

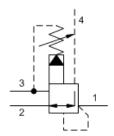
## Ventable, pilot operated, pressure reducing/relieving valve

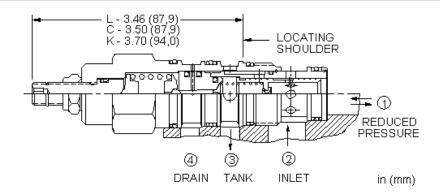
Capacity: 20 gpm (80 L/min.)

> Model: **PVFB**

#### Product Description

Ventable, pilot-operated pressure reducing/relieving valves reduce a high primary pressure at the inlet to a constant reduced pressure at port 1, with a full-flow relief function from port 1 to tank (port 3). The vent port (port 4) can be used as a means for remote control by pilot or 2-way valves.





#### Technical Features

- Pressure at port 3 is directly additive to the valve setting at a 1:1 ratio Pilot operated valves exhibit exceptionally flat pressure/flow and should not exceed 3000 psi (210 bar).
- Full reverse flow from reduced pressure (port 1) to inlet (port 2) may cause the main spool to close. If reverse free flow is required in the circuit, consider adding a separate check valve to the circuit.
- Pilot operated valves exhibit very low dead-band transition between reducing and relieving modes.
- Recommended maximum inlet pressure is determined by the adjustment range. Ranges D, E, N, and Q are tested with a 2000 psi (140 bar) maximum differential between inlet and reduced pressure. Ranges A, B, and H are tested with a 3000 psi (210 bar) maximum differential between inlet and reduced pressure. Ranges C and W are tested with 5000 psi (350 bar) of inlet pressure.
- characteristics, are very stable and have low hysteresis
- By controlling the pressure at the vent (port 4), the effective setting of the valve can be controlled below the nominal valve setting.
- Incorporates the Sun floating style construction to minimize the possibility of internal parts binding due to excessive installation torque and/or cavity/cartridge machining variations.

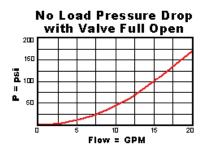
#### Special Notes

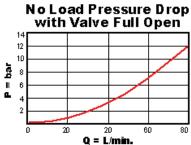
Maximum pressure differentials for spring ranges: A and B are 3000 psi (210 bar) D and E are 2000 psi (140 bar) W is 5000 psi (350 bar) inlet

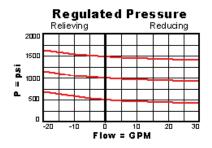
#### Technical Data

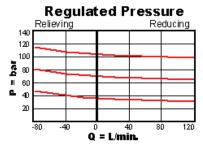
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|--|-------------------|------------------------------------|--|
|  | U.S. Units        | Metric Units                       |  |
| Cavity                                   | T-22A             |                                    |  |
| Capacity                                 | 20 gpm            | 80 L/min.                          |  |
| Control Pilot Flow                       | 10 - 15 in³/min.  | 0,16 - 0,25 L/min.                 |  |
| Factory Pressure Settings Established at | blocked control p | blocked control port (dead headed) |  |
| Maximum Operating Pressure               | 5000 psi          | 5000 psi 350 bar                   |  |
|  |                   |                                    |  |

| Series (from Cavity)                                       | Series 2<br>5      |            |  |
|--|--------------------|------------|--|
| Adjustment - Number of Clockwise Turns to Increase Setting |                    |            |  |
| Valve Hex Size   | 1 1/8 in.          | 28,6 mm    |  |
| Valve Installation Torque                                  | 45 - 50 lbf ft     | 60 - 70 Nm |  |
| Adjustment Screw Internal Hex Size                         | 5/32 in. 4 mm      |            |  |
| Adjustment Locknut/Cap Hex Size                            | 9/16 in.           | 15 mm      |  |
| Adjustment Nut Torque                                      | 80 - 90 lbf in.    | 9 - 10 Nm  |  |
| Seal Kits - Cartridge                                      | Buna: 990-022-007  |            |  |
| Seal Kits - Cartridge                                      | Viton: 990-022-006 |            |  |
| Model Weight   | 0.74 lb.           | 0.34 kg.   |  |









# PVFB-LAN

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#### Standard Options

- C\* Tamper Resistant Factory Set
- K Handknob
- L Standard Screw Adjustment

### Adjustment Range

### Standard Options

- A 100 3000 psi (7 210 bar), 200 psi (14 bar) Standard Setting
- B 50 1500 psi (3,5 105 bar), 200 psi (14 bar) Standard Setting
- D 25 800 psi (1,7 55 bar),200 psi (14 bar) StandardSetting
- E 25 400 psi (1,7 28 bar), 200 psi (14 bar) Standard Setting
- W 150 4500 psi (10,5 315 bar), 200 psi (14 bar) Standard Setting

#### Seal Material

### Standard Options

N Buna-N V Viton

Additional Options

Control

#### Adjustment Range

Seal Material

- H 30 3000 psi (2 210 bar), 200 psi (14 bar) Standard Setting
- J 25 1500 psi (1,7 105 bar), 200 psi (14 bar) Standard Setting

\* Special Setting required, specify at time of order Customer specified setting stamped on hex.