

Hydraulic Interface Valve

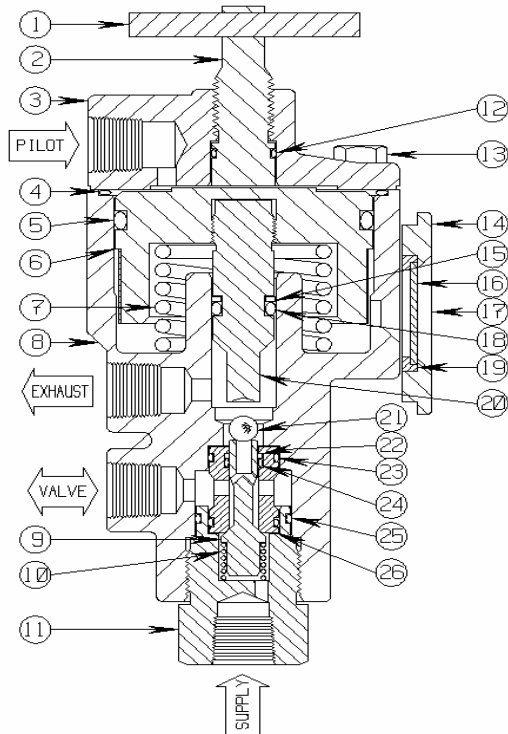
Piston (150 PSI Max)

3-WAY NC, 1/4" FNPT, .125 ORIFICE, 6,000 PSI W/MANUAL OVERRIDE
& STATUS INDICATOR

Models 20HM42 STD SVC, 20HM43 H2S SVC, 20HM198 ARCTIC SVC
20HM82 HYD. PILOT, 20HM89 HYD.PILOT H2S SERV.



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

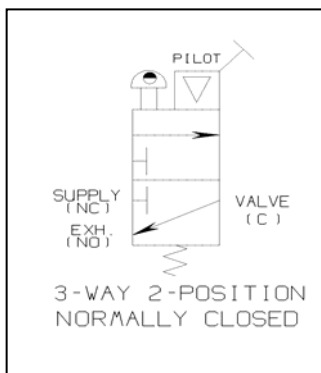


The **20HM42** is a two position, three-way normally closed, Pilot Supply pressure operated hydraulic flow control valve assembly. It is designed to establish high-pressure hydraulic fluid output automatically with each application of relatively low Pilot Supply pressure.

A loss of Pilot Supply pressure will block the hydraulic Supply (inlet) port and exhaust the accumulated pressure downstream of the valve port (receiving control circuit).

The 20HM42 has a Red/Green Indicator that permits easy identification of the valve condition. Red will indicate Pilot Supply pressure is absent or not applied. A display of Green will indicate that Pilot Supply pressure is applied or the valve is in the manual override condition.

A manual Override Handle is provided 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 operation or for testing purposes.



PARTS LIST:

1. Cross Pin	10. Spring *	19. Snap Ring
2. Override Plunger	11. Retainer	20. Plunger
3. Upper Cover	12. O Ring *	21. Ball *
4. O Ring *	13. Hex Bolt *	22. Back Up *
5. O Ring *	14. Face Plate	23. O Ring *
6. Piston	15. Back Up Ring *	24. O Ring *
7. Spring *	16. Lucite Window	25. O Ring *
8. Valve Body	17. Screw *	26. Valve Spool *
9. Valve Seat *	18. O Ring *	

* Indicates parts included in a Repair Kit

Sigma Model Numbers 20HM42/43/82/89/198
3-WAY NC, 1/4" FNPT, .125 ORIFICE, 6,000 PSI W/MANUAL OVERRIDE
& STATUS INDICATOR

Product Specifications

Flow Control Application: Normally Closed

Control Function: Three-Way (Block & Bleed)

Pressure Rating Body (Control Ports): 6,000 PSI maximum (413 bar)

Seal Material: Viton **Weight:** 4.5 Lbs.

Operator (Pilot Cap): Piston Operated 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: Rotation Limited to Turns (Offset) of 90°

Manual Override Handle: Rotating Screw Type

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

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

Panel Mounting: Panel Face Plate Mounting **Panel Hole Cutout Size Required:** 1.75 Diameter

Mounting Bracket Available: 20H26 Bracket

Pilot Supply Operating Ratio: 50 to 1

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

Status Indicator: In-Service Visual Reference Flag, Red/Green Indicator provided

Operating Temperature: -20° F to +250° F (-29° C to +121° C) Standard & H2S
-55° F to +250° F ARCTIC SERVICE

Overall Dimensions: 6-1/4 Height x 3-1/8 Pilot Head Diameter (15.88 cm Height x 7.94 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 (Instrument Supply Pressure) Closed to Valve Port
Valve	Outlet Pressure to Receiving Control Circuit (Open to Exhaust Port)
Exhaust	Hydraulic Fluid Return to Reservoir