



These pilot-stage, directional, 2-position, 2-way valves are pneumatically operated, spring-return cartridges and are available in either normally open or normally closed configurations. 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	.25 gpm
Maximum Operating Pressure	5000 psi
Maximum Valve Leakage at 110 SUS (24 cSt)	10 drops/min. @5000 psi
Minimum Pilot Pressure to Operate	See Technical Features
Pilot Control Port	See Control Options
Valve Hex Size	7/8 in.
Valve Installation Torque	20 - 25 lbf ft
Seal kit - Cartridge	Buna: 990-508-007
Seal kit - Cartridge	Viton: 990-508-006

## OPTION SELECTION EXAMPLE: DAAPFCNV

CONTROL	(F) SPOOL CONFIGURATION	(C) SEAL MATERIAL	(V) MATERIAL/COATING
<b>F</b> External 1/8 NPTF Port	<b>C</b> Normally Closed	<b>V</b> Viton	Standard Material/Coating
<b>E</b> External 4-SAE Port	<b>H</b> Normally Open	<b>E</b> EPDM	<b>IAP</b> Stainless Steel, Passivated
<b>P</b> External 1/8 BSPP Port		<b>N</b> Buna-N	

### 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.
- The preferred flow path through the valve is port 2 to port 1.
- Different pilot control port options are available. See Option Selection for details.
- Hardened spool and sleeve provide consistent operation, low spool leakage rates and superior wear characteristics.
- The minimum pilot pressure required to operate the valve is determined by the following formula: pilot pressure = 20 psi + pressure @ Port 1 divided by 100. This results in a pilot pressure range of 20 to 70 psi. In metric; pilot pressure = 1,4 bar + pressure @ Port 1 divided by 100. This results in a pilot pressure of 1,4 to 5 bar.
- All ports will accept 5000 psi (350 bar) with the exception of the pilot port which accepts 500 psi (35 bar) max.
- 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

