

## KEY EXPLANATION:

5. Teflon Seal
6. Filter, 10 Micron, Sintered Bronze
7. Spanner Hole & Vent to Atmosphere
8. Filter Retainer
9. Stainless Steel Spring
10. Piston Guide Ring, UHMW Machined
11. O-Ring, Buna-N
12. O-Ring, Buna-N
13. Bonnet Face Spanner Holes ( 2 )
14. Pilot Port, 1/8 NPT
15. Bonnet
16. Actuator Cylinder
17. Actuator Piston
18. Spring Retaining System
19. Teflon Seal
20. Spanner Hole & Vent to Atmosphere
21. Retaining Ring, Spool Cage Assembly
22. O-Ring, Buna-N
24. Spool Cage, Heat Treated Stainless, Honed
25. Teflon Back Up Ring ( 2 )
26. O-Ring, Buna-N
27. Teflon Back Up Ring ( 2 )
28. O-Ring, Buna-N
29. Booster Spring on 54H6-- & 54H7-- Models only.

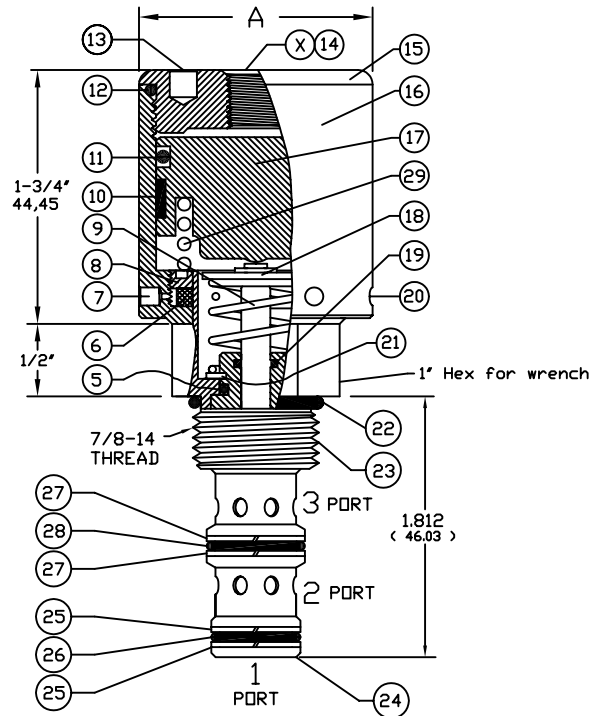
## OPTIONS

Pilot Port (Key X) is 1/8 NPT.  
 Optional Pilot Porting includes 1/4 NPT, SAE4, and SAE6.  
 Standard seals are Buna-N with Teflon back up rings.  
 Optional seals include Viton, Teflon and others.  
 Keys 7 & 20 are vents to atmosphere.  
 T Option provides 10-32 Threaded ports at these locations.

## PILOT RATIO NOTES:

- TO CALCULATE THE CORRECT PILOT RATIO VALVE TO ORDER FOLLOW THESE STEPS:
1. Determine the MAXIMUM possible system pressure.  
 Multiply X 1.1 = SYSTEM
  2. Determine MINIMUM possible pilot pressure.  
 Multiply X .9 = PILOT
  3. Divide SYSTEM by PILOT = PILOT TO SYSTEM RATIO
  4. Round up to standard available ratio.

## CARTRIDGE VALVE



## Cavity & Housing

Cavity & Tooling C-8543 (10-3):  
 See Spec. Sheet 1200634

Line Mount Housings:  
 See Spec. Sheet 1200673 & 1201903

Panel Mount Housings & Spacers:  
 See Spec. Sheets  
 1202983 and 1202990

Cavity, Tooling & Housing Info  
 found at [www.doering.com](http://www.doering.com)  
 Cavities, Housings & Manifolds.

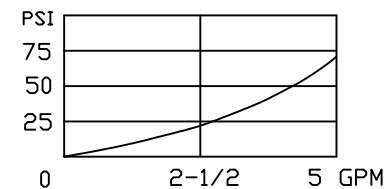
Doering Company also manufactures  
 multi function and multi station  
 Housings & Manifolds.

Please call for assistance.

## SPECIFICATIONS:

Air Pilot Operated Hydraulic Spool Valve.  
 Three Way, Directional Control or Selector Valve.  
 Maximum System Pressure:  
 Ports 1, 2, and 3 rated to 3,000 PSI.  
 Maximum Pilot Pressure (X port) 150 PSI.  
 Fluid temperature -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 to 20 foot pounds torque.  
 Use lubricant on external oil seals and mounting threads.

## PRESSURE DROP CHART

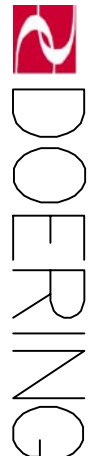


## 3PS SERIES

3 Way Spool Valve, Pilot Operated.  
 Directional Control or Selector Valve.

Spec. Sheet No. 1201637 Rev. 004

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Pilot to System Ratio applies to Port 1 only.	" A " Diameter	Cartridge Valve Order Number	Functional Symbol Suggested Connections
108:1 131:1 183:1 277:1	1-1/2 ( 38.1 ) 1-5/8 ( 41.28 ) 1-7/8 ( 47.63 ) 2-1/4 ( 57.15 )	54H2371080 54H3371310 54H6371830 54H7372770	 Normally Open: 1=Cyl., 2=P, 3=T
108:1 131:1 183:1 277:1	1-1/2 ( 38.1 ) 1-5/8 ( 41.28 ) 1-7/8 ( 47.63 ) 2-1/4 ( 57.15 )	54H2371081 54H3371311 54H6371831 54H7372771	 Normally Closed: 1=Cyl., 2=P, 3=T
108:1 131:1 183:1 277:1	1-1/2 ( 38.1 ) 1-5/8 ( 41.28 ) 1-7/8 ( 47.63 ) 2-1/4 ( 57.15 )	54H2371085 54H3371315 54H6371835 54H7372775	 Selector: 2=P, 1=C1, 3=C2