Technical Information

General Description

Series S and SM accessory valves are two-position, three way selector valves. They are designed for directing flow from one single pump to one, or the other of two separate hydraulic lines. An example of this is the operation of two single-acting cylinders, independent of each other.

Series H and HM accessory valves are two-position, three way selector valves. They are designed to be used with a three-position, four way valve to provide a float or free-wheeling condition. Application examples include plows, loaders, and certain winches.

All four versions of this valve should be shifted prior to the application of pressure. The flow forces might make this valve difficult to shift under normal operating pressure and flow conditions.

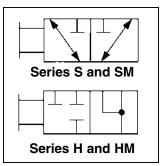
Operation

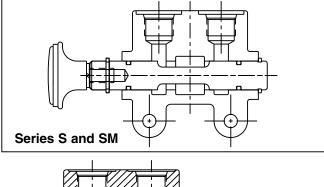
Flow enters the valve at the inlet port. When the lever is pushed in, the spool shifts allowing inlet flow to reach the work port furthest away from the lever. When the lever is pulled out, the spool shifts allowing inlet flow to reach the work port closest to the lever.

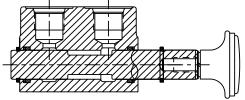
Features

- Pressure balanced spool
- Chrome plated spool
- High-tensile cast iron body









Series H and HM

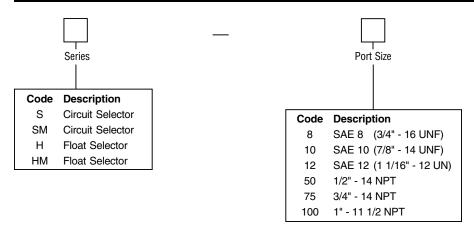
Specifications

Input Flow 37.5 LPM (10 GPM)	HM-8 and HM-50	Operating Temperature Range (Ambient)	Nitrile Seals: -40°C to +93°C (-40°F to +200°F)			
75 LPM (20 GPM) 112.5 LPM (30 GPM) 225 LPM (60 GPM)	S-8, SM-8, S-10, S-50 and SM-50 S-12, H-12, S-75 and H-75 S-16, S-100	Material	Body – High strength cast iron Spool – Hardened and ground steel			
Operating Pressure SAE Ports	207 Bar (3000 PSI)	Filtration	ISO Code 16/13 SAE Class 4 or better			
NPTF Ports	138 Bar (2000 PSI)	Mounting Position	In-line; no restrictions			



S-H-SM-HM.p65, dd

Ordering Information



The following models are not available:

H-8	HM-10	SM-10
H-10	HM-12	SM-12
H-16	HM-16	SM-16
H-50	HM-75	SM-75
H-100	HM-100	SM-100

All valves are shipped with a knob.

Service Parts

Knob Kit with Lockwasher all versions	06645001
Clevis Kit	08650235
Spool Seal & Retaining Ring Kit	
Size 12 and 75 only (H or S)	06492001
Size 8, 10 and 50 only (H or S)	06490001
Size 16 and 100 only (H or S)	06493001
Spool Seal, Retaining Ring & Back-up Ring Kit (HM & SM Only)	11411001

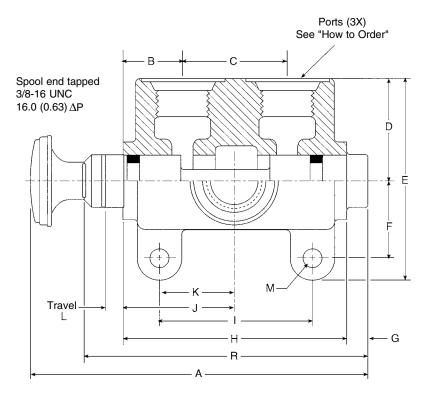
Note: The body and the spool are not service items.

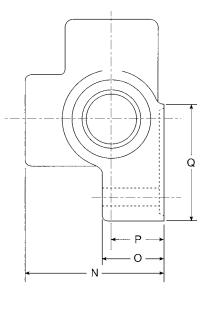


27

Dimensions

Inch equivalents for millimeter dimensions are shown in (**)





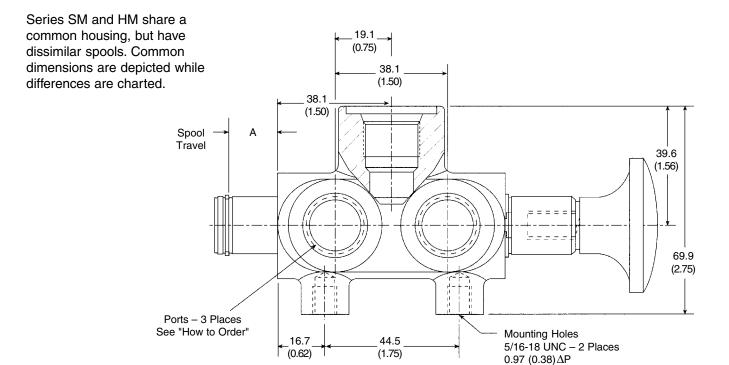


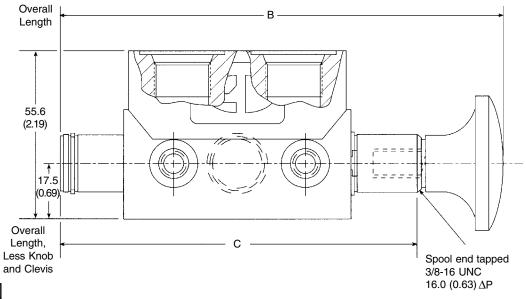
Series	Α	В	С	D	E	F	G	Н	ı	J	K	L	M	N	0	Р	Q	R
S-50	147.1	24.6	41.4	42.9	84.1	30.2	6.4	90.4	54.1	45.2	26.9	7.9	8.9	66.6	28.5	25.4	50.8	117.4
3-30	(5.79)	(0.97)	(1.63)	(1.69)	(3.31)	(1.19)	(0.25)	(3.56)	(2.13)	(1.78)	(1.06)	(0.31)	(0.35)	(2.62)	(1.12)	(1.00)	(2.00)	(4.62)
S-75	168.2	28.7	53.9	52.3	101.6	38.1	6.4	111.3	76.2	55.6	38.1	9.7	8.9	66.6	28.5	25.4	58.7	138.2
0-70	(6.62)	(1.13)	(2.12)	(2.06)	(4.00)	(1.50)	(0.25)	(4.38)	(3.00)	(2.19)	(1.50)	(0.38)	(0.35)	(2.62)	(1.12)	(1.00)	(2.31)	(5.44)
S-100	188.5	30.2	65.0	57.2	114.3	42.9	6.4	125.5	87.4	62.7	43.7	9.7	10.4	88.9	35.1	31.8	73.2	158.8
3-100	(7.42)	(1.19)	(2.56)	(2.25)	(4.50)	(1.69)	(0.25)	(4.94)	(3.44)	(2.47)	(1.72)	(0.38)	(0.41)	(3.50)	(1.38)	(1.25)	(2.88)	(6.25)
H-75	168.2	28.7	53.9	52.3	101.6	38.1	6.4	111.3	76.2	55.8	38.1	9.7	8.9	66.6	28.5	25.4	58.7	138.2
11273	(6.62)	(1.13)	(2.12)	(2.06)	(4.00)	(1.50)	(0.25)	(4.38)	(3.00)	(2.19)	(1.50)	(0.38)	(0.35)	(2.62)	(1.12)	(1.00)	(2.31)	(5.44)



Dimensions

Inch equivalents for millimeter dimensions are shown in (**)



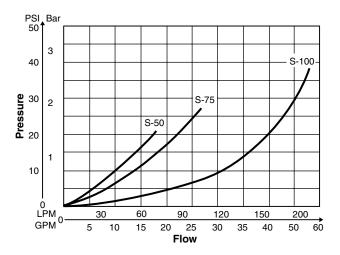


Series	Α	В	C			
SM	16.0	150.4	120.7			
SIVI	(0.63)	(5.92)	(4.75)			
нм	10.4	140.7	111.3			
ПІИ	(0.40)	(5.54)	(4.38)			



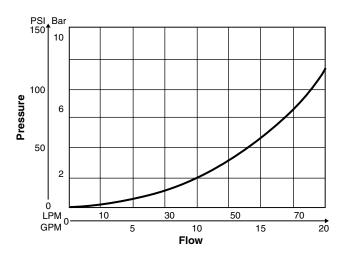


Series S

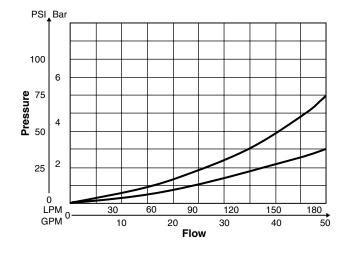


Note: Model S selectors will tolerate flow rates well in excess of those shown here. Consideration should be given to the restrictiveness of the port adaptors.

Series SM



Series H



Series HM

