

Neutral Position Plug-in Limit Switch

Bulletin Number 802



WARNING: To avoid electrical shock and/or unintended operation of equipment, disconnect all power to the limit switch and the controlled equipment before proceeding with any repair or adjustment of the limit switch.

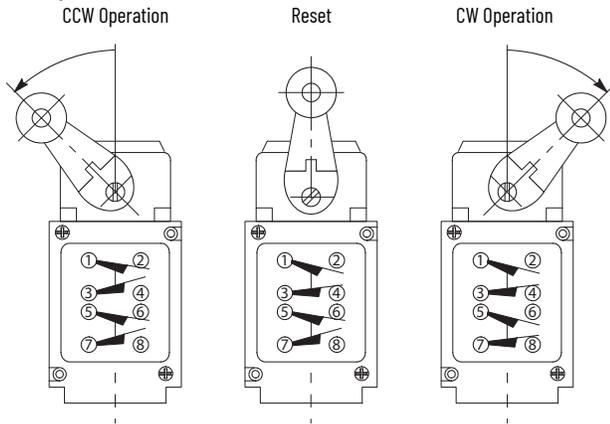
Overview

A neutral position limit switch is a device that consists of two different switching elements that are contained in one enclosure. As shown in [Figure 1](#), these switching elements are operated in a specific manner with only one of the two being operated at a time.

When an external operator of the device is moved in one direction, one of the switches is operated: the second switch remains unoperated. The switch action reverses when the actuator moves in the opposite direction: the second switch operates, the first does not.

The operating head and the switch unit that is used in this style of device are unique and can only be used with one another. Operating heads or switches from other styles of devices cannot be interchanged with these devices.

Figure 1 - Operation



Mounting

IMPORTANT Position the conduit that leads into the switch so that any fluid inside the conduit does not drain into the switch enclosure. Apply a sealing compound to the conduit threads to help prevent against fluids entering at the joint.

You can mount the base by either of two methods:

1. Two #10...32 tapped holes are provided for rear mounting.

IMPORTANT Be sure the screws that are used for rear mounting are not so long as to interfere with the screws that are used to secure the front to the base.

2. Two clearance holes for #10 screws are provided for front mounting.

Wiring

IMPORTANT The contacts in each switch element must have the same polarity. The circuit diagram is shown on the nameplate.

The pressure type connector terminals in the base accept 4 mm² (12 AWG) and smaller solid or stranded wire. For proper tightening, use nothing smaller than 1 mm² (18 AWG). Before inserting the wire under the pressure plates, strip the insulation approximately 9.5 mm (0.375 in). Tighten all pressure plate terminal screws, whether used or not, to avoid interference with the screw cover.

A grounding screw is enclosed in the terminal base near the conduit opening. If the grounding screw has a self-lifting pressure plate and wire barrier, the proper installation position of the ground wire is between the pressure plate and the wire barrier in a direction parallel to the edge of the casting. Be sure that the ground wire does not interfere with the gasket or the switch portion of the device.

After you complete the wiring, check that all wires in the wiring cavity of the terminal block do not interfere with the switch when it is plugged into the terminal block. Recheck all wiring terminal screws for tightness.



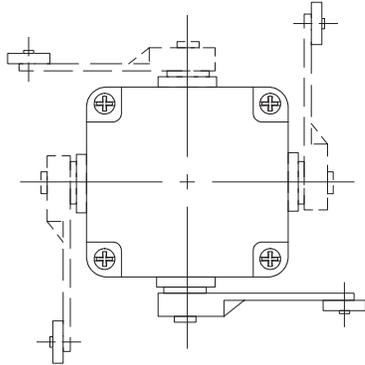
For switches that have been wired at the factory, check the wire color and their position in the terminal block for proper circuit hookup.

When the switch has been plugged into the terminal block, securely tighten the two cover screws to compress the body gasket.

Actuator Head Positioning

The actuator head can be placed in any of four positions on the switch body.

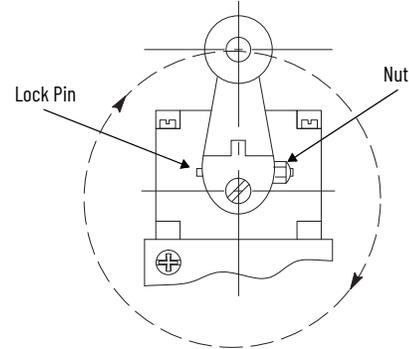
1. Loosen the four captive head screws.
2. Place the head in the desired position.
3. Securely retighten the four screws.



Lever Positioning

The lever that is used with rotary actuated devices is adjustable to any position through 360° around the shaft.

1. Loosen the nut.
2. Move the lever to the desired position.
3. Securely retighten the nut.



Renewal Parts

If you require renewal parts or additional lubricant, give the bulletin number, catalog number, and series letter found on the nameplate.

Waste Electrical and Electronic Equipment (WEEE)



At the end of life, this equipment should be collected separately from any unsorted municipal waste.

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