**SPECIFICATIONS**

- **Load Current**
  - AC: 4 to 25 mA
  - DC: 2 to 25 mA
- **Leakage Current** ≤ 1.7 mA at 120 V
- **Operating Voltage** 20–132 V AC/DC
- **Voltage Drop** ≤ 10 V
- **Repeatability** 10% typical
- **Hysteresis** 10% typical
- **Transient Noise Protection** Incorporated
- **Short Circuit Protection** Incorporated
- **False Pulse Protection** Incorporated
- **Overload Protection** Incorporated
- **Radio Frequency Protection** Min. 10 V per Meter, Frequency range 20–1000 MHz
- **Shock and Vibration** 5G, 30–120 Hz
- **UL Approved** Listed
- **CSA Approved** Certified
- **Enclosure** NEMA 1, 2, 3, 4, 12, 13, IP65 (IEC529)
  - Self extinguishing glass reinforced polyester body
- **Hazardous Location** Division 2, Class I Groups A, B, C & D; Class II Groups F & G; Class III
- **LED**
  - RED: Power, RED: Output
- **Operating Temperature** -25°C to +75°C (-13°F to 167°F)

**WIRING DIAGRAMS**

Load can be switched to Terminal 1

1. Connect to Terminal 1
2. Connect Load to Terminal 2
**INSTALLATION INSTRUCTIONS**

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**WARNING:** Do not let METAL objects that are not to be sensed come within three times the sensing distance of this device. Unintended process activation may result in a hazardous condition.

**CAUTION:** Solid state devices can be susceptible to radio frequency (RF) interference depending on the frequency of the transmitting source. If RF transmitting equipment is to be used in the vicinity of the solid state devices, thorough testing should be performed to assure that the transmitter operation is restricted to a safe operating distance from the control equipment and wiring.

**IMPORTANT:** Save these instructions for future use. For additional information and proper operating guidance, refer to the Allen-Bradley Proximity Catalog 871-1.2.

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**MOUNTING NEARBY METAL SURFACES**

Shielded construction allows the proximity to be mounted flush in surrounding metal, and may increase the sensing distance.

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**SPACING BETWEEN SENSORS**

Units may be mounted side-by-side. When mounting face-to-face, use 1.8 times the diameter.

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**CHANGING POSITION OF HEAD**

The sensing head can be positioned to face the front, rear, or either side. Loosen the four screws on the top of the switch, lift the head, and rotate the head to the desired position. **NOTE:** Excessive twisting of the connecting wires can result in damage.

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**SENSING DISTANCE**

**CORRECTION FACTORS**

<table>
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<tr>
<th>SQUARE TARGET SIZE (X IN INCHES)</th>
<th>0.050</th>
<th>0.100</th>
<th>0.150</th>
<th>0.200</th>
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<tbody>
<tr>
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<td>20</td>
<td>30</td>
<td>40</td>
</tr>
<tr>
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<td>50</td>
<td>60</td>
<td>70</td>
<td>80</td>
</tr>
<tr>
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</tr>
<tr>
<td>2.0</td>
<td>130</td>
<td>140</td>
<td>150</td>
<td>160</td>
</tr>
</tbody>
</table>

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**SERIES CONNECTED SWITCHES**

When connected in series, the operating load voltage must be less than or equal to the minimum supply voltage, minus the voltage drops across the proximity switches connected in series. The load will energize when the connected outputs of all proximity switches are energized.

**PARALLEL CONNECTED SWITCHES**

To determine the maximum number of switches for an application, the sum of the maximum OFF-state currents of the switches connected in parallel must be less than the maximum OFF-state current of the load device. The load will be energized when the output of any proximity switch energizes. **NOTE:** Parallel operation of switches does not provide higher load current capability.