

## SPECIFICATIONS:

### Pilot to Close Check Valve:

This valve only flows from 1 to 2.  
In the steady state (non-piloted), valve will flow from 1 to 2. The poppet spring will determine the poppet crack pressure. When the pilot is energized, the poppet is held closed and flow is blocked.  
See Pilot Ratio Notes to determine pilot ratio.

Valve will also function as a Normally Open, Pilot to Close 2-Way valve provided flow is only required from 1 to 2.

Working Pressure: 5,000 PSI Port 1, 3,000 PSI Port 2  
Pilot Pressure Range, 50 PSI Min. to 150 PSI Max.

Pilot medium is to be Air Only!

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

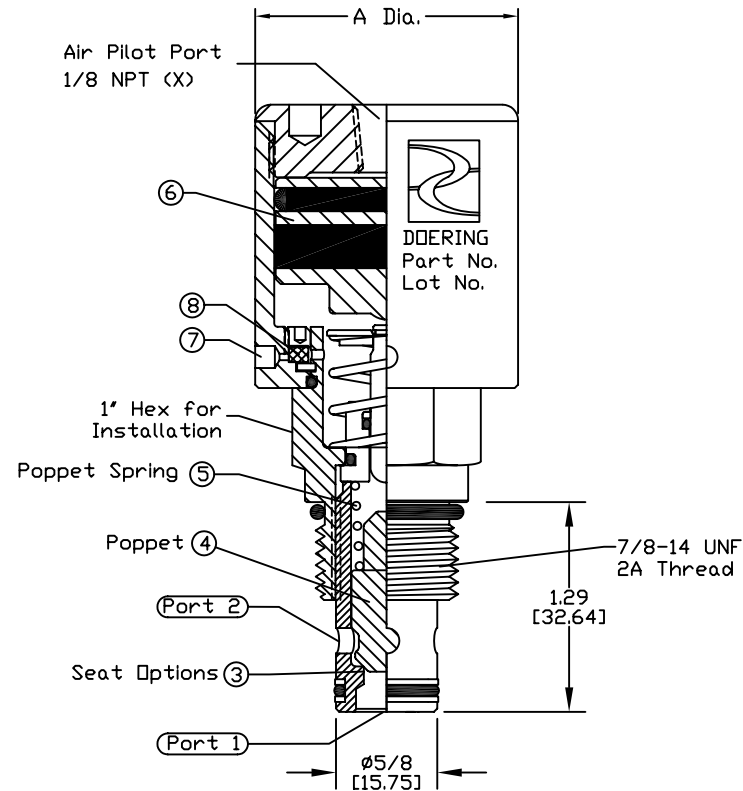
### KEY

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 Bias Spring, Stainless Steel  
Also see Spring Options.
6. Piston Assembly
7. Vent Port (2 Places)
8. Internal Sintered Filter, 10 Micron

## Pilot Ratio Notes:

Indicated pilot ratio refers to the area of the pilot piston as compared to the seat area, Port 1.  
Add an additional 15 psi to compensate for spring force. Please call for any assistance or clarification.

# 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:

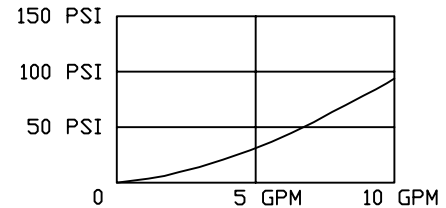
Custom Housings and Manifolds.

Materials include:

Aluminum, 304 SST., 316 SST.

Pressure Drop/Flow Chart.

Orifice  $\phi$ .28 (Cv 1.0)



## CARTRIDGE VALVE ORDERING INFORMATION:

Ratio	A Diameter	Valve Number
19:1	1-1/2" [38,10]	904H#92019##
24:1	1-5/8" [41,28]	904H#93024##
33:1	1-7/8" [47,63]	904H#96033##
50:1	2-1/4" [57,15]	904H#97050##

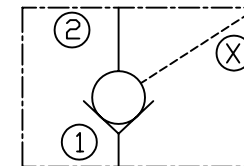
### SEAT OPTIONS, Ref. Key 3

Blank = Hard Seat, Standard Hydraulic Test  
K = Kel-F Soft Seat, Bubble Tested

### 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:

Air Pilot to Close:

Can Control Fluid or Gas, Ports 1 & 2:

See Ratio Notes:

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



DOERING