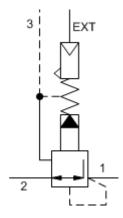
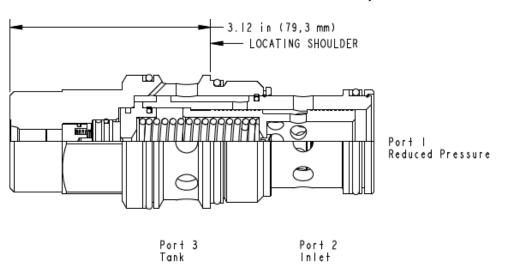




sunhydraulics.com/model/PPJC





Air-controlled, pilot-operated pressure reducing/relieving valves use compressed air over a diaphragm instead of an adjustable spring to control the setting. These valves reduce a high primary pressure at the inlet (port 2) to a constant reduced pressure at port 1, with a full-flow relief function from port 1 to tank (port 3). The air signal is supplied through a port in the hex-end of the cartridge and the hydraulic setting is directly proportional to the air setting at a ratio of 20:1 (hydraulic:air).

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

Cavity	T-19A
Series	4
Capacity	80 gpm
Maximum Operating Pressure	2000 psi
Pilot Ratio	20:1
Control Pilot Flow	15 - 20 in³/min.
Maximum Air Pressure	150 psi
Valve Hex Size	1 5/8 in.
Valve Installation Torque	350 - 375 lbf ft
Locknut Hex Size	9/16 in.
Locknut Torque	80 - 90 lbf in.
Model Weight	0.00 lb.
Seal kit - Cartridge	Buna: 990-019-007
Seal kit - Cartridge	Polyurethane: 990-019-002
Seal kit - Cartridge	Viton: 990-019-006

OPTION SELECTION EXAMPLE: PPJCBBN

CONTROL	(B)	OPERATING RANGE ((B)	SEAL MATERIAL	(N)
B External 4-SAE Port		B 50 - 1500 psi (3,5 - 105 bar)		N Buna-N	
				V Viton	

TECHNICAL FEATURES

- All three-port pressure reducing and reducing/relieving cartridges are physically interchangeable (i.e. same flow path, same cavity for a given frame size). When considering mounting configurations, it is sometimes recommended that a full capacity return line (port 3) be used with reducing/relieving cartridges.
- 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.
- The pressure at port 3 determines the minimum valve setting and should not exceed 1000 psi (70 bar).
- The full adjustment range is 50 to 1500 psi (3.5 to 105 bar).
- Maximum air pressure should not exceed 150 psi (10,5 bar) due to the strength of the diaphragm.
- Maximum pressure differential, inlet to outlet, should not exceed 3000 psi (210 bar).
- Pilot operated reducing, reducing/relieving valves by nature are not fast acting valves. For superior dynamic response, consider direct acting valves. •
- The air control feature allows explosion proof remote control.

320

160 Q = L/min. 480

 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.

No Load Pressure Drop No Load Pressure Drop Regulated Pressure with Valve Full Open Reducina with Valve Full Open Re lie u lug 2000 200 15 1500 150 bs ģ = psi 100 1000 ۳ ک в. ۵. ബ sm п 160 240 320 ñ ō 80 80 20 40 60 -80 4 Flow = GPM 80 120 Flow = GPM Q = L/min. **Regulated Pressure** Reducing Relieving 140 120 100 bar 80 I 60 ۵. 40 20

PERFORMANCE CURVES

-320

-160

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