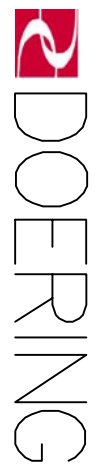


6343 RIVER ROAD SE ■ CLEAR LAKE, MN 55319 USA
 Telephone: 320-743-2276 ■ Fax: 320-743-3723
 mailbox@doering.com ■ www.doering.com



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 No. 471 Spanner Tool.
 Valve should screw in freely to the Mount Seal.
 Final tightening to 15 foot pounds torque.
 Use lubricant on external oil seals and mounting threads.

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.
 † Option provides 10-32 Threaded ports at these locations.

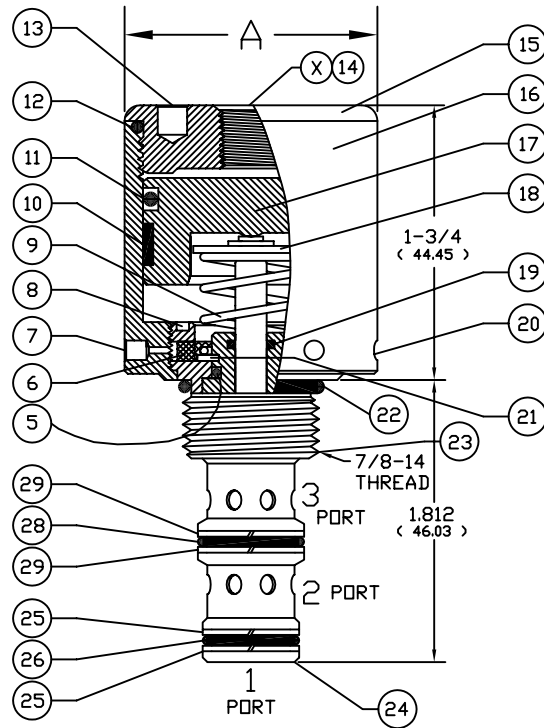
TOOLING

- * Cavity Form Tool: FT-8543
- * 1/8 (3.175) Pin Spanner Tool
Order No. 471, Ref. Key No. 20
- * 3/16 (4.763) Face Spanner Tool
Order No. 482, Ref. Key No. 13

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



Cartridge Valve Requires Cavity C-8543

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

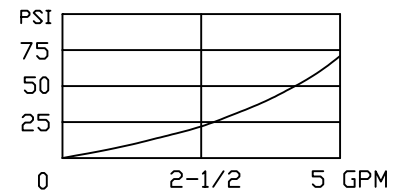
Cavity, Tooling & Housing Info
 found at www.doering.com
 Cavities, Housings & Manifolds.

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

Please call for assistance.

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)	542371080 543371310 546371830 547372770	 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)	542371081 543371311 546371831 547372771	 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)	542371085 543371315 546371835 547372775	 Selector: 2=P, 1=C1, 3=C2

PRESSURE DROP CHART



3PS SERIES

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