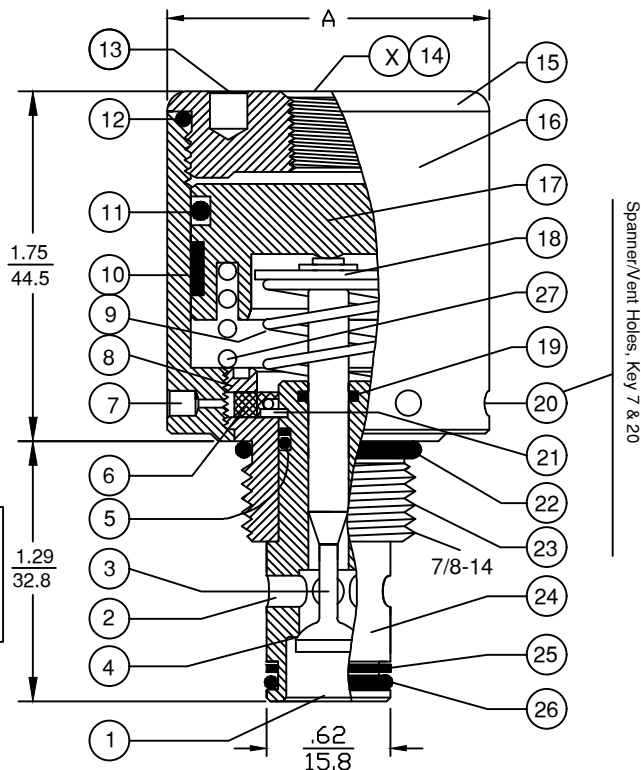


6343 RIVER ROAD SE ■ CLEAR LAKE, MN 55319 USA
 Telephone: 320-743-2276 ■ Fax: 320-743-3723
 mailbox@doering.com ■ www.doering.com



DOERING

CARTRIDGE VALVE



Fits
 C-8542
 (10-2)
 Valve
 Cavity

KEY EXPLANATION:

1. Port No. 1, System Inlet
 2. Port No. 2, System Outlet
 3. Poppet, Hard Stainless Steel
 4. Seat passage sealing area, Hard 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. Poppet and Actuator Return Spring, Stainless
 10. Piston Guide Ring UHMW material
 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. Poppet Return Spring Retainer Assembly
 19. Poppet Seal, TFE
 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. Cartridge Mounting Threads, Stainless Steel
 24. Cartridge Seat, Hard Stainless
 25. Backup Ring, Teflon
 26. O-Ring Seal, Buna N (Also See Options)
 27. Spring, Stainless Steel
- Key 27 Used on valves with 1-7/8 and 2-1/4" "A" Dia.

PILOT RATIO NOTES:

TO CALCULATE THE CORRECT PILOT RATIO VALVE,
 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.

INCH
METRIC

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.

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

Cavity & Housing

Cavity C-8542 (10-2):
 See Spec. Sheet 1200621

Line Mount Housings:
 See Spec. Sheets
 1200674 and 1201455

Panel Mount Housings:
 See Spec. Sheets
 1202982 and 1202990

SPECIFICATIONS:

Pilot operated two way cartridge valve. Normally closed. Pilot to open passage between ports one and two. Valve will not hold pressure from 2 to 1. Use No. 1 port as pressure inlet port.

Maximum pressure 5,000 PSI Port 1, 3,000 PSI Port 2

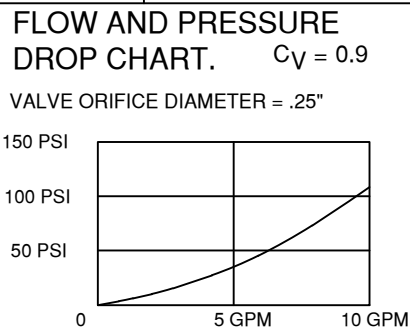
Pilot Pressure Range, 50 PSI Min. to 150 PSI Max.
 Fluid temperature -45°F, (42.7°C) to 200°F, (93.3°C)

Install Cartridge Valve using 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.

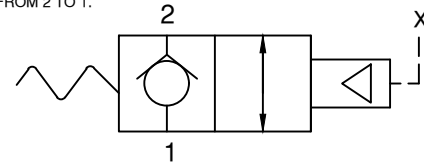
PILOT TO SYSTEM RATIOS:	" A " Diameter	
	Inch	Metric
19:1	1-1/2	38.10
24:1	1-5/8	41.28
33:1	1-7/8	47.63
50:1	2-1/4	57,15

CARTRIDGE VALVE NO.	" A " Diameter
842090191	1-1/2
843090241	1-5/8
846090331	1-7/8
847090501	2-1/4



2P SERIES

IN CLOSED POSITION, VALVE DOES NOT FREE FLOW FROM 2 TO 1.



2P N/C

This Valve is not a POC.

SPEC. SHEET NO. 1201456 REV. 005