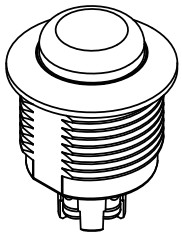
EZ-LIGHT® S22L
General Purpose Indicators

Datasheet

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 Euro connector models available for plug and play indication
- Wide 180º field of view
- Wide 10 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 provide greater visibility in high ambient light conditions

Models

Table 1: Standard Models

Family	Color 1	Color 2	Color 3	Input	Connector
S22L	G	R	Y	P	Q
MODEL KEY	G = Green R = Red Y = Yellow B = Blue W = White O = Orange T = Turquoise V = Violet M = Magenta X = No color in this position			P = PNP N = NPN	Q = 4 pin Euro QD Blank = 2 meter cable QP = Euro Pigtail QD T = 4 screw terminals

Table 2: Daylight Visible Models

Family	Color 1	Color 2	Color 3	Input	Connector
S22DL	G	R	Y	P	Q
MODEL KEY	G = Green R = Red Y = Yellow B = Blue W = White O = Orange X = No color in this position			P = PNP N = NPN	Q = 4 pin Euro QD Blank = 2 meter cable QP = Euro Pigtail QD T = 4 screw terminals

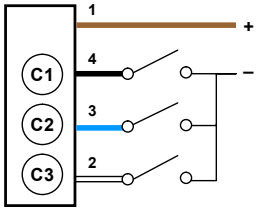
Example Model	Indicators	Input	Connector Type
S22LGRYP	Green, Red, Yellow	PNP	2 m cable
S22LGXXPQ	Green	PNP/NPN	4-pin Euro QD
S22LGRXPQP	Green, Red	PNP	Euro Pigtail QD
S22LGRYPT	Green, Red, Yellow	PNP	4 screw terminals

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

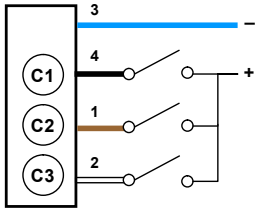
Wiring Diagrams

Multi Color Wiring

NPN



PNP

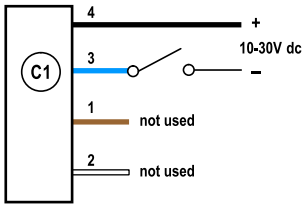


1 = Brown
2 = White
3 = Blue
4 = Black

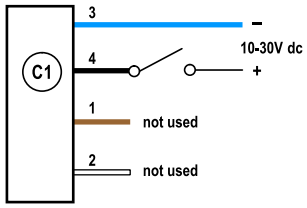
C1 = Color 1
C2 = Color 2
C3 = Color 3

Single Color Wiring

NPN



PNP



Specifications

Supply and Voltage Current
10 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

Input Response Time
Indicator ON/OFF: 1 ms max

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

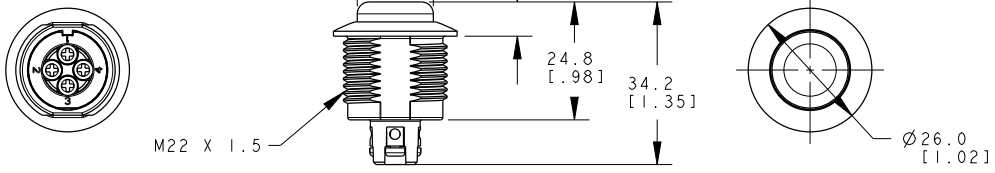
Connections
4-pin Euro-style integral QD (Q), 150 mm (5.9 in) PVC pigtail QD (QP), or 4-wire, 2 m (6.5 ft) PVC integral cable, 4 color-coded screw terminals for up to 16 AWG wire, depending on model, screw terminal max. torque 0.11 N·m (1.0 lbf·in)

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 with a suitable enclosure

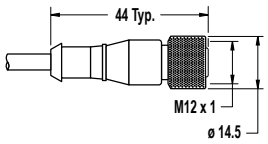
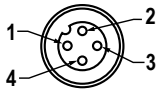
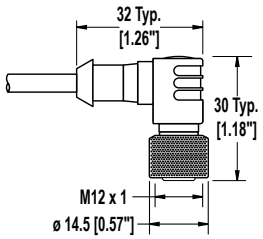
Operating Conditions
−40 °C to 50 °C (−40 °F to 122 °F)
Limited to one color on at a time

Certifications

Dimensions



Cordsets

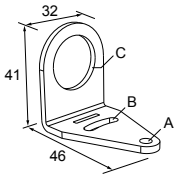
4-Pin Threaded M12/Euro-Style Cordsets				
Model	Length	Style	Dimensions	Pinout
MQDC-406	1.83 m (6 ft)	Straight		
MQDC-415	4.57 m (15 ft)			
MQDC-430	9.14 m (30 ft)			
MQDC-450	15.2 m (50 ft)			
MQDC-406RA	1.83 m (6 ft)	Right-Angle		1 = Brown 2 = White 3 = Blue 4 = Black
MQDC-415RA	4.57 m (15 ft)			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

Brackets

All measurements are listed in millimeters.

SMB22A

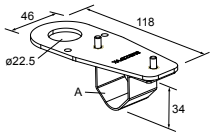
- Right-angle bracket with curved slot for versatile orientation
- 12-ga. stainless steel
- Mounting hole for 22 mm sensor



Hole center spacing: A to B = 26.0
Hole size: A = ø 4.6, B = 4.6 x 16.9, C = 22.2

SMB22FVK

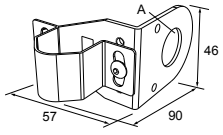
- V-clamp, flat bracket and fasteners for mounting to pipe or extensions
- Clamp accommodates 28 mm diameter tubing or 1 in. square extrusions
- 22 mm hole for mounting sensor



Hole size: A = ø 22.5

SMB22RAVK

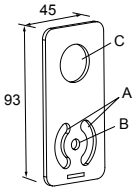
- V-clamp, right-angle bracket and fasteners for mounting to pipe or extensions
- Clamp accommodates 28 mm diameter tubing or 1 in. square extrusions
- 22 mm hole for mounting sensor



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

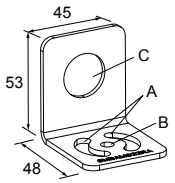


Hole center spacing: A = 26.0, A to B = 13.0

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

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.