# EZ-LIGHT® S22L General Purpose Indicators

## Features

*DC-Operated LED Indicators with One, Two, or Three Colors*



- Up to three independent colors in one unit
- Translucent face appears gray when off to avoid false indication
- M12 connector models available for plug and play indication
- Wide 180° field of view
- Wide 10 V DC to 30 V DC operating range allows for use in battery-powered mobile applications
- Available with PNP or NPN input, depending on model
- IP69K rated to withstand harsh wash-down environments
- Wide operating range of –40 °C to +50 °C (–40 °F to +122 °F)
- Daylight visible models with a clear cover and more focused light output provideg reater visibility in high ambient light conditions

## Models

*Standard Models*

| Family | Color 1 | Color 2 | Color 3 | Input | Connector |
|---|---|---|---|---|---|
| **S22L** | **G** | **R** | **Y** | **P** | **Q** |
| MODEL KEY | G = Green<br>R = Red<br>Y = Yellow<br>B = Blue<br>W = White<br>O = Orange<br>T =Turquoise<br>V = Violet<br>M = Magenta<br>X = No color in this position | | | P = PNP<br>N = NPN | Blank = 2 m (6.5 ft) integral PVC-jacketed cable<br>Q = Integral 4-pin M12 male quick-disconnect connector<br>QP = 150 mm (6 in) PVC-jacketed cable with a 4-pin M12 male quick-disconnect connector<br>T = 4-screw terminals |

*Daylight Visible Models*

| Family | Color 1 | Color 2 | Color 3 | Input | Connector |
|---|---|---|---|---|---|
| **S22DL** | **G** | **R** | **Y** | **P** | **Q** |
| MODEL KEY | G = Green<br>R = Red<br>Y = Yellow<br>B = Blue<br>W = White<br>O = Orange<br>X = No color in this position | | | P = PNP<br>N = NPN | Blank = 2 m (6.5 ft) integral PVC-jacketed cable<br>Q = Integral 4-pin M12 male quick-disconnect connector<br>QP = 150 mm (6 in) PVC-jacketed cable with a 4-pin M12 male quick-disconnect connector<br>T = 4-screw terminals |

| Example Model | Indicators | Input | Connector Type |
|---|---|---|---|
| S22LGRYP | Green, Red, Yellow | PNP | 2 m (6.5 ft) integral PVC-jacketed cable |
| S22LGXXPQ | Green | PNP/NPN | Integral 4-pin M12 male quick-disconnect connector |
| S22LGRXPQP | Green, Red | PNP | 150 mm (6 in) PVC-jacketed cable with a 4-pin M12 male quick-disconnect connector |
| S22LGRYPT | Green, Red, Yellow | PNP | 4 screw terminals |

**NOTE:** Single color models should be ordered as PNP models, but can be wired for either PNP or NPN input.

Original Instructions
25-Aug-25

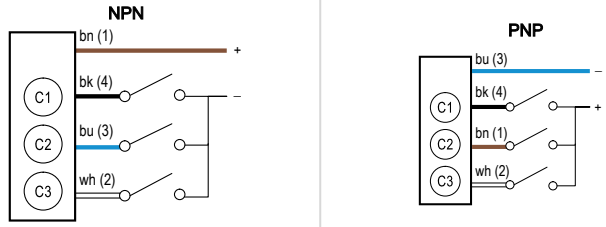
© Banner Engineering Corp. All rights reserved.
www.bannerengineering.com

171439
p/n: 171439 Rev. D

ПРОМЭЛЕКТРОНИКА/ sales@prom-elec.com

# Wiring

**Multi Color Wiring**

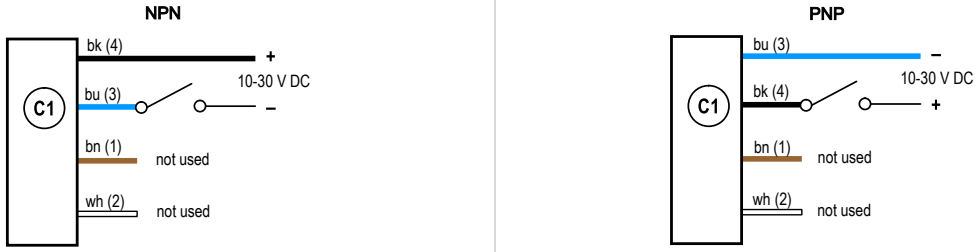



1 = Brown
2 = White
3 = Blue
4 = Black
5 = Gray

C1 = Color 1
C2 = Color 2
C3 = Color 3

Gray Wire not used in K30 Terminal models

**Single Color Wiring**




# Specifications

**Supply Voltage and Current**

10 V DC to 30 V DC at 25 mA max. per LED color

**Indicators**

LEDs are independently selected; 1, 2, or 3 colors, depending on model. For other colors/ combinations, contact Factory for availability

**Standard Models:** Entire translucent dome provides even indication viewable from over 180 degrees

**Daylight Visible Models:** Clear dome and more focused light provides even brighter indication when used in high ambient light areas

**Indicator Response Time**

Indicator ON/OFF: 1 ms max

**Indicator Characteristics**

| Color | Dominant Wavelength (nm) or Color Temperature (CCT) | Color Coordinates[1] | | Lumen Output (Typical at 25 °C) | |
|---|---|---|---|---|---|
| | | X | Y | | |
| | S22L & S22DL | S22L Only | | S22L | S22DL |
| Green | 520-535 nm | – | – | 4.1 | 2.3 |
| Red | 620-630 nm | – | – | 1.1 | 1.4 |
| Yellow | 585-595 nm | – | – | 0.8 | 1.2 |
| Blue | 465-475 nm | – | – | 0.6 | 0.6 |
| Orange | 600-615 nm | – | – | 4 | 4 |
| White | 5665-9000 K | – | – | 0.8 | 0.9 |
| Turquoise | – | 0.19 | 0.34 | 2.4 | NA[2] |
| Violet | – | 0.21 | 0.11 | 0.5 | NA[2] |
| Magenta | – | 0.35 | 0.15 | 0.5 | NA[2] |

[1] Refer to CIE 1931 chromaticity diagram or color chart, to show equivalent color with indicated color coordinates.
[2] Colors not available in this model.

**Environmental Rating**

Rated IP67, and IP69K per ISO 20653. Cabled models meet DIN IP69K if the cable is protected from high-pressure spray . Indicator side of terminal models meet IP67, and IP69K per ISO 20653 when installed in an enclosure. Screw connection points meet IP00.

Meets UL Type 4X and UL Type 13 when mounted in a UL Type 4X or Type 13 enclosure.

**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 |

**Construction**

UV-stabilized polycarbonate housing

PBT mounting nut max torque 2.3 N·m (20 lbf·in)

Nitrile sealing washer

**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) 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)

Limited to one color on at a time

**Certifications**

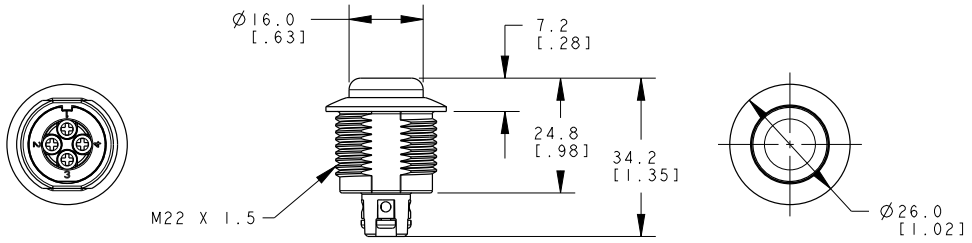
Banner Engineering BV
Park Lane, Culliganlaan 2F bus 3
1831 Diegem, BELGIUM

Turck Banner LTD Blenheim House
Blenheim Court
Wickford, Essex SS11 8YT
GREAT BRITAIN


© Banner Engineering Corp. All rights reserved.
www.bannerengineering.com

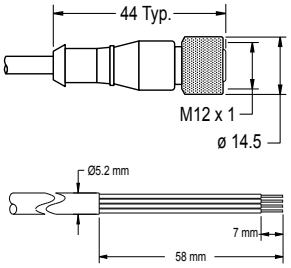
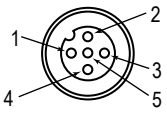
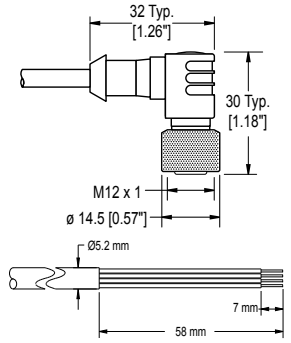
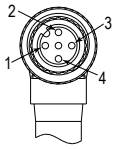
## Dimensions

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




# 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<br>2 = White<br>3 = Blue<br>4 = Black<br>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) | | | | |

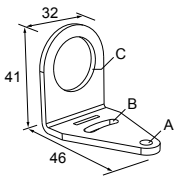
## Brackets

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

**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 = ø 4.6, B = 4.6 x 16.9, C = 22.2



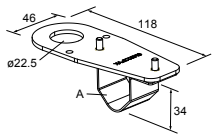


© Banner Engineering Corp. All rights reserved.
www.bannerengineering.com

**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

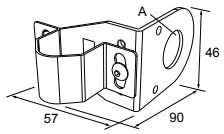
**Hole size:** A = ø 22.5




**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

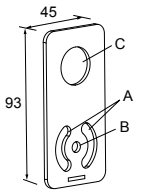
**Hole size:** A = ø 22.5




**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

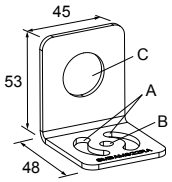
**Hole center spacing:** A = 26.0, A to B = 13.0
**Hole size:** A = 26.8 x 7.0, B = ø 6.5, C = ø 22.5




**SMBAMS22RA**

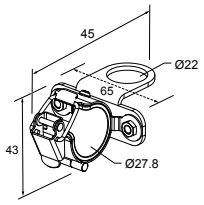
- Right-angle SMBAMS series bracket with 22 mm hole for mounting sensors
- Articulation slots for 90+° rotation
- 12-ga. (2.6 mm) cold-rolled steel

**Hole center spacing:** A = 26.0, A to B = 13.0
**Hole size:** A = 26.8 x 7.0, B = ø 6.5, C = ø 22.5




**LMB22LPC**

- For 28 mm tubular racking
- Toolless mount to racking
- 22 mm mounting hole




# 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.


© Banner Engineering Corp. All rights reserved.
www.bannerengineering.com