

S15L In-Line Sensor Status Indicator



Datasheet



- Bright indication of sensor power and output status
- Two colors - one for power and one for sensor output status
- Rugged over-molded design meets IP66, IP67, and IP68
- Connected directly to a sensor or anywhere in-line for easy visual indication
- Models available with PNP or NPN inputs

Models

Table 1: 4-Pin M12 Models

Models	Power ON (Color 1)	Input Active (Color 2)	Input Type	Connection
S15LGYQPQ	Green	Yellow	PNP	4-Pin Male/Female M12 quick disconnect
S15LGYNPQ			NPN	
S15LGRPQ		Red	PNP	
S15LGRNPQ			NPN	
S15LRGPQ	Red	Green	PNP	
S15LYGPQ	Yellow			

Table 2: 3-Pin M8 Models

Models	Power ON (Color 1)	Input Active (Color 2)	Input Type	Connection
S15LGYPM8Q3	Green	Yellow	PNP	3-Pin Male/Female M8 quick disconnect
S15LGYNM8Q3			NPN	
S15LGRPM8Q3		Red	PNP	
S15LGRNM8Q3			NPN	
S15LRGPM8Q3	Red	Green	PNP	
S15LYGPM8Q3	Yellow			

Wiring

Table 3: Wiring Diagram - 4-Pin M12 Models

Male	Female	Pin	Wire Color	Description ¹
		1	Brown	10 V DC to 30 V DC: Power LED will be ON (Color 1)
		2	White	Not used; Passes through
		3	Blue	DC Common
		4	Black	Input from sensor: Color 2 overrides Color 1 when active

Table 4: Wiring Diagram - 3-Pin M8 Models

Male	Female	Pin	Wire Color	Description
		1	Brown	10 V DC to 30 V DC: Power LED will be ON (Color 1)
		3	Blue	DC Common
		4	Black	Input from Sensor: Color 2 overrides Color 1 when active

¹ Continuity between male and female connection for all four wires, including IO-link communications.



Specifications

Supply Voltage

10 V DC to 30 V DC at 15 mA maximum

Supply Protection Circuitry

Protected against reverse polarity and transient voltages

Leakage Current Immunity

400 μ A

Indicators

2 colors
Color 2 overrides Color 1

Connections

Integral male/female 4-pin M12 quick disconnect
Integral male/female 3-Pin M8 quick disconnect

Construction

Coupling Material: Nickel-plated brass
Connector Body: PVC translucent white

Certifications



(4-pin M12 Models Only)



(4-pin M12 Models Only)



Banner Engineering Europe

Park Lane,
Culliganlaan 2F bus 3,
1831 Diegem, BELGIUM

Turck Banner LTD

Blenheim House, Blenheim
Court, Wickford, Essex
SS11 8YT, Great Britain

40 °C (104 °F) maximum
operating temperature for
applications requiring UL

Safety (4-Pin M12 Models Only):

The S15L Indicator design and PCB composition were evaluated and approved for use with the Banner 4-pin or 5-pin M12 safety products.

Environmental Rating

4-Pin M12 Models: IP66, IP67, IP68, UL Type 1
3-Pin M8 Models: IP67

Operating Conditions

Temperature: -40 °C to +50 °C (-40 °F to +122 °F)
90% at +50 °C maximum relative humidity (non-condensing)
Storage Temperature: -40 °C to +70 °C (-40 °F to +158 °F)

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 (Amps)
20	5.0
22	3.0
24	2.0
26	1.0
28	0.8
30	0.5

Dimensions

All measurements are listed in millimeters [inches], unless noted otherwise.

Figure 1. 4-pin M12 Model

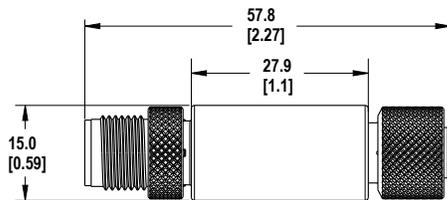
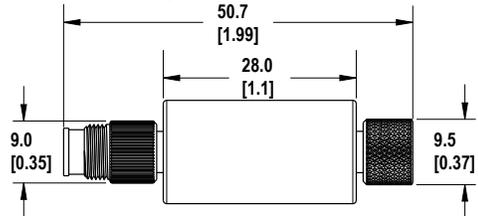


Figure 2. 3-Pin M8 Model



Accessories

Cordsets

4-Pin Threaded M12 Cordsets—Single Ended				
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 = Unused

4-Pin Threaded M12 Cordsets—Double Ended					
Model	Length	Style	Dimensions	Pinout	
MQDEC-401SS	0.31 m (1 ft)	Male Straight/Female Straight		Female	
MQDEC-403SS	0.91 m (2.99 ft)				
MQDEC-406SS	1.83 m (6 ft)			Male	
MQDEC-412SS	3.66 m (12 ft)				
MQDEC-420SS	6.10 m (20 ft)				
MQDEC-430SS	9.14 m (30.2 ft)				
MQDEC-450SS	15.2 m (49.9 ft)			1 = Brown 2 = White 3 = Blue 4 = Black	

3-pin Threaded M8 Cordsets—Double Ended					
Model	Length	Style	Dimensions	Pinout	
PKG3M-35-PSG3M	0.35 m (1.15 ft)	Female Straight/Male Straight		Female	
PKG3M-1.0-PSG3M	1 m (3.28 ft)				
PKG3M-2-PSG3M	2 m (6.56 ft)			Male	
PKG3M-4-PSG3M	4 m (13.12 ft)				
PKG3M-9.0-PSG3M	9 m (29.53 ft)				

Connection Conversion Cordsets

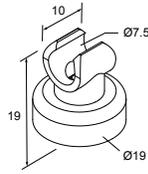
3-pin Threaded M8 to 4-pin Threaded M12 Cordsets—Double Ended						
Model	Length	Style	Dimensions	Pinout (Female)	Pinout (Male)	
PKG3M-5-MQDCM410	0.15 m (0.49 ft)	Female Straight/ Male Straight		<p>1 = Brown 3 = Blue 4 = Black</p>	<p>1 = Brown 2 = No connection 3 = Blue 4 = Black</p>	

4-pin Threaded M12 to 3-pin Threaded M8 Cordsets—Double Ended						
Model	Length	Style	Dimensions	Pinout (Female)	Pinout (Male)	
BC-M12F4-M8M3-24-0.16M	0.16 m (0.52 ft)	Male Straight/ Female Straight		<p>1 = Brown 2 = No connection 3 = Blue 4 = Black</p>	<p>1 = Brown 3 = Blue 4 = Black</p>	

Brackets

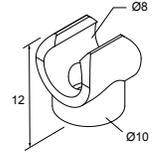
LMBM12MAG

- Attaches to M12 cordset end
- Black polypropylene
- 11.8 kg (26 lb) pull force
- One piece



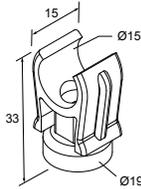
LMBM12SP

- Attaches to M12 cordset end
- Black polypropylene
- Supplied with thread forming hardware
- Pack of seven



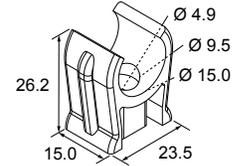
LMBS15MAG

- Attaches to S15 housing
- White polypropylene
- 11.8 kg (26 lb) pull force
- One piece



LMBS15SP

- Attaches to S15 housing
- White polypropylene
- Clearance for M5 or #10 hardware
- Pack of five



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.