

Namur Standard Solenoid Valves



INTRODUCTION

Namur is an international standard for valve interface and is adapted for direct mounting of operating valve on the Rotary Actuator. The valve is provided with 3 mounting holes while rotary actuator has 4 tapped holes. These mounting holes and outlet port positions with 'NAMUR' valves are so designed as to have normally open port of the valve connected to the required rotary actuator's port by suitable positioning of the valve. (Position -1 or 2 in the sketch).

CONSTRUCTION

The valve body and housing is made up of aluminium alloy. Internal parts are of carbon steel / brass for standard valve and are also offered in stainless steel as optional. The seals are made of special quality nitrile to have trouble free life.

The encapsulated solenoid coil incorporates Class 'H' insulated winding wire and has overall Class 'F' insulation. The standard coil is offered with plug in connector as per DIN 43650 standard and has degree of protection : IP-65 as per IS 2147. The valve is alternatively offered with coil having flameproof enclosure with junction box; duly approved by CRMS, Dhanbad for group I, II A & II B as per IS 2148.

OPERATION

Internal construction of the valve is spool type in which sliding spool moves inside static 'O' rings, which are spaced along with a series of perforated shells, each forming an individual chamber opposite the valve ports. Machined grooves on the spool connect the different chambers allowing the air supply to flow to the required ports. The connection between inlet and cylinder port is changed by actuation of the coil which pushes the spool through an auxiliary piston. De-energisation of

coil returns the spool to its original position through a spring. NAMUR valve is also offered with double Solenoid version in case the requirement is of detained actuation.

SPECIFICATIONS

1. Port Size : 1/4" BSP
2. C.V. Factor : 1.08 (1500 Lit. per minute at 7 bar inlet pressure)
3. Minimum operating pressure : 2.7 bar
4. Maximum operating pressure : 10 bar
5. Coil rating
 - a) A.C. Coil
 - Pick up : 21 VA
 - Hold on : 14.5VA
 - b) D.C. Coil
 - Wattage : 10 Watt
 - c) Allowable Voltage
 - Fluctuation : +10%
-15%
6. Part Nos.
 - a) With weatherproof G50 Coil
 - i) Single Sol. spring return Valve : GNM 53214
 - ii) Double Sol. Valve : GNM 53224
 - b) With Flameproof Coil
 - i) For valve with flameproof coil with lead wire : Add suffix 'F'
 - ii) For valves with flameproof coil and Junction box : Add suffix 'FJB'

