1" Hex for wrench

PORT THREAD 7/8-14

Stroke and Over Travel dimensions are approximate.

Install Cartridge valve using 1" wrench

Final tightening 20 to 30 foot pounds torque.

Fluid temperatures -40°F (-40°C) to 200°F (93.3°C)

Valve should screw in freely to the Mount Seal.

Use lubricant on external oil seals and mounting threads.

Spool Stroke is 1/4" .

OPERATION

1. Bottom: System Port (1)
2. Second from bottom: System Port (2)
3. Third from bottom: System Port (3)
4. Cartridge Seal Seat (Teflon)
5. Filter: .15 Micron Sintered Bronze (optional SST)
6. Vents to atmosphere (2 Places 180° apart)
7. Filter Retainer, Aluminum (optional SST)
8. Spool return Spring, Stainless Steel
9. Piston Wear Ring, UHMW (optional Teflon)
10. Actuator Guide Cylinder, Aluminum (optional SST)
11. Bonnet O-Ring, Buna-N (also see options)
12. Operator Knob (See part No. designations)
13. Upper Actuator Bonnet, Aluminum (optional SST)
14. Overtravel Protection Option (Per. 1/8")
15. Operator Follower Assembly, Aluminum (Optional SST)
16. Spring Retainer Assembly
17. O-Ring Seal, Teflon
18. Spool Connector Linkage (17-4PH900 SST)
19. Retaining Ring, Carbon Steel (optional SST)
20. O-Ring Seal, Buna-N (also see options)
21. Cartridge Mounting Threads (7/8-14)
22. Spool Cage (Heat Treated Stainless)
23. Back Up Rings, Teflon (two used)
24. O-Ring Seal, Buna-N (also see options)
25. Bronze Bushing

KEY EXPLANATION:
1. Bottom: System Port (1)
2. Second from bottom: System Port (2)
3. Third from bottom: System Port (3)
4. Cartridge Seal Seat (Teflon)
5. Filter: .15 Micron Sintered Bronze (optional SST)
6. Vents to atmosphere (2 Places 180° apart)
7. Filter Retainer, Aluminum (optional SST)
8. Spool return Spring, Stainless Steel
9. Piston Wear Ring, UHMW (optional Teflon)
10. Actuator Guide Cylinder, Aluminum (optional SST)
11. Bonnet O-Ring, Buna-N (also see options)
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21. Cartridge Mounting Threads (7/8-14)
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23. Back Up Rings, Teflon (two used)
24. O-Ring Seal, Buna-N (also see options)
25. Bronze Bushing

SHIFT FORCE NOTES:
10 to 15 Pounds of Force is required to shift the valve spool with zero pressure on port no. 1.

Any pressure on Port No. 1 will increase Force Requirement by .012 X Port No. 1 PSI.

INCH METRIC

CARTRIDGE VALVE ORDERING INFORMATION:

Order P/N 54H237M###

SPOOL DESIGNATION:

No Overtravel Protection = 0
With Overtravel Protection = P

KNOB DESIGNATION:

R: Red Anodized Aluminum
K: Non-Anodized Aluminum
S: Stainless Steel

OPTION:

Available with or without Overtravel Protection.
Optional seals include Viton, Teflon and others.

OPERATION

Manually Operated Hydraulics Spool Valve.
Three Way, Directional Control or Selector Valve.

Maximum System Pressure: Ports 1, 2, and 3 (is 3,000 PSIG. See "SHIFT FORCE NOTES"

Spool Stroke 1/4".

Drive and Over Travel dimensions are approximate.

Fluid temperatures: -40°F (-40°C) to 200°F (93.3°C)

Install Cartridge valve using 1" wrench.

Valve should screw in freely to the Mount Seal.

Final tightening 20 to 30 foot pounds torque.

Use lubricant on external oil seals and mounting threads.

PRESSURE DROP CHART

3PS SERIES
3 Way Spool Valve, Manually Operated. Directional Control or Selector Valve.