



# RADIUS SERIES NM SOLENOID VALVE

Installation, Maintenance and Operation Guidelines.

**Description:**

The Radius NM series solenoid valves are design to mount to NAMUR style actuators eliminating the need for additional tubing and fittings. The solenoid valve is unique in the fact that it is provided with a selector gasket that can be inserted one of two different ways. This selector gasket can be changed the function of the valve to either a four way valve for double acting actuators or a three way valve for spring return actuators.

The two functions are outlined at bottom page.

**Installation:**

1. The valve is shipped with one o-ring and one selector gasket inserted into the bores of the valve. Should they become loose from shipping the picture, bottom left, shows the proper placement of the o-ring and gasket into the valve when used on a spring return actuator (three way function). This view is of the interface side of the valve as it mates with the actuator and the air supply port is pointed downward.
2. Please note that although it is hard to depict in the photos, there are clear markings on the valve that help position the selector gasket (left gasket in picture) to achieve the desired valve function. Should a four way function be desired the selector gasket is merely rotated 180 degrees. (Figure 1 & 2). Fig 1 shows 3 way function (spring return actuators) and Fig 2 shows 4 way function (double acting actuators)
3. Once the gasket and o-ring is inserted into the valve the valve is then ready to mount to the actuator. The actuator is shipped with two socket head mounting screws.
4. Position the valve onto the actuator so that the three threaded air ports point downward and the coil or operator points to the left. See diagram below right. Tighten bolts in alternating fashion making sure o-ring and gasket hold their position.

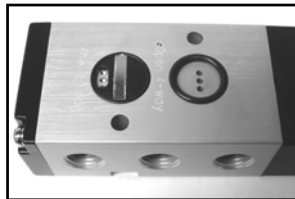
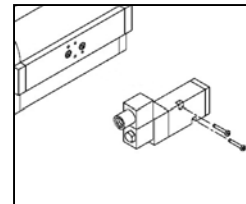


FIGURE 1

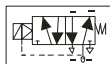


FIGURE 2



5. Once the valve is attached to the actuator connect air supply to the center 1/4" NPT airport. At this time you can cycle the actuator manual to check for proper functionality and detection of any leaks. Manual operation can be achieved by pushing and releasing blue manual over-ride button located just near the coil. Make proper electrical connections at the coil following local electrical codes. A wiring diagram is provided for proper wiring of the coil.

**Function**



5/2 configuration for double -acting actuators. De-energized state, with supply to port 1, flow is directed to port 4 and port 2 is vented to atmosphere via port 3.



3/2 configuration for spring return actuators. De-energized state, with port 3 sealed, supply port is blocked and port 2 exhaust is fed back to port 4 with excess vented to atmosphere via port 5.

