Features

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 V DC to 30 V DC operation
- Cabled and quick-disconnect connector 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.

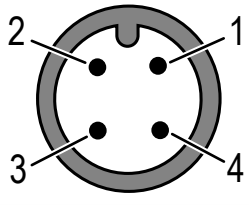
WARNING:

- **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

Model	LED Color	Lumens	Lux		Lens Angle	Connection[1]
			0.5 m	1 m		
WL50SWL5PWMQ	White, 5000K to 8300K	295	13780	3445	±5° (smaller, more focused spot; see graph)	Integral 5-pin M12 male quick-disconnect connector (use with a 4-wire mating cordset; only 3 wires used for connection)
WL50SWL11PWMQ	White, 5000K to 8300K	285	5460	1365	±11° (larger spot; see graph)	
WL50SWL20PWMQ	White, 5000K to 8300K	270	2000	500	±20° (largest spot; see graph)	

Wiring

Pinout	Pins	Color	Connection
	1	Brown	12 V DC to 30 V DC
	2	White	Pulse Width Modulation (PWM) input
	3	Blue	DC common
	4	Black	Not used

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

[1] Integral quick-disconnect connector models are listed. To order the integral 2 m (6.5 ft) PVC cable models, omit the suffix Q from the model number (example, WL50SWL5PWM). A model with a quick-disconnect connector requires a mating cordset.

Original Instructions
26-Mar-26

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179498
p/n: 179498 Rev. B

ПРОМЭЛЕКТРОНИКА/ sales@prom-elec.com

Specifications

Supply Voltage and Current

Operating voltage: 12 V DC to 30 V DC

Current draw: 400 mA maximum

Pulse Width Modulation (PWM)

Frequency: Up to 40 kHz

Voltage: 5 V DC to 30 V DC

Current: 15 mA maximum

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 quick-disconnect connector or PVC-jacketed cable; black zinc-plated steel mounting nut

Mounting

30 × 1.5 mm thread base mount

Connections

Integral 5-pin M12 male quick-disconnect connector or 2 m (6.5 ft) integral PVC-jacketed cable, depending on model

4-pin connecting cordset required for quick-disconnect connector models; only 2 wires used

Environmental Rating

IP67, IP69K per ISO 20653

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, Method 201A (Vibration: 10 Hz to 60 Hz maximum, 0.06 inch (1.52 mm) double amplitude, 10G maximum acceleration) requirements. Also meets IEC 60947-5-2 (Shock: 30G 11 ms duration, half sine wave) requirements.

Storage Temperature

–40 °C to +70 °C (–40 °F to +158 °F)

Certifications

Banner Engineering BV
Park Lane, Culliganlaan 2F bus 3
1831 Diegem, BELGIUM

Required Overcurrent Protection

WARNING: Electrical connections must be made by qualified personnel in accordance with local and national electrical codes and regulations.

Overcurrent protection is required to be provided by end product application per the supplied table.

Overcurrent protection may be provided with external fusing or via Current Limiting, Class 2 Power Supply.

Supply wiring leads < 24 AWG shall not be spliced.

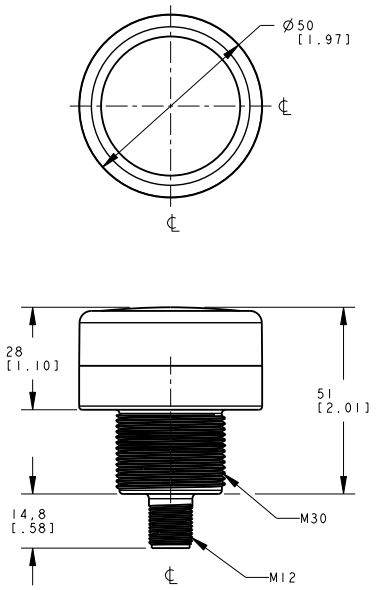
For additional product support, go to www.bannerengineering.com.

Supply Wiring (AWG)	Required Overcurrent Protection (A)	Supply Wiring (AWG)	Required Overcurrent Protection (A)
20	5.0	26	1.0
22	3.0	28	0.8
24	2.0	30	0.5

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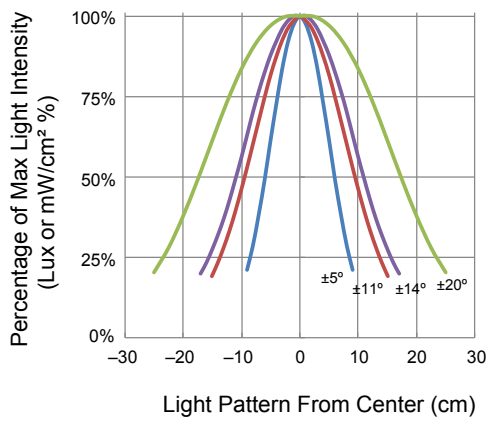
Dimensions

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

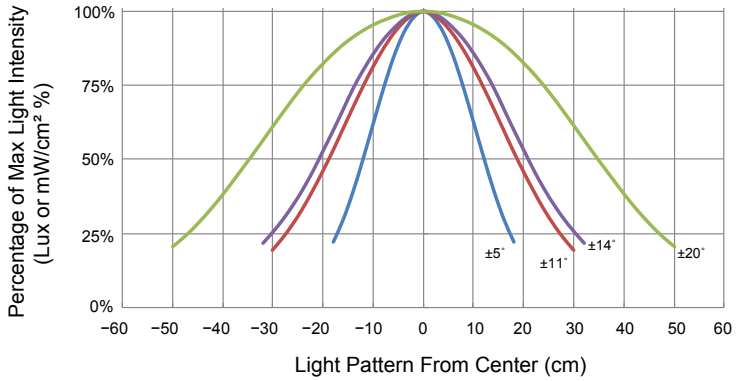


Beam Patterns

Percentage of Maximum Light Intensity Per Lens Type at 0.5 Meter (Typical)



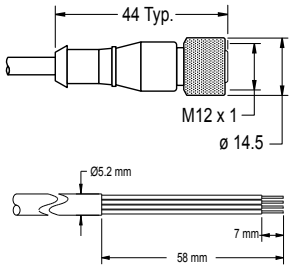
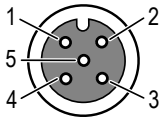
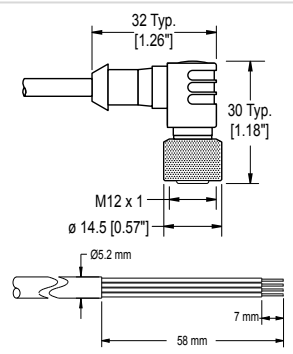
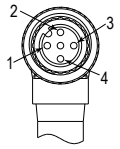
Percentage of Maximum Light Intensity Per Lens Type at 1 Meter (Typical)



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Accessories

Cordsets

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)				

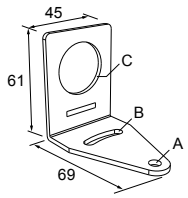
Mounting Brackets

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-gauge stainless steel
- CAD Files: DXF, PDF, IGS, STP

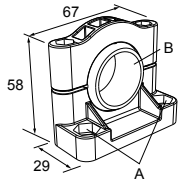
Hole center spacing: A to B=40
Hole size: A=ø 6.3, B= 27.1 × 6.3, C=ø 30.5



SMB30SC

- Swivel bracket with 30 mm mounting hole for sensor
- Black reinforced thermoplastic polyester
- Stainless steel mounting and swivel locking hardware included
- CAD Files: DXF, PDF, IGS, STP

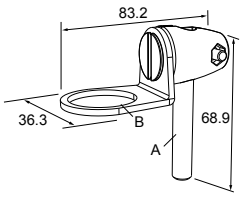
Hole center spacing: A=ø 50.8
Hole size: A=ø 7.0, B=ø 30.0



SMB30FA

- Swivel bracket with tilt and pan movement for precise adjustment
- Mounting hole for 30 mm sensor
- 12-gauge 304 stainless steel
- Easy sensor mounting to extrude rail T-slot
- Metric- and inch-size bolt available
- CAD Files: DXF, PDF, IGS, STP

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

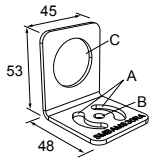


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SMBAMS30RA

- Right-angle SMBAMS series bracket
- 30 mm hole for mounting sensors
- Articulation slots for 90°+ rotation
- 12-gauge (2.6 mm) cold-rolled steel
- CAD Files: DXF, PDF, IGS, STP

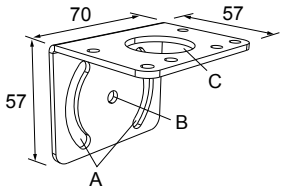
Hole center spacing: A=26.0, A to B=13.0
Hole size: A=26.8 × 7.0, B=ø 6.5, C=ø 31.0



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
- CAD Files: DXF, PDF, IGS, STP

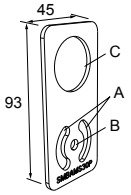
Hole center spacing: A=51, A to B=25.4
Hole size: A=42.6 × 7, B=ø 6.4, C=ø 30.1



SMBAMS30P

- Flat SMBAMS series bracket
- 30 mm hole for mounting sensors
- Articulation slots for 90°+ rotation
- 12-gauge 300 series stainless steel
- CAD Files: DXF, PDF, IGS, STP

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



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