

### SPECIFICATIONS:

Manually Operated poppet valve.  
 Two way, normally closed, push operator to open.  
 Maximum pressure 5,000 PSI, Cavity C-8502  
 Cavity C-8542, 5,000 PSI Port 1, 3,000 PSI Port 2  
 See 'SHIFT FORCE NOTES' regarding operating force  
 required to open valve.  
 Full Flow is achieved at  $.08''$  Stroke.  
 Full Travel is at Prox.  $.16''$  Stroke.  
 Do not travel to or past full stroke with positive  
 force.  
 Use Pin Spanner tool to install valve.  
 Torque to 20 foot pounds.  
 Use lubricant on external oil seals and mounting  
 threads.  
 Fluid temperature  $-45^{\circ}\text{F}$  ( $-42.7^{\circ}\text{C}$ ) to  $200^{\circ}\text{F}$  ( $93.3^{\circ}\text{C}$ )

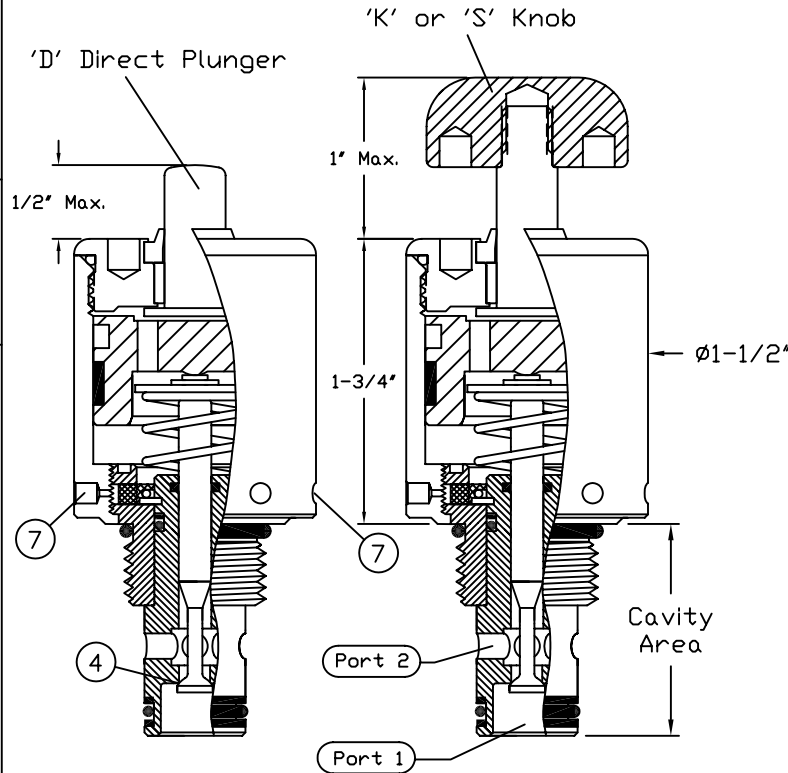
### STANDARD OPTIONS

T Option 10-32 vent ports at Key 7 ( 2 Places )  
 Seat ( Key 4 ) is heat treated Stainless Steel.  
 Seal Materials used are Buna-N and Teflon.  
 Optional seal and construction materials available.  
 Direct Plunger is Heat Treated 17-4 PH SST.

### SHIFT FORCE NOTES:

10 to 15 Pounds of Force is  
 required to shift the valve  
 poppet with zero pressure on  
 ports 1 and 2.  
 Any pressure on port 1 will  
 increase Force requirement  
 by  $.030 \times \text{PSI}$  at No. 1 Port.  
 Any pressure on port 2 will  
 increase Force requirement  
 by  $.003 \times \text{PSI}$  at No. 2 Port.  
 For total force requirement,  
 add all 3 results.  
 Using port 2 as pressure  
 inlet may reduce the force  
 requirement to shift valve.

## CARTRIDGE VALVE



### Cavity & Housing

For 82#227M0#1 Valve:  
 Cavity C-8502 (8-2);  
 See Spec. Sheet 1200630

Line Mount Housings:  
 See Spec. Sheets  
 1200672 and 1203123

Panel Mount Housings:  
 See Spec. Sheets  
 1202981 and 1202990

For 84#227M0#1 Valve:  
 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

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DOERING

SPEC. SHEET NO. 1203069 REV. 001

Valve Number: 8##227M0#1

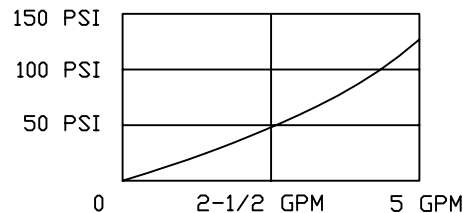
2 = 3/4-16 Thread  
 Cavity C-8502  
 ( 8-2 )  
 4 = 7/8-14 Thread  
 Cavity C-8542  
 ( 10-2 )

Key No. 4  
 Blank = Hard Seat  
 K = Soft Seat

D = Direct Plunger  
 K = Knob, Aluminum  
 S = Knob, Stainless

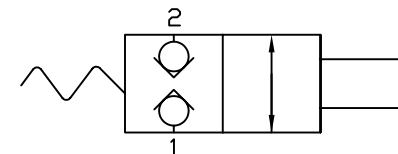
### PRESSURE DROP CHART $C_v = 0.4$

VALVE ORIFICE DIAMETER =  $.180''$



## 2PB SERIES

Functional Symbol



2PB N/C

2 Way Poppet Valve, Manually Operated