

### 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.

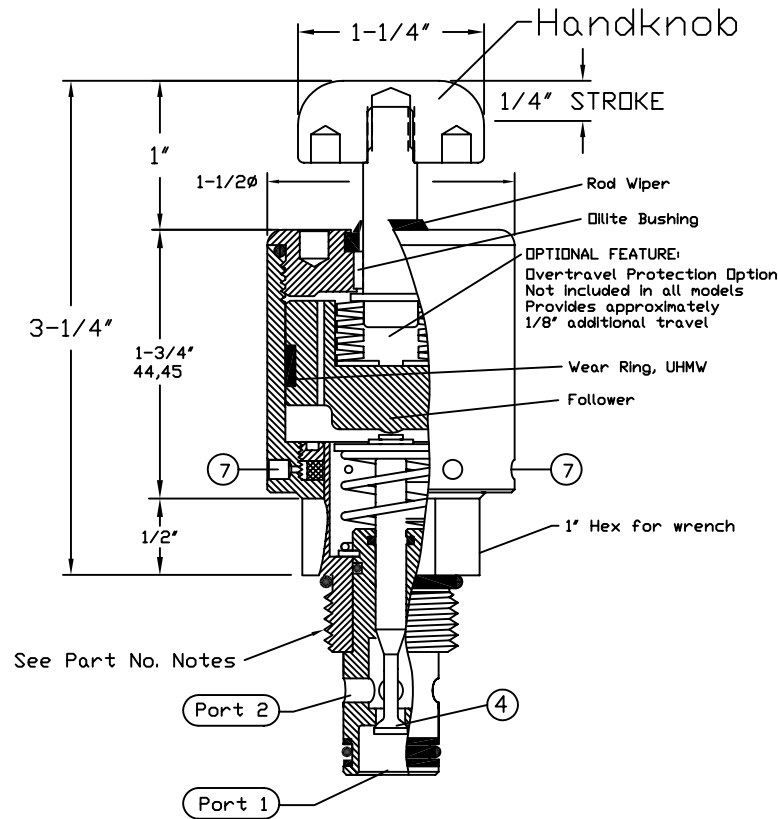
### SHIFT FORCE NOTES:

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 X .03 = 90#  
 90 + 15 = 105#  
 Total Operator Force = 105#

## CARTRIDGE VALVE



### Cavity & Housing

For 82H#227M##1 Valve:

Cavity Drawing:  
 1200630 Spec. Sheet

Line Mount Housings:  
 1200672 Spec. sheet

Panel Mount Housings:  
 1202981 and 1202990  
 Spec. Sheets

For 84H#227M##1 Valve:

Cavity Drawing:  
 1200621 Spec. Sheet

Line Mount Housings:  
 1200674 and 1201455  
 Spec. Sheets

Panel Mount Housings:  
 1202982 and 1202990  
 Spec. Sheets

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 )

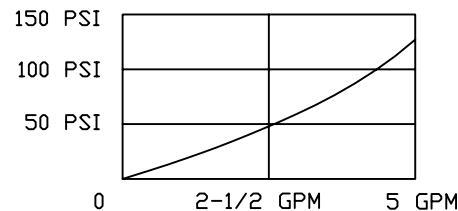
D = Direct Plunger  
 K = Knob, Aluminum  
 S = Knob, Stainless

□ = No Overtravel  
 Protection  
 P = Overtravel  
 Protection

Blank = Standard Hard Seat  
 K = Kel-F Soft Seat with  
 Hard Seat backup. Ref. Key 4  
 Reduces Flow C<sub>v</sub> = 0.3 Prox.

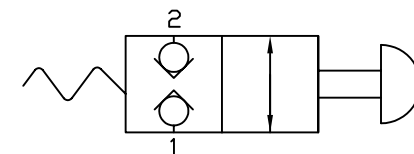
### PRESSURE DROP CHART C<sub>v</sub> = 0.4 Hard Seat Only.

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



## 2PB SERIES

Functional Symbol



2PB N/C  
 2 Way Poppet Valve, Manually Operated

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