

## SPECIFICATIONS:

Pilot operated cartridge check valve. Normally open. Pilot to close passage between ports one and two.

Valve will also function as a Pilot Operated Relief valve. See notes regarding pilot pressure.

Maximum recommended system pressure ( ports one and two ) 5,000 PSI.

Pilot Pressure Range, 50 PSI Min. to 5000 PSI Max.

Pilot minimum may be lower if valve is used as a pilot operated relief valve.

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 oil seals and mounting threads.

## Features

### KEY

1. No. 1 working port
2. No. 2 working port
3. Seat, Heat Treated Stainless  
Also see Seat Options.
4. Poppet, Heat Treated Stainless
5. Poppet Spring, Stainless Steel
6. Seat Saver Piston Assembly
7. Vent Port (2 Places)

## 13:1 PILOT RATIO:

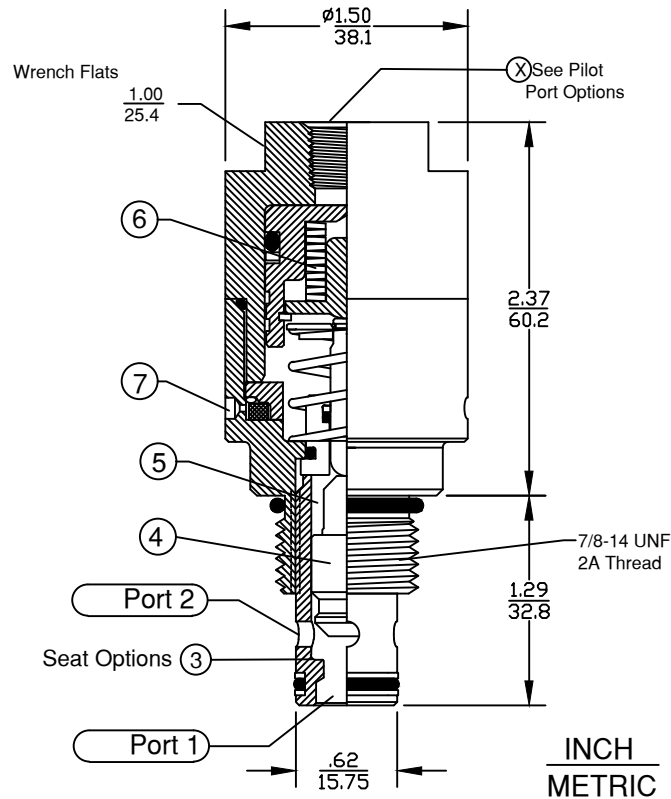
Area of pilot piston is 13 X larger than seat area.

To determine Minimum Pilot pressure required, follow these steps:

- (1) Multiply the maximum possible system pressure X 1.1 = SM ( System Max. )
- (2) Divide SM by 13 = MP ( Min. Pilot )

Note: MP is minimum pilot pressure needed for normally open / pilot to close valve function. If pilot pressure falls below MP, the valve will function as a pilot operated relief valve.

## CARTRIDGE VALVE



## CAVITY

Cavity C-8542 (Industry 10-2)

Form Tool: FT-8542

Call for source information.

Cavity Drawing Spec. Sheet No. 1200621

Visit [www.Doering.com](http://www.Doering.com) and enter

Spec. sheet 1200621.

in 'document search' box.

## HOUSING

Line Mount Housings:

Spec. Sheets 1200674 and 1201455.

Visit [www.Doering.com](http://www.Doering.com) and enter

Spec. sheet number

in 'document search' box.

Doering Company also offers:

Custom Housings and Manifolds.

Materials include:

Aluminum, 304 SST., 316 SST.

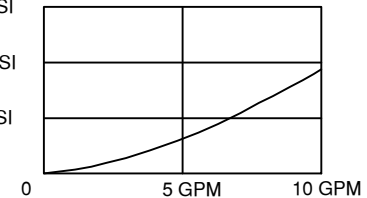
Pressure Drop/Flow Chart.

Orifice Ø.28 (Cv 1.0)

150 PSI

100 PSI

50 PSI



## CARTRIDGE VALVE ORDERING INFORMATION:

Valve Number: **904#95#13##**

### SEAT OPTIONS, Ref. Key 3

Blank = Hard Seat, Standard Hydraulic Test

K = Kel-F Soft Seat, Bubble Tested

### PILOT PORT OPTIONS

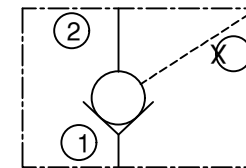
- 1 (1/8 NPT)
- 2 (1/4 NPT)
- 4 (SAE4, ORB)
- G4 (G 1/4-19 BSPP)
- 6 (SAE6, ORB)
- G6 (G 3/8-19 BSPP)

### SPRING OPTIONS, POPPET BIAS

Value in PSI Crack, Ref. Key 5

- 00 = NO SPRING
- 03 = STAINLESS STEEL
- 25 = STAINLESS STEEL

## POC SERIES



Check Valve, Normally Open, Pilot to Close

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