



Features



- 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 V DC to 30 V DC operation



Contact Factory for more information



WARNING:

- **Do not use this device for personnel protection**
- Using this device for personnel protection could result in serious injury or death.
- This device does not include the self-checking redundant circuitry necessary to allow its use in personnel safety applications. A device failure or malfunction can cause either an energized (on) or de-energized (off) output condition.

Models

NOTE: Optional sun shield model K50DS is available for enhanced visibility in desert sun brightness levels (see [Sun Shields](#)).

Model ⁽¹⁾	LED Function ⁽²⁾	Inputs ⁽³⁾
K50LDGRYPQ	3 Color: Green, Red, Yellow	PNP
K50LDGRYNQ		NPN
K50LDGRBPQ	3 Color: Green, Red, Blue	PNP
K50LDGRBNQ		NPN

Model ⁽¹⁾	LED Function ⁽²⁾	Inputs ⁽³⁾
K50LDXGXPQ	1 Color: Green	PNP/NPN
K50LDXRXPQ	1 Color: Red	PNP/NPN
K50LDXYXPQ	1 Color: Yellow	PNP/NPN
K50LDXWXPQ	1 Color: White	PNP/NPN
K50LDXBXPQ	1 Color: Blue	PNP/NPN

Contact factory for other colors and color combinations.

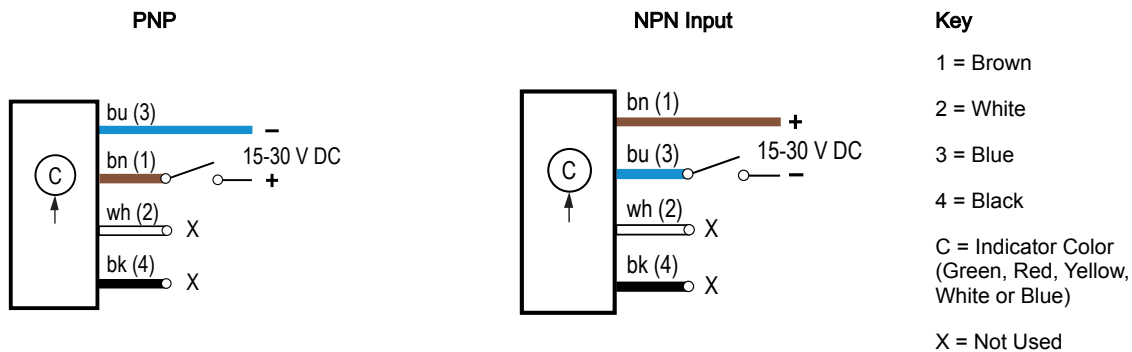
⁽¹⁾ Integral quick-disconnect connector models are listed.

- To order the 150 mm (6 in) PVC-jacketed cable with quick-disconnect connector 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 quick-disconnect connector requires a mating cordset (see [Accessories](#)).

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

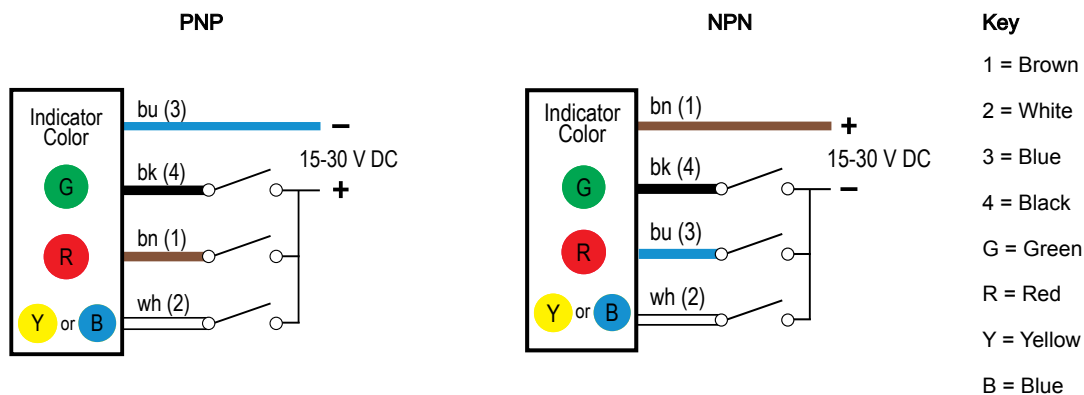
⁽³⁾ 1-color models are PNP/NPN selectable, depending on wiring.

Wiring – 1-Color Models



NOTE: 1-color models are PNP/NPN selectable.

Wiring – 3-Color Models



Specifications

Supply Voltage and Current

- 15 V DC to 30 V DC at 120 mA maximum (1-color models)
- 15 V DC 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 IP67

Construction

- Base and covers: polycarbonate

Connections

Integral 4-pin M12 male quick-disconnect connector, 150 mm (6 in) PVC-jacketed cable with a 4-pin M12 male quick-disconnect connector, or 2 m (6.5 ft) integral PVC-jacketed 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

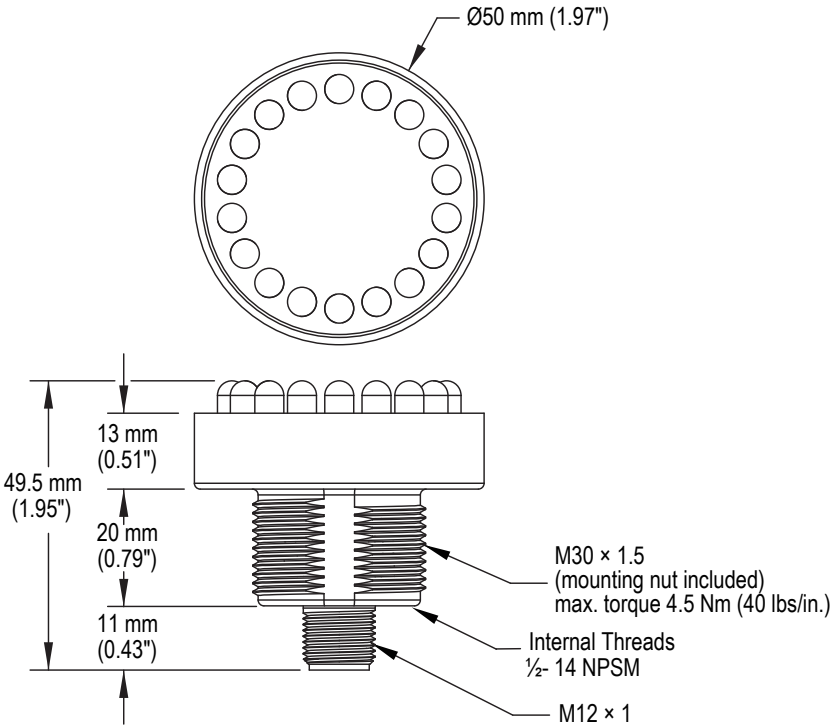


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Park Lane, Culliganlaan 2F bus 3
1831 Diegem, BELGIUM

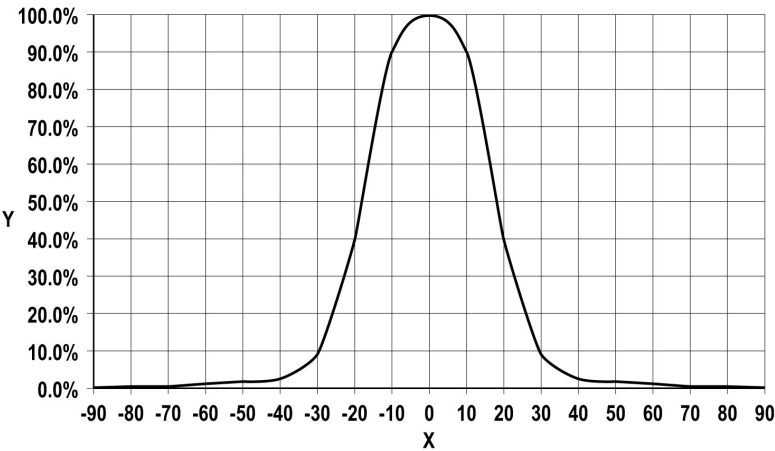


Dimensions

All measurements are listed in millimeters [inches], unless noted otherwise. The measurements provided are subject to change.



Percent of Maximum Intensity vs Viewing Angle



X: Viewing Angle (Deg)
Y: Intensity (Percent)

Accessories

4-Pin Single-Ended M12 Female Cordsets					
Model	Length	Style	Dimensions	Pinout (Female)	
MQDC-406	2 m (6.56 ft)	Straight			1 = Brown 2 = White 3 = Blue 4 = Black 5 = Not used
MQDC-415	5 m (16.4 ft)				
MQDC-430	9 m (29.5 ft)				
MQDC-450	15 m (49.2 ft)				
MQDC-406RA	2 m (6.56 ft)	Right-Angle			
MQDC-415RA	5 m (16.4 ft)				
MQDC-430RA	9 m (29.5 ft)				
MQDC-450RA	15 m (49.2 ft)				

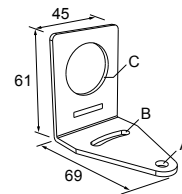
Mounting Brackets

SMB30A

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

Hole center spacing: A to B=40

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

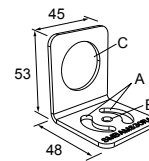


SMBAMS30RA

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

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

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

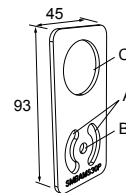


SMBAMS30P

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

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

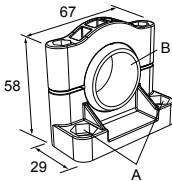
Hole size: A=26.8 × 7.0, B=ø 6.5, C=ø 31.0



SMB30SC

- Swivel bracket with 30 mm mounting hole for sensor
- Black reinforced thermoplastic polyester
- Stainless steel mounting and swivel locking hardware included

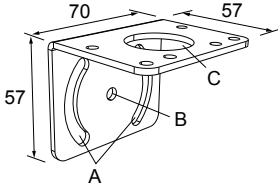
Hole center spacing: A=ø 50.8
Hole size: A=ø 7.0, B=ø 30.0



SMB30MM

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

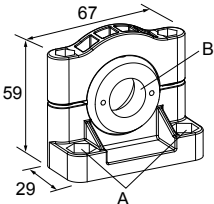
Hole center spacing: A = 51, A to B = 25.4
Hole size: A = 42.6 × 7, B = ø 6.4, C = ø 30.1



SMB3018SC

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

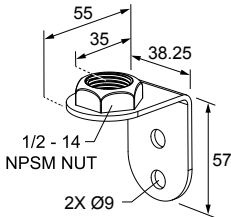
Hole center spacing: A = 50.8
Hole size: A = ø 7.0, B = ø 18.0



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

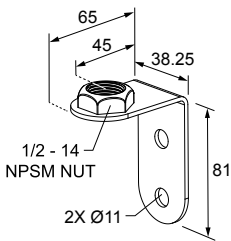
Hole center spacing: 20.0



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 Shields

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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