WL50-2 LED Work Light - PWM Dimmable



Datasheet



- Intensity can be controlled from 15 to 95% using Pulse Width Modulation (PWM) on an input control wire
- Designed for enclosure or area lighting
- · Use with an optional flex arm mount for adjustable, industrial task lighting
- Illuminates a large area with an even pattern of light
- Standard or push-button models available
- Flat-mount or 30 mm base-mount models available
 Rugged, sealed polycarbonate housing rated to IP69K (standard models) or IP67 (push-
- button models)
- Low-profile design with several mounting options
- 12 to 30 V dc operation
- Cabled and quick-disconnect models available
- Low power consumption; less than 3 watts

Models

Flat-mount models include a 48 mm (1.9 in) circular velcro mounting kit for easy mounting with no additional hardware.

Model ¹	Push-Button	Mounting Style	Input
WL50F-2PWM	Standard (no push button)	Flat-mount	12 to 30 V dc
WL50-2PWM		30 mm base-mount	



For PWM dimming, use with the LC65 Dimmer Module. For more information, refer to the LC65 LED Dimmer Module datasheet, p/n *177086*.

For more information about using the dimmer module, refer to *Wiring* on page 1.

Wiring

	Pins	Color	Connection	
1- 2-2	1	brown	12 to 30 V dc	
4-0-3-3	3	blue	dc common	
	4	black	Pulse width modulation (PWM) input; for maximum intensity, connect the black wire to 12 to 30 V dc	
	2	white	Not used	



For standard polarity PWM dimming, use with the LC65P2T dimming module. Use the LC65P1T or LC65P1Q5 dimming modules for opposite polarity dimming.

1 Only standard 2 m (6.5 ft) cable models are listed.

[•] To order the 9 m (30 ft) cable models, add the suffix W/30 to the model number , for example, WL50F-2PWM W/30.

[•] To order the 4-pin Euro-style Integral QD connector models, add the suffix Q to the model number, for example, WL50F-2PWMQ.

To order the 150 mm (6 in) 4-pin Euro pigtail QD models, add the suffix QP to the model number , for example, WL50F-2PWMQP.

[·] A model with a QD requires a mating cordset.

Specifications

Supply Voltage and Current 12 V to 30 V dc (Use only with suitable Class 2 power supply) Max. current at -40 °C (-40 °F): 233 mA at 12 V dc 110 mA at 24 V dc 90 mA at 30 V dc Max. Input Power: 2.8 watts Pulse Width Modulation (PWM)

Frequency: Up to 300 Hz Voltage: 12 V to 30 V dc Current: 3 mA max.

Power-Up Response Time Light On: 1 ms (max.) for models without push-button

Construction

Polycarbonate housing; nickel-plated QD connector or PVC-jacketed cable

Environmental Rating Standard models: IEC IP67, IP69K per DIN 40050 Push-Button Models: IEC IP67

Operating Conditions -40 °C to +50 °C (-40 °F to +122 °F)

Light Characteristics Color temperature (CCT): 6000–7000K Color: Cool white Lumen output at 25 °C (77 °F) typical: 185 lumens Luminous efficacy at 25 °C (77 °F) typical: 72 lumens per watt Lux (typical):

at 0.5 m (1.6 ft): 350 lux

- at 1.0 m (3.3 ft): 88 lux at 2.0 m (6.6 ft): 22 lux
- Connections

Integral 4-pin Euro-style QD, 150 mm (5.9 in) PVC pigtail with QD, or 2 m (6.5 ft) integral cable, depending on model

Certifications





Intensity Distribution



Dimensions - Flat Mount Models



Dimensions - 30 mm Base Mount Models



Accessories

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)			1 = Brown 2 = White 3 = Blue 4 = Black		
MQDC-450	15.2 m (50 ft)					
MQDC-406RA	1.83 m (6 ft)	Right-Angle	Right-Angle			
MQDC-415RA	4.57 m (15 ft)					
MQDC-430RA	9.14 m (30 ft)					
MQDC-450RA	15.2 m (50 ft)					

Mounting Accessories



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FCC Part 15 and CAN ICES-3 (B)/NMB-3(B)

This device complies with part 15 of the FCC Rules and CAN ICES-3 (B)/NMB-3(B). Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference, and
- 2. This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules and CAN ICES-3 (B)/NMB-3(B). These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. This equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna. Increase the separation between the equipment and receiver. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. Consult the manufacturer.

