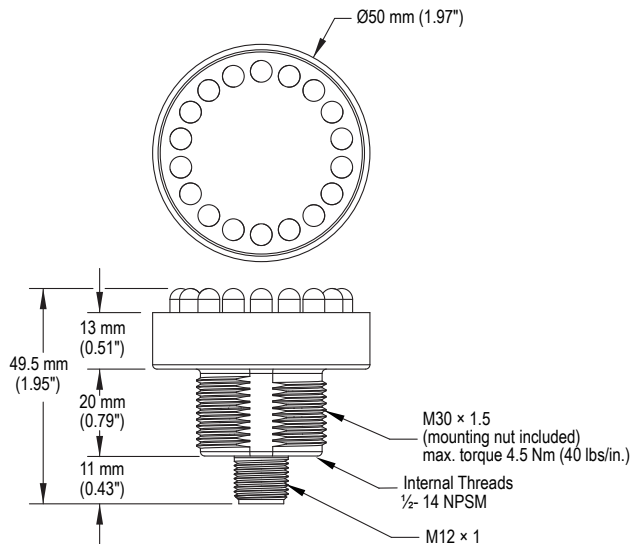
Operating Conditions

-40 °C to +50 °C (-40 °F to +122 °F)
90% at +55 °C maximum relative humidity (non-condensing)

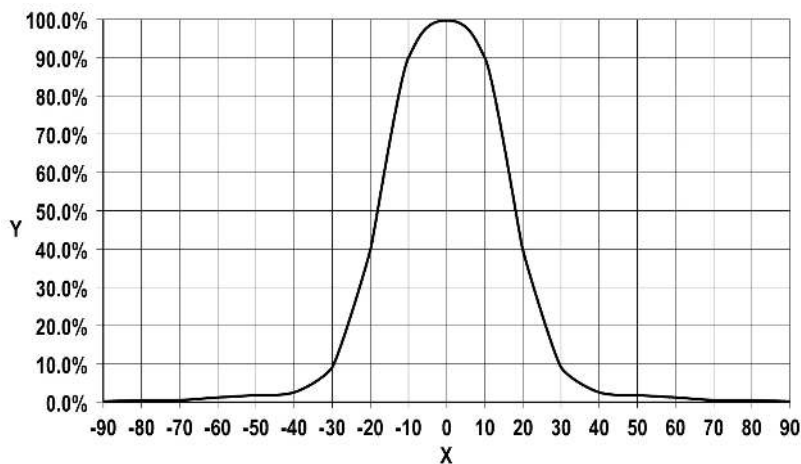
Certifications



Dimensions



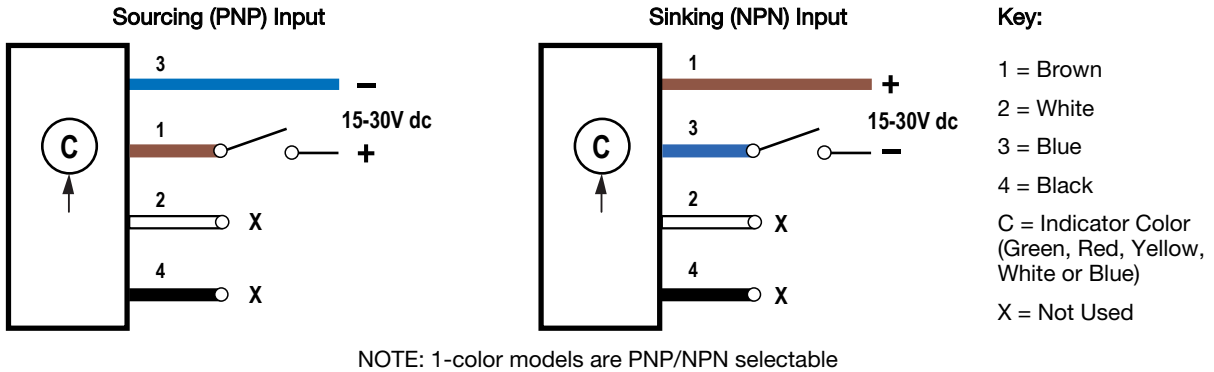
Percent of Maximum Intensity vs Viewing Angle



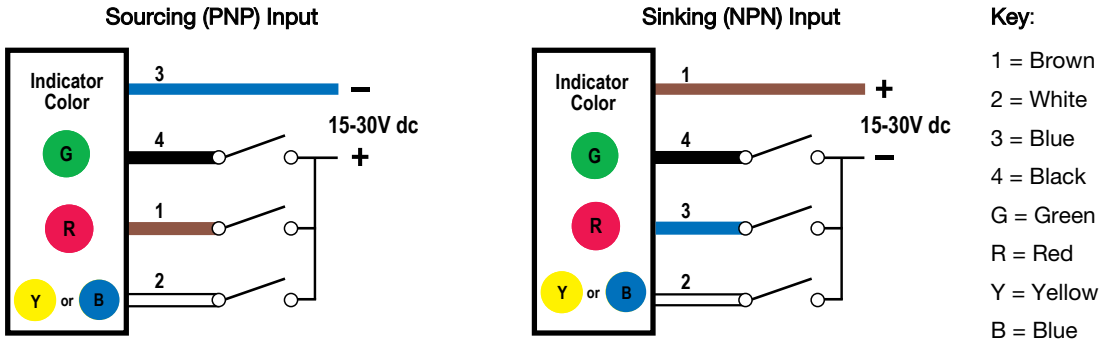
X: Viewing Angle (Deg)

Y: Intensity (Percent)

Wiring – 1-Color Models



Wiring – 3-Color Models



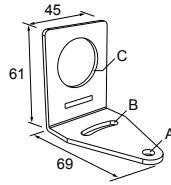
Accessories

| 4-Pin Threaded M12/Euro-Style Cordsets—Single Ended | | | | |
|---|----------------|-------------|------------|---|
| Model | Length | Style | Dimensions | Pinout (Female) |
| MQDC-406 | 1.83 m (6 ft) | Straight | | <p>1 = Brown 2 = White 3 = Blue 4 = Black</p> |
| 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 | | |
| MQDC-415RA | 4.57 m (15 ft) | | | |
| MQDC-430RA | 9.14 m (30 ft) | | | |
| MQDC-450RA | 15.2 m (50 ft) | | | |

Mounting Brackets

SMB30A

- Right-angle bracket with curved slot for versatile orientation
- Clearance for M6 (1/4 in) hardware
- Mounting hole for 30 mm sensor
- 12-ga. stainless steel

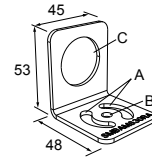


Hole center spacing: A to B=40

Hole size: A=ø 6.3, B= 27.1 x 6.3, C=ø 30.5

SMBAMS30RA

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

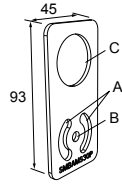


Hole center spacing: A=26.0, A to B=13.0

Hole size: A=26.8 x 7.0, B=ø 6.5, C=ø 31.0

SMBAMS30P

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

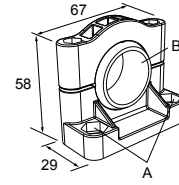


Hole center spacing: A=26.0, A to B=13.0

Hole size: A=26.8 x 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

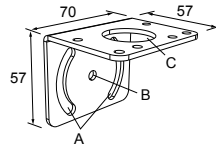


Hole center spacing: A=ø 50.8

Hole size: A=ø 7.0, B=ø 30.0

SMB30MM

- 12-ga. stainless steel bracket with curved mounting slots for versatile orientation
- Clearance for M6 (1/4 in) hardware
- Mounting hole for 30 mm sensor

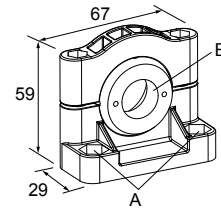


Hole center spacing: A = 51, A to B = 25.4

Hole size: A = 42.6 x 7, B = ø 6.4, C = ø 30.1

SMB3018SC

- 18 mm swivel side or barrel-mount bracket
- Black reinforced thermoplastic polyester
- Stainless steel swivel locking hardware included



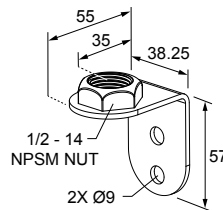
Hole center spacing: A = 50.8

Hole size: A = ø 7.0, B = ø 18.0

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

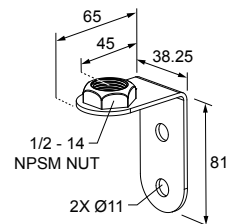
Hole center spacing: 20.0



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



Sun Shield -- MASTER

K50DS

- Use for enhanced visibility in desert sun brightness levels
- Thermoplastic polyester



K90DS

- Use for enhanced visibility in direct sunlight conditions
- Polycarbonate



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