

KEY EXPLANATION:

1. Port No. 1, System
2. Port No. 2, System
3. Poppet, Check, Hard Stainless
4. Poppet Check Spring, Stainless Steel
5. O-Ring Seal, Buna N (Also See Options)
6. Filter, 10 Micron, Sintered Bronze
7. Vent (2 Pl.) Optional T Port Locations
8. Filter Retainer
9. Actuator Return Spring, Stainless Steel
10. Piston Guide Ring
11. Piston O-Ring Seal, Buna N (Also See Options)
12. Bonnet O-Ring Seal, Buna N (Also See Options)
13. 3/16" (4.763) Spanner Holes (2 Pl.)
14. 1/8 NPT Pilot Port X (Also See Options)
15. Bonnet, Aluminum Material
16. Actuator Body, Aluminum
17. Actuator Piston, Aluminum
18. Push Rod, Hard Stainless Steel
19. Push Rod Seal, Teflon
20. 1/8" (3.175) Spanner Holes (4 or 6 Pl.)
21. Cartridge Seat Retaining Ring
22. Mount O-Ring Seal, Buna N (Also See Options)
23. 7/8-14 Cartridge Mounting Threads, Stainless Steel
24. Cartridge Seat, Hard Stainless
25. Back Up Ring, Teflon
26. O-Ring Seal, Buna N (Also See Options)
27. Spring (Used on valves = "A" Dia. 1-7/8 & 2-1/4")

SPECIFICATIONS:

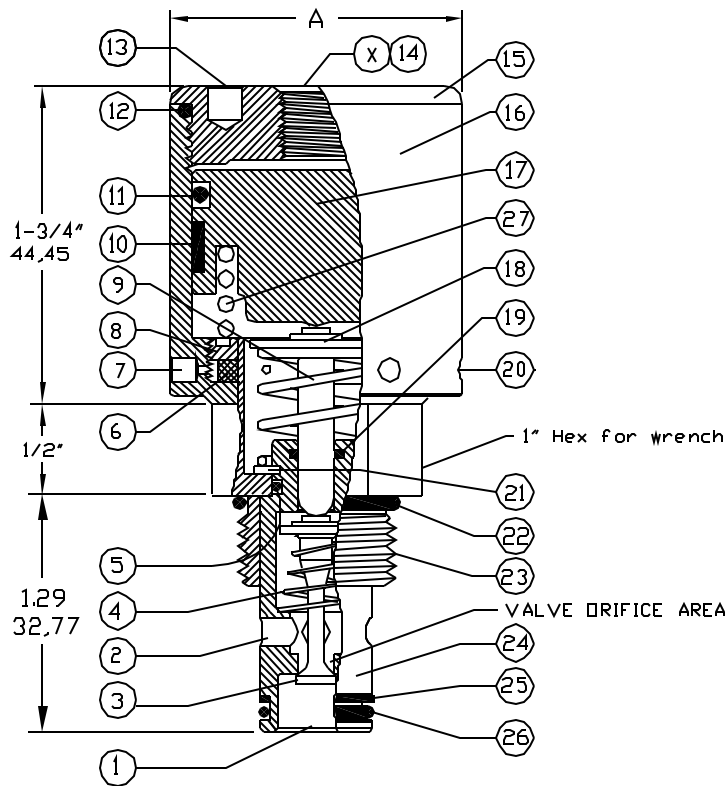
Pilot Operated Check Valve.
 Flow is checked from port 1 to port 2.
 Add Seat Crack pressure for flow from 2 to 1.
 Piloting valve allows free flow in both directions.
 Maximum pressure at Ports 1 and 2 is 3,000 PSI.
 Pilot Pressure Range, 50 PSI Min. to 150 PSI Max.
 Fluid temperature -45°F, (42.7°C) 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 O-Ring seals and mounting threads.

PILOT RATIO NOTES:

TO CALCULATE THE CORRECT PILOT RATIO VALVE, FOLLOW THESE STEPS:

1. Determine the MAXIMUM possible system pressure. Multiply X 11 = 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



STANDARD OPTIONS

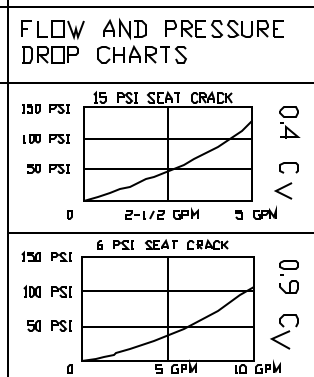
Pilot Port (Key X) 1/8 NPT. Optional SAE4 Available.
 Seals: Buna N, Viton or Teflon. Others please specify.
 T Option: 10-32 Ports at Key 7 & 20, Random 360° Pos. Seat (Key 4) Hard Stainless. Optional Soft Available.
 Add letter K after H to order Kel-F Bl soft seat.

TOOLING

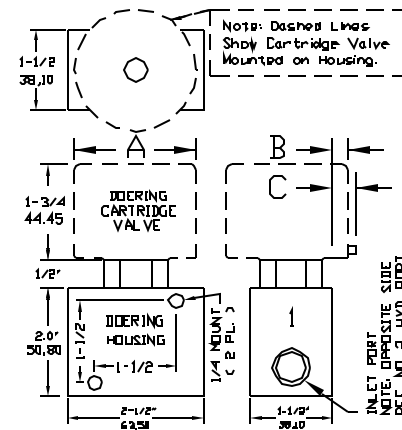
*Cavity Form Tool: FT-8542
 *1/8 (3.175) Pin Spanner Tool
 Order No. 471. Ref. Key No. 20
 *3/16 (4.763) Face Spanner Tool
 Order No. 482. Ref. Key No. 13

PILOT TO SYSTEM RATIO	" A " DIAMETER		" B " MAXIMUM		" C " MAXIMUM APPLICABLE TO T OPTION ONLY		CARTRIDGE VALVE NO.	HOUSING BODY NO.
	1-1/2	38,10	NOT APPLICABLE					
40:1	1-1/2	38,10	NOT APPLICABLE		.15	3,81	94H7204015	S8542 - OR - S8542-2 - OR - S8542-6
49:1	1-5/8	41,28	.06	1,53	.21	5,34	94H7304915	
69:1	1-7/8	47,63	.19	4,83	.34	8,64	94H7606915	
104:1	2-1/4	57,15	.38	9,65	.53	13,46	94H7710415	
19:1	1-1/2	38,10	NOT APPLICABLE		.15	3,81	94H9201906	
24:1	1-5/8	41,28	.06	1,53	.21	5,34	94H9302406	
33:1	1-7/8	47,63	.19	4,83	.34	8,64	94H9603306	
50:1	2-1/4	57,15	.38	9,65	.53	13,46	94H9705006	

VALVE DRIFICE AREA	HOUSING BODY NO.
1.29 32,77	S8542
	S8542-2
	S8542-6

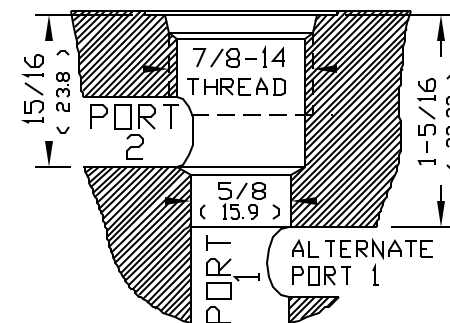


HOUSING



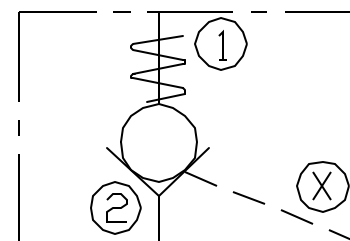
Standard Housing is 3/8 NPT, -2 is 1/4 NPT, -6 is SAE6
 Standard Housing Material is Aluminum.
 For Stainless add -S or -2S or -6S to Housing No.

CAVITY



REQUEST CAVITY DRAWING: C-8542
 REFERENCE FORM TOOL: FT-8542

POC SERIES



DOERING