

# Parker S & H Series Selector Valve Service Manual

## 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

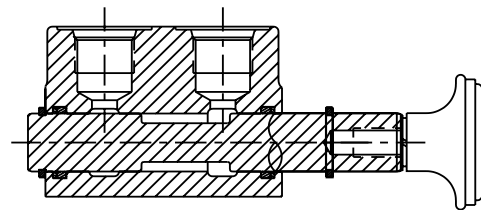
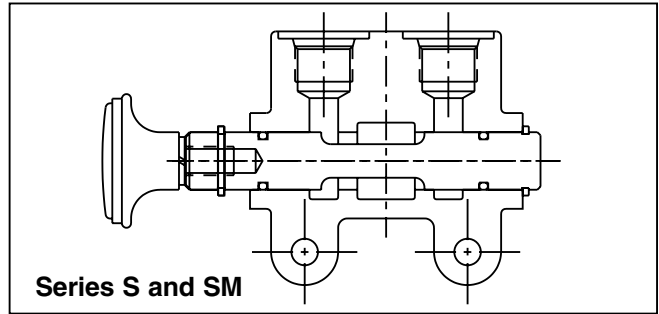
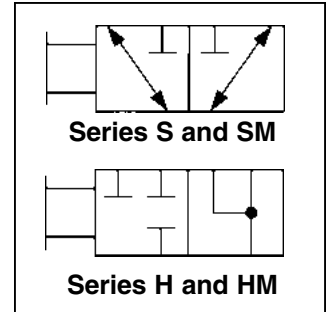
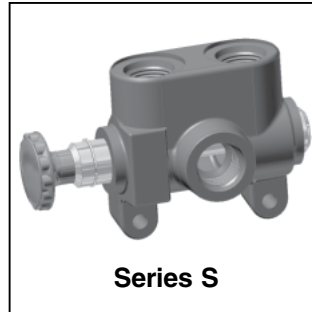
Flow enters the valve at the inlet port. When the lever is pushed in, the spool shifts allowing inlet flow to reach the work port furthest away from the lever. When the lever is pulled out, the spool shifts allowing inlet flow to reach the work port closest to the lever.

## Features

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

## Specifications

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



□	Series
<b>Code</b>	<b>Description</b>
S	Circuit Selector
SM	Circuit Selector
H	Float Selector
HM	Float Selector

□	Port Size
<b>Code</b>	<b>Description</b>
8	SAE 8 (3/4" - 16 UNF)
10	SAE 10 (7/8" - 14 UNF)
12	SAE 12 (1 1/16" - 12 UN)
50	1/2" - 14 NPT
75	3/4" - 14 NPT
100	1" - 11 1/2 NPT

**The following models are not available:**

<b>H-8</b>	<b>HM-10</b>	<b>SM-10</b>
<b>H-10</b>	<b>HM-12</b>	<b>SM-12</b>
<b>H-16</b>	<b>HM-16</b>	<b>SM-16</b>
<b>H-50</b>	<b>HM-75</b>	<b>SM-75</b>
<b>H-100</b>	<b>HM-100</b>	<b>SM-100</b>

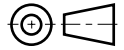
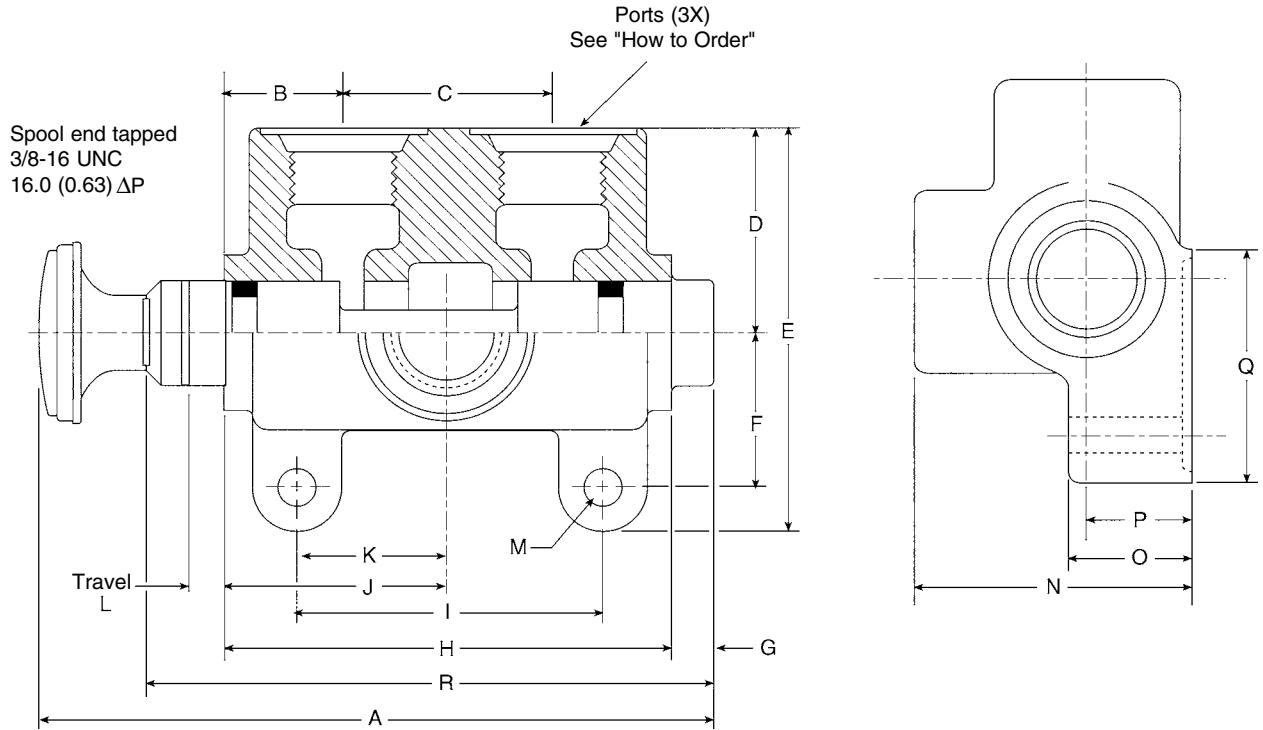
All valves are shipped with a knob.

**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.

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



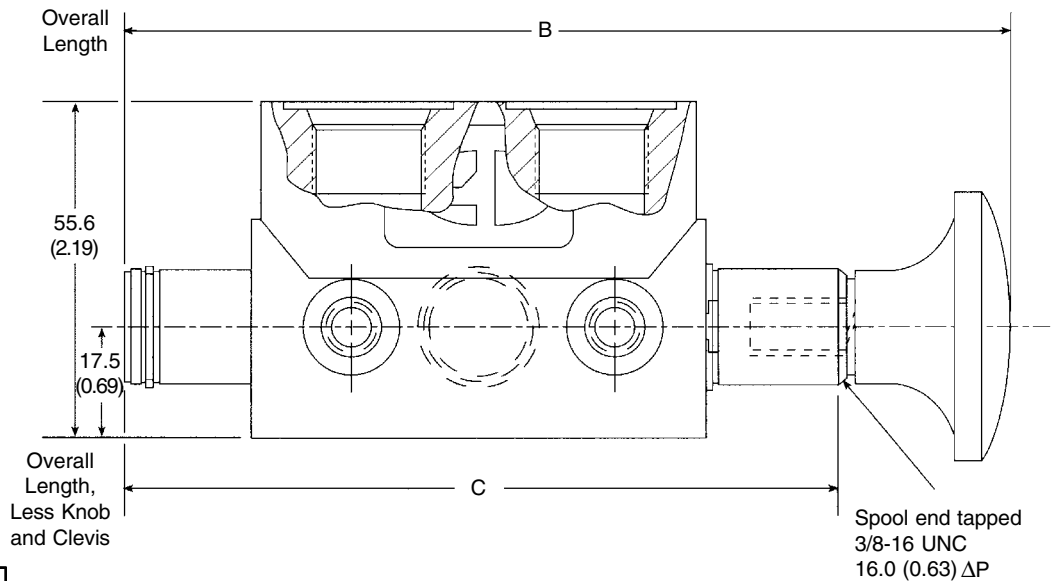
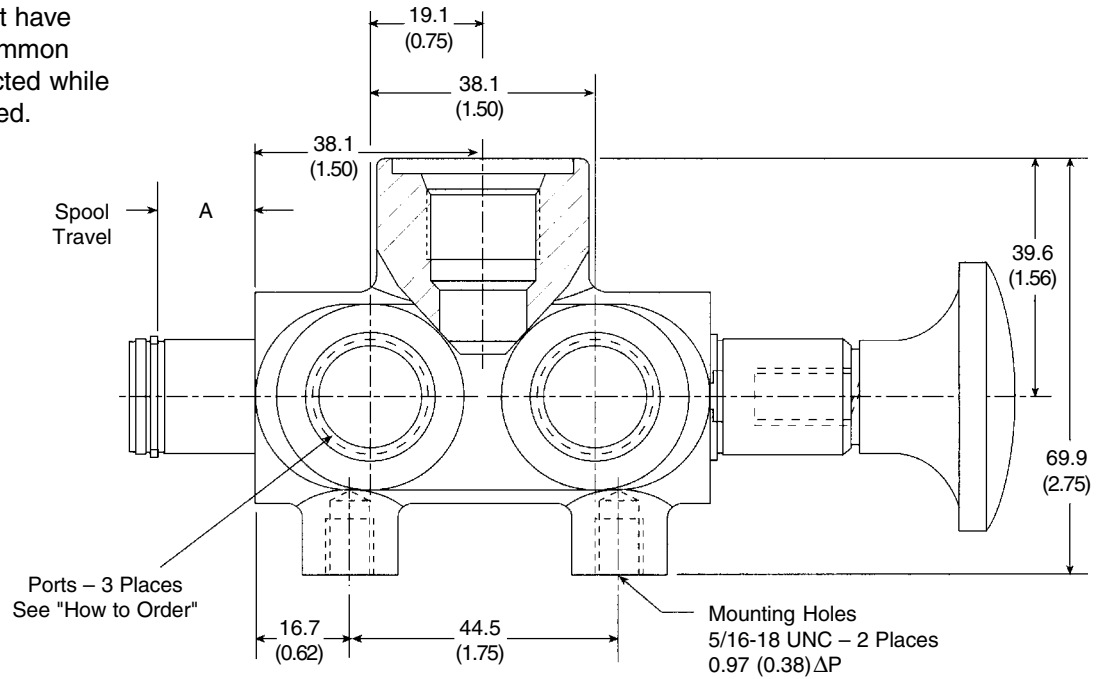
Series	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
<b>S-50</b>	147.1 (5.79)	24.6 (0.97)	41.4 (1.63)	42.9 (1.69)	84.1 (3.31)	30.2 (1.19)	6.4 (0.25)	90.4 (3.56)	54.1 (2.13)	45.2 (1.78)	26.9 (1.06)	7.9 (0.31)	8.9 (0.35)	66.6 (2.62)	28.5 (1.12)	25.4 (1.00)	50.8 (2.00)	117.4 (4.62)
<b>S-75</b>	168.2 (6.62)	28.7 (1.13)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

**Dimensions**

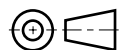
**Mobile Accessory Valves  
Series SM and HM**

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

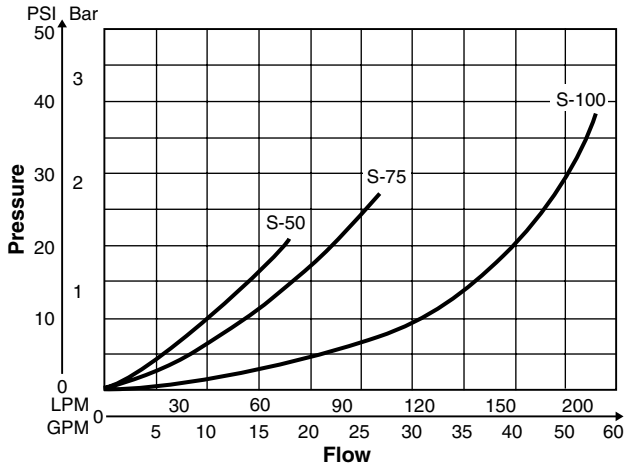
Series SM and HM share a common housing, but have dissimilar spools. Common dimensions are depicted while differences are charted.



Series	A	B	C
SM	16.0 (0.63)	150.4 (5.92)	120.7 (4.75)
HM	10.4 (0.40)	140.7 (5.54)	111.3 (4.38)

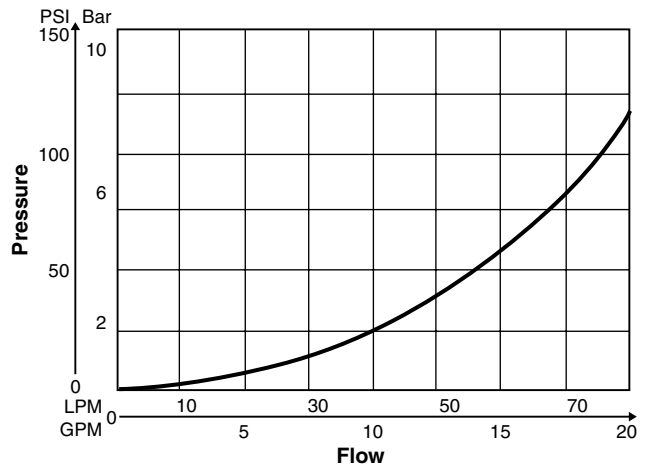


**Series S**

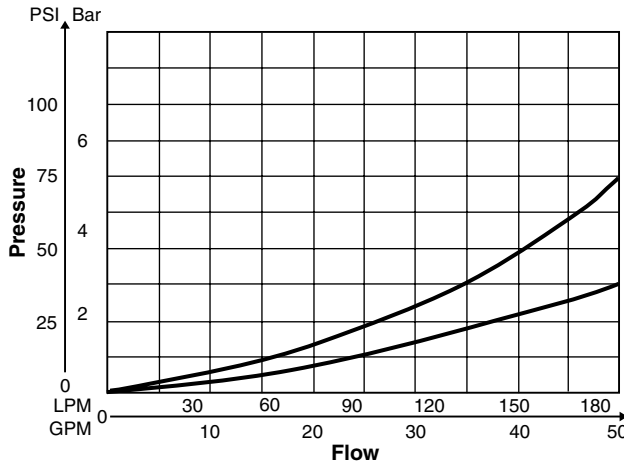


**Note:** Model S selectors will tolerate flow rates well in excess of those shown here. Consideration should be given to the restrictiveness of the port adaptors.

**Series SM**



**Series H**



**Series HM**

