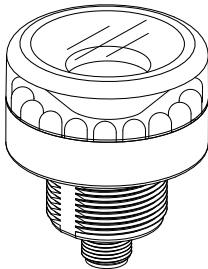


Datasheet

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 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 |
| K50BLXRX PQ | K50BCLXRX PQ | | 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 | |
| | | | | |

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 °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

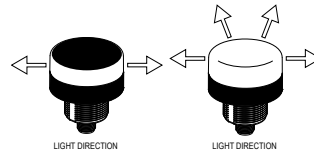
ON: 10 ms; OFF: 7 ms

AC models

ON/OFF: 500 μ s

Application Note

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

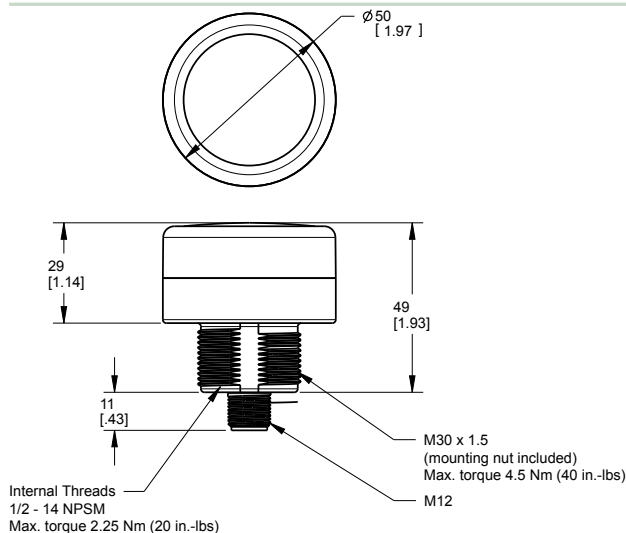


Certifications



Approvals are pending for 230V models

Dimensions



Wiring — DC Models

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

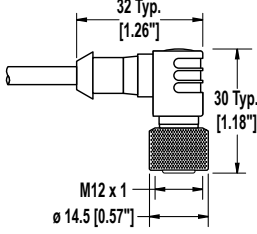
| 2-Color Models | | |
|----------------------|--------|---|
| Sourcing (PNP) Input | Pinout | Wiring Key: |
| | | 1 = Brown 2 = White 3 = Blue 4 = Black C1 = Indicator color 1 C2 = Indicator color 2 X = Not used |

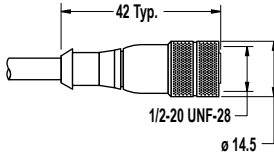
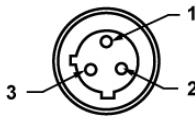
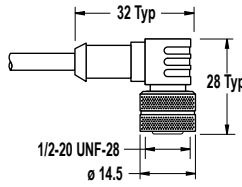
Wiring — AC Models

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

Accessory Cordsets

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

| 4-Pin Threaded M12/Euro-Style Cordsets | | | | |
|--|----------------|-------------|--|--------|
| Model | Length | Style | Dimensions | Pinout |
| 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) | | | |

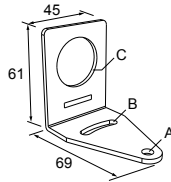
| 3-Pin Micro-Style Cordsets | | | | |
|----------------------------|----------------|-------------|---|--|
| Model | Length | Style | Dimensions | Pinout |
| MQDC-306 | 1.83 m (6 ft) | Straight |  |  <p>1 = Green 2 = Red/Black 3 = Red/White</p> |
| MQDC-315 | 4.57 m (15 ft) | | | |
| MQDC-330 | 9.14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

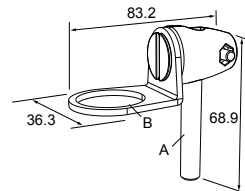


Hole center spacing: A to B=40

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



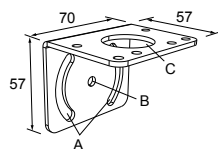
Bolt thread: SMB30FA, A= 3/8 - 16 x 2 in;

SMB30FAM10, A= M10 - 1.5 x 50

Hole size: B= ø 30.1

SMB30MM

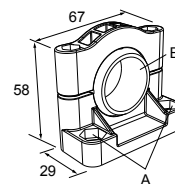
- 12-ga. stainless steel bracket with curved mounting slots for versatile orientation
- Clearance for M6 (¼ in) hardware
- Mounting hole for 30 mm sensor



Hole center spacing: A = 51, A to B = 25.4
 Hole size: A = 42.6 x 7, B = \varnothing 6.4, C = \varnothing 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= \varnothing 50.8
 Hole size: A= \varnothing 7.0, B= \varnothing 30.0

Elevated Mount System

| Model | | | Features | Components |
|--------------------------------------|-------------------------------------|--------------------------------------|---|------------|
| SA-M30E12 - Black Acetal | | | <ul style="list-style-type: none"> • 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 | <ul style="list-style-type: none"> • 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 | | | <ul style="list-style-type: none"> • 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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