



Features

One-Color DC-Operated LED Indicator



- M12 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:



- 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

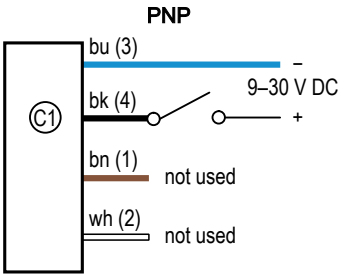
Model Key

Housing	Color	Connection ⁽¹⁾
S18DLH	B	Q
	B = Blue G = Green R = Red W = White Y = Yellow	Blank = 2 m (6.5 ft) integral PVC-jacketed cable Q = Integral 4-pin M12 male quick-disconnect connector QP = 150 mm (6 in) PVC-jacketed cable with a 4-pin M12 male quick-disconnect connector T = 4 screw terminals

Example Models

Example Models	Indicator Color	Connector
S18DLHG	Green	2 m (6.5 ft) integral PVC-jacketed cable
S18DLHWQ	White	Integral 4-pin M12 male quick-disconnect connector
S18DLHRQP	Red	150 mm (6 in) PVC-jacketed cable with a 4-pin M12 male quick-disconnect connector
S18DLHYT	Yellow	4 screw terminals

Wiring



- Key
- 1 = Brown
 - 2 = White
 - 3 = Blue
 - 4 = Black
 - C1 = Color 1

⁽¹⁾ Models with a quick-disconnect connector require a mating cordset.



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	5000 K	20

Connections

Integral 4-pin M12 male quick-disconnect connector, 150 mm (6 in) PVC-jacketed cable with a 4-pin M12 male quick-disconnect connector, or 4-wire, 2 m (6.5 ft) integral PVC-jacketed 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 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 (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

Certifications

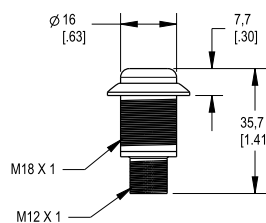
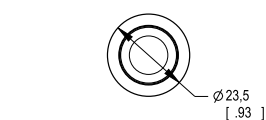


Banner Engineering BV
Park Lane, Culliganlaan 2F bus 3
1831 Diegem, BELGIUM

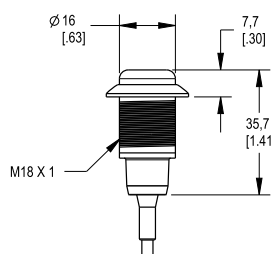
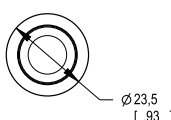


Dimensions

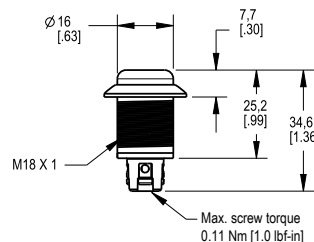
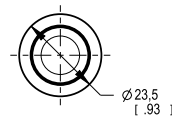
All measurements are listed in millimeters [inches], unless noted otherwise. The measurements provided are subject to change.



QD Models



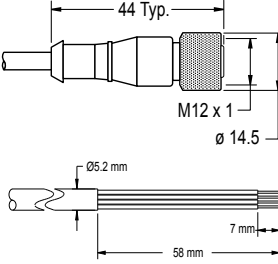
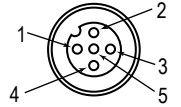
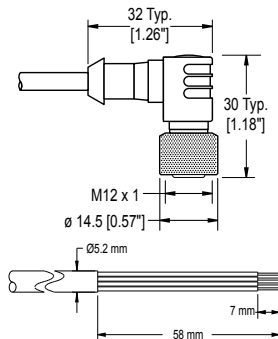
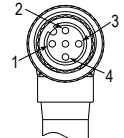
Cable Models



Terminal Models

Accessories

Cordsets

4-Pin Single-Ended M12 Female Cordsets				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC-406	2 m (6.56 ft)	Straight		
MQDC-415	5 m (16.4 ft)			
MQDC-430	9 m (29.5 ft)			
MQDC-450	15 m (49.2 ft)	Right-Angle		
MQDC-406RA	2 m (6.56 ft)			
MQDC-415RA	5 m (16.4 ft)			
MQDC-430RA	9 m (29.5 ft)			
MQDC-450RA	15 m (49.2 ft)			

1 = Brown
2 = White
3 = Blue
4 = Black
5 = Not used



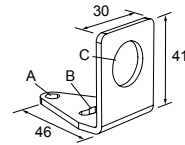
Brackets

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

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

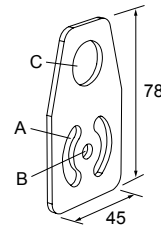
Hole center spacing: A to B = 24.2
Hole size: A = \varnothing 4.6, B = 17.0 \times 4.6, C = \varnothing 18.5



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 \times 7.0, B = \varnothing 6.5, C = \varnothing 19.0



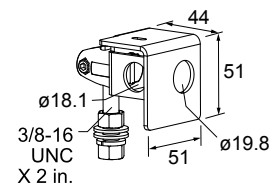
SMB18AFA..

- 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

Bolt Thread (A):

SMB18AFA = 3/8 - 16 \times 2 in
SMB18AFAM10 = M10 - 1.5 \times 50

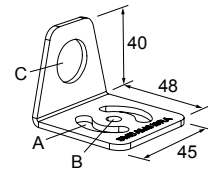


SMBAMS18RA

- 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

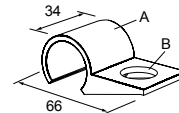
Hole size: A = 26.8 × 7.0, B = ø 6.5, C = ø 19.0

**SMBC18**

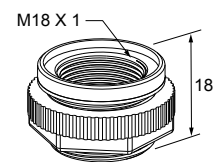
- 18 mm sensor mounting hole
- Snaps onto 28 mm diameter structural framing

A = ø 26.9 mm

Hole size: B = ø 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.

For patent information, see www.bannerengineering.com/patents.