

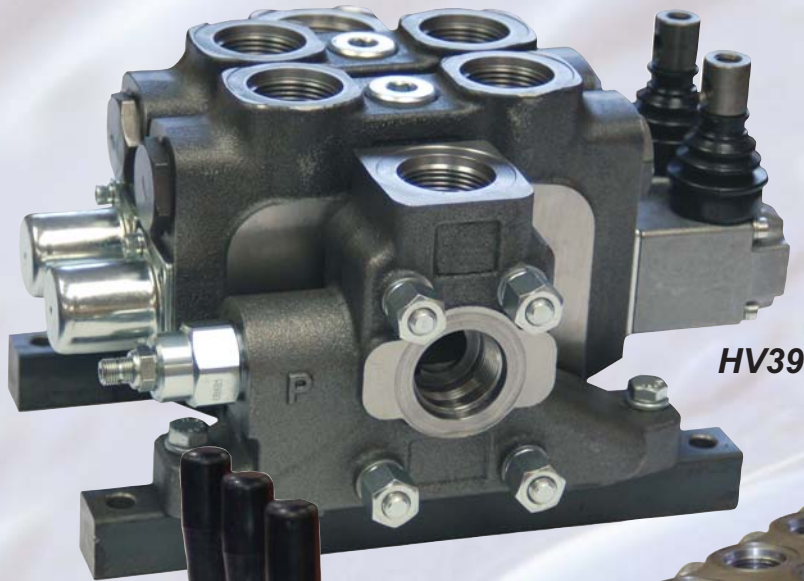


INDUSTRIAL FLUID POWER COMPONENTS
AND SYSTEMS



HV SERIES

Manual/ Proportional Directional Valves



HV39



HV9



HV18



EPHV39
Lever Actuated
with Optional
Proportional
Control

General Features

Standard Material Specifications

- High Strength Cast Iron
- Spools are Hard Chrome Plated
- Steel Spring Caps
- Aluminum Lever Caps
- NBR Seals

Standard Features

- 1/2" Single Spool Monoblock Valve
- Adjustable Relief Valve (500-5000 psi)
- Housed Knuckle Joint
- Parallel Circuit
- Single - Double Action



HV9-2C-8FS

HV9 Series is a single spool 9.25 gpm (35 lpm) capacity monoblock valve. Typical applications are: power packs, small cranes, agricultural machines and tractors.

General Specifications

Standard Working Conditions

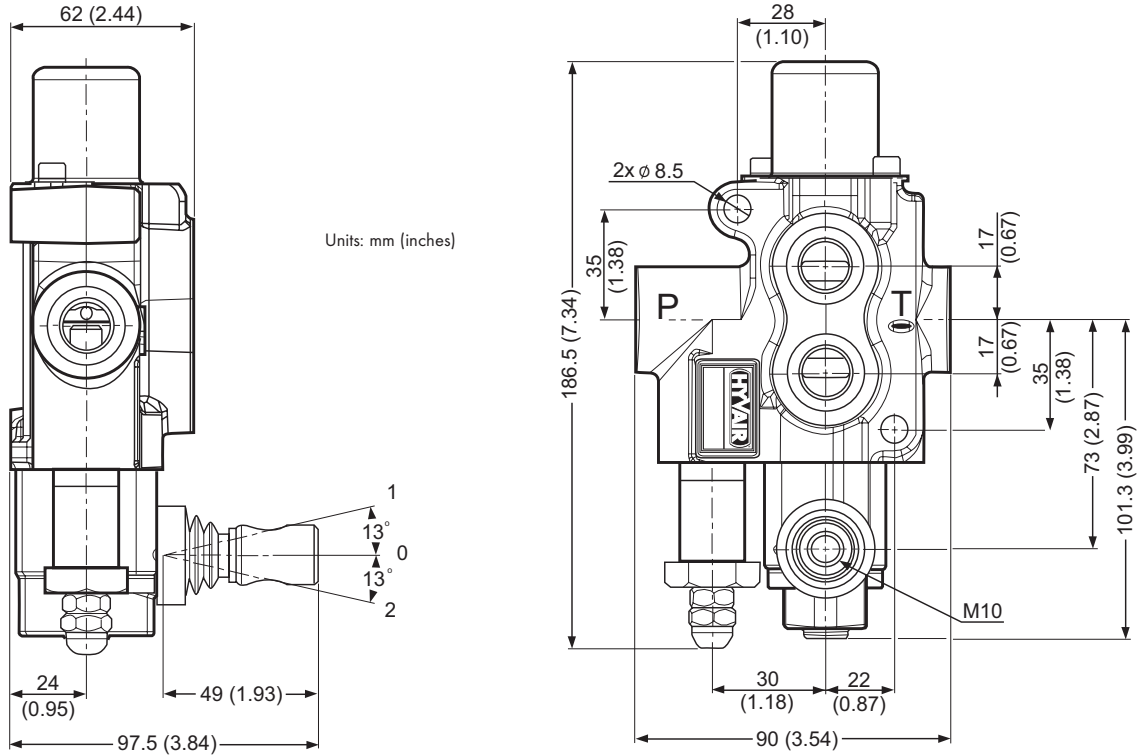
- Flow Rate.....9.25 gpm (35 lpm)
- Maximum Operating Pressure.....5000 psi (350 Bar)
- Maximum Back Pressure.....435 psi (30 Bar)
- Recommended Fluid Temperature Range.....-4° to 176°F (-20° to 80°C)
- Ambient Temperature Range.....-31° to 140°F (-35° to 60°C)
- Recommended Oil Viscosity Range.....32 cSt
- Internal Leakage (at 1450 psi (100 Bar); 32 cSt, 104°F (40°C)).....4 to 9 cc/ min
- Recommended Oil Filtering.....β 10 > 75
- Maximum Contamination Level.....Class 9 (NAS 1638)
19/16 (ISO 4406)

Technical Specifications

- Number of Spools.....1
- Weight.....5.3 lbs (2.4 kg)

Dimensional Data

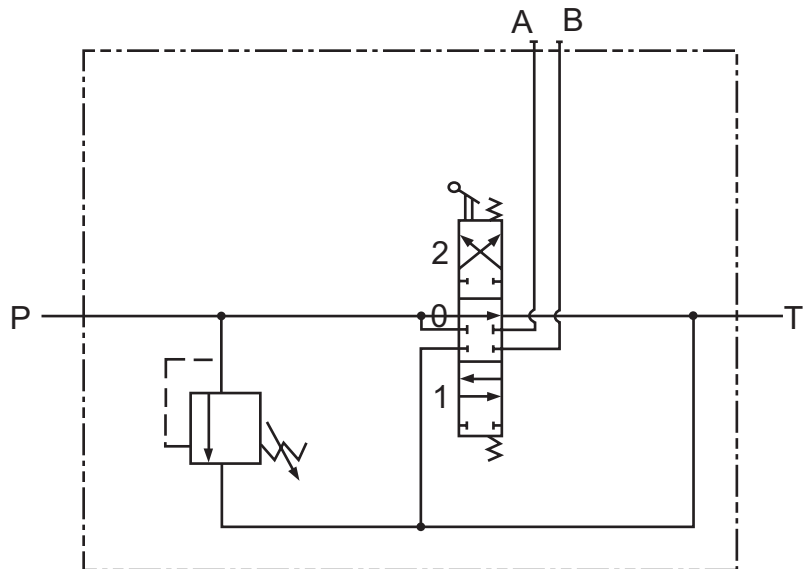
Units: mm (inches)



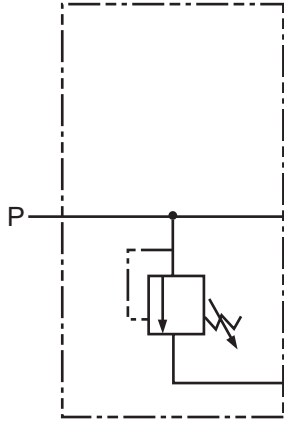
Hydraulic Circuit

Parallel Circuit

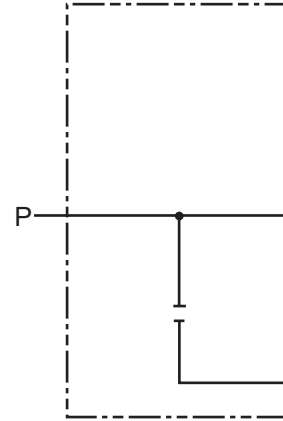
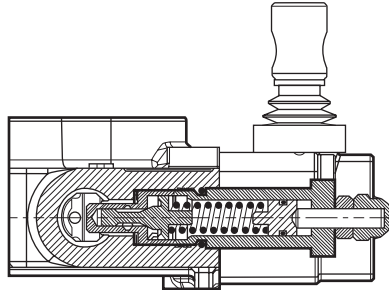
When the spool is operated, it intercepts the switch gallery by diverting the flow of oil to service port A or B. If two or more spools are actuated at the same time, the oil will power the service port that has the lower load by selecting the path with the least resistance; by throttling the spools, the flow of oil can be divided between two or more service ports.



Main Relief Valve

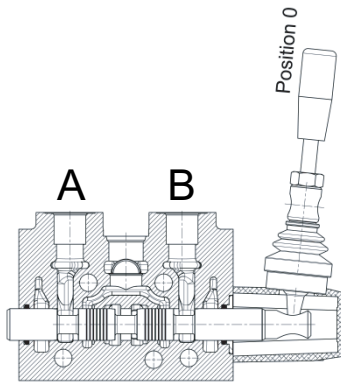


Inlet with Main Relief Valve



Inlet without Main Relief Valve

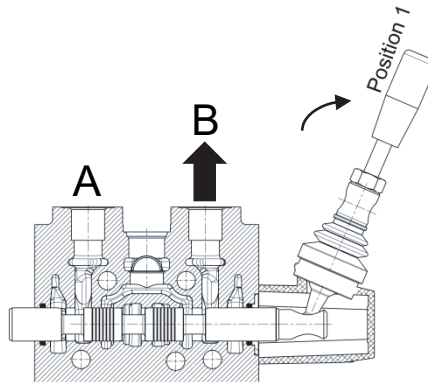
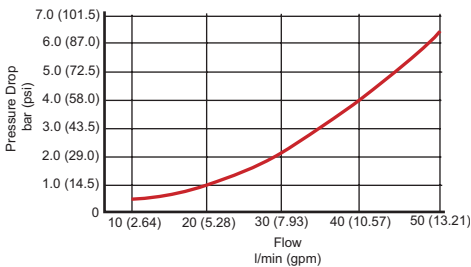
Spool Control Position/ Pressure Drop Curves



Spool-neutral position:
POSITION 0



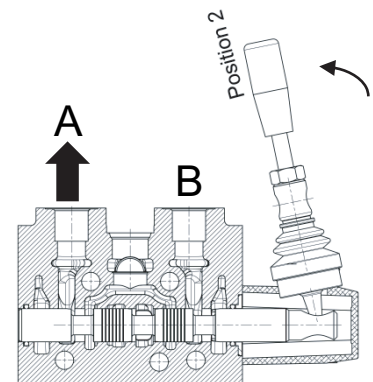
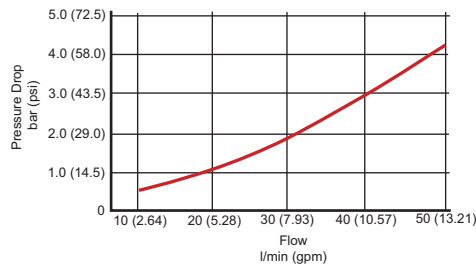
P - T



Spool-out position:
POSITION 1



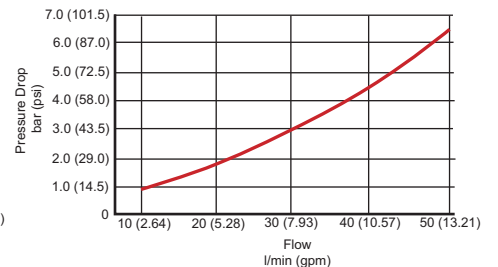
P - A/B



Spool-in position:
POSITION 2

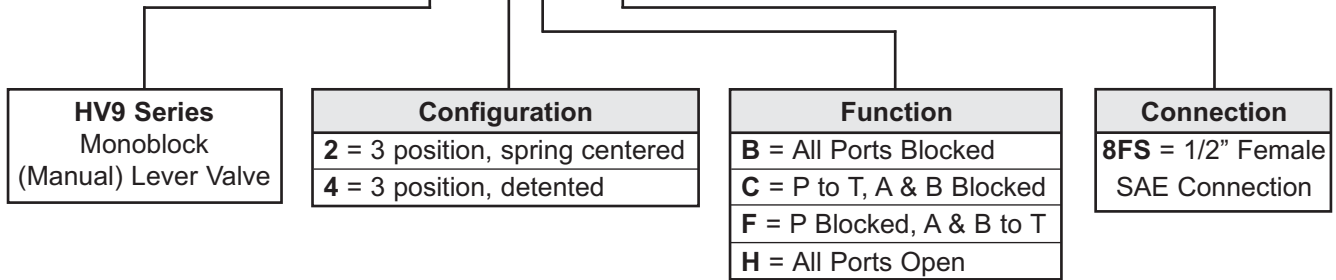


A/B - T



Ordering Information

HV9 - 2 C - 8FS



Options
HVHANDLE = Handle
HV9-DK = Detent Kit



Units: mm (inches)

