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EZ-LIGHT® S18L 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 +60 °C (–40 °F to +140 °F)
- Daylight visible models with a clear cover and more focused light output provide greater visibility in high ambient light conditions

Models

Standard Models

Family	Color 1	Color 2	Color 3	Input	Connector
S18L	**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	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

Daylight Visible Models

Family	Color 1	Color 2	Color 3	Input	Connector
S18DL	**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	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 Model	Indicators	Input	Connector Type
S18LGRYP	Green, Red, Yellow	PNP	Blank = 2 m (6.5 ft) integral PVC-jacketed cable
S18LGXXPQ	Green	PNP/NPN	Integral 4-pin M12 male quick-disconnect connector
S18LGRXPQP	Green, Red	PNP	150 mm (6 in) PVC-jacketed cable with a 4-pin M12 male quick-disconnect connector
S18LGRYPT	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.

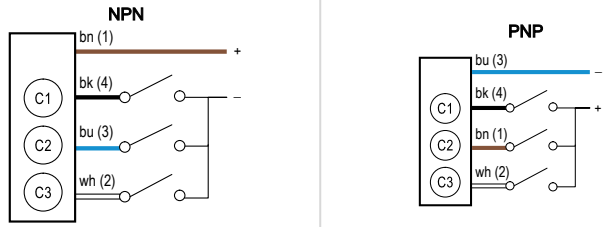
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p/n: 160690 Rev. I

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Wiring

Multi Color Wiring

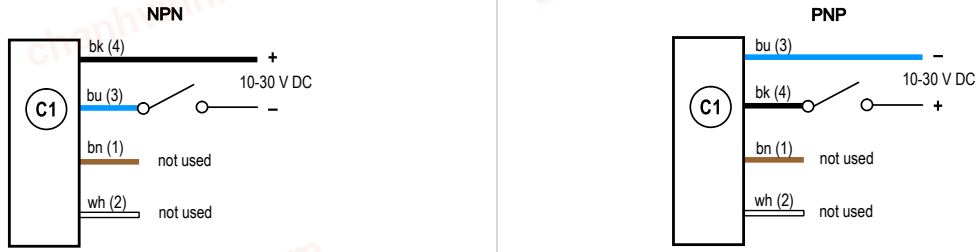


1 = Brown
2 = White
3 = Blue
4 = Black
5 = Gray

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		
	S18L & S18DL	S18L Only		S18L	S18DL
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

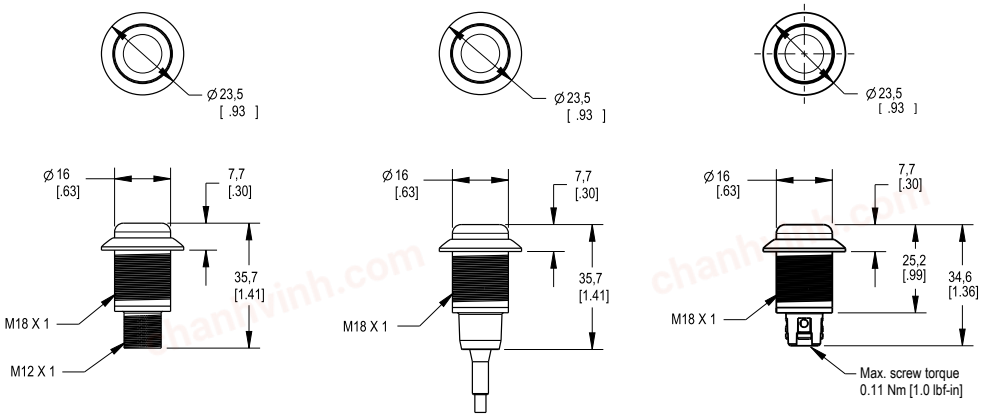
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Dimensions

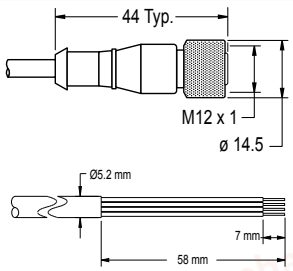
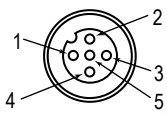
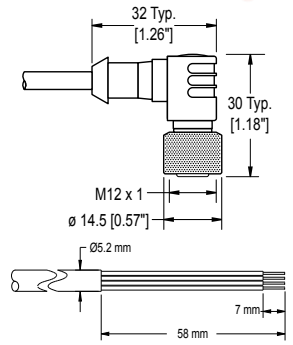
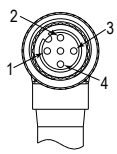
All measurements are listed in millimeters [inches], unless noted otherwise. The measurements provided are subject to change.



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

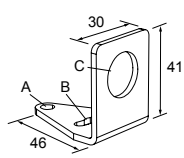
Brackets

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

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 = ø 4.6, B = 17.0 × 4.6, C = ø 18.5



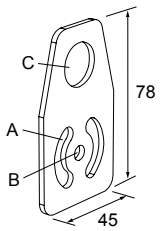
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SMBAMS18P

- 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 × 7.0, B = ø 6.5, C = ø 19.0

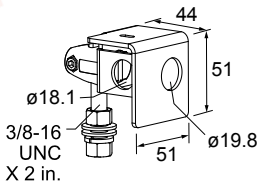


SMB18AFA..

- 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 = ø 18.1

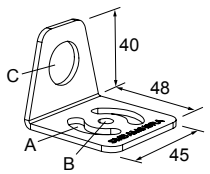
Bolt Thread (A):
SMB18AFA = 3/8 - 16 × 2 in
SMB18AFAM10 = M10 - 1.5 × 50



SMBAMS18RA

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

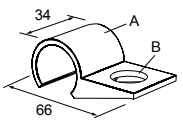
Hole center spacing: A = 26.0, A to B = 13.0
Hole size: A = 26.8 × 7.0, B = ø 6.5, C = ø 19.0



SMBC18

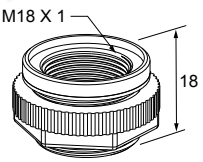
- 18 mm sensor mounting hole
- Snaps onto 28 mm diameter structural framing

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



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