

## S15L Features

- Bright indication of sensor power and output status
- Two colors - one for power and one for sensor output status
- Rugged overmolded design meets IP65, IP67, and IP68
- Connected directly to a sensor or anywhere in-line for easy visual indication
- Models available with PNP or NPN inputs



## S15L Models

### 4-Pin M12 Models

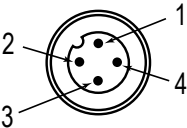
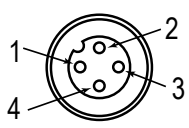
| Models   | Power ON<br>(Color 1) | Input Active<br>(Color 2) | Input Type | Connection                             |
|----------|-----------------------|---------------------------|------------|----------------------------------------|
| S15LGYPQ | Green                 | Yellow                    | PNP        | 4-Pin Male/Female M12 quick disconnect |
| S15LGYNQ |                       |                           | NPN        |                                        |
| S15LGRPQ |                       | Red                       | PNP        |                                        |
| S15LGRNQ |                       |                           | NPN        |                                        |
| S15LRGPQ | Red                   | Green                     | PNP        |                                        |
| S15LYGPQ | Yellow                |                           |            |                                        |

### 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        |                                       |

## S15L Wiring

### Wiring Diagram - 4-Pin M12 Models

| Male                                                                                | Female                                                                              | Pin | Wire Color | Description <sup>(1)</sup>                               |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----|------------|----------------------------------------------------------|
|  |  | 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 |

### 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 |

## S15L 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  $\mu$ 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

<sup>(1)</sup> Continuity between male and female connection for all four wires, including IO-link communications.

Construction

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

Environmental Rating

4-Pin M12 Models: IP65, IP67, IP68, UL Type 1  
3-Pin M8 Models: IP67

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 (A) | Supply Wiring (AWG) | Required Overcurrent Protection (A) |
|---------------------|-------------------------------------|---------------------|-------------------------------------|
| 20                  | 5.0                                 | 26                  | 1.0                                 |
| 22                  | 3.0                                 | 28                  | 0.8                                 |

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Operating Conditions

4-Pin M12 Models: -40 °C to +40 °C (-40 °F to +104 °F)  
3-Pin M8 Models: -40 °C to +70 °C (-40 °F to +158 °F)  
90% at +50 °C maximum relative humidity (non-condensing)  
**Storage Temperature:** -40 °C to +70 °C (-40 °F to +158 °F)

Continued from page 1

| Supply Wiring (AWG) | Required Overcurrent Protection (A) | Supply Wiring (AWG) | Required Overcurrent Protection (A) |
|---------------------|-------------------------------------|---------------------|-------------------------------------|
| 24                  | 1.0                                 | 30                  | 0.5                                 |

Certifications

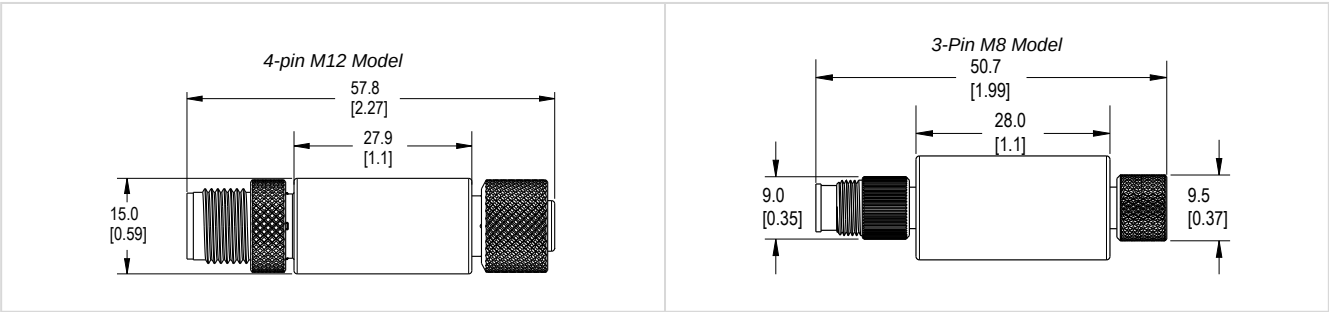
 Banner Engineering BV  
Park Lane, Culliganlaan 2F bus 3  
1831 Diegem, BELGIUM

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

 **UL LISTED**  
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.

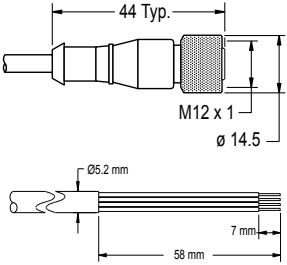
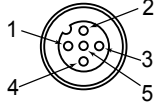
S15L Dimensions

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 |  |  | <p>1 = Brown<br/>2 = White<br/>3 = Blue<br/>4 = Black<br/>5 = Unused</p>  |
| MQDC-415                               | 5 m (16.4 ft)  |          |                                                                                      |                                                                                       |                                                                                                                                                                |
| MQDC-430                               | 9 m (29.5 ft)  |          |                                                                                      |                                                                                       |                                                                                                                                                                |
| MQDC-450                               | 15 m (49.2 ft) |          |                                                                                      |                                                                                       |                                                                                                                                                                |

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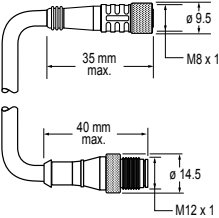
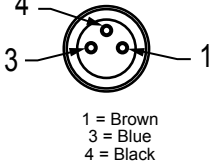
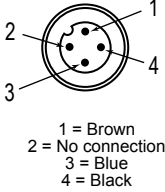
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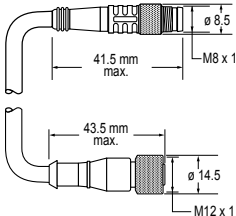
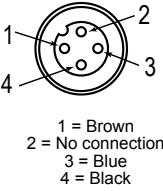
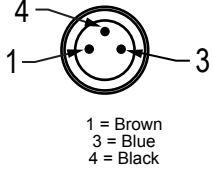
| 4-Pin Single-Ended M12 Female Cordsets |                |             |            |                 |
|----------------------------------------|----------------|-------------|------------|-----------------|
| Model                                  | Length         | Style       | Dimensions | Pinout (Female) |
| 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) |             |            |                 |

| 4-Pin Double-Ended M12 Female to M12 Male Cordsets |                  |                               |            |                                                           |
|----------------------------------------------------|------------------|-------------------------------|------------|-----------------------------------------------------------|
| 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-415SS                                        | 4.58 m (15 ft)   |                               |            | <p>1 = Brown<br/>2 = White<br/>3 = Blue<br/>4 = Black</p> |
| MQDEC-420SS                                        | 6.10 m (20 ft)   |                               |            |                                                           |
| MQDEC-430SS                                        | 9.14 m (30.2 ft) |                               |            |                                                           |
| MQDEC-450SS                                        | 15.2 m (49.9 ft) |                               |            |                                                           |

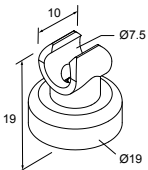
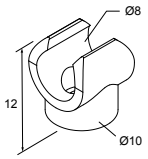
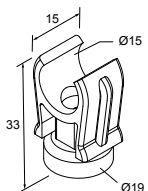
| 3-pin Threaded M8 Cordsets—Double Ended |                  |                               |            |                                             |
|-----------------------------------------|------------------|-------------------------------|------------|---------------------------------------------|
| 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)   |                               |            | <p>1 = Brown<br/>3 = Blue<br/>4 = Black</p> |

# Connection Conversion Cordsets

| 3-pin M8 Female to 4-pin M12 Male Cordsets |                  |                                   |                                                                                   |                                                                                                                          |                                                                                                                                                |
|--------------------------------------------|------------------|-----------------------------------|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Model                                      | Length           | Style                             | Dimensions                                                                        | Pinout (Female)                                                                                                          | Pinout (Male)                                                                                                                                  |
| PKG3M-.5-MQDCM4IO                          | 0.15 m (0.49 ft) | Female Straight/<br>Male Straight |  | <br>1 = Brown<br>3 = Blue<br>4 = Black | <br>1 = Brown<br>2 = No connection<br>3 = Blue<br>4 = Black |

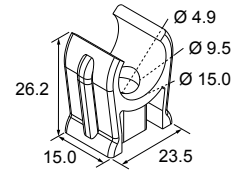
| 4-pin Threaded M12 to 3-pin Threaded M8 Cordsets—Double Ended |                  |                                   |                                                                                   |                                                                                                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

## Brackets

|                                                                                                                                                                                             |                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>LMBM12MAG</b> <ul style="list-style-type: none"><li>Attaches to M12 cordset end</li><li>Black polypropylene</li><li>11.8 kg (26 lb) pull force</li><li>One piece</li></ul>               |  |
| <b>LMBM12SP</b> <ul style="list-style-type: none"><li>Attaches to M12 cordset end</li><li>Black polypropylene</li><li>Supplied with thread-forming hardware</li><li>Pack of seven</li></ul> |  |
| <b>LMBS15MAG</b> <ul style="list-style-type: none"><li>Attaches to S15 housing</li><li>White polypropylene</li><li>11.8 kg (26 lb) pull force</li><li>One piece</li></ul>                   |  |

**LMBS15SP**

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



## Banner Engineering Corp Limited Warranty

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