

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 Part (Key X) is 1/8 NPT.
 Optional Pilot Parting 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.
 1 Option provides 10-32 Threaded parts at these locations.

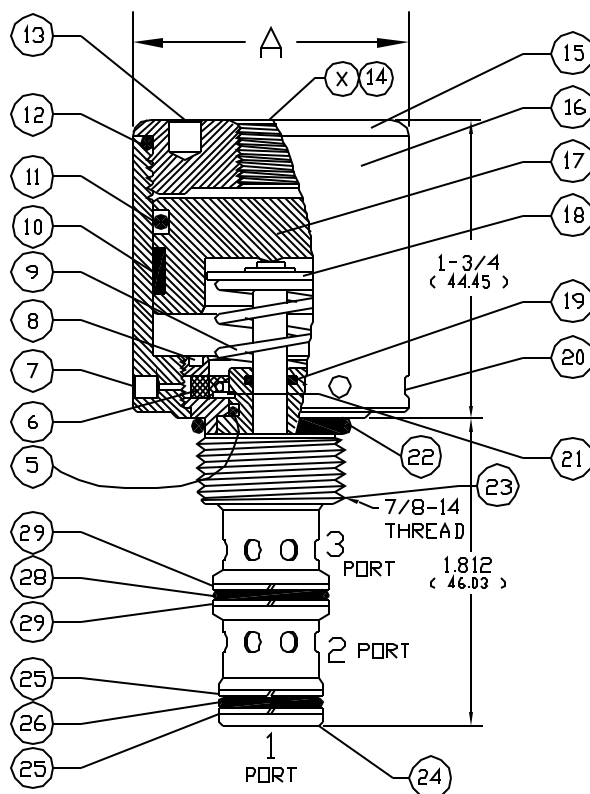
TOOLING

*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:

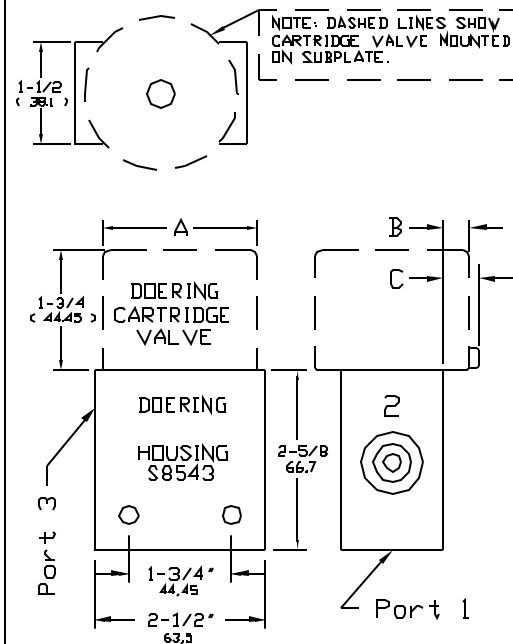
- TO CALCULATE THE CORRECT PILOT RATIO VALVE TO ORDER FOLLOW THESE STEPS:
- Determine the MAXIMUM possible system pressure.
 Multiply X 11 = SYSTEM
 - Determine MINIMUM possible pilot pressure.
 Multiply X .9 = PILOT
 - Divide SYSTEM by PILOT = PILOT TO SYSTEM RATIO
 - Round up to standard available ratio.

CARTRIDGE VALVE



Cartridge Valve Requires Cavity C-8543

HOUSING

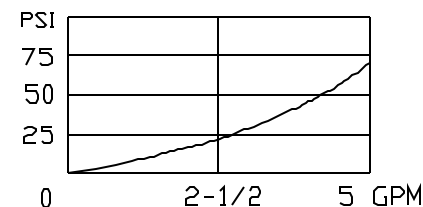


Housing Ports 1, 2 & 3: P/N S8543 are 3/8 NPT,
 P/N S8543-2 are 1/4 NPT, P/N S8543-6 are SAE6.
 Mounting holes are 9/32" diameter.
 Standard Housing material is Aluminum,
 For Stainless order S8543-3 or S8543-2S or S8543-6S.

SPEC. SHEET NO. 1200798 REV. 012

PILOT TO SYSTEM RATIO	" A " DIAMETER	" B " MAXIMUM	" C " MAXIMUM APPLICABLE TO 1 OPTION ONLY	CARTRIDGE VALVE NO.	HOUSING BODY NO.	Functional Symbol
108:1	1-1/2 (38.1)	NOT APPLICABLE	.15 (3.8)	542371080	S8543	<p>Normally Open: 1=Cyl., 2=P, 3=T</p>
131:1	1-5/8 (41.28)	.06 (1.6)	.21 (5.4)	543371310	- OR - S8543-2	
183:1	1-7/8 (47.63)	.19 (4.8)	.34 (8.6)	546371830	- OR - S8543-6	
277:1	2-1/4 (57.15)	.38 (9.6)	.53 (13.5)	547372770	S8543-6	<p>Normally Closed: 1=Cyl., 2=P, 3=T</p>
108:1	1-1/2 (38.1)	NOT APPLICABLE	.15 (3.8)	542371081	S8543	
131:1	1-5/8 (41.28)	.06 (1.6)	.21 (5.4)	543371311	- OR - S8543-2	
183:1	1-7/8 (47.63)	.19 (4.8)	.34 (8.6)	546371831	- OR - S8543-6	<p>Selector: 2=P, 1=C1, 3=C2</p>
277:1	2-1/4 (57.15)	.38 (9.6)	.53 (13.5)	547372771	S8543-6	
108:1	1-1/2 (38.1)	NOT APPLICABLE	.15 (3.8)	542371085	S8543	
131:1	1-5/8 (41.28)	.06 (1.6)	.21 (5.4)	543371315	- OR - S8543-2	
183:1	1-7/8 (47.63)	.19 (4.8)	.34 (8.6)	546371835	- OR - S8543-6	
277:1	2-1/4 (57.15)	.38 (9.6)	.53 (13.5)	547372775	S8543-6	

PRESSURE DROP CHART



3PS SERIES

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