CARTRIDGE VALVE

KEY EXPLANATION:
1. Port No. 1, System Inlet
2. Port No. 2, System Outlet
3. Poppet, Hard Stainless Steel
5. O-Ring Seal, Buna N (Also See Options)
6. Filter, 10 Micron, Sintered Bronze.
7. Vent (2 Pl.) Optional T Port Locations
8. Filter Retainer
9. Poppet and Actuator Return Spring, Stainless
10. Piston Guide Ring UHMW material
11. Piston O-Ring Seal, Buna N (Also See Options)
12. Bonnet O-Ring Seal, Buna N (Also See Options)
13. 3/16" x 4.763" Spanner Holes (2 Pl.)
14. 1-8 NPT Pilot Port X (Also See Options)
15. Bonnet, Aluminum material
16. Actuator Body, Aluminum
17. Actuator Piston, Aluminum
18. Poppet Return Spring Retainer Assembly
19. Poppet Seal, TFE
20. 1-8" x 3.175" Spanner Holes (4 or 6 Pl.)
21. Cartridge Seal Retaining Ring
22. Mount O-Ring Seal, Buna N (Also See Options)
23. Cartridge Mounting Threads, Stainless Steel
24. Cartridge Seat, Hard Stainless
25. Back Up Rings, Teflon
26. O-Ring Seal, Buna N (Also See Options)
27. Spring (Used on valves = "A" Cav. 1-7/8 & 2-1/4")
28. Orifice Options, 0.015 or 0.031.

SPECIFICATIONS:
- Pilot operated two way cartridge valve. Normally closed.
- Use No. 1 port as pressure inlet port.
- Use No. 2 port as pressure outlet port.
- Use No. 1 cavity for 82H#### series.
- Use No. 2 cavity for 84H#### series.
- Fluid temperature -40°F to 200°F (-40°C to 93.3°C).
- Torque to 20 TO 30 foot pounds.
- Pilot Pressure Range, 50 PSI Min. to 150 PSI Max.
- Fluid temperatures -40°F to 200°F (-40°C to 93.3°C).
- All flow performance data based on tests using fluid at a specific gravity of 0.85 and a viscosity of 150 S.U.S. at a temperature of 100°F.

PILOT RATIO NOTES:
To calculate the correct pilot ratio valve, follow these steps:
1. Determine the maximum possible system pressure. Multiply X 1.1 = SYSTEM
2. Determine the minimum possible pilot pressure. Multiply X .9 = PILOT
3. Divide SYSTEM by PILOT = PILOT TO SYSTEM RATIO
4. Round up to standard available ratio.

FLOW AND PRESSURE DROP CHART:
- Cv = 0.1 Without Optional Orifice (Key 28).
- All flow performance data based on tests using fluid at a specific gravity of .85 and a viscosity of 150 S.U.S. at a temperature of 100°F.

For 82H#### series:
- Cavity C-8502 (8-2):
- See Spec. Sheet 1200630
- Line Mount Housings:
- See Spec. Sheets 1200672 and 1203123
- Panel Mount Housings:
- See Spec. Sheets 1202981 and 1202990

For 84H#### series:
- Cavity C-8542 (10-2):
- See Spec. Sheet 1200621
- Line Mount Housings:
- See Spec. Sheets 1200674 and 1201455
- Panel Mount Housings:
- See Spec. Sheets 1202982 and 1202990

SPECIAL OPTIONS:
- T Option: 10-32 Ports at Key 7 & 20, Random 360° Pos.
- Seals: Buna N, Viton or Teflon. Others please specify.
- Pilot Port (Key X) 1/8 NPT. Optional SAE4 Available.