



BULLETIN 802PR

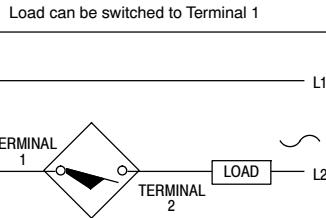
INDUCTIVE PROXIMITY SENSOR

75001-025-01(B)

SPECIFICATIONS

Load Current	AC: 4 to 25mA DC: 2 to 25mA
Leakage Current	≤1.7mA at 120V
Operating Voltage	20-132V AC/DC
Voltage Drop	≤10V
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. 10V 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



INSTALLATION INSTRUCTIONS

<p>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.</p>																						
<p>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.</p>	<p>SENSING DISTANCE</p> <p>CORRECTION FACTORS</p> <table border="1"> <caption>Approximate data points from the Sensing Distance graph</caption> <thead> <tr> <th>Square Target Size (X)</th> <th>Head on Sensing Distance (inch)</th> <th>Head on Sensing Distance (mm)</th> </tr> </thead> <tbody> <tr> <td>0.5</td> <td>0.20</td> <td>5.0</td> </tr> <tr> <td>1.0</td> <td>0.30</td> <td>7.5</td> </tr> <tr> <td>1.5</td> <td>0.35</td> <td>8.8</td> </tr> <tr> <td>2.0</td> <td>0.40</td> <td>10.2</td> </tr> <tr> <td>3.0</td> <td>0.50</td> <td>12.5</td> </tr> <tr> <td>4.0</td> <td>0.55</td> <td>14.0</td> </tr> </tbody> </table>	Square Target Size (X)	Head on Sensing Distance (inch)	Head on Sensing Distance (mm)	0.5	0.20	5.0	1.0	0.30	7.5	1.5	0.35	8.8	2.0	0.40	10.2	3.0	0.50	12.5	4.0	0.55	14.0
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<p>IMPORTANT: Save these instructions for future use. For additional information and proper operating guidance, refer to the Allen-Bradley Proximity Catalog 871-1.2.</p>																						
<p>MOUNTING NEARBY METAL SURFACES</p> <p>Shielded construction allows the proximity to be mounted flush in surrounding metal, and may increase the sensing distance.</p>																						
<p>SPACING BETWEEN SENSORS</p> <p>Units may be mounted side-by-side. When mounting face-to-face, use 1.8 times the diameter.</p>	<p>SERIES CONNECTED SWITCHES</p> <p>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.</p> <p>PARALLEL CONNECTED SWITCHES</p> <p>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.</p> <p>NOTE: Parallel operation of switches does not provide higher load current capability.</p>																					
<p>CHANGING POSITION OF HEAD</p> <p>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.</p>																						