

Direct-acting, pressure reducing/relieving main stage piloted from port 4

Capacity:
80 gpm (320 L/min.)

Functional Group:

Products : Cartridges : Reducing/Relieving : 4 Port : Direct Acting, Main Stage

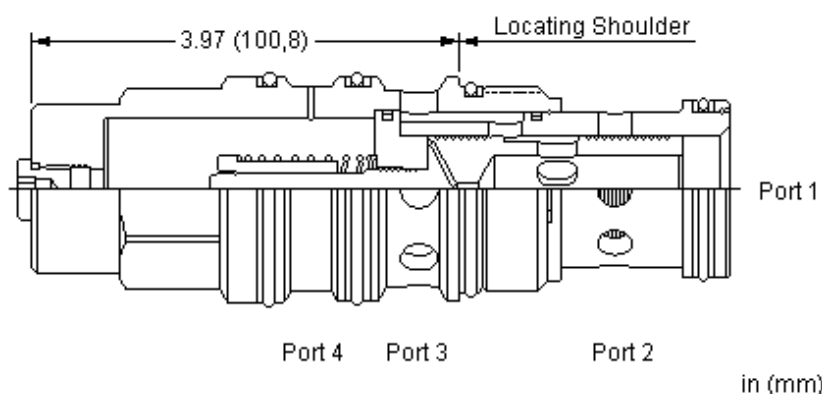
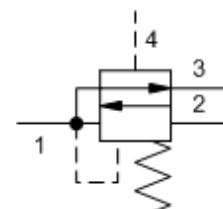
Model:

PSJT

Product Description

The direct-acting reducer/reliever main section is meant to act as an interface between a low flow pressure source at port 4 and a circuit with higher flow requirements. The valve will reduce a high primary pressure at the inlet (port 2) to a reduced pressure at port 1, with a full-flow relief function from port 1 to tank (port 3).

The valve incorporates a damped construction for stable operation allowing the use of high reduced pressure.

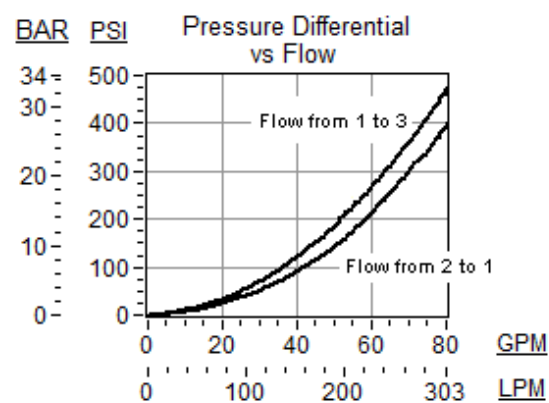
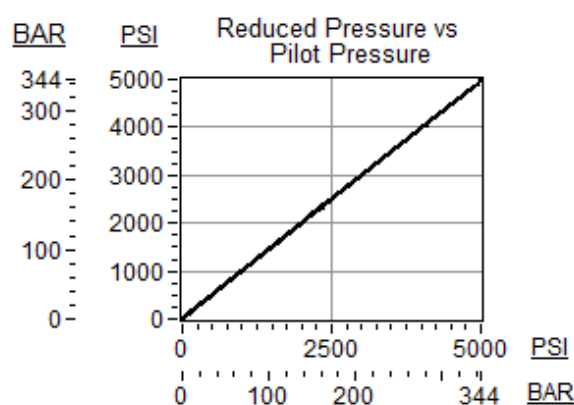


Technical Features

- The valve is biased to the relieving mode with a 100 psi (7 bar) spring. Pressure at port 4 is directly added to the setting of the valve once this threshold is exceeded. For example, 1000 psi (70 bar) at port 4 will result in a setting of 900 psi (63 bar) at port 1.
- Maximum pressure at port 3 should be limited to 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.
- All spring ranges are tested for correct operation with 5000 psi (350 bar) inlet pressure.
- Suitable for accumulator circuits since the absence of pilot control flow results in reduced secondary circuit leakage.
- Direct acting concept provides highly reliable operation in contaminated systems, especially at dead headed conditions.
- Direct operated version offers superior dynamic response compared to equivalent pilot operated models.
- Pressure on the drain (port 4) is directly additive to the valve setting at a 1:1 ratio and should not exceed 5000 psi (350 bar).
- Leakage specified in Technical Data is out of port 3 with a supply pressure of 2000 psi (140 bar) and the valve set at mid range. This leakage is directly proportional to pressure differential and inversely proportional to viscosity expressed in centistokes.
- 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.

Technical Data

	U.S. Units	Metric Units
Cavity	T-24A	
Capacity	80 gpm	320 L/min.
Factory Pressure Settings Established at	blocked control port (dead headed)	
Maximum Operating Pressure	5000 psi	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	4 in ³ /min.@1000 psi	65 cc/min.@70 bar
Series (from Cavity)	Series 4	
Valve Hex Size	1 5/8 in.	41,3 mm
Valve Installation Torque	350 - 375 lbf ft	475 - 500 Nm
Seal Kits - Cartridge	Buna: 990-024-007	
Seal Kits - Cartridge	Viton: 990-024-006	
Model Weight	2.89 lb.	1.31 kg.

**PSJT-XFN****Control****Standard Options****X** Not Adjustable**Bias Pressure****Standard Options****F** 30 psi (2 bar)**Seal Material****Standard Options****N** Buna-N**V** Viton