

# Hydraulic Interface Valve

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



## Pneumatic Pilot

Model 20HM24 Standard Service

Model 20HM30 - H2S Service

## Hydraulic Pilot

Model 20HM108 - Standard Service

Model 20HM109 - H2S Service

## Pneumatic Pilot without Override

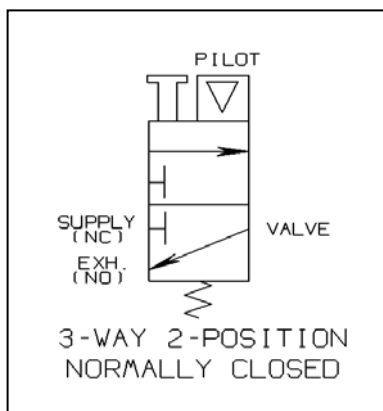
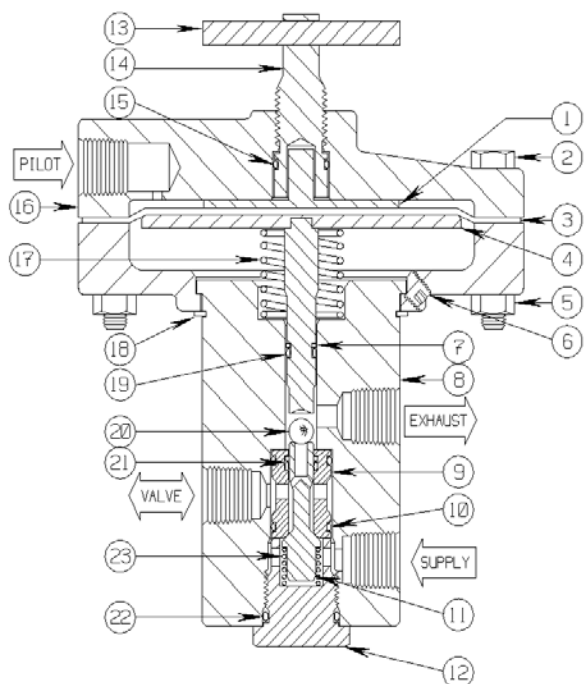
Model 20HM24-NO Standard Service

Model 20HM30-NO H2S Service

## Hydraulic Pilot without Override

Model 20HM108-NO Standard Service

Model 20HM109-NO 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, 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

**NO Manual Override Handle Option:** Include “-NO” at end of model number, i.e; 20HM24-NO

**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 Equiv. 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**

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