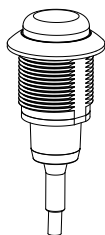


Datasheet

One-Color DC-Operated LED Indicator



- M12 Euro connector models available for plug and play indication
- Wide 9 V dc to 30 V dc operating range allows for use in battery powered mobile applications
- IP69K rated to withstand harsh wash-down environments
- Wide operating range of -40 °C to +60 °C (-40 °F to +140 °F)
- May also be used in task lighting or vision lighting applications
- Intense light level is viewable in direct sunlight

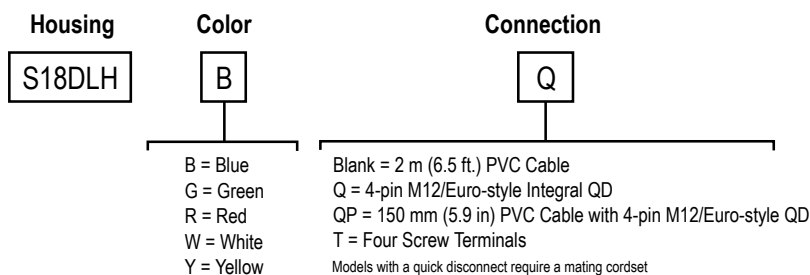


WARNING: Not To Be Used for Personnel **Protection**

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.

Models

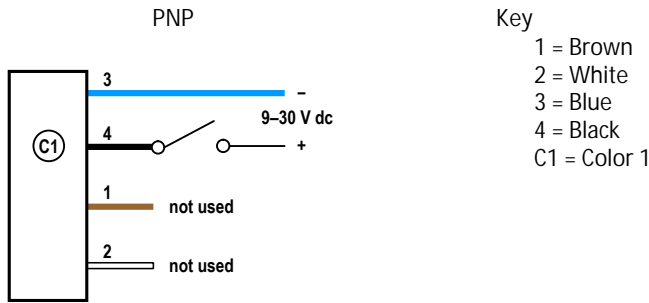
S18DLH Models



Example Models	Indicator Color	Connector
S18DLHG	Green	2 m (6.5 ft) PVC cable
S18DLHWQ	White	4-pin M12/Euro-style integral quick disconnect
S18DLHRQP	Red	150 mm (6 in) PVC cable with a 4-pin M/12Euro-style quick disconnect
S18DLHYT	Yellow	Four screw terminals



Wiring Diagram



Specifications

Supply and Voltage Current

9 V dc to 30 V dc
60 mA at 9 V dc; 25 mA at 30 V dc

Indicator Response Time

Indicator ON/OFF: 1 ms max

Indicator Characteristics

Color	Dominant Wavelength (nm) or Color Temperature (CCT)	Lumen Output (Typical at 25 °C)
Green	530 nm	20
Red	625 nm	12.5
Yellow	596 nm	7.5
Blue	478 nm	6.5
White	7500 K	20

Connections

4-pin M12/Euro-style integral QD, 150 mm (5.9 in) PVC cable with QD, or 4-wire, 2 m (6.5 ft) PVC integral cable, 4 color-coded screw terminals for up to 16 AWG wire, depending on model, screw terminal max. torque 0.11 N-m (1.0 lbf-in)

Operating Conditions

-40 °C to +60 °C (-40 °F to +140 °F)

Environmental Rating

Rated IEC IP67, and IP69K, per DIN 40050-9. Cabled models also meet IP69K if the cable and cable entrance are protected from high-pressure spray. Indicator side of terminal models meet IP67, and IP69K when installed in an enclosure. Screw connection points meet IP00
Meets UL type 4X and 13, when used in a suitable enclosure

Construction

UV stabilized polycarbonate housing
PBT mounting nut max torque 2.3 N-m (20 lbf-in)
Nitrile sealing washer

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.

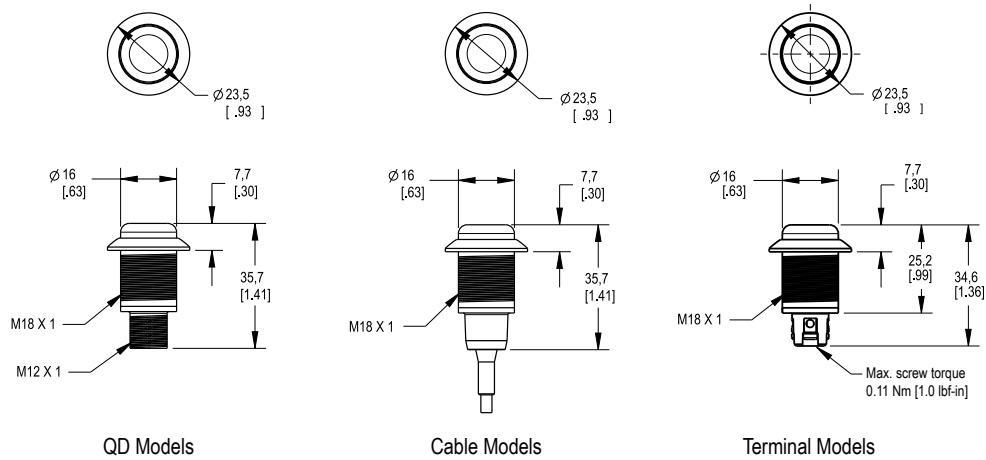
For additional product support, go to www.bannerengineering.com.

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

Certifications



Dimensions



Accessories

Cordsets

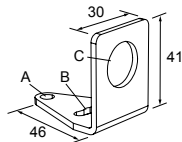
4-Pin Threaded M12/Euro-Style Cordsets				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC-406	1.83 m (6 ft)	Straight		<p>1 = Brown 2 = White 3 = Blue 4 = Black</p>
MQDC-415	4.57 m (15 ft)			
MQDC-430	9.14 m (30 ft)			
MQDC-450	15.2 m (50 ft)			
MQDC-406RA	1.83 m (6 ft)	Right-Angle		
MQDC-415RA	4.57 m (15 ft)			
MQDC-430RA	9.14 m (30 ft)			
MQDC-450RA	15.2 m (50 ft)			

Mounting Brackets

All measurements are listed in millimeters, unless noted otherwise.

SMB18A

- Right-angle mounting bracket with a curved slot for versatile orientation
- 12-ga. stainless steel
- 18 mm sensor mounting hole
- Clearance for M4 (#8) hardware

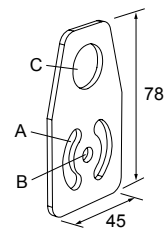


Hole center spacing: A to B = 24.2

Hole size: A = \varnothing 4.6, B = 17.0 x 4.6, C = \varnothing 18.5

SMBAMS18P

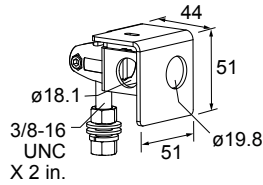
- Flat SMBAMS series bracket with 18 mm hole
- Articulation slots for 90+° rotation
- 12-ga. (2.6 mm) cold-rolled steel



Hole center spacing: A = 26.0, A to B = 13.0
Hole size: A = 26.8 x 7.0, B = \varnothing 6.5, C = \varnothing 19.0

SMB18AFA..

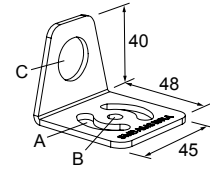
- Protective, swivel bracket with tilt and pan movement for precision adjustment
- Easy sensor mounting to extruded rail T-slots
- Metric and inch size bolts available
- Mounting hole for 18 mm sensors

Hole size: B = \varnothing 18.1

Model	Bolt Thread (A)
SMB18AFA	3/8 - 16 x 2 in
SMB18AFAM10	M10 - 1.5 x 50

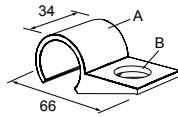
SMBAMS18RA

- Right-angle SMBAMS series bracket with 18 mm hole
- 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 = \varnothing 6.5, C = \varnothing 19.0

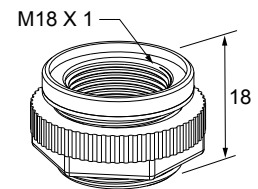
SMBC18

- 18 mm sensor mounting hole
- Snaps onto 28 mm diameter structural framing

A = \varnothing 26.9 mmHole size: B = \varnothing 18.4

LMB1822FM

- Adaptor for mounting the S18L into standard 22 mm holes
- Includes adaptor, nut, and gasket



Banner Engineering Corp. Limited Warranty

Banner Engineering Corp. warrants its products to be free from defects in material and workmanship for one year following the date of shipment. Banner Engineering Corp. will repair or replace, free of charge, any product of its manufacture which, at the time it is returned to the factory, is found to have been defective during the warranty period. This warranty does not cover damage or liability for misuse, abuse, or the improper application or installation of the Banner product.

THIS LIMITED WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES WHETHER EXPRESS OR IMPLIED (INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE), AND WHETHER ARISING UNDER COURSE OF PERFORMANCE, COURSE OF DEALING OR TRADE USAGE.

This Warranty is exclusive and limited to repair or, at the discretion of Banner Engineering Corp., replacement. IN NO EVENT SHALL BANNER ENGINEERING CORP. BE LIABLE TO BUYER OR ANY OTHER PERSON OR ENTITY FOR ANY EXTRA COSTS, EXPENSES, LOSSES, LOSS OF PROFITS, OR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES RESULTING FROM ANY PRODUCT DEFECT OR FROM THE USE OR INABILITY TO USE THE PRODUCT, WHETHER ARISING IN CONTRACT OR WARRANTY, STATUTE, TORT, STRICT LIABILITY, NEGLIGENCE, OR OTHERWISE.

Banner Engineering Corp. reserves the right to change, modify or improve the design of the product without assuming any obligations or liabilities relating to any product previously manufactured by Banner Engineering Corp. Any misuse, abuse, or improper application or installation of this product or use of the product for personal protection applications when the product is identified as not intended for such purposes will void the product warranty. Any modifications to this product without prior express approval by Banner Engineering Corp will void the product warranties. All specifications published in this document are subject to change; Banner reserves the right to modify product specifications or update documentation at any time. Specifications and product information in English supersede that which is provided in any other language. For the most recent version of any documentation, refer to: www.bannerengineering.com.