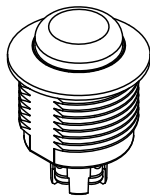


Datasheet

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

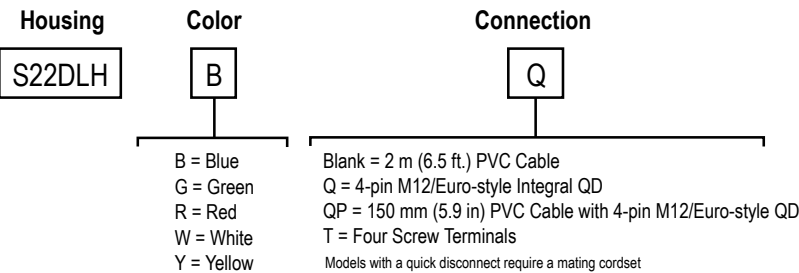


**WARNING: Not To Be Used for Personnel Protection**

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

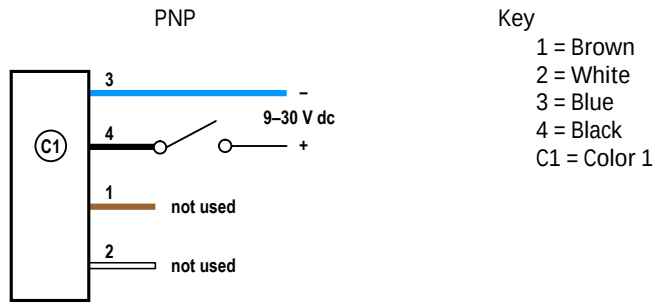
**S22DLH Models**



| Example Models | Color  | Connector Type                                                       |
|----------------|--------|----------------------------------------------------------------------|
| S22DLHG        | Green  | 2 m (6.5 ft) PVC cable                                               |
| S22DLHWQ       | White  | 4-pin M12/Euro-style integral quick disconnect                       |
| S22DLHRQP      | Red    | 150 mm (6 in) PVC cable with a 4-pin M12/Euro-style quick disconnect |
| S22DLHYT       | 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.

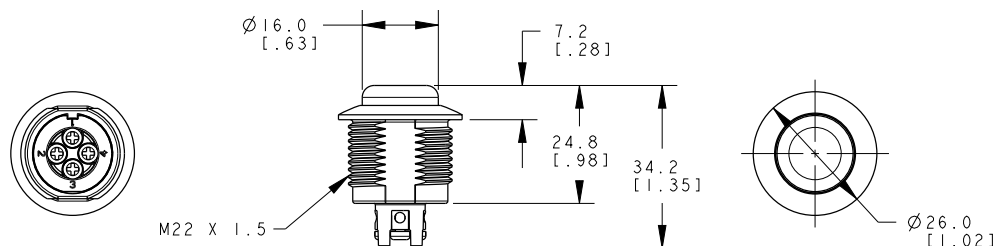
For additional product support, go to [www.bannerengineering.com](http://www.bannerengineering.com).

| 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

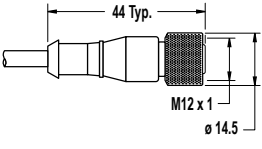
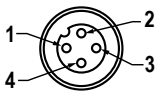
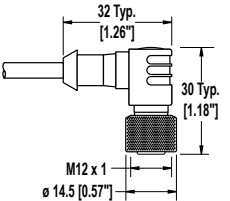


## Dimensions



## Accessories

### Cordsets

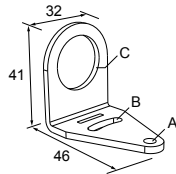
| 4-Pin Threaded M12/Euro-Style Cordsets |                |             |                                                                                    |                                                                                                                                               |
|----------------------------------------|----------------|-------------|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Model                                  | Length         | Style       | Dimensions                                                                         | Pinout (Female)                                                                                                                               |
| MQDC-406                               | 1.83 m (6 ft)  | Straight    |  |  <p>1 = Brown<br/>2 = White<br/>3 = Blue<br/>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) |             |                                                                                    |                                                                                                                                               |

### Brackets

All measurements are listed in millimeters, unless noted otherwise.

#### SMB22A

- Right-angle bracket with curved slot for versatile orientation
- 12-ga. stainless steel
- Mounting hole for 22 mm sensor

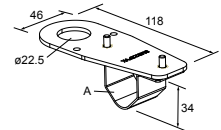


Hole center spacing: A to B = 26.0

Hole size: A =  $\varnothing$  4.6, B = 4.6 x 16.9, C = 22.2

#### SMB22FVK

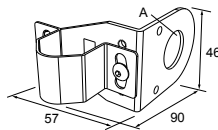
- V-clamp, flat bracket and fasteners for mounting to pipe or extensions
- Clamp accommodates 28 mm diameter tubing or 1 in. square extrusions
- 22 mm hole for mounting sensor



Hole size: A =  $\varnothing$  22.5

#### SMB22RAVK

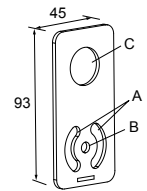
- V-clamp, right-angle bracket and fasteners for mounting to pipe or extensions
- Clamp accommodates 28 mm diameter tubing or 1 in. square extrusions
- 22 mm hole for mounting sensor



Hole size: A =  $\varnothing$  22.5

#### SMBAMS22P

- Flat SMBAMS series bracket with 22 mm hole for mounting sensors
- Articulation slots for 90+° rotation
- 12-ga. (2.6 mm) cold-rolled steel

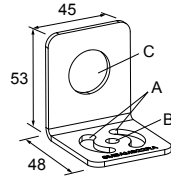


Hole center spacing: A = 26.0, A to B = 13.0

Hole size: A = 26.8 x 7.0, B =  $\varnothing$  6.5, C =  $\varnothing$  22.5

**SMBAMS22RA**

- Right-angle SMBAMS series bracket with 22 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 =  $\varnothing$  6.5, C =  $\varnothing$  22.5

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