

Hydraulic Interface Valve

3-WAY NC, 1/4" FNPT, 10,000 PSI W/MANUAL OVERRIDE



Pneumatic Pilot

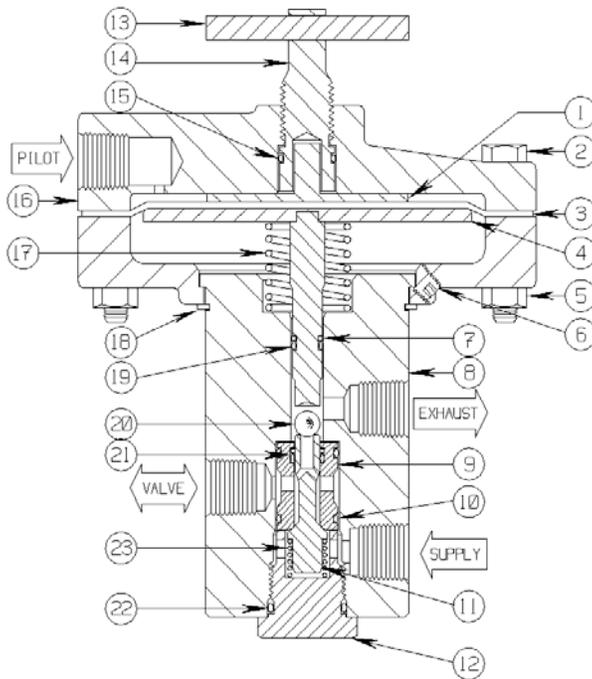
Model 20HM24 Standard Service

Model 20HM30 - H2S Service

Hydraulic Pilot

Model 20HM108 - Standard Service

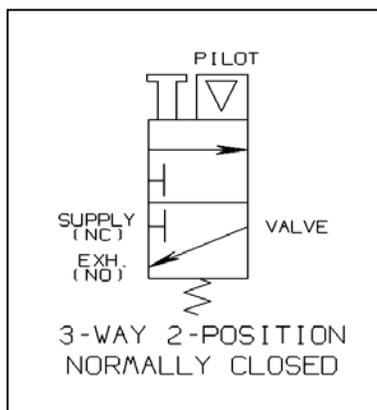
Model 20HM109 - H2S Service



The **20HM**** Series 3-Way NC valve is a two position, three-way normally closed, low pilot supply pressure operated, hydraulic flow control valve assembly. It is designed to establish high-pressure hydraulic fluid output, automatically with each application of relatively low Pilot Supply pressure.

A loss of Pilot Supply pressure will block the hydraulic Supply (inlet) port and exhaust the accumulated operating pressure within the high pressure receiving control circuit. Hydraulic Interfaces (Interface Valves) are generally used to control the open/close operating sequence of Surface Controlled Sub-Surface Safety Valves (SCSSV) or Surface Safety Valves (SSV).

The valves are provided with a manual Override Handle (shown) to establish internal hydraulic Supply to Valve flow, without the application of Pilot Supply pressure. This feature allows the SCSSV or SSV to be opened for normal start-up



PARTS LIST:

- | | |
|-------------------|------------------------|
| 1. Protector | 13. Cross Pin |
| 2. Hex Bolt | 14. Override Stem |
| 3. Diaphragm * | 15. O Ring * |
| 4. Plate/Plunger | 16. Upper Housing |
| 5. Hex Nut * | 17. Spring * |
| 6. Set Screw * | 18. Spiral Ring * |
| 7. Back Up Ring * | 19. O Ring * |
| 8. Valve Body | 20. Ball * |
| 9. Spool * | 21. O Ring & Back Up * |
| 10. O Ring (2) * | 22. O Ring * |
| 11. Valve Seat * | 23. Spring * |
| 12. Seat Retainer | |

* Indicates parts included in a Repair Kit

Sigma Model Number 20HM24/30/108/109
3-WAY NC, 1/4" FNPT, .125 ORIFICE, 10,000 PSI W/MANUAL OVERRIDE

Product Specifications

Flow Control Application: Normally Closed

Control Function: Three-Way (Block & Bleed)

Maximum Working Pressure (Control Ports): 10,000 PSI (690 Bar)

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 on 20HM24 / 20HM30
Hydraulic on 20HM108 / 20HM109

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

Manual Override Handle: Rotating T-Handle Screw Type

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

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

Seal Material: Viton

Panel Mount: No

Mount Bracket Available: 20H26 Bracket

Pilot Supply Operating Ratio: 100 to 1

Orifice: .125 Diameter **Cv Factor:** .20

Weight: 7 Lbs.

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

Overall Dimensions: 6-1/2 Height x 4-5/8 Pilot Head Diameter (16.51 cm Height x 11.75 cm PHD)

Shelf Position Port Status

| | |
|----------------|---|
| Pilot | Pilot Supply Inlet (Pneumatic On/Off Operating Pressure) |
| Supply | Inlet (Instrument Supply Pressure) Closed to Valve Port |
| Valve | Outlet Pressure to Receiving Control Circuit (Open to Exhaust Port) |
| Exhaust | Hydraulic Fluid Return to Reservoir |