



Ventable, bypass/restrictive, fixed-orifice, priority flow controls take an input flow at port 1 and use it to satisfy the priority flow at port 3. If the input flow exceeds the priority flow requirement, the excess is bypassed out port 2. The bypass flow may be used in a secondary circuit. A vent port (port 4) allows these valves to be controlled remotely.

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

Cavity	T-21A
Series	1
Capacity	6 gpm
Maximum Operating Pressure	5000 psi
Maximum Input Flow	15 gpm
Nominal Vent Flow	46 in ³ /min.
Valve Hex Size	7/8 in.
Valve Installation Torque	30 - 35 lbf ft
Adjustment Screw Internal Hex Size	5/32 in.
Locknut Hex Size	9/16 in.
Locknut Torque	80 - 90 lbf in.
Model Weight	.30 lb
Seal kit - Cartridge	Buna: 990-021-007
Seal kit - Cartridge	Polyurethane: 990-021-002
Seal kit - Cartridge	Viton: 990-021-006

OPTION SELECTION EXAMPLE: FVCAxANV

CONTROL	(X) SETTING RANGE	(A) SEAL MATERIAL	(N)
X Not Adjustable	A Replaceable Orifice .1 - 6 gpm (0,4 - 23 L/min.)	N Buna-N	
L Tuning Adjustment		V Viton	

TECHNICAL FEATURES

- Customer must specify a flow rating. Factory set flow ratings are within +/- 10% of the requested setting.
- Using a pressure control on port 4 will limit the pressure at the priority port (port 3). If pressure on the bypass port (port 2) exceeds the setting of the pressure control, priority flow will be shut off and all the flow will go out the bypass port.
- Maximum pressure at port 3 should be limited to 3000 psi (210 bar).
- Both priority and bypass flow are usable up to the system operating pressure.
- Priority remains relatively constant regardless of variation in input flow.
- Bypass flow is not available until priority flow requirements are satisfied, except when the valve is vented. When port 4 (vent) is open, all flow diverts to port 2 if pressure at port 1 (inlet) is 150 psi (10,5 bar) or higher.
- Pressure at the bypass port (port 2) may exceed pressure at the priority port (port 3).
- The sharp-edged orifice design minimizes flow variations due to viscosity changes.
- A tuneable adjustment control option provides up to +/- 25% variation from the nominal factory pre-set flow. Adjustment is done with +/- 3 turns of the adjust screw. Screw in (CW) to increase flow.
- 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

