CARTRIDGE VALVE

SPECIFICATIONS:

Manually Operated poppet valve.
Two way, normally closed, push operator to open.
Use Port No. 1 for Pressure Inlet.
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

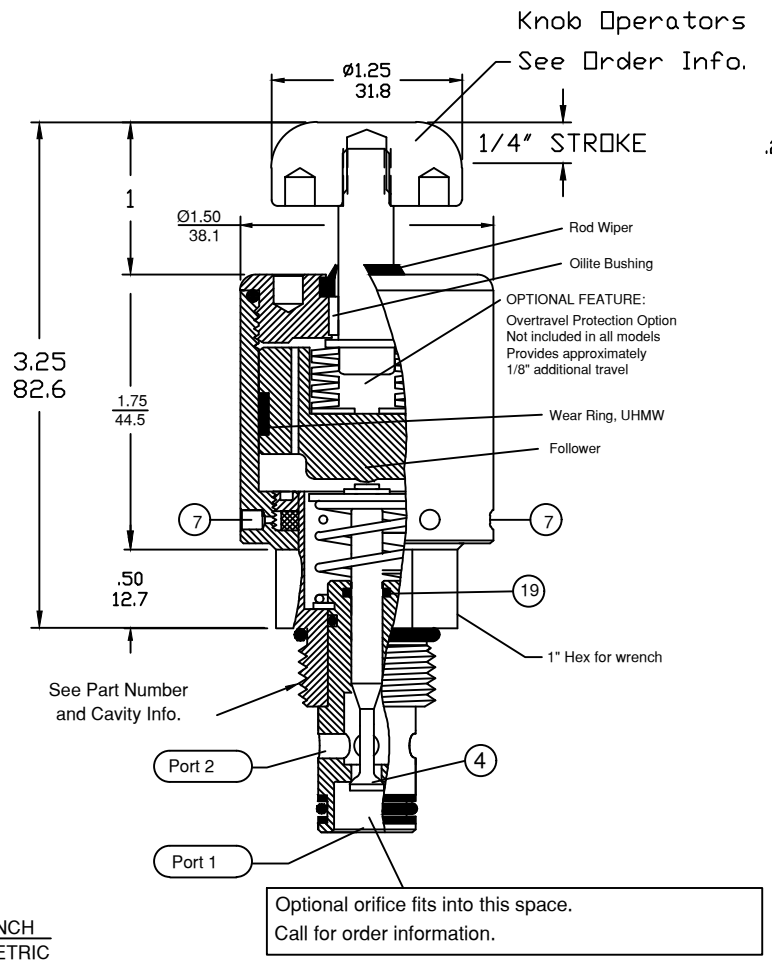
Hand Knob operator shown.
Hand Knob is available in Aluminum or Stainless Steel.
Direct Plunger available for mechanical operation.
T Option 10-32 vent ports at Key 7 (2 Places)
Poppet & Seat (Key 4) 17-4 PH900 SST.
Seal Materials used are Buna-N and Teflon.
Optional seal and construction materials available.

SHIFT FORCE NOTES:

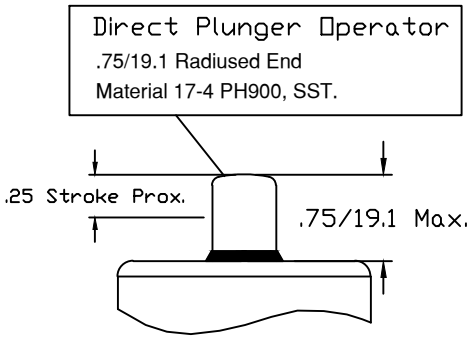
10 to 15 Pounds of Force is required to shift the valve poppet with zero pressure on ports 1 and 2.

To determine the additional operating force imposed by the system pressure, multiply the system pressure X .013 and add the result to the 10 or 15 Pounds.

Example: 3,000 PSI System
3000 X .013 = 39#
39 + 15 = 54#
Total Operator Force = 54#



INCH
METRIC



Cavity & Housing

For 82H204M##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 84H204M##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

Valve Number: 8#H204M##1

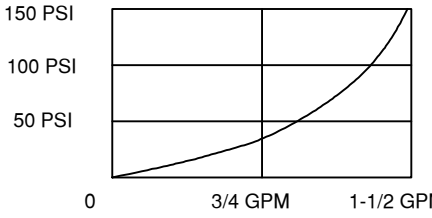
- 2 = 3/4-16 Thread, Cavity C-8502 (8-2)
- 4 = 7/8-14 Thread, Cavity C-8542 (10-2)

Operators:
D = Direct Plunger
K = Knob, Aluminum
R = Knob, Red Ano.
S = Knob, Stainless

O = No Overtravel Protection
P = Overtravel Protection

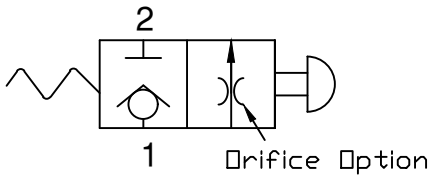
PRESSURE DROP CHART

Flow without optional Orifice. $C_V = 0.1$



2PB SERIES

Functional Symbol



With optional ORIFICE, flow from Port 2 to Port 1 may damage the valve.

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

DOERING

SPEC. SHEET NO. 1201499 REV. 007