

Hydraulic Interface Valve

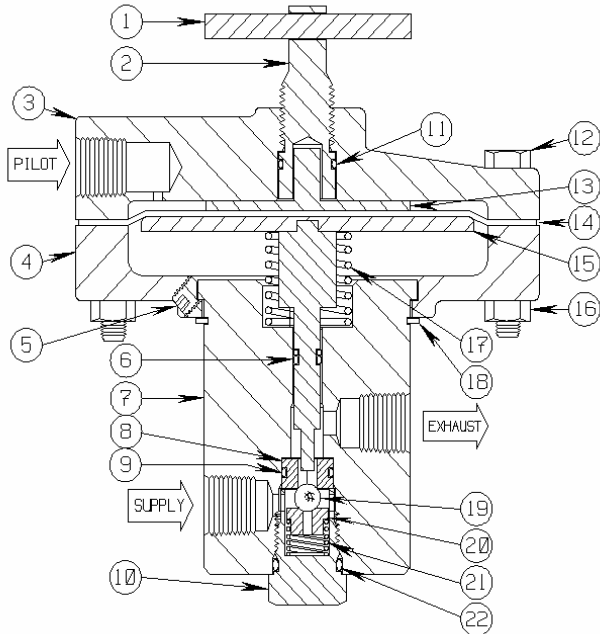
Diaphragm (150 PSI Max)

2-WAY NC, 1/4" FNPT, .140 ORIFICE, 10,000 PSI W/MANUAL OVERRIDE

Model 20HM27



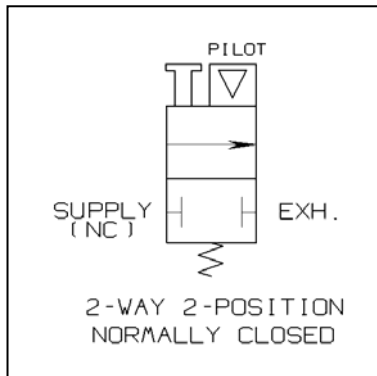
Conforms to the SEP category of the European Pressure Equipment Directive
Issue No. 97/23/EC



The **20HM27** is a two position, two-way normally closed, Pilot Supply pressure operated hydraulic flow control valve assembly. It is designed to establish internal hydraulic Supply to Exhaust flow automatically with the application of relatively low Pilot Supply pressure.

A loss of Pilot Supply pressure will block the hydraulic Supply (inlet) port. Two-way normally closed Hydraulic Interfaces (Interface Valves) of this type are used in special application control circuits only.

The model 20HM27 can be provided with an optional manual Override Handle (shown) to establish internal hydraulic Supply to Valve flow, without the application of Pilot Supply pressure.



PARTS LIST:

- | | |
|-----------------------|-------------------------|
| 1. Cross Pin | 12. Hex Bolt * |
| 2. Override Plunger | 13. Diaphragm Protector |
| 3. Upper Housing | 14. Diaphragm * |
| 4. Lower Housing | 15. Plate/Plunger |
| 5. Soc. Set Screw * | 16. Hex Nut * |
| 6. O Ring & Back Up * | 17. Spring* |
| 7. Valve Body | 18. Spiral Ring * |
| 8. Reversible Seat * | 19. Ball * |
| 9. O Ring * | 20. Ball Guide |
| 10. Retainer | 21. Spring * |
| 11. O Ring * | 22. O Ring * |

* Indicates parts included in a Repair Kit

Sigma Model Number 20HM27

2-WAY NC, 1/4" FNPT, .140 ORIFICE, 10,000 PSI W/MANUAL OVERRIDE

Product Specifications

Flow Control Application: Normally Closed

Control Function: Two-Way

Pressure Rating Body (Control Ports): 10,000 PSI maximum (690 bar)

Seal Material: Viton

Operator (Pilot Cap): Diaphragm Assembly 150 PSI (10.34 bar) maximum - 30 PSI (2.06 bar) minimum

Instrument Supply Media for Operator (Pilot Cap): Pneumatic

Pilot Port Rotation (Orientation) Capability: Full Turning Radius of 360°

Manual Override Handle: Rotating Screw Type

Connection Size (Body): 1/4-18 Female N.P.T. Pilot, Supply, Exhaust

Wetted Component Material (Metal): 316 Stainless Steel and 17-4PH SS

Panel Mount: No

Mounting Bracket Available: 20H26 Bracket

Pilot Supply Operating Ratio: 280 to 1

Orifice: .14 Diameter

Cv Factor: 0.18

Weight: 5.0 Lbs.

Operating Temperature: -20° F to +250° F (-29° C to +121° C)

Overall Dimensions: 5-3/8 Height x 4-5/8 Pilot Head Diameter (13.65 cm Height x 11.75 cm PHD)

Pressure Equipment Directive (PED): This product conforms to the SEP Category of the European P.E.D.

Installation and Maintenance Instructions:

This hydraulic interface valve may be mounted using a mounting bracket or may be suspended by the plumbing or tubing runs to the individual ports as labeled in the attached drawing. Sigma recommends the use of appropriate thread sealant for each port connection.

Shelf Position Port Status

Inlet Instrument supply pressure normally closed

Exhaust Depressurizes instrument supply upon actuation

Repair Kit Information

Repair Kits contain all of the Seals and other components typically replaced when repairing the assembly. In order to maintain optimum operating control function.