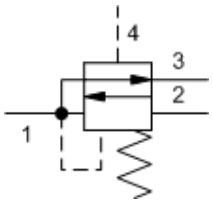
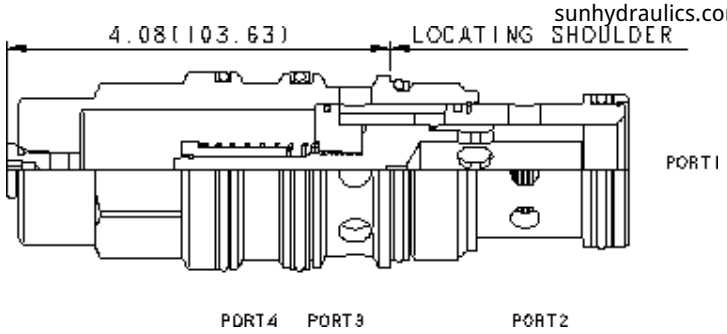
MODEL
PSJT

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

SERIES 4 / CAPACITY: 80 gpm / CAVITY: T-24A

sunhydraulics.com/model/PSJT





CONFIGURATION

X	Control	Not Adjustable
F	Bias Pressure	100 psi (7 bar)
N	Seal Material	Buna-N
(none)	Material/Coating	

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 DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Cavity	T-24A
Series	4
Capacity	80 gpm
Maximum Operating Pressure	5000 psi
Maximum Valve Leakage at 110 SUS (24 cSt)	4 in³/min.@1000 psi
Valve Hex Size	1 5/8 in.
Valve Installation Torque	350 - 375 lbf ft
Seal kit - Cartridge	Buna: 990024007
Seal kit - Cartridge	EPDM: 990024014
Seal kit - Cartridge	Polyurethane: 990024002
Seal kit - Cartridge	Viton: 990024006
Model Weight	2.89 lb.

CONFIGURATION OPTIONS

Model Code Example: PSJTXFN

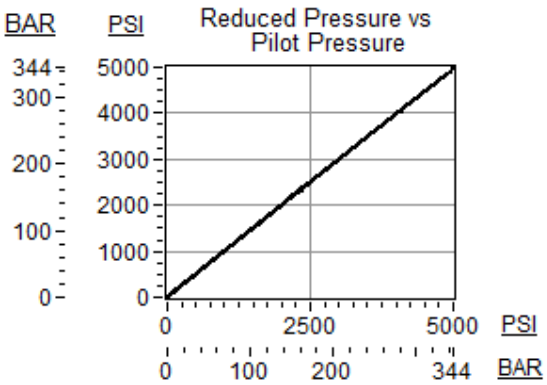
CONTROL (X)	BIAS PRESSURE (F)	SEAL MATERIAL (N)	MATERIAL/COATING
X Not Adjustable	**F** 100 psi (7 bar)	**N** Buna-N	Standard Material/Coating
		E EPDM	**/AP** Stainless Steel, Passivated
		V Viton	

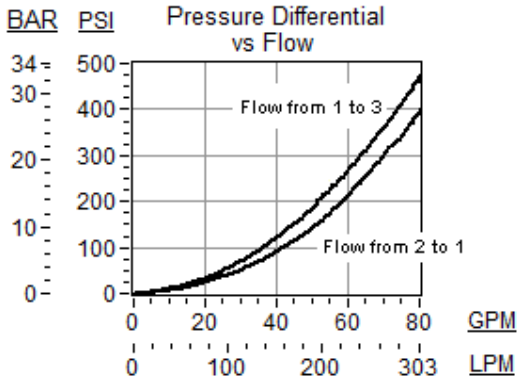
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TECHNICAL FEATURES

- The valve is biased to the relieving mode with a 100 psi (7 bar) spring. Once this threshold is exceeded, pressure at port 4 is directly added to the pressure at port 1 of the valve. For example, 1000 psi (70 bar) at port 4 will result in a pressure reading of 900 psi (63 bar) at port 1.
- Maximum pressure at port 3 should be limited to 3000 psi (210 bar).
- 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.
- 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.
- Valve is tested for correct operation with 5000 psi (350 bar) inlet pressure.
- Pressure on the drain (port 4) is directly additive to the pressure at port 1 at a 1:1 ratio and should not exceed 5000 psi (350 bar).
- Cartridges configured with EPDM seals are for use in systems with phosphate ester fluids. Exposure to petroleum based fluids, greases and lubricants will damage the seals.
- 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.
- 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.

PERFORMANCE CURVES





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