



Two-port, pilot-stage, air-controlled, direct-acting relief cartridges are normally closed pressure regulating valves. When the pressure at port 1 (inlet) is sufficient to overcome the force due to the air signal, a flow path is opened from port 1 to port 2 (tank). These cartridges are designed for pilot flow applications and utilize Sun's T-8A cavity so they can be used in conjunction with Sun's pilot-operated, main-stage valves.

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

Cavity	T-8A
Series	P
Capacity	2.5 gpm
Maximum Operating Pressure	5000 psi
Maximum Pilot Pressure	150 psi
Maximum Valve Leakage at 110 SUS (24 cSt)	15 drops/min.
Pilot Control Port	See Control Options
Valve Installation Torque	20 - 25 lbf ft
Seal kit - Cartridge	Buna: 990-608-007
Seal kit - Cartridge	EPDM: 990-608-014
Seal kit - Cartridge	Polyurethane: 990-008-002
Seal kit - Cartridge	Viton: 990-608-006

OPTION SELECTION EXAMPLE: RBARBWN

CONTROL	(B) AIR PILOT RATIO	(W) SEAL MATERIAL	(N)
B External 4-SAE Port	W 50:1	N Buna-N	
A External 1/8 NPTF Port	Y 75:1	E EPDM	
D External 1/8 BSPP Port		V Viton	

TECHNICAL FEATURES

- Utilizes the Sun T-8A 2-port cavity making it the ideal choice to use in conjunction with Sun's main stage pilot or vent-to-operate cartridges. Separate pilot lines are eliminated and only one cavity needs to be machined to accommodate both the control and primary function. Note: All 2-position, 2-way pilot stage control cartridges utilize the same cavity and are physically interchangeable. Functionality is the only consideration.
- Note: The main stage valve should first be installed to the correct torque value followed by the T-8A pilot control section into the main stage valve to its required torque value.
- Different pilot control port options are available. See Option Selection for details.
- Ports 1 and 2 may be pressured to 5000 psi (350 bar).
- Hardened poppet and seat provide consistent operation, low leakage rates and superior wear characteristics.
- Two different oil-to-air pilot ratios are available; 50:1 and 75:1. See Option Selection.
- Maximum pilot control port pressure is 150 psi (10 bar).
- Backpressure at port 2 increases the relief setting by a .43 multiplier.
- 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

