| AC MINI-BEAM Product Specifications | |
|---|---|
| **Supply Voltage and Current** | 24 to 240V ac (50 to 60 Hz); 250V ac max. |
| **Output Configuration** | SPST SCR solid-state relay with either normally closed or normally open contact (light/dark operate selectable); 2-wire hookup |
| **Output Rating** | Minimum load current 5 mA; maximum steady-state load capability 300 mA to 50º C ambient (122º F), 100 mA to 70º C ambient (158º F)<br>**Inrush Capability** 3 amps for 1 second (non-repetitive); 10 amps for 1 cycle (non-repetitive).<br>**Off State Leakage Current** less than 1.7mA rms<br>**On State Voltage Drop** ≤5 volts at 300 mA load, ≤10 volts at 15 mA load. |
| **Output Protection Circuitry** | Protected against false pulse on power-up and inductive load transients. |
| **Output Response Time** | 4 milliseconds “on” and “off.” “Off”response time does not include load response time of up to 1/2 ac cycle (8.3 milliseconds). Response time specification of load should be considered when important. (300 millisecond delay on power-up). |
| **Repeatability** | 1.3 milliseconds. Response time and repeatability specifications are independent of signal strength. |
| **Adjustments** | LIGHT/DARK OPERATE select switch, and 15-turn slotted brass screw GAIN (sensitivity) adjustment potentiometer (clutched at both ends of travel). Both controls are located on rear panel of sensor and protected by a gasketed, clear acrylic cover. |
| **Indicators** | Red indicator LED on rear of sensor is "ON" when the load is energized |
| **Construction** | Reinforced VALOX® housing, totally encapsulated, o-ring sealing, acrylic lenses, and stainless steel screws. |
| **Environmental Rating** | Meets NEMA standards 1, 2, 3, 3S, 4, 4X, 12, and 13; IEC IP66 |
| **Connections** | PVC-jacketed 2-conductor 2 m (6.5ft) or 9 m (30ft) cables, or 3-pin micro-style quick disconnect (QD) fitting are available. QD cables are ordered separately. See page 8. |
| **Operating Temperature** | **Temperature:** -20 to +70° C (-4 to +158° F)<br>**Maximum relative humidity:** 90% at 50° C (non-condensing) |
| **Application Notes** | i) ac MINI-BEAMs may be destroyed from overload conditions<br>ii) Use on low voltage requires careful analysis of the load to determine if the leakage current or on-state voltage of the sensor will interfere with proper operation of the load<br>iii) The false-pulse protection feature may cause momentary drop-out of the load when the sensor is wired in series or parallel with mechanical switch contacts |
| **Certifications** | |

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**For MINI-BEAM:**

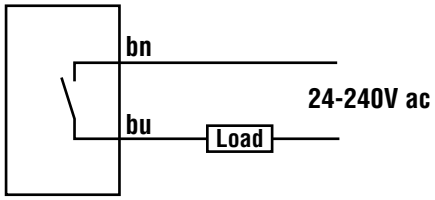
i) 9 m (30 ft) cables are available by adding suffix **“W/30”** to the model number of any cabled sensor (e.g. - **SM2A312LP W/30**)

ii) A 150 mm (6 in) long pigtail cable with attached QD connector is available by adding suffix “QDP” to the model number (e.g. - **SM2A312LPQDP**).

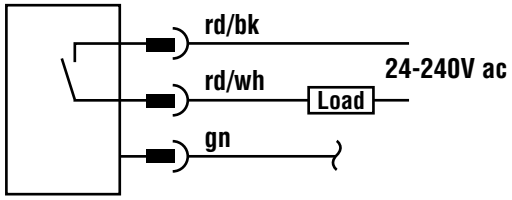
iii) A model with a QD connector requires an optional mating cable (see accessories, page 8).

## MINI-BEAM AC Hookup Diagrams

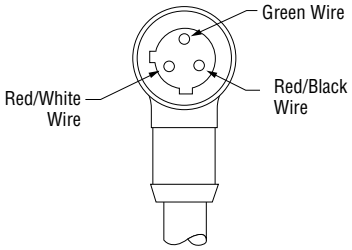
### AC Sensors with Attached Cable




### AC Sensors with Quick Disconnect (3-Pin Micro-Style)




### 3-Pin Micro-Style Pin-out (Cable Connector Shown)



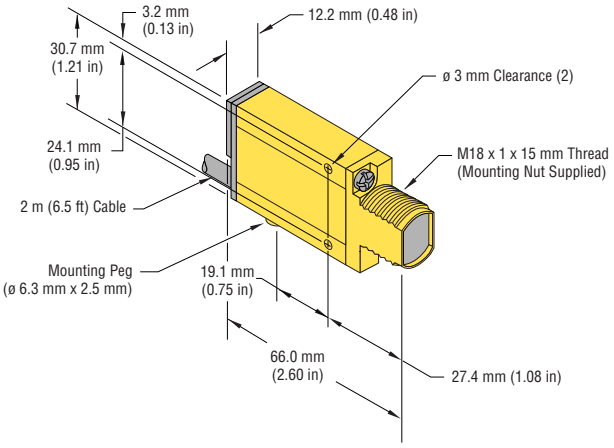

### Quick Disconnect (QD) Option

AC MINI-BEAM sensors are sold with either a 2 m (6.5 ft) or a 9 m (30 ft) attached PVC-covered cable, or with a 3-pin micro-style QD cable fitting.

AC QD sensors are identified by the letters “QD” in their model number suffix. Mating cables for QD MINI-BEAM sensors are model MQDC-315 (straight connector) or MQDC-315RA (right-angled connector). Cables are supplied in a standard length of 5 m (15 ft). For more information on QD cables, see page 8.

## MINI-BEAM Dimension Information

### MINI-BEAM AC Sensor with Integral Cable




### MINI-BEAM AC Sensor with Quick-Disconnect