CARTRIDGE VALVE

KEY EXPLANATION:

1. Bottom: System Port (1)
2. Second from bottom: System Port (2)
3. Third from bottom: System Port (3)
4. Fourth from bottom: System Port (4)
5. Cartridge Body, Lower Section, 7/8"-14 Thread
7. Vents to atmosphere (2 Places 180° apart)
8. Filter Retainer
9. Spool return Spring, Stainless Steel.
10. Vents to atmosphere (2 Places 180° apart)
11. Bushing, Sintered Bronze, Qty. 2
12. Rod Operator Follower
13. Cartridge Body, Upper Section
14. 1" Wrench Flats
15. Manual Operator Push Rod, Heat Treated 17-4 SST
19. O-Ring Seal, Teflon
20. Back Up Ring, Teflon
21. Spring Retainer Assembly
22. Spool Connector Linkage (Stainless Steel)
23. O-Ring Seal, Teflon
25. Retaining Ring
26. O-Ring Seal, Teflon
27. O-Ring Seal, Buna-N
28. Spool Cage (Heat Treated Stainless)
29. Back Up Rings, Teflon (two used)
30. O-Ring Seal, Buna-N
31. Back Up Rings, Teflon (two used)
32. O-Ring Seal, Buna-N
33. Back Up Rings, Teflon (two used)
34. O-Ring Seal, Buna-N
35. Retaining Ring

SHIFT FORCE

To determine the minimum theoretical operating force (#) required to shift the valve manually, multiply the pressure at Port 1 by .012 and add the spring force of 7-1/2 pounds (#).

Example: 3000 (pressure) multiply by .012

= 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.

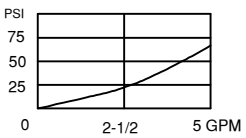
OPERATION

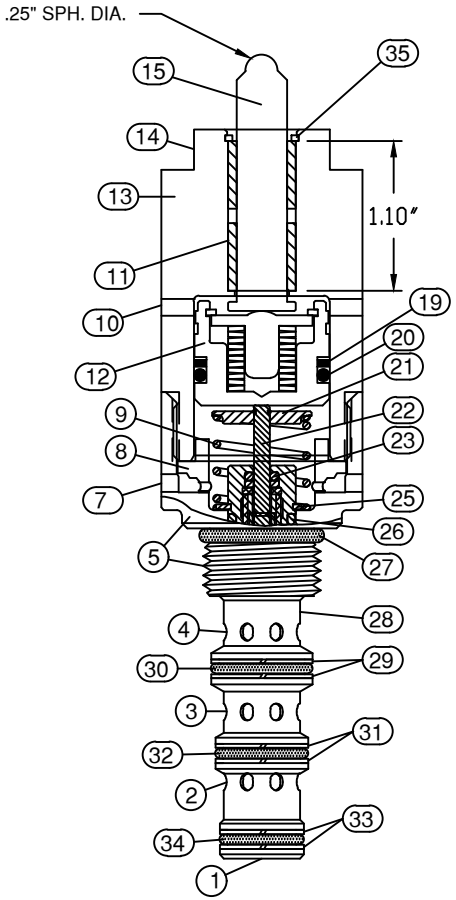
In its steady-state spring offset position, the 1202534 Valve functions according to the functional symbol flow path located nearest the spring symbol in the corresponding functional symbol found on the right side of this spec. sheet.

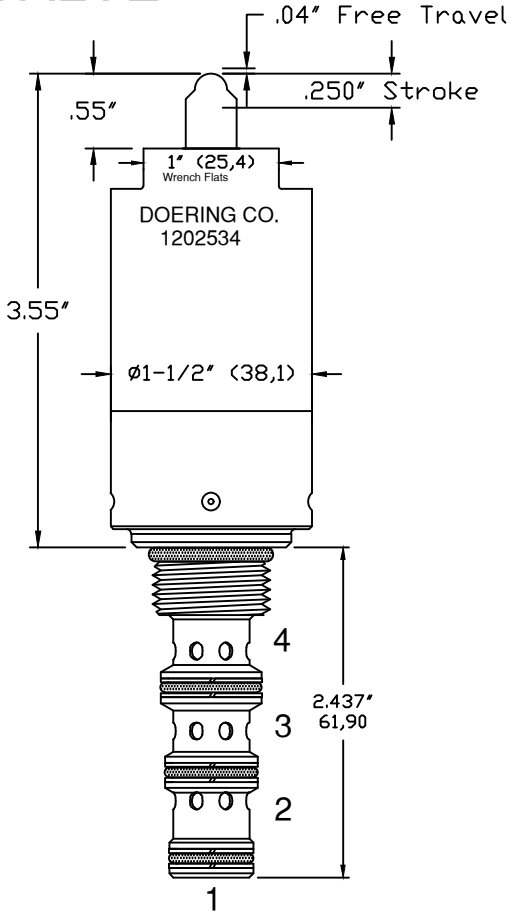
As the operator plunger is depressed to the 1/2 stroke position (1/8" Spool Travel) the function corresponds with the middle of the symbol.

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.

PRESSURE DROP / FLOW





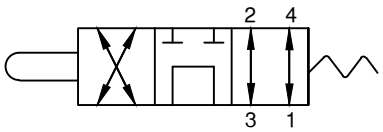


CAVITY INFO.

Cavity C-8544 (Industry 10-4)
Form Tool: 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, S8544-** Group.
Also see Web Sheet S8544 at www.doering.com.
Choose from Aluminum or Stainless materials.
Multi Station and Custom Housings or Manifolds also available.



ORDERING INFORMATION:

CARTRIDGE VALVE PART NO.

1202534

4PS SERIES

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

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