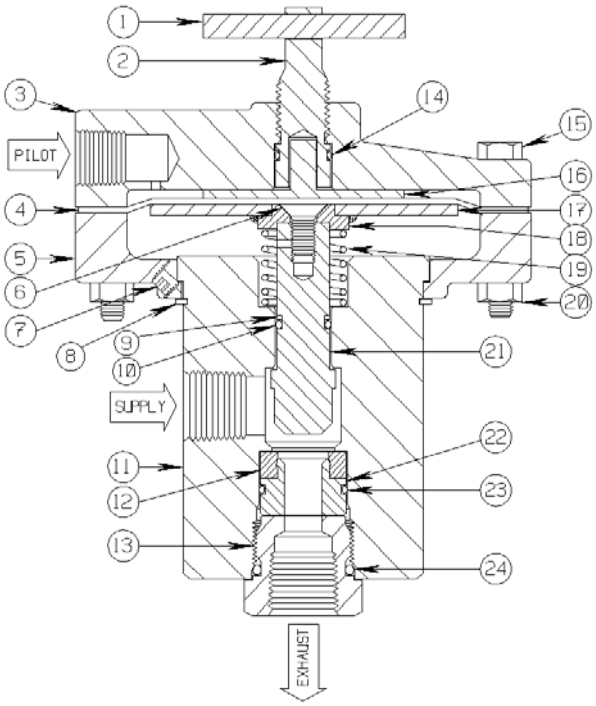
Hydraulic Interface Valve

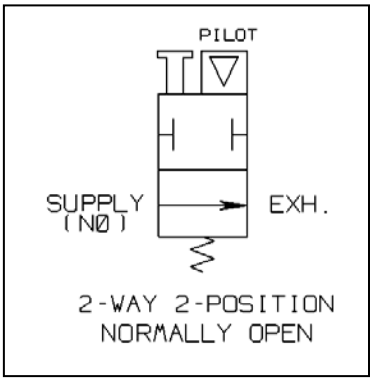
Diaphragm (150 PSI Max)

2-WAY NO, 3/8" FNPT, .375 ORIFICE, 10,000 PSI W/MANUAL OVERRIDE

Model 20HM20

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





The **20HM20** is a two position, two-way normally open, Pilot Supply pressure operated, **high flow** control valve assembly. It is designed to block incoming hydraulic Supply pressure automatically when relatively low Pilot Supply pressure is applied.

A loss of Pilot Supply pressure will open the hydraulic Supply (inlet) port to the Exhaust port and vent accumulated pressure upstream of the Supply port. 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 model 20HM20 can be provided with an optional manual Override Handle (shown) to close the internal hydraulic flow path (Supply to Exhaust) without the application of Pilot Supply pressure. This feature allows the SCSSV or SSV, to be opened (through pressurization of the operating hydraulic control circuit) for normal start-up operation or for maintenance/testing purposes.

PARTS LIST:

1. Cross Pin
2. Override Plunger
3. Upper Housing
4. Diaphragm *
5. Lower Housing
6. Flat Head Screw *
7. Soc. Set Screw *
8. Spiral Ring *
9. Back Up Ring *
10. O Ring *
11. Valve Body
12. Kel-F Seat *
13. Retainer
14. O Ring *
15. Hex Head Bolt
16. Diaphragm Protector
17. Pressure Plate
18. Plate Insert
19. Spring *
20. Hex Nut *
21. Valve Plunger
22. Seat Block *
23. O Ring *
24. O Ring *

* Indicates parts included in a Repair Kit

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Sigma Model Number 20HM20

2-WAY NO, 3/8" FNPT, .375 ORIFICE, 10,000 PSI W/MANUAL OVERRIDE

Product Specifications

Flow Control Application: Normally Open

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): 3/8-18 Female N.P.T. Supply, Exhaust, 1/4-18 Female N.P.T. Pilot

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

Panel Mount: No **Mounting Bracket Available:** 20H26 Bracket

Pilot Supply Operating Ratio: 30 to 1

Orifice: .375 Diameter **Cv Factor:** 0.58

Weight: 9.0 Lbs.

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

Overall Dimensions: 6 Height x 4-5/8 Pilot Head Diameter (15.24 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

Pilot	Pilot Supply Inlet (Pneumatic On/Off Operating Pressure)
Supply	Inlet Hydraulic Fluid Supply Open to Exhaust
Exhaust	Hydraulic Fluid Return to Reservoir (Storage Tank)