KEY EXPLANATION:
1. Bottom: System Port (T)
2. Second from bottom: System Port (A)
3. Third from bottom: System Port (P)
4. Fourth from bottom: System Port (B)
5. Body Mount, 7/8"-14 Thread (SST.)
6. Filter, 10 Micron Sintered Bronze (Other Options Available)
7. Vents to atmosphere (2 Places 180° apart)
8. Filter Retainer, Aluminum (Other Options Available)
9. Operator Follower, Aluminum (Other Options Available)
10. Operator Follower, Aluminum (Other Options Available)
11. Operator Bonnet, Aluminum (Other Options Available)
12. Operator Bonnet, Aluminum (Other Options Available)
13. Operator Bonnet, Aluminum (Other Options Available)
15. Shoulder, Urethane
16. Back Up Ring, Teflon (two used)
17. Back Up Ring, Teflon (two used)
18. Back Up Ring, Teflon (two used)
19. Spring, Spool Return, Stainless Steel (7-1/2#)
20. Spool Cage (Heat Treated Stainless)
21. O-Ring Seal, Buna-N (Other Options Available)
22. O-Ring Seal, Buna-N (Other Options Available)
23. O-Ring Seal, Buna-N (Other Options Available)
24. O-Ring Seal, Buna-N (Other Options Available)
25. O-Ring Seal, Buna-N (Other Options Available)
26. O-Ring Seal, Buna-N (Other Options Available)
27. O-Ring Seal, Buna-N (Other Options Available)
28. O-Ring Seal, Buna-N (Other Options Available)
29. O-Ring Seal, Buna-N (Other Options Available)
30. O-Ring Seal, Buna-N (Other Options Available)
31. O-Ring Seal, Buna-N (Other Options Available)
32. O-Ring Seal, Buna-N (Other Options Available)

CARTRIDGE VALVE

SPOOL SELECTION

SHIFT FORCE
To determine the minimum theoretical operating force (#) required to shift the valve manually, multiply the pressure at Port 1 by 0.12 and add the spring force of 7.1/2 pounds (#). Example: 3000 (pressure) multiply by 0.12 = 36 + 7-1/2 pounds spring force = 43-1/2#. This represents the theoretical minimum manual operating force required to shift the valve. Considering variations in springs and hysteresis it is advisable to add at least 10# to the calculated minimum theoretical operating force to assure full valve function.

OPERATION
In its steady-state spring off-set position, the 34H237MPD Valve functions according to the functional symbol flow path located nearest the spring symbol in the corresponding functional symbol found on the right side of this spec. sheet. As the operator plunger is depressed to the 1/2 stroke position (1.8" Spool Travel) the function corresponds with the middle of the symbol. At full stroke (1.4" Spool Travel) the function corresponds to the portion of the symbol on the plunger end. At the end of the full stroke the OverTravel Protection will allow approximately 1/16" maximum additional travel of the operator, without damaging the valve.

CAVITY INFO.
Cavity C-8544 (Industry 10-4)
Form Test: FT-8544 Call for source information.
Reference Cavity Spec. Sheet No. 1200023 or Web Sheet C-8544 at www.doering.com

HOUSING & MANIFOLD INFO.
Single Station Housings (Sub-Plates) illustrated on Spec. Sheet No. 1200706, SB444™ Group.
Choose from Aluminum or Stainless materials.
Multi Station and Custom Housings or Manifolds also available.

PRESSURE DROP / FLOW

ORDERING INFORMATION:
CARTRIDGE VALVE PART NO.
34H237MPD#

ORDERING INFORMATION:
CARTRIDGE VALVE PART NO.
34H237MPD#

# = Enter Spool No.

4PS SERIES
Three Position 4 Way Spool Valve.
Manually Operated. Spring Return.
Directional Control or Selector Valve.