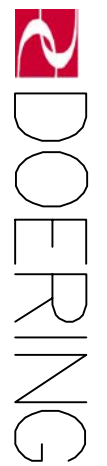


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### SPECIFICATIONS:

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, 3,500 PSI Port 2  
 See 'SHIFT FORCE NOTES' regarding operating force  
 required to open and hold open the valve.  
 1/4" Stroke is approximate.  
 Overtravel Protection is available.  
 Overstroking will damage the valve.  
 Use 1" wrench to install valve.  
 Torque to 20 foot pounds.  
 Use lubricant on external oil seals and mounting  
 threads.  
 Fluid temperature -45°F (-42.7°C) to 200°F (93.3°C)

### STANDARD OPTIONS

Hand Knob operator shown.  
 Hand Knob is available in Aluminum or Stainless Steel.  
 Direct Plunger available for mechanical operation.  
 T Option 10-32 vent ports at Key 7 ( 2 Places )  
 Seat ( Key 4 ) is heat treated Stainless Steel.  
 K Option: Kel-F Soft Seat with hard seat backup.  
 Seal Materials used are Buna-N and Teflon.  
 Optional seal and construction materials available.

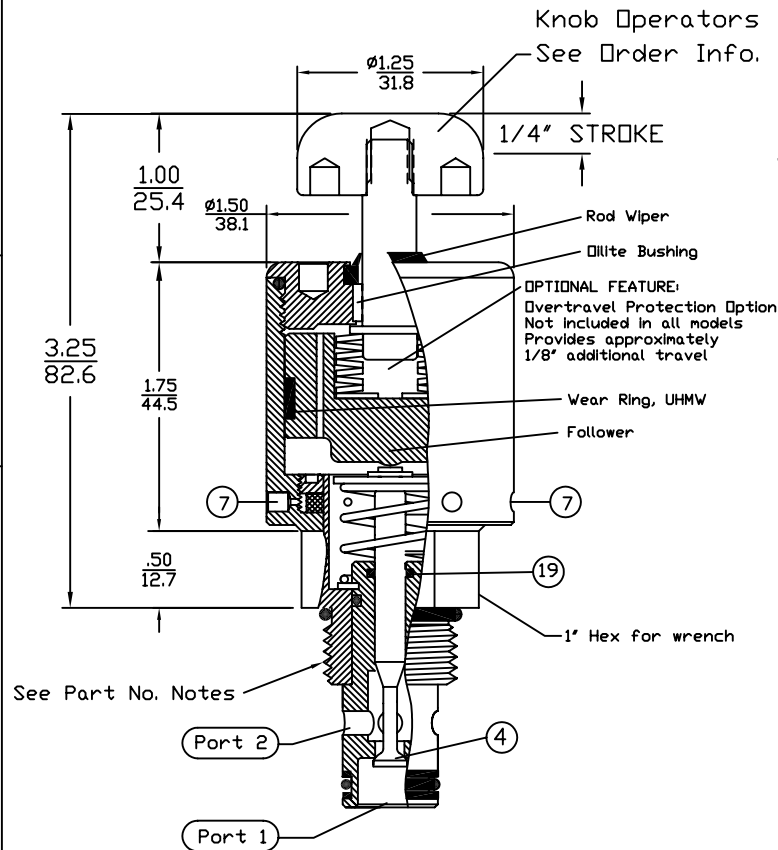
### SHIFT FORCE NOTES:

10 to 15 Pounds of Force is  
 required to shift the valve  
 poppet with zero pressure on  
 ports 1 and 2.

To determine the additional  
 operating force imposed by  
 the system pressure, multiply  
 the system pressure X .03  
 and add the result to the  
 10 or 15 Pounds.

Example: 3,000 PSI System  
 $3000 \times .03 = 90\#$   
 $90 + 15 = 105\#$   
 Total Operator Force = 105#

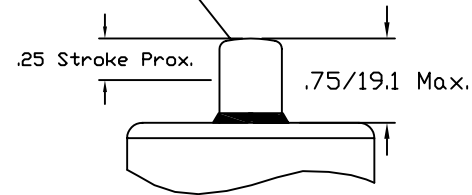
## CARTRIDGE VALVE



INCH  
 METRIC

Knob Operators  
 See Order Info.

Direct Plunger Operator  
 .75/19.1 Radiused End  
 Material 17-4 PH900, SST.



### Cavity & Housing

For 82H#227M##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

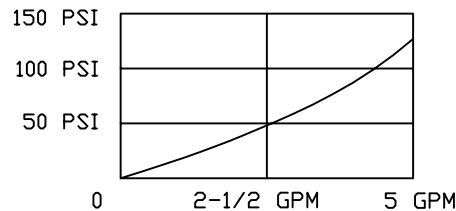
For 84H#227M##1 Valve:  
 Cavity C-8542 (10-2);  
 See Spec. Sheet 1200621

Line Mount Housings:  
 See Spec. Sheets  
 1200674 and 1201455

Panel Mount Housings:  
 See Spec. Sheets  
 1202982 and 1202990

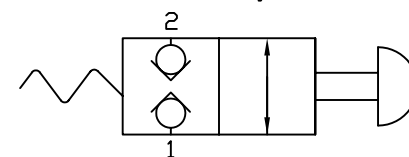
### PRESSURE DROP CHART $C_v = 0.4$ Hard Seat Only.

VALVE ORIFICE DIAMETER = .180"  
 Smaller Orifice with K Option Seat.



## 2PB SERIES

Functional Symbol



2PB N/C

2 Way Poppet Valve,  
 Manually Operated

Valve Number: 8#H#227M##1

2 = 3/4-16 Thread  
 Cavity C-8502  
 ( 8-2 )

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

Blank = Standard Hard Seat  
 K = Kel-F Soft Seat with  
 Hard Seat backup. Ref. Key 4  
 Reduces Flow  $C_v = 0.3$  Prox.

Operators:  
 D = Direct Plunger  
 N = No Knob, Threaded  
 K = Knob, Aluminum  
 R = Knob, Red Ano.  
 S = Knob, Stainless

□ = No Overtravel  
 Protection  
 P = Overtravel  
 Protection