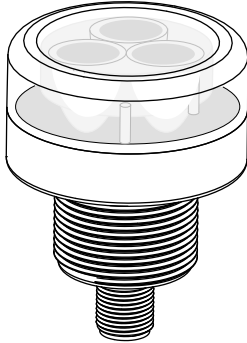


WL50S High-Intensity Spot Light - PWM Dimmable



Datasheet

General-purpose LED work lighting



- Intensity can be controlled from 0 to 100% using Pulse Width Modulation (PWM) on an input control wire
- Three lens options, depending on model, to vary spot size
- Illuminates a large area with an even pattern of light and no shadows
- 12 to 30 V dc operation
- Cabled and quick-disconnect models available
- 50 mm diameter with flat profile and 30 mm mounting base
- Rugged sealed housing rated to IP69K



For PWM dimming, use with the LC65 Dimmer Module. For more information, refer to the LC65 LED Dimmer Module datasheet, p/n [177086](#).

| Model ¹ | LED Color | Lumens | Lux | | Lens Angle | Connection |
|--------------------|--------------------|--------|-------|------|---|---|
| | | | 0.5 m | 1 m | | |
| WL50SWL5PWMQ | White, 5000-8300 K | 295 | 13780 | 3445 | ±5° (smaller, more focused spot; see graph) | 5-pin Euro-style integral QD connector (use with a 4-wire mating cordset; only 3 wires used for connection) |
| WL50SWL11PWMQ | White, 5000-8300 K | 285 | 5460 | 1365 | ±11° (larger spot; see graph) | |
| WL50SWL20PWMQ | White, 5000-8300 K | 270 | 2000 | 500 | ±20° (largest spot; see graph) | |



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 integral 2 m (6.5 ft) PVC cable models, omit the suffix Q from model number (example, WL50SWL5PWM). A model with a QD requires a mating cordset.



Specifications

Supply Voltage and Current

Operating voltage: 12 to 30 V dc
Current draw: 400 mA maximum

Pulse Width Modulation (PWM)

Frequency: Up to 40 kHz
Voltage: 5 V to 30 V dc
Current: 15 mA max.

Supply Protection Circuitry

Protected against reverse polarity and transient voltages

Light Source

Three high-intensity LEDs; see models table for color temperature or wavelengths

Useful Life

When operating within specifications, output will decrease less than 30% after 50,000 hours.

Construction

Black anodized aluminum housing; polycarbonate window; nickel-plated QD connector or PVC-jacketed cable; black zinc-plated steel mounting nut

Mounting:

30 × 1.5 mm thread base mount

Connections

Integral 5-pin M12 quick disconnect fitting or 2 m (6.5 ft) integral cable, depending on model; 4-pin connecting cordset required for quick disconnect fitting models; only 2 wires used

Environmental Rating

IEC IP67, IP69K per DIN 40050-9



NOTE: Do not spray the cable with a high-pressure sprayer or cable damage will result.

Operating Conditions

-20 °C to +50 °C (-4 °F to +122 °F)
95% 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", maximum acceleration 10G). Also meets IEC 947-5-2; 30G 11 ms duration, half sine wave.

Storage Temperature

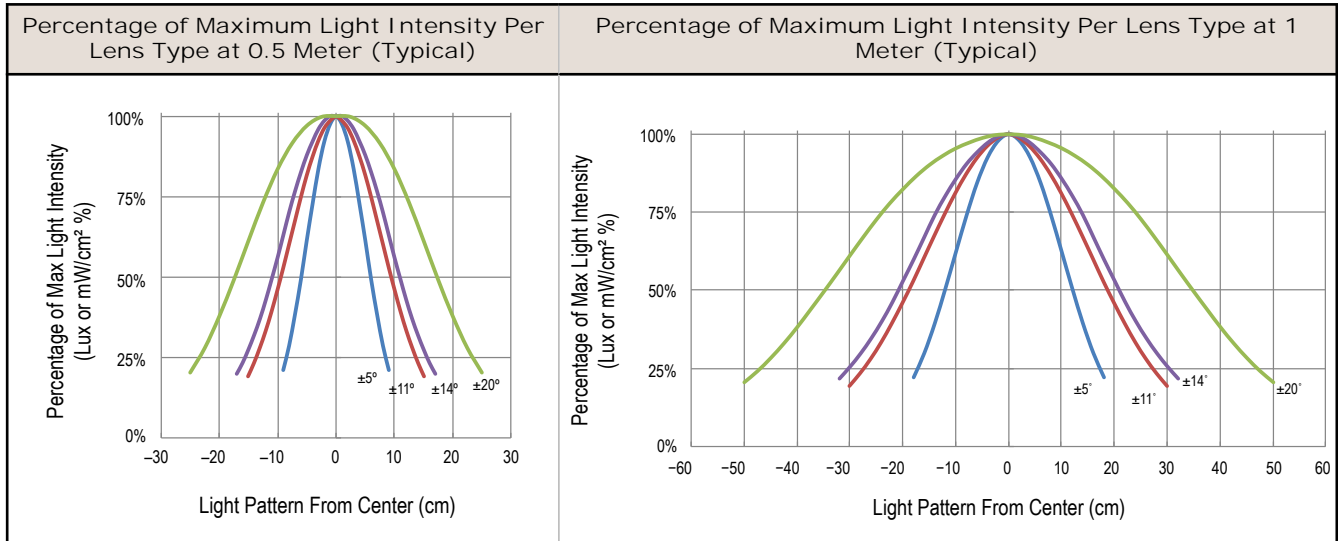
-40 °C to +70 °C (-40 °F to +158 °F)

Certifications

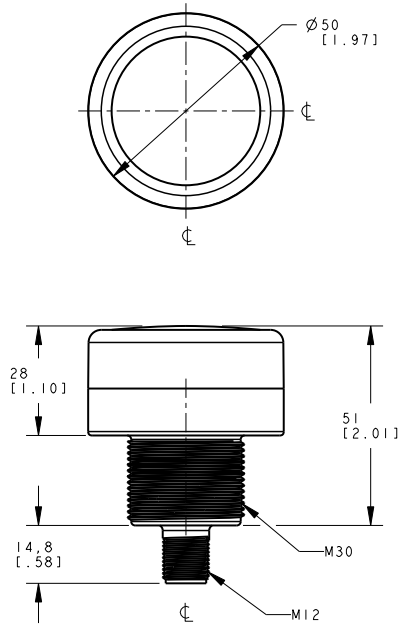


UL Recognized for easy installation in control cabinets

Beam Patterns



Dimensions



Wiring

| | Pins | Color | Color/Connection |
|--|------|-------|------------------------------------|
| | 1 | brown | 12 to 30 V dc |
| | 3 | blue | dc common |
| | 4 | black | Not used |
| | 2 | white | Pulse Width Modulation (PWM) input |

For maximum intensity, leave the white and black wires floating or connected to common.

Accessories

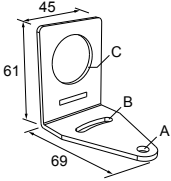
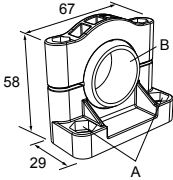
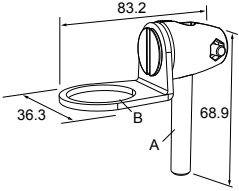
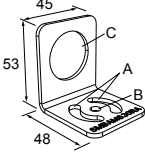
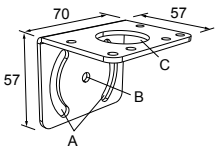
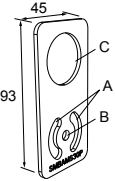
4-Pin Euro-Style Cordsets

| 4-Pin Threaded M12/Euro-Style Cordsets | | | | |
|--|----------------|----------|------------|---|
| 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) | | | |

| 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) | | | |

Mounting Brackets

All measurements are in mm

| | |
|--|--|
| <p>SMB30A</p> <ul style="list-style-type: none"> 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  <p>Hole center spacing: A to B=40 Hole size: A=ø 6.3, B= 27.1 x 6.3, C=ø 30.5</p> | <p>SMB30SC</p> <ul style="list-style-type: none"> Swivel bracket with 30 mm mounting hole for sensor Black reinforced thermoplastic polyester Stainless steel mounting and swivel locking hardware included  <p>Hole center spacing: A=ø 50.8 Hole size: A=ø 7.0, B=ø 30.0</p> |
| <p>SMB30FA</p> <ul style="list-style-type: none"> 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  <p>Bolt thread: SMB30FA, A= 3/8 - 16 x 2 in; SMB30FAM10, A= M10 - 1.5 x 50 Hole size: B= ø 30.1</p> | <p>SMBAMS30RA</p> <ul style="list-style-type: none"> Right-angle SMBAMS series bracket 30 mm hole for mounting sensors Articulation slots for 90° + rotation 12-ga. (2.6 mm) cold-rolled steel  <p>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</p> |
| <p>SMB30MM</p> <ul style="list-style-type: none"> 12-ga. stainless steel bracket with curved mounting slots for versatile orientation Clearance for M6 (¼ in) hardware Mounting hole for 30 mm sensor  <p>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</p> | <p>SMBAMS30P</p> <ul style="list-style-type: none"> Flat SMBAMS series bracket 30 mm hole for mounting sensors Articulation slots for 90° + rotation 12-ga. 300 series stainless steel  <p>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</p> |

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