

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

Functional Group:

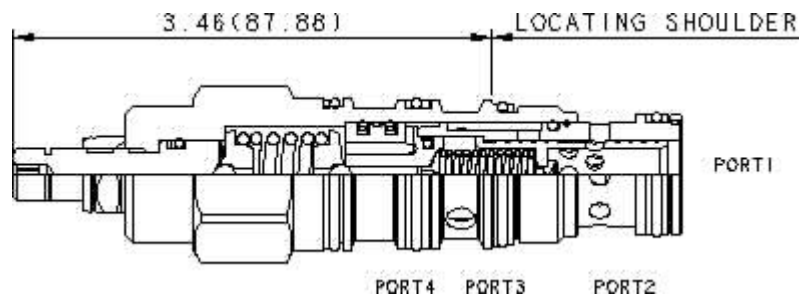
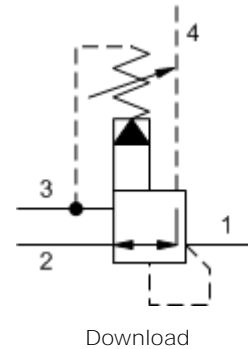
Products : Cartridges : Reducing/Relieving : 4 Port : Pilot Operated, Ventable

Capacity:  
20 gpm (80  
L/min.)

Model:  
PVFB-LAN

### 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

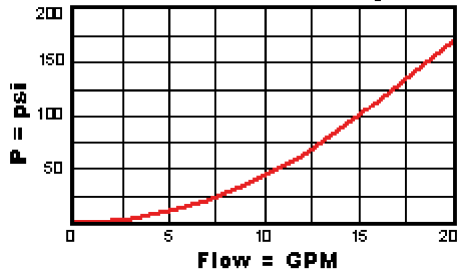
- Pressure at port 3 is directly additive to the valve setting at a 1:1 ratio and should not exceed 3000 psi (210 bar).
- Pilot operated valves exhibit very low dead-band transition between reducing and relieving modes.
- Pilot operated valves exhibit exceptionally flat pressure/flow characteristics, are very stable and have low hysteresis.
- 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.
- 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.
- 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 (200 bar) maximum differential between inlet and reduced pressure. Ranges C and W are tested with 5000 psi (350 bar) of inlet pressure.
- By controlling the pressure at the vent (port 4), the effective setting of the valve can be controlled below the nominal valve setting.

### Technical Data

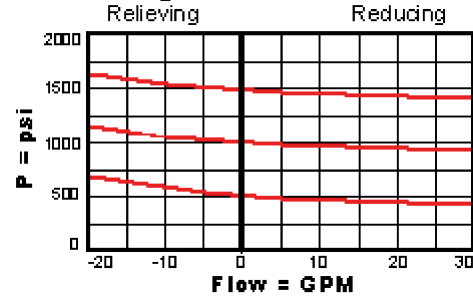
	U.S. Units	Metric Units
Model Weight	0.73 lb.	0.33 kg.

Cavity	T-22A	
Capacity	20 gpm	80 L/min.
Adjustment - Number of Clockwise Turns to Increase Setting	5	
Control Pilot Flow	10 - 15 in <sup>3</sup> /min.	0,16 - 0,25 L/min.
Factory Pressure Settings Established at	blocked control port (dead headed)	
Maximum Operating Pressure	5000 psi	350 bar
Series (from Cavity)	Series 2	
Valve Hex Size	1 1/8 in.	28,6 mm
Valve Installation Torque	45 - 50 lbf ft	60 - 70 Nm
Adjustment Screw Hex Socket Size	5/32 in.	4 mm
Adjustment Nut Hex Size	9/16 in.	15 mm
Adjustment Nut Torque	108 lbf in.	12 Nm
Seal Kits	Buna: 990-022-007	
Seal Kits	Viton: 990-022-006	

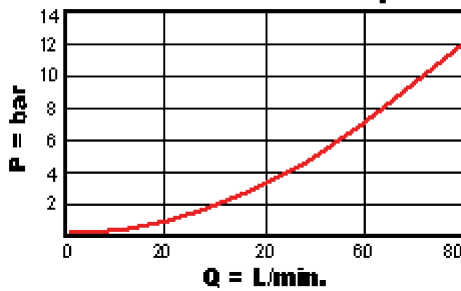
**No Load Pressure Drop with Valve Full Open**



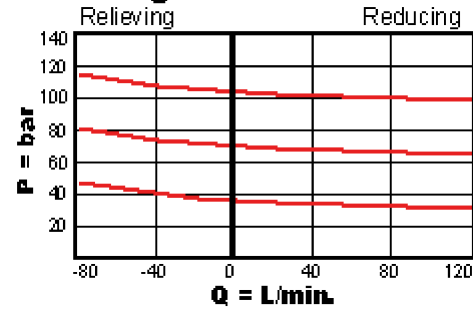
**Regulated Pressure**



**No Load Pressure Drop with Valve Full Open**



**Regulated Pressure**



PVFB-LAN

Control

Adjustment Range

External Material/Seal Material

L Standard Screw Adjustment

+0.00 100 - 3000 psi (7 - 210 A bar), 200 psi (14 bar) Standard Setting

+0.00 N Buna-N +0.00

Customer specified setting stamped on hex \$1.10

- Explanation of Sun cartridge control options - US units.
- Explanation of Sun cartridge control options - metric units.

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