

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

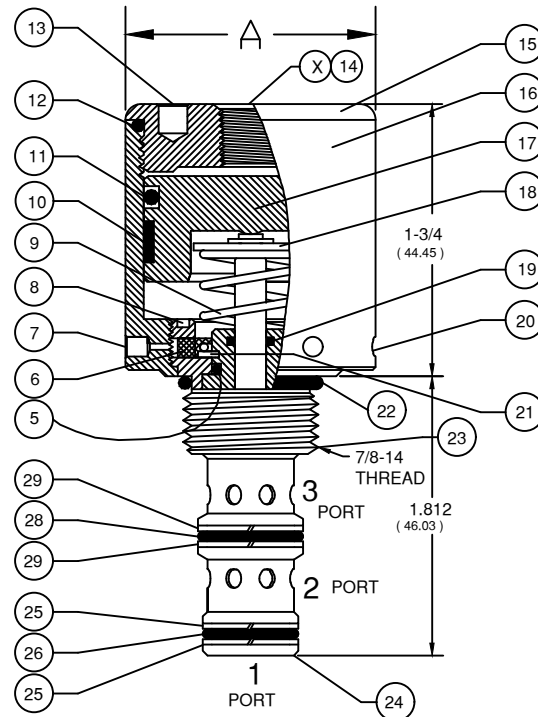
TOOLING

- * 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

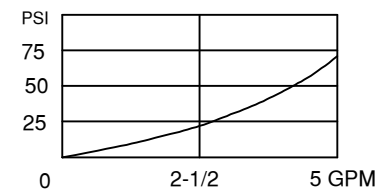
Panel Mount Housings & Spacers:
 See Spec. Sheets
 1202983 and 1202990

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.

PRESSURE DROP CHART



3PS SERIES

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

Pilot to System Ratio applies to Port 1 only.	" A " Diameter	Cartridge Valve Order Number	Functional Symbol Suggested Connections
108:1	1-1/2 (38.1)	542371080	<p>Normally Open: 1=Cyl., 2=P, 3=T</p>
131:1	1-5/8 (41.28)	543371310	
183:1	1-7/8 (47.63)	546371830	
277:1	2-1/4 (57.15)	547372770	
108:1	1-1/2 (38.1)	542371081	<p>Normally Closed: 1=Cyl., 2=P, 3=T</p>
131:1	1-5/8 (41.28)	543371311	
183:1	1-7/8 (47.63)	546371831	
277:1	2-1/4 (57.15)	547372771	
108:1	1-1/2 (38.1)	542371085	<p>Selector: 2=P, 1=C1, 3=C2</p>
131:1	1-5/8 (41.28)	543371315	
183:1	1-7/8 (47.63)	546371835	
277:1	2-1/4 (57.15)	547372775	

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DOERING