



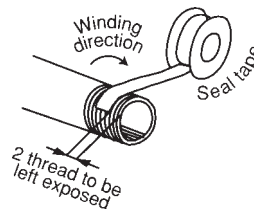
Operation Guide for NAMUR Solenoid Valve

I. Precautions

A. Piping

1. When piping, please use I.D. equivalent to or larger than NPT size on the Namur valve.
2. Before piping, flush the system to remove dust, scale, chips, seal tape, etc. in the pipe line both on the supply side (supply pressure port side) and secondary side (operation equipment port side).
3. For three-position closed center, perfect check valve, check for leakage from piping and fittings in-between valve and cylinder by means of soapy water to ensure that there is no leakage. Also, check the leakage from cylinder rod seal and piston seal. If there is any leakage, the cylinder (when the valve is de-energized) may move without stopping at mid-position. Therefore, leakage from piping and fittings should be completely removed. When applying teflon sealing tape to the thread area, wind it around the thread area 1-2 times while ensuring the thread extends one or two screw pitches beyond the taped area. Also, when applying liquid seal materials, leave 1-2 threads from the end, and avoid over-application. Never apply to the female side of the equipment.

Clamping Torque		
Thread	In. lbs.	Nm
1/4	105.9 to 123.5	12 to 14



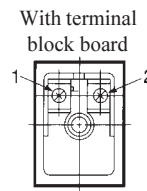
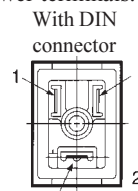
Taking safety into consideration, the piping system should always be mounted so that disassembling and assembling can be carried out easily.

B. Mounting

1. Single acting valves can be mounted in any direction. Never use in a vibration condition of more than 5G.

C. Wiring

1. For DIN connector and terminal block (with indicator light/surge voltage suppressor), the interior wiring is shown below. Please connect with respective power terminals.



Applicable terminal: 1.25-3, 1.25-3S, 1.25Y-3N, 1.25Y-3S. But in the case of the DIN connector board, it is not a terminal structure

Note: No polarity

D. Environmental Conditions

1. When valve is installed in a dusty area, protect cylinder rod to prevent dust from entering secondary piping from rod end. Install to prevent dust from entering secondary piping from rod area. Install silencer or elbow fitting with its outlet pointed downwards to prevent dust from entering the exhaust port of the valve.
2. When used in environmental conditions where corrosive gas, chemical solutions, steam, seawater or high temperatures higher than 140°F exist, contact DEI.

Note: Filtration and speed control devices are available from DEI.

E. Lubrication

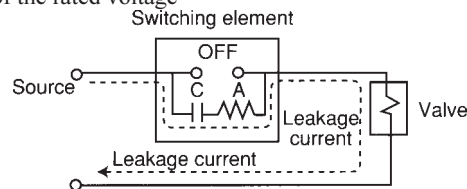
1. Valves are pre-lubricated (no further lubrication is necessary).
2. If a lubricant is used (if required for cylinder, etc.), install lubrication (oiler) on the supply side piping.
 - a. The recommended lubricant is turbine oil #1 (ISO VG32).
 - b. Never use spindle oil or machine oil.
 - c. When valve is used at low temperature, low temperature oil should be used.
 - d. The use of turbine oil at temperatures lower than 32°F leads to increased viscosity and may cause the valve to malfunction.



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F. Leakage Voltage

1. It must be noted that when connecting C-R element parallel to switching element, leakage current flows through C-R element and the leak voltage increases.
2. Ensure that voltage leakage across the coil as follows:
AC coil: No more than 20% of the rated voltage
DC coil: No more than 3% of the rated voltage



G. Momentary Energizing Time

1. When the double solenoid type is used with momentary energizing, the energizing time should be taken as 0.1 second or more (at the supply pressure of 50 kPa [75 PSI]).

II. Warning

1. The compatibility of pneumatic equipment is the responsibility of the person who designs the pneumatic system or decides its specifications.

Since the products specified here are used in various operating conditions, their compatibility for the specific pneumatic system must be based on specifications or after analysis and/or tests to meet your specific requirements.

2. Only trained personnel should operate pneumatically operated machinery and equipment.

Compressed air can be dangerous if an operator is unfamiliar with it. Assembly, handling or repair of pneumatic systems should be performed by trained and experienced operators.

3. Do not service machinery/equipment or attempt to remove component until safety is confirmed.

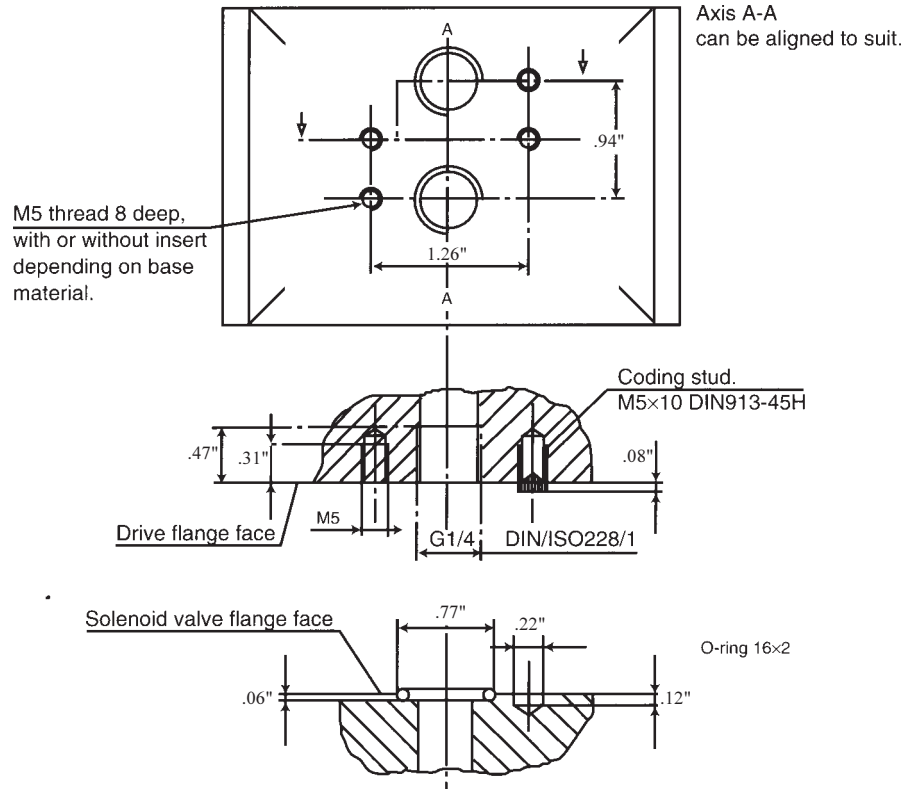
1. Inspection and maintenance of machinery/equipment should only be performed after confirmation of safe locked-out control positions.
2. When equipment is to be removed, confirm the safety process as mentioned above. Cut the supply pressure for this equipment and exhaust all residual compressed air in the system.
3. Before machinery/equipment is restarted, take measures to prevent shooting-out of cylinder piston rod, etc. (Bleed air into the system gradually to create back-pressure.)

4. Contact DEI if the product is to be used in any of the following conditions:

1. Conditions and environments beyond the given specifications, or if product is used outdoors.
2. Installation on equipment in conjunction with atomic energy, railway, air navigation, vehicles, medical equipment, food and beverage, recreation equipment, emergency stop circuits, press applications, safety equipment, maritime equipment or mining equipment.
3. An application which has the possibility of having negative effects on people, property, or animals, requiring special safety analysis.



NAMUR Mounting Pattern



The solenoid valve can be attached with 2 mounting bolts.

The positioning of the coding stud hole is left up to the manufacturer and thus also determines the location of the coding stud.

Note: All threads are metric.