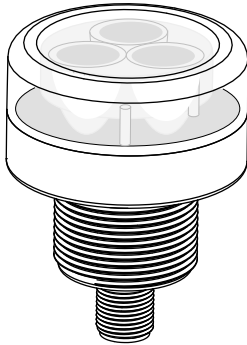


WL50S High-Intensity Spot Light - PWM Dimmable



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

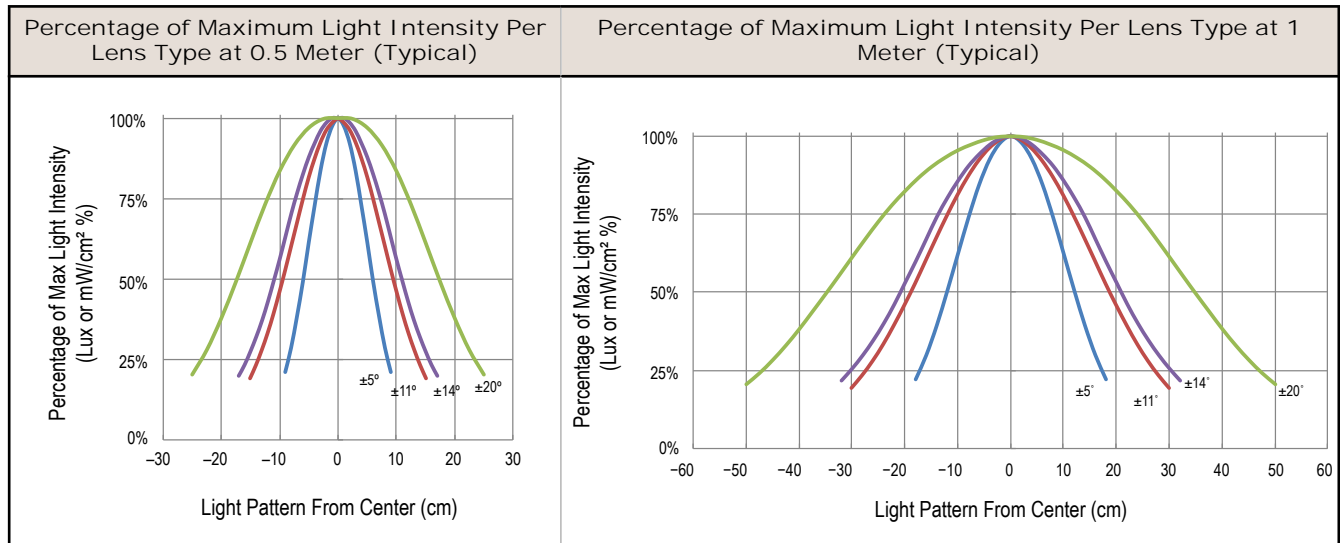
−40 °C to +70 °C (−40 °F to +158 °F)

Certifications

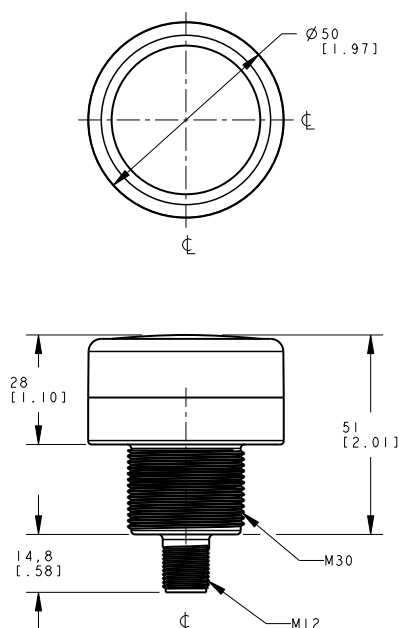


UL Recognized for
easy installation in
control cabinets

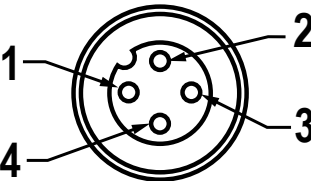
Beam Patterns



Dimensions



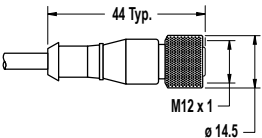
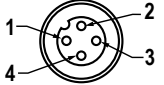
Wiring

	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		
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

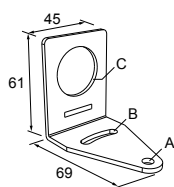
4-Pin Threaded M12/Euro-Style Cordsets				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC-406RA	1.83 m (6 ft)	Right-Angle		
MQDC-415RA	4.57 m (15 ft)			
MQDC-430RA	9.14 m (30 ft)			
MQDC-450RA	15.2 m (50 ft)			

Mounting Brackets

All measurements are in mm

SMB30A

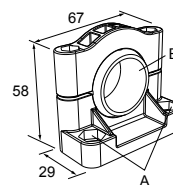
- Right-angle bracket with curved slot for versatile orientation
- Clearance for M6 (¼ in) hardware
- Mounting hole for 30 mm sensor
- 12-ga. stainless steel



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

SMB30SC

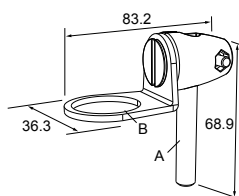
- Swivel bracket with 30 mm mounting hole for sensor
- Black reinforced thermoplastic polyester
- Stainless steel mounting and swivel locking hardware included



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

SMB30FA

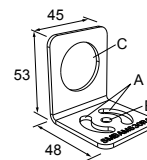
- Swivel bracket with tilt and pan movement for precise adjustment
- Mounting hole for 30 mm sensor
- 12-ga. 304 stainless steel
- Easy sensor mounting to extrude rail T-slot
- Metric and inch size bolt available



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

SMBAMS30RA

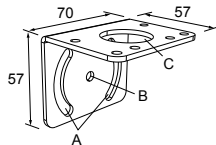
- Right-angle SMBAMS series bracket
- 30 mm hole for mounting sensors
- Articulation slots for 90° + rotation
- 12-ga. (2.6 mm) cold-rolled steel



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

SMB30MM

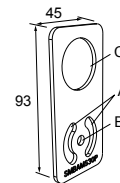
- 12-ga. stainless steel bracket with curved mounting slots for versatile orientation
- Clearance for M6 (¼ in) hardware
- Mounting hole for 30 mm sensor



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

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

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