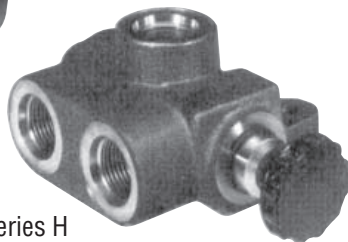


Series S



Series H

Bulletin HY14-2721-B1/US

Series S, H, SM and HM 3-Port Selector Valve

Effective: February 1, 2004

Supersedes: Cat. No. GPA-10-150 dated 12/96

Features

- Flows to 60 GPM (227 LPM)
- Pressure balanced spool
- Chrome plated spool
- High-tensile cast iron body
- Easy to mount

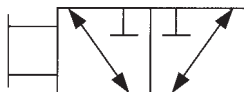
Description

Parker's Series S and SM offer a simple method of directing system flow to one or the other of two separate lines. An example of this is the operation of two single-acting cylinders, independent of each other with one three-way control valve.

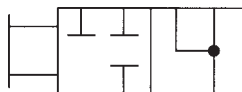
Since the S and SM spools are of open-crossover design, they should be shifted before pressure is applied.

Series H and HM can be used with a 3-position, four-way control valve to provide a float or free-wheeling condition. Application examples include plows, loaders, and certain winches.

The H and HM along with S and SM should be shifted prior to the application of pressure.



Series S, SM



Series H, HM

Specifications

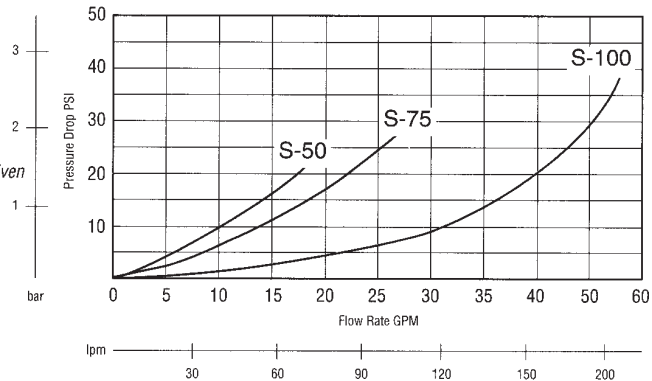
- **Operating Pressure**
Model S, Model H 3000 PSI (206,8 bar) maximum
Model SM, Model HM 2000 PSI (138 bar) maximum
- **Capacity (Nominal)**
S-50 20 GPM (75,7 lpm)
S-75 30 GPM (113,5 lpm)
S-100 60 GPM (227,1 lpm)
SM 20 GPM (75,7 lpm)
HM 10 GPM (37,8 lpm)
- **Fluid Recommendations**
Premium grade hydraulic fluid with 60 SUS (10cst) to 1000 SUS (216 cst) viscosity at operating temperature, per VG32.
- **Seals** BUNA N Standard
Consult factory for other seal requirements.
- **Temperature**
Under normal conditions of operation, fluid temperature should not exceed 160°F (71°C). In no instance should temperature exceed 180°F (82°C).
- **Ports** NPT*, SAE or BSP
- **Mounting Position** Unrestricted
- **Weight**
S-50 3.2 lbs. (1,4 kg)
S-75 5.4 lbs. (2,4 kg)
S-100 8.3 lbs. (3,7 kg)
SM, HM 2.3 lbs. (1,1 kg)
- **Leakage** at 1000 PSI (68,9 bar), less than 20 cu. in. (322 cc)

*VALVES WITH NPT PORTS LIMITED TO 2000 PSI (137.9 bar) MAXIMUM.

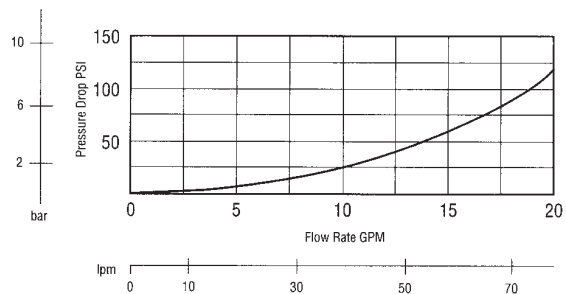
PERFORMANCE DATA

Model S

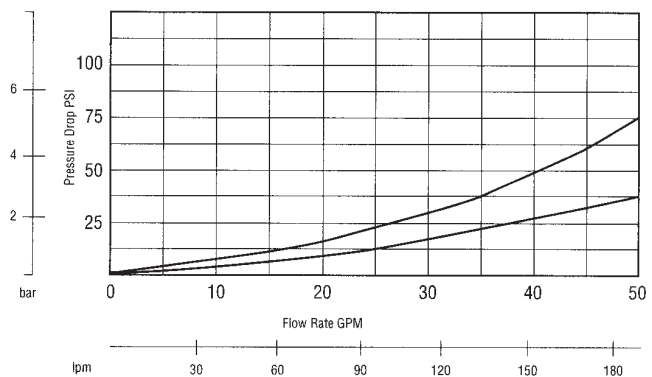
NOTE: Model S selectors will tolerate flow rates well in excess of those shown here. Consideration should be given to the restrictiveness of the port adaptors.



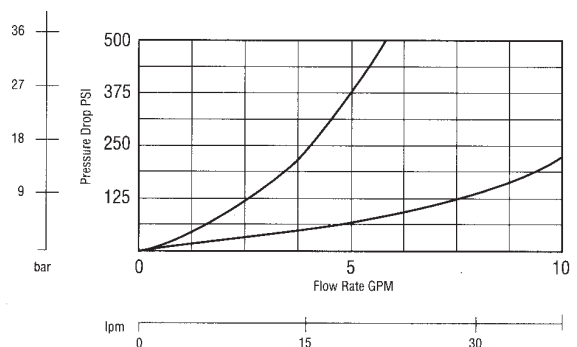
Model SM



Model H



Model HM

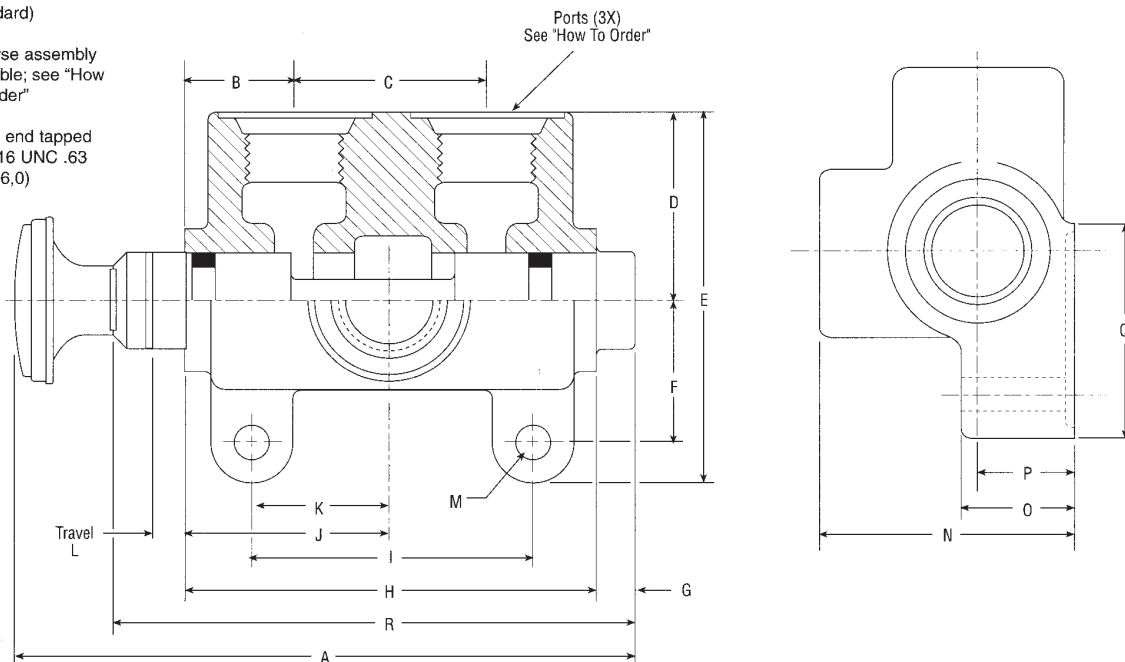


DIMENSIONS - Series S and H

Shown with knob
(standard)

Reverse assembly
available; see "How
To Order"

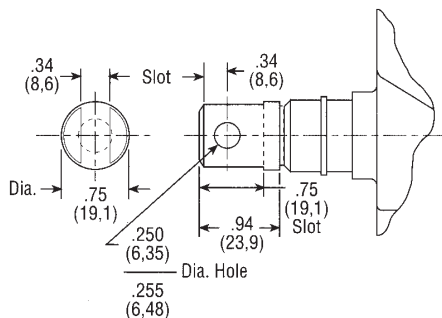
Spool end tapped
3/8 - 16 UNC .63
DP (16,0)



MODEL	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"	"I"	"J"	"K"	"L"	"M"	"N"	"O"	"P"	"Q"	"R"
S-50	5.79 (147,1)	.97 (24,6)	1.63 (41,4)	1.69 (42,9)	3.31 (84,1)	1.19 (30,2)	.25 (6,4)	3.56 (90,4)	2.13 (54,1)	1.78 (45,2)	1.06 (26,9)	.31 (7,9)	.35 (8,9)	2.62 (66,6)	1.12 (28,5)	1.00 (25,4)	2.00 (50,8)	4.62 (117,4)
S-75	6.62 (168,2)	1.13 (28,7)	2.12 (53,9)	2.06 (52,3)	4.00 (101,6)	1.50 (38,1)	.25 (6,4)	4.38 (111,3)	3.00 (76,2)	2.19 (55,6)	1.50 (38,1)	.38 (9,7)	.35 (8,9)	2.62 (66,6)	1.12 (28,5)	1.00 (25,4)	2.31 (58,7)	5.44 (138,2)
S-100	7.42 (188,5)	1.19 (30,2)	2.56 (65,0)	2.25 (57,2)	4.50 (114,3)	1.69 (42,9)	.25 (6,4)	4.94 (125,5)	3.44 (87,4)	2.47 (62,7)	1.72 (43,7)	.38 (9,7)	.41 (10,4)	3.50 (88,9)	1.38 (35,1)	1.25 (31,8)	2.88 (73,2)	6.25 (158,8)
H-75	6.62 (168,2)	1.13 (28,7)	2.12 (53,9)	2.06 (52,3)	4.00 (101,6)	1.50 (38,1)	.25 (6,4)	4.38 (111,3)	3.00 (76,2)	2.19 (55,6)	1.50 (38,1)	.38 (9,7)	.35 (8,9)	2.62 (66,6)	1.12 (28,5)	1.00 (25,4)	2.31 (58,7)	5.44 (138,2)

Optional Clevis - Series S and H

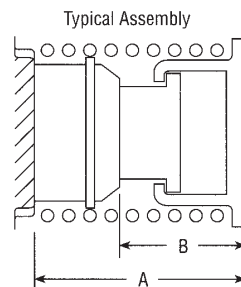
Both valves are available with a clevis actuator in place of the standard knob, or can be supplied with neither. See Order Code.



For field conversion, specify clevis 1478-001.

Optional Spring - Series S

Model S (only), is available with an offset spring for intermittent actuation. (See Order Code.) It is installed on the spool end opposite that of the actuator and returns the spool to the "IN" position when released. **CAUTION:** The spring mechanism is open to atmosphere.



Model	A	B
S-50	1.43 [36,5]	1.10 [27,9]
S-75	1.69 [42,9]	1.31 [33,2]
S-100	2.28 [57,9]	1.89 [48,0]

The spring offset option is not available for field installation.

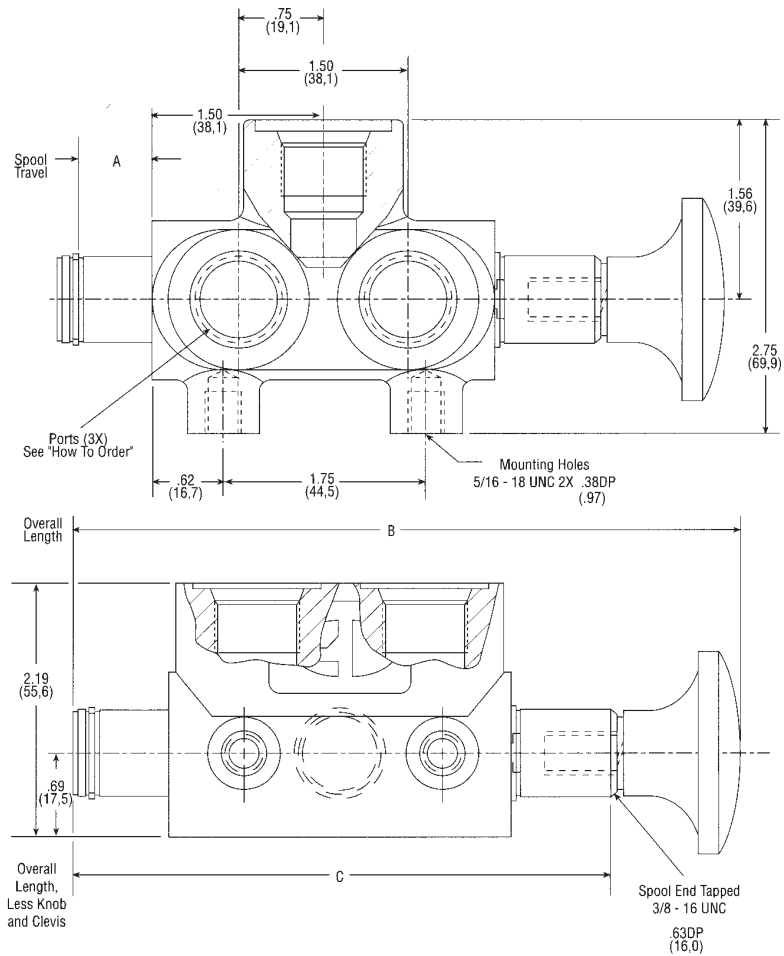
DIMENSIONS ARE IN INCHES (MILLIMETERS) AND ARE FOR REFERENCE ONLY.

DIMENSIONS - Series SM and HM

Models SM and HM share a common housing, but have dis-similar spools. Common dimensions are depicted while differences are charted. All are in inches (millimeters) and are for reference only.

Shown with knob
(standard)

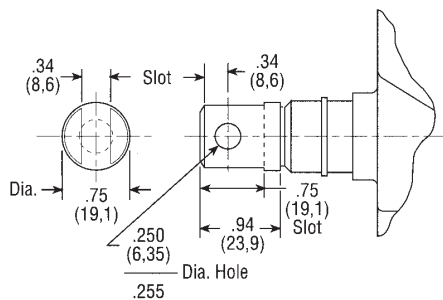
Reverse assembly
available; see "How
To Order"



MODEL	"A"	"B"	"C"
SM	.63 (16,0)	5.92 (150,4)	4.75 (120,7)
HM	.40 (10,4)	5.54 (140,7)	4.38 (111,3)

Optional Clevis - Series SM and HM

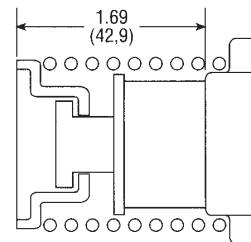
Both valves are available with a clevis actuator in place of the standard knob, or can be supplied with neither. See Order Code.



For field conversion, specify clevis 1478-001.

Optional Spring - Series SM

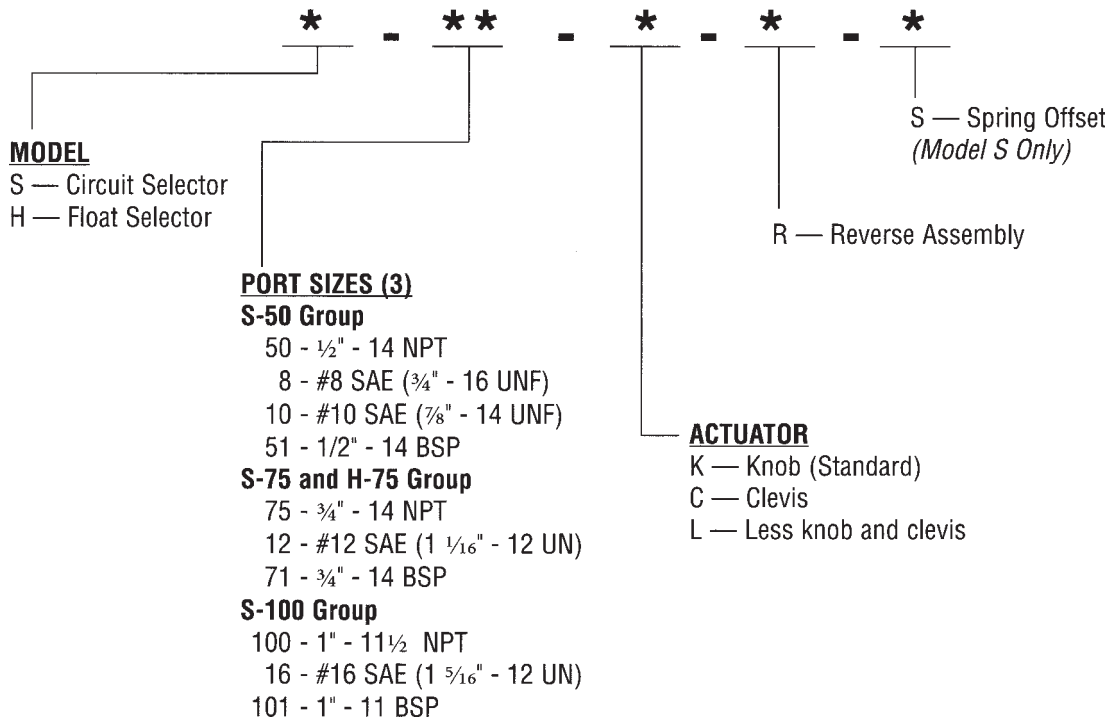
Model SM (only) is available with an offset spring for intermittent actuation. (See Order Code.) It is installed on the spool end opposite that of the actuator and returns the spool to the "IN" position when released. **CAUTION:** The spring mechanism is open to atmosphere.



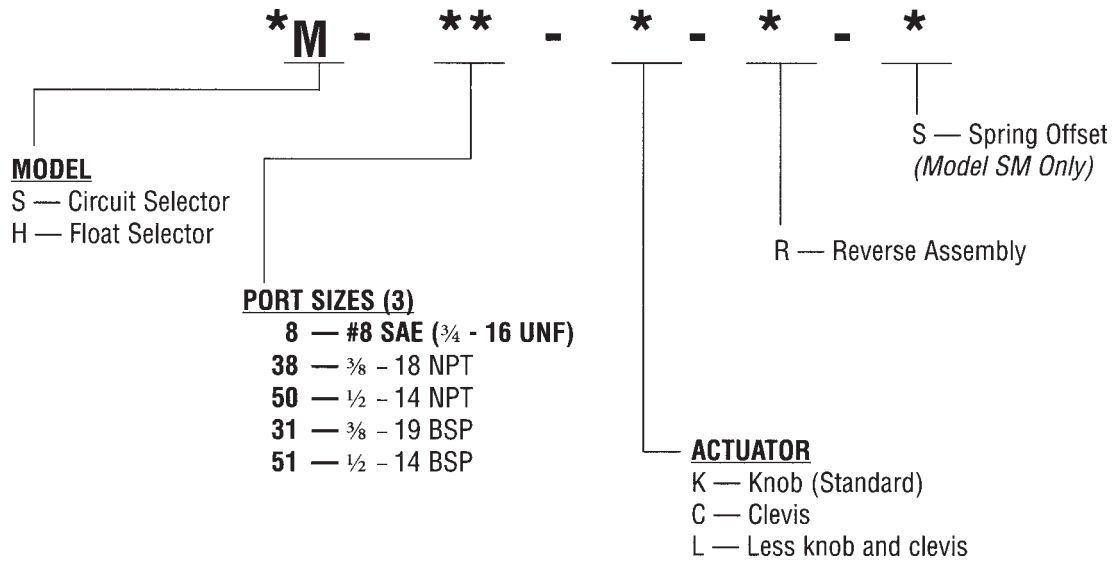
The spring offset option is not available for field installation.

DIMENSIONS ARE IN INCHES (MILLIMETERS) AND ARE FOR REFERENCE ONLY.

ORDER CODE - Series S and H



ORDER CODE - Series SM and HM





WARNING

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3C, 2/04, PHD