

VersaCube Proximity Sensor

Bulletin Number 871P

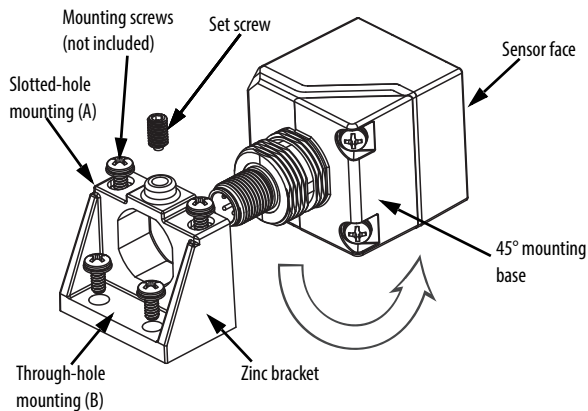
Summary of Changes

This publication contains an updated [Change the Sensing Head Position](#) section on [page 2](#).



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 used in the vicinity of the solid-state devices, thorough testing must be performed to assure that the 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 must be guarded.

Mount with the Zinc Bracket



The VersaCube® sensor and zinc bracket can come as a preassembled unit.

Use either the slotted-hole mounting (A) or the through-hole mounting (B). The slotted mounting holes allow fine adjustment of sensing position by sliding the unit back and forth before tightening the screws.

Follow these steps to install with the zinc bracket:

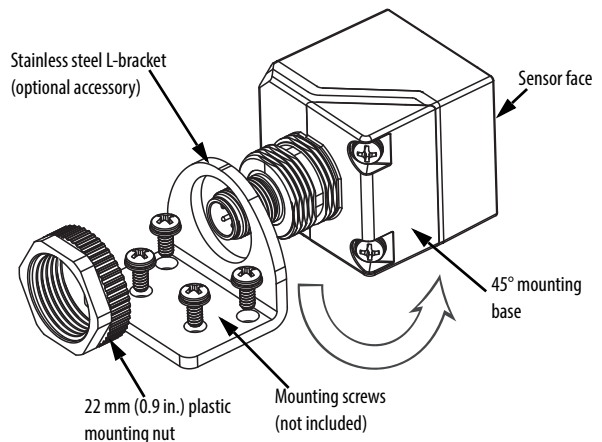
1. Mount the unit to a stable, flat surface with two screws (not included). Recommended: 10-32 x 1.75 in. for slotted holes, 10-32 x 0.75 in. for through holes, or equivalent 5 mm (0.2 in.) screws.
2. Tighten the mounting screws to 0.9 N·m (8 in-lb), maximum.

Rotate the Sensor

1. Loosen the set screw with a 2.5 mm (0.1 in.) hex tool to remove the sensor from the zinc bracket.
2. Rotate the sensor in 90° increments to the desired orientation.
3. Insert the sensor into the zinc bracket.
4. Tighten the set screw to 0.56 N·m (5 in-lb), maximum.

To change between top and side sensing positions, see [Change the Sensing Head Position on page 2](#).

Mount with the Stainless Steel L-bracket (Optional Accessory)



1. Insert the sensor into the optional L-bracket in the desired orientation.

2. Tighten the provided 22 mm (0.9 in.) plastic mounting nut to 0.9 N·m (8 in·lb), maximum.
3. Mount the L-bracket to a stable, flat surface with at least two screws (not included). Recommended: 10-32 x 0.75 in. or equivalent 5 mm (0.2 in.) screws.
4. Tighten the mounting screws to 0.9 N·m (8 in·lb), maximum.

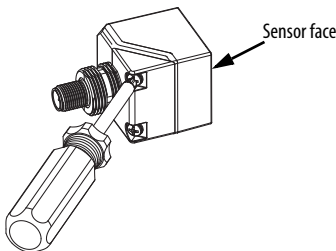
To change between top and side sensing positions, see [Change the Sensing Head Position](#).

Change the Sensing Head Position

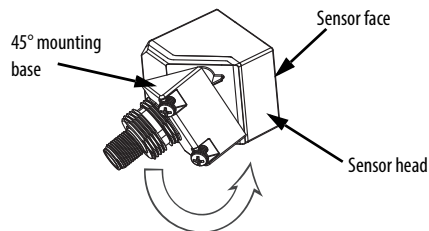
To switch the sensing head between top and side sensing positions, follow these steps:

1. Remove the sensor from the mounting bracket (zinc or L-bracket).
2. Unscrew the two 6-32 pan head screws.

IMPORTANT Each screw includes a captive internal-tooth lock washer.

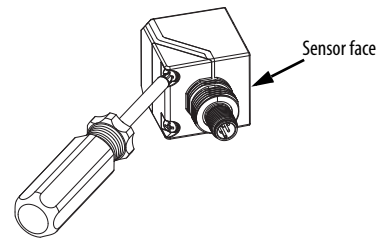


3. Pull sensor head and 45° mounting base gently apart and twist 180° to the new position.



IMPORTANT Do not pull on the connecting cable, or rotate more than 180°, as damage to the sensor can result.

4. Reinstall the two 6-32 screws with washers, and torque to:
 - 0.56 N·m (5 in·lb), maximum for units with plastic 45° mounting base.
 - 0.9...1.13 N·m (8...10 in·lb), maximum for units with metal 45° mounting base.

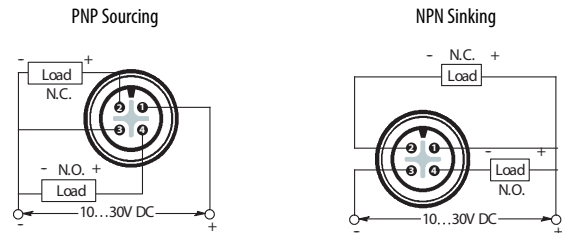


Wiring

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

Wiring Diagrams for DC Switches, Micro Connector

Complementary Normally Open and Normally Closed



IMPORTANT Class 2 source is required.

Accessories

Description	Cat. No.
Zinc Mounting Bracket	871A-PBR
Stainless Steel L-Bracket (includes one 22 mm [0.9 in.] plastic mounting nut)	871A-BR559
22 mm (0.9 in.) Plastic Mounting Nut	871T-N9

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Rockwell Otomasyon Ticaret A.Ş., Kar Plaza İş Merkezi E Blok Kat:6 34752 İçerenköy, İstanbul, Tel: +90 (216) 5698400

www.rockwellautomation.com

Power, Control and Information Solutions Headquarters

Americas: Rockwell Automation, 1201 South Second Street, Milwaukee, WI 53204-2496 USA, Tel: (1) 414.382.2000, Fax: (1) 414.382.4444
 Europe/Middle East/Africa: Rockwell Automation NV, Pegasus Park, De Kleetlaan 12a, 1831 Diegem, Belgium, Tel: (32) 2 663 0600, Fax: (32) 2 663 0640
 Asia Pacific: Rockwell Automation, Level 14, Core F, Cyberport 3, 100 Cyberport Road, Hong Kong, Tel: (852) 2887 4788, Fax: (852) 2508 1846

Publication 871P-IN004B-EN-P - June 2017

PN-172832

10000352894 Ver 01

Supersedes Publication 871P-IN004A-EN-P - September 2012

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