

### KEY EXPLANATION:

- 5. Teflon Seal
- 6. Filter, 10 Micron, Sintered Bronze
- 7 & 20 Spanner Holes and Vent Holes
- 9. Spring, Spool Return ( SST )
- 10. Piston Guide Ring, UHMW
- 11. O-Ring Seal, Piston
- 14. 1/8 NPT Pilot Port
- 19. Teflon Seal
- 27. Spring ( Used on valves = "A" Dia. 1-7/8 & 2-1/4" )

### SPECIFICATIONS:

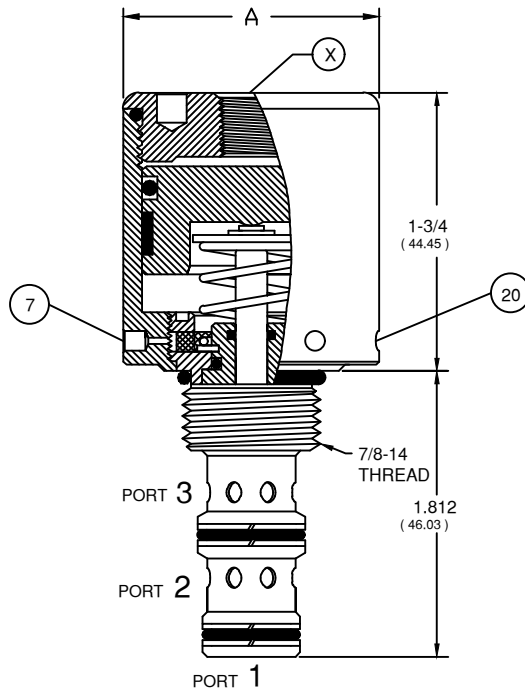
Air Pilot Operated Hydraulic Spool Valve.  
 Three Way, Directional Control or Selector Valve.  
 Maximum System Pressure:  
 Ports 1, 2, and 3 rated to 3,000 PSI.  
 Maximum Pilot Pressure (X port) 150 PSI.  
 Fluid temperature -40°F (-40°C) to 200°F (93.3°C)  
 Install Cartridge Valve using appropriate tool.  
 Valve should screw in freely to the Mount Seal.  
 Final tightening 15 to 20 foot pounds torque.  
 Use lubricant on external oil seals and mounting threads.

### TOOLING

- \* 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

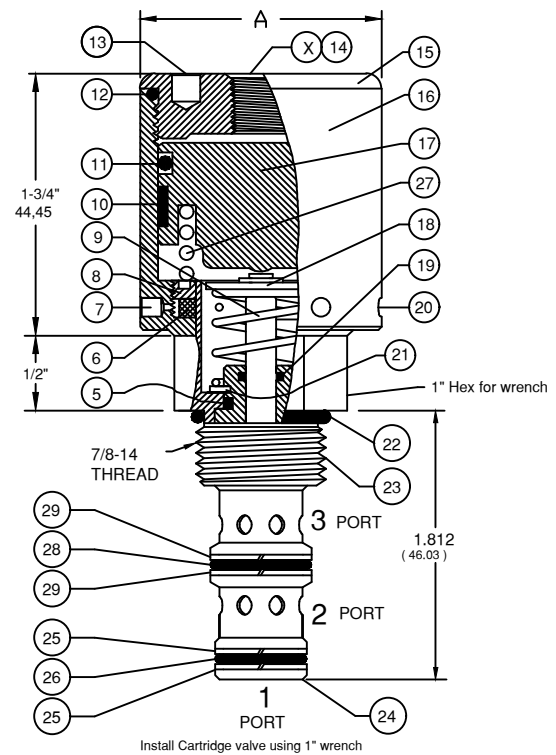
### PILOT RATIO NOTES:

- 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.



Install Cartridge Valve using No. 471 Spanner Tool.  
Reference Spanner holes, Keys 7 & 20.

**Cartridge Valve  
 Tamper Resistant Series  
 54\*37\*\*\*\***



Install Cartridge valve using 1" wrench

**Cartridge Valve  
 Hex Wrench Series  
 54H\*37\*\*\*\***

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SPEC. SHEET NO. 1200878 REV. 008

PILOT TO SYSTEM RATIO	" A " DIAMETER	Cavity & Housing	CARTRIDGE VALVE NO.	CARTRIDGE VALVE NO.	Functional Symbol	PRESSURE DROP CHART
108:1	1-1/2 ( 38.1 )	Cavity C-8543 (10-3): See Spec. Sheet 1200634  Line Mount Housings: See Spec. Sheets 1200673 and 1201903	542371086	54H2371086		<p>PSI</p> <p>0 2-1/2 5 GPM</p>
131:1	1-5/8 ( 41.28 )		543371316	54H3371316		
183:1	1-7/8 ( 47.63 )		546371836	54H6371836		
277:1	2-1/4 ( 57.15 )		547372776	54H7372776		
108:1	1-1/2 ( 38.1 )	Panel Mount Housings: See Spec. Sheets 1202983 and 1202990	542371087	54H2371087		<p><b>3PS SERIES</b>                      3 Way Spool Valve, Pilot Operated.                      Directional Control or Selector Valve.</p>
131:1	1-5/8 ( 41.28 )		543371317	54H3371317		
183:1	1-7/8 ( 47.63 )		546371837	54H6371837		
277:1	2-1/4 ( 57.15 )		547372777	54H7372777		



DOERING