

S15J In-Line Resettable Fuse



Datasheet



- Protect devices from over-current
- Rugged over-molded design meets IP65, IP67, and IP68
- Simple M12 connection for easy installation where needed in the circuit
- LEDs provide fuse status to indicate healthy or blown status

Models

| Model Number | Function Description |
|---------------|---|
| S15J-2.2ART-Q | Resettable Fuse, 2.2 A Trip, 1.1 A Hold |
| S15J-3ART-Q | Resettable Fuse, 3 A Trip, 1.5 A Hold |

Wiring

| Male Pinout | Female Pinout | Diagram |
|-------------|---------------|---------|
| | | |

Specifications

Supply Voltage

12 V DC to 30 V DC at 15 mA maximum device current draw
Use only with a suitable Class 2 power supply (UL) or SELV power supply (CE)

Maximum Fuse Current

Model-dependent, see [Models](#) on page 1 and [Operational Conditions](#) on page 1

Connections

Integral 5-pin M12 male/female quick-disconnect connector

Construction

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

Environmental Rating

IP65, IP67, IP68
UL Type 1

Operating Conditions

Temperature: -40 °C to +55 °C (-40 °F to +131 °F)
Storage Temperature: -40 °C to +70 °C (-40 °F to +158 °F)

Indicators ¹

Green: Power present, normal signal transmission
Red & Green: Power present, normal signal transmission, but current approaching or over trip point
Red: Fuse tripped, signal transmission stopped

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 |

Operational Conditions

The operation of the fuse is variable, and depends on ambient temperature and conditions. The hold current is the maximum current at which the device is guaranteed not to trip. The trip current is the current at which the device is guaranteed to trip. The hold and trip currents listed with the fuse vary with the ambient temperature it operates in. The ratings are based on 23 °C ratings. The chart below shows the Temperature (°C) and Percentage (%) of the Trip/Hold current that occurs.

| Temperature Rating | Trip/Hold Value from Original Current Rating |
|--------------------|--|
| -40 °C | 140% |
| -20 °C | 130% |
| 0 °C | 117% |
| 23 °C | 100% |
| 40 °C | 82% |
| 55 °C | 74% |

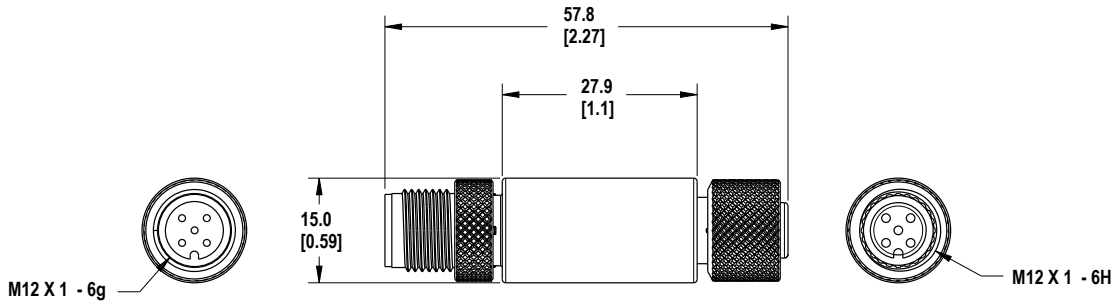
¹ The fuse functions properly when power is applied on either the male or female connector. The LEDs function properly only when power is applied to Pin 1 on the male connector.



Once the Resettable Fuse has tripped, removing power resets the fuse to normal operation by returning the components back to ambient conditions. Once reset, the fuse can be used again.

Dimensions

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



Accessories

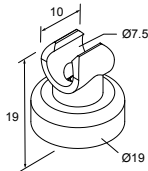
Cordsets

| 5-Pin Threaded M12 Cordsets—Double Ended | | | | | |
|--|------------------|-----------------------------------|------------|---|-----------------|
| Model | Length | Style | Dimensions | Pinout (Male) | Pinout (Female) |
| MQDEC-501SS | 0.31 m (1.02 ft) | Male Straight/ Female Straight | | | |
| MQDEC-503SS | 0.91 m (2.99 ft) | | | 1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray | |
| MQDEC-506SS | 1.83 m (6 ft) | | | | |
| MQDEC-512SS | 3.66 m (12 ft) | | | | |
| MQDEC-515SS | 5 m (16.4 ft) | | | | |
| MQDEC-530SS | 9 m (29.5 ft) | | | | |
| MQDEC-550SS | 15 m (49.2 ft) | | | | |

Brackets

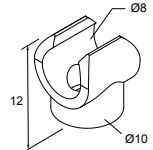
LMBM12MAG

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



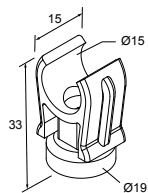
LMBM12SP

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



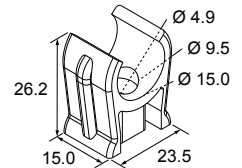
LMBS15MAG

- 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



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