

## KEY EXPLANATION:

1. Port No. 1, System
2. Port No. 2, System
3. Poppet, Hard Stainless Steel
4. Filter, 10 Micron Sintered Bronze. Omitted W/ T option.
9. Poppet and Piston return spring, Stainless
11. Seat Saver Spring group, Stainless Steel.
12. Piston, Seat Saver style.
13. Bonnet, Stainless Steel.
14. 1" Wrench Flats.
15. Pilot Port. See Pilot port options / ordering info.
24. O-Ring Seal, Filter Retainer ( Buna-N )
30. Cartridge Seat, Hard Stainless Steel.

## SPECIFICATIONS:

Pilot operated two way cartridge valve. Normally open. Pilot to close passage between ports one and two.

Valve will also function as a Pilot Operated Relief valve. See notes regarding pilot pressure.

Maximum pressure 5,000 PSI, Cavity C-8502

Cavity C-8542, 5,000 PSI Port 1, 3,000 PSI Port 2

Pilot Pressure Range, 50 PSI Min. to 5000 PSI Max.

Pilot minimum may be lower if valve is used as a pilot operated relief valve.

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.

## 26:1 PILOT RATIO:

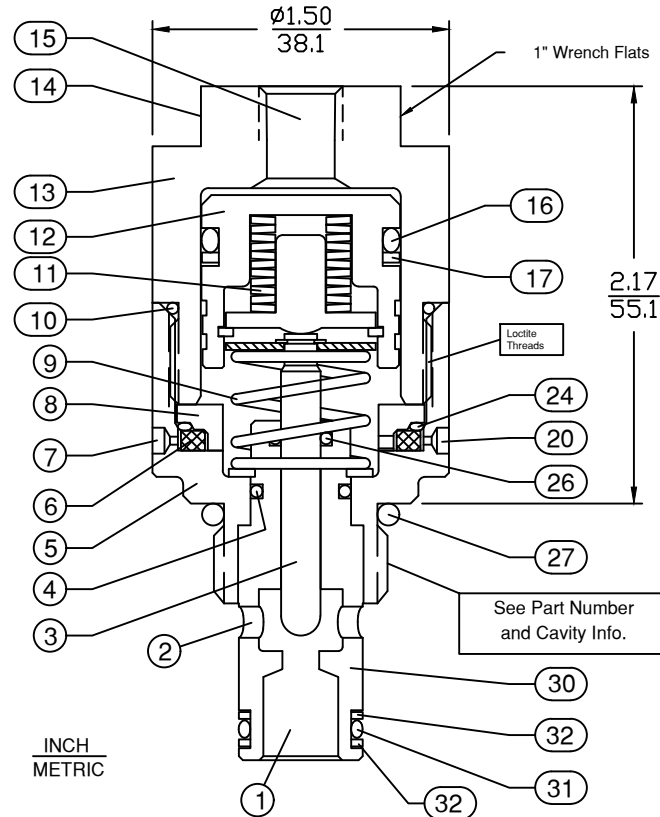
Area of pilot piston is 26 X larger than seat area.

To determine Minimum Pilot pressure required, follow these steps:

- (1) Multiply the maximum possible system pressure X 1.1 = SM ( System Max. )
- (2) Divide SM by 26 = MP ( Min. Pilot )

Note: MP is minimum pilot pressure needed for normally open / pilot to close valve function. If pilot pressure falls below MP, the valve will function as a pilot operated relief valve.

## CARTRIDGE VALVE



## OPTIONS, Partial List

Orifice Flow Restrictors (.015 or .031") at Key 1. Only flow 1 to 2 with restrictor.

Standard Seals are Buna-N with Teflon Back Up. Call for Options.

T Option: 10-32 Gasket Ports at Key 7 & 20

T Options provides piping connection to piston Vent area.

## CARTRIDGE VALVE ORDERING INFORMATION:

Valve Number: **8#527#260**

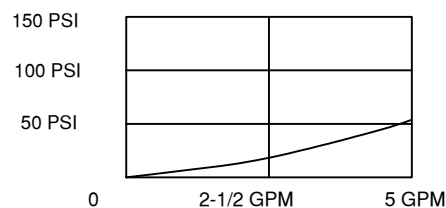
2 = 3/4-16 Thread  
Cavity C-8502  
( 8-2 )

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

Pilot Porting, Key 15

- 1 (1/8 NPT)
- 2 (1/4 NPT)
- 4 (SAE4, ORB)
- G4 (G 1/4-19 BSPP)
- 6 (SAE6, ORB)
- G6 (G 3/8-19 BSPP)

## PRESSURE DROP CHART $C_V = 0.5$



## Cavity & Housing

For 82527#260 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 84527#260 Valve:

Cavity C-8542 (10-2):  
See Spec. Sheet 1200621

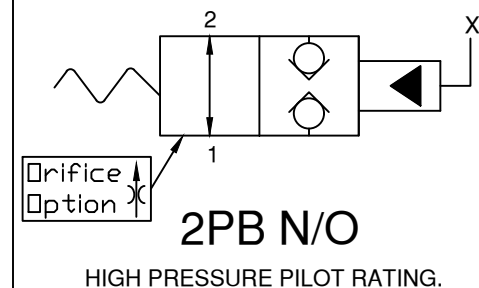
Line Mount Housings:

See Spec. Sheets  
1200674 and 1201455

Panel Mount Housings:

See Spec. Sheets  
1202982 and 1202990

## 2PB SERIES



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