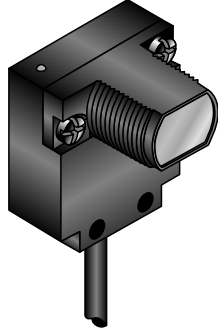


Datasheet

Miniature self-contained polarized retroreflective mode photoelectric sensors



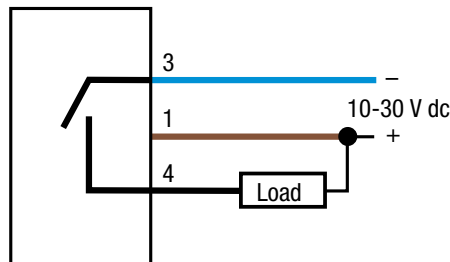
- 1.8 m (6 ft) sensing range
- 10 V dc to 30 V dc operation
- NPN output rated at 150 milliamps
- Meets NEMA standards 1, 3, 4, 12, and 13
- Simple installation with no adjustments
- Small, low-cost, self-contained modulated dc sensors engineered to provide reliable sensing, primarily in OEM applications where optical contrast is high
- Totally solid-state and epoxy-encapsulated for unlimited life



WARNING:

- **Do not use this device for personnel protection**
- Using this device for personnel protection could result in serious injury or death.
- This device does not include the self-checking redundant circuitry necessary to allow its use in personnel safety applications. A device failure or malfunction can cause either an energized (on) or de-energized (off) output condition.

Wiring Diagram



Key

- 1 = Brown
- 3 = Blue
- 4 = Black

Specifications

Supply Voltage

10 V dc to 30 V dc (10% max. ripple) at less than 20 mA, exclusive of load

Output Configuration

One light operate (NPN) open collector transistor

Output Rating

150 mA
 OFF-state leakage current: less than 1 μ A
 Output saturation voltage: less than 200 mV at 10 mA and less than 1 V at 150 mA

Circuit Protection

Protected against reverse polarity and false pulse on power up

Response Time

Less than 1 millisecond ON
 OFF time is a function of the delay time setting

Sensing Range

51 mm (2 in) to 1.8 m (6 ft) (with model BRT-3 retroreflective target)

Sensing Beam

Visible red, 650 nm (with polarizing filter)

Indicator LED

Red LED indicator on rear panel lights to follow the sensor's output (see Adjustments)

Adjustments

Rear-panel control adjusts the sensor's output off-delay from 0.01 seconds to 1 second

Construction

Totally encapsulated in housing of molded polycarbonate for protection against moisture, vibration, and corrosion
 Rated NEMA 1, 3, 4, 12, and 13

Connections

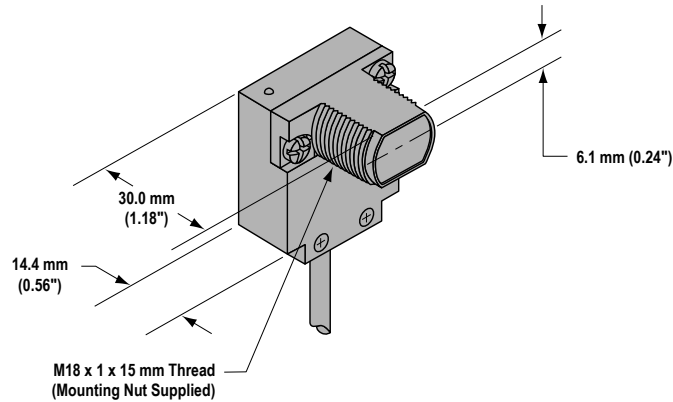
457 mm (18 in) unterminated 3-conductor PVC-jacketed cable, with 51 mm (2 in) exposed leads fitted with T-Tap connectors (power leads are male, output lead is female)

Operating Temperature

0 °C to +50 °C (+32 °F to +122 °F)



Dimensions



Accessories

Retroreflector: BRT-3 Retroreflective Target

Bracket: SMB18SM-32051 Bracket

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