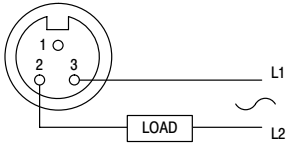
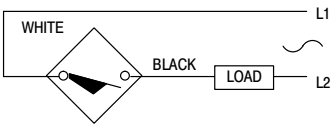
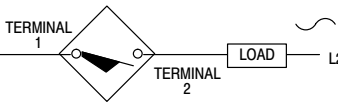




# BULLETIN 802PR

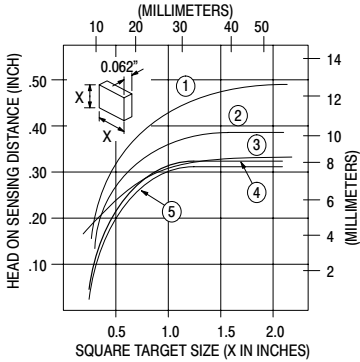
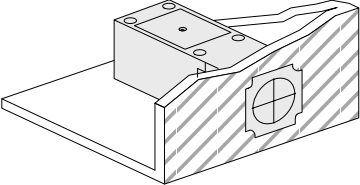
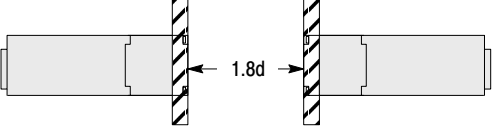
# INDUCTIVE PROXIMITY SENSOR

75001-021-01(A)

SPECIFICATIONS Type LB and XB	WIRING DIAGRAMS
<p>Load Current ..... AC: 4 to 25mA DC: 2 to 25mA</p> <p>Leakage Current ..... <math>\leq 1.7\text{mA}</math> at 120V, <math>\leq 2.5\text{mA}</math> at 250V</p> <p>Operating Voltage ..... 20–250V AC/DC</p> <p>Voltage Drop ..... <math>\leq 10\text{V}</math></p> <p>Repeatability ..... 10% typical</p> <p>Hysteresis ..... 10% typical</p> <p>Transient Noise Protection ..... Incorporated</p> <p>Short Circuit Protection ..... Incorporated</p> <p>False Pulse Protection ..... Incorporated</p> <p>Overload Protection ..... Incorporated</p> <p>Radio Frequency Protection ..... Min. 10V per Meter, Frequency range 20–1000 MHz</p> <p>Shock and Vibration ..... 5G, 30–120 Hz</p> <p>UL Approved ..... Listed</p> <p>CSA Approved ..... Certified</p> <p>Factory Mutual ..... Approved</p> <p>Enclosure ..... NEMA 1, 2, 3, 4, 4X*, 12, 13 IP65 (IEC529) *Corrosion resistant models Self extinguishing glass reinforced polyester body</p> <p>Hazardous Location Models ..... Division 2, Class I Groups A, B, C &amp; D; Class II Groups F &amp; G; Class III</p> <p>Cable Models ..... 8' (2.5m), 2 conductor STO cable</p> <p>Quick Disconnect Models ..... 3 pin, Mini Style</p> <p>LED ..... GREEN: Power; RED: Output</p> <p>Operating Temperature: ..... <math>-25^{\circ}\text{C}</math> to <math>+75^{\circ}\text{C}</math> (<math>-13^{\circ}\text{F}</math> to <math>167^{\circ}\text{F}</math>)</p>	<p><b>QD Models</b> Load can be switched to Pin 3</p>  <p><b>Cable Models</b> Load can be switched to white lead</p>  <p><b>Conduit Models</b> Load can be switched to Terminal 1</p> 

# INSTALLATION INSTRUCTIONS

Printed in USA

<p><b>CAUTION:</b> 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><b>WARNING:</b> 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><b>SENSING DISTANCE CORRECTION FACTORS</b></p> 
<p><b>IMPORTANT:</b> 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><b>MOUNTING NEARBY METAL SURFACES</b></p> <p>Shielded construction allows the proximity to be mounted flush in surrounding metal, and may increase the sensing distance.</p> 	<p>① COLD ROLLED LOW CARBON STEEL          ② COLD ROLLED STAINLESS STEEL (AISI 304)          ③ HALF HARD BRASS (ALLOY 260 ASTM B36)          ④ ALUMINUM (ALLOY 1100-H14)          ⑤ HALF HARD COLD ROLLED COPPER (ASTM B152)</p>
<p><b>SPACING BETWEEN SENSORS</b></p> <p>Units may be mounted side-by-side. When mounting face-to-face, use 1.8 times the diameter.</p> 	<p><b>SERIES CONNECTED SWITCHES</b></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><b>CHANGING POSITION OF HEAD</b></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>	<p><b>PARALLEL CONNECTED SWITCHES</b></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. NOTE: Parallel operation of switches does not provide higher load current capability.</p>