

Mounting and Wiring Instructions 871P VersaCube™ Proximity Sensor

IMPORTANT: SAVE THESE INSTRUCTIONS FOR FUTURE USE.
This publication does not include specifications, dimensions, and other installation considerations.
Refer to the product catalog pages for additional information.



ATTENTION: Solid-state devices can be susceptible to radio frequency interference (RFI) depending on the power and 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 transmitter operation is restricted to a safe operating distance from the control equipment and its wiring.

If a hazardous condition can result from unintended operation of this device, access to the hazardous area should be guarded.

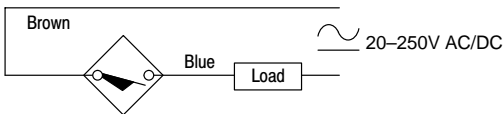
Wiring

All external wiring should conform to the National Electric Code and applicable local codes. Connect the proximity switch to the power supply and load as shown in the wiring diagrams below. If the positive (+) and negative (-) wires on DC switches are reversed, the switch will not operate properly.

Wiring Diagrams for AC/DC Switches

Cable

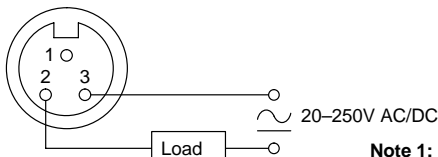
Normally Open or Normally Closed



Note 1: Attach housing to ground.

Mini-Connector

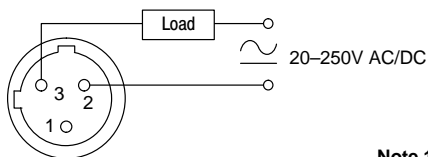
Normally Open or Normally Closed



Note 1: Attach housing to ground.

Micro-Connector

Normally Open or Normally Closed

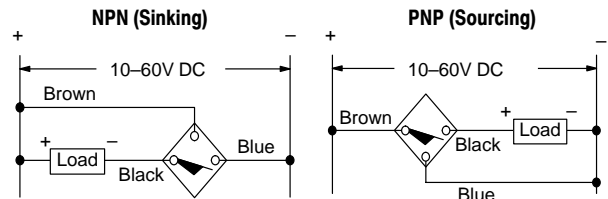


Note 1: Attach housing to ground.

Wiring Diagrams for DC Switches

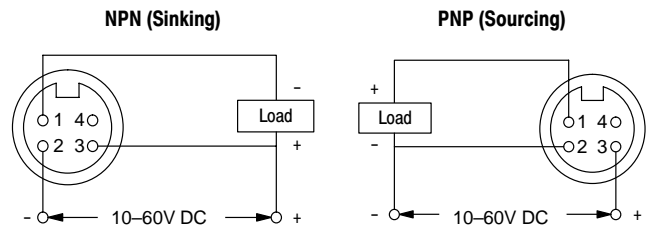
Cable

Normally Open or Normally Closed



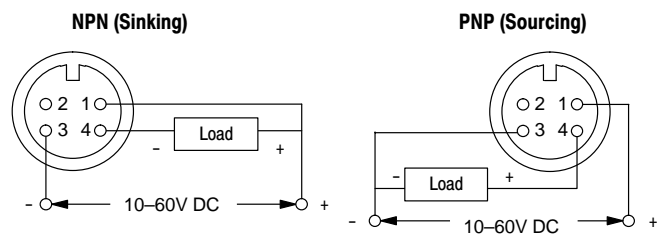
Mini-Connector

Normally Open or Normally Closed



Micro-Connector

Normally Open or Normally Closed

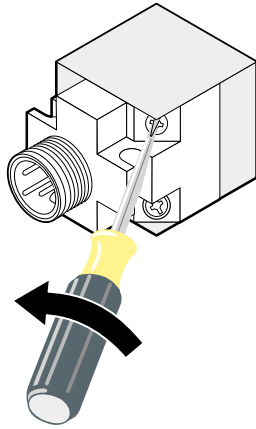


Note: Unit must be mounted to a grounded metal frame or grounded via a field wiring lug per NEC requirements. Recommended grounding lug is available in Allen-Bradley mounting kit 871A-PKIT.

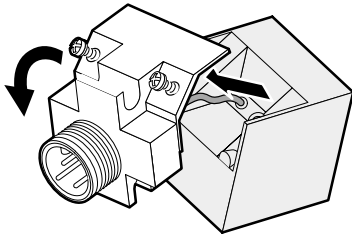
Changing Head Positions

To switch between top and side sensing head positions, follow these three steps:

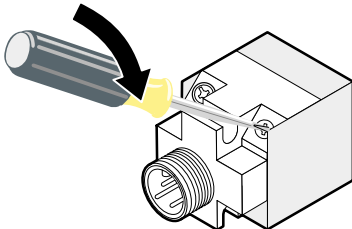
1. Unscrew the two #6–32 screws. **Note:** these screws are captive. It is not necessary to remove them completely.



2. Pull head and mounting base gently apart and twist to new position. **Note:** do not pull on connecting cable. Damage to unit may result.

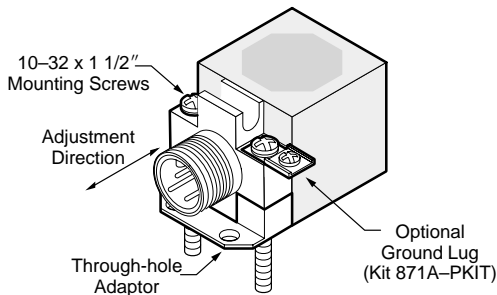


3. Re-install the two #6–32 screws and torque to 8–10 in-lbs.



Mounting and Adjustment Instructions

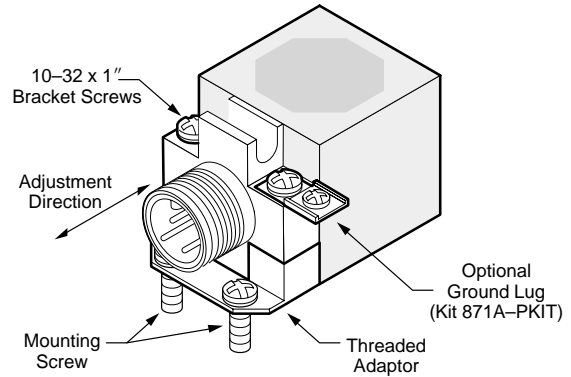
Mount the unit to a stable, flat surface as shown below. Use the two #10–32 x 1 1/2" screws provided in the hardware kit. The slotted mounting holes allow adjustment of sensing position by sliding the unit back and forth before tightening the screws.



NOTE: Weld field immune models include 871A-PKIT.

Retrofitting Rectangular Models

Some rectangular-style proximity sensors have a hole pattern which requires a threaded adaptor which is available with screws in the 871A-PKIT. Mount the VersaCube to the threaded adaptor using two #10–32 x 1" screws. Remove the rectangular-style sensor and install the VersaCube and bracket in its place as shown. The VersaCube's slotted mounting holes allow adjustment of the sensing position by moving the unit backward or forward before tightening the bracket screws.



Retrofitting Limit Switch—Style Models

Limit switch style brackets are available for superior mounting stability and convenience when retrofitting a limit switch-style proximity sensor. Mount the VersaCube to the limit switch bracket (871A-PKITLS) with one #10–32 x 1" screw. Remove the limit switch-style proximity sensor and install the VersaCube and bracket in its place as shown. The VersaCube's slotted mounting holes allow adjustment of the sensing position by moving the unit backward or forward before tightening the bracket screws.

