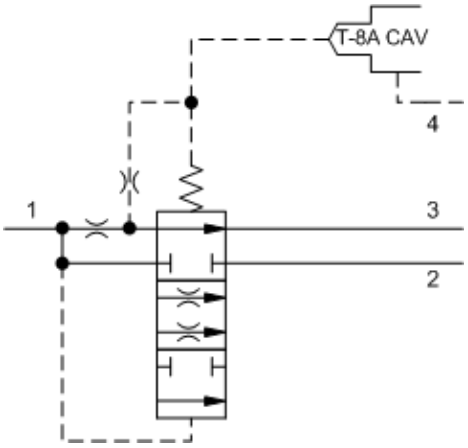
MODEL

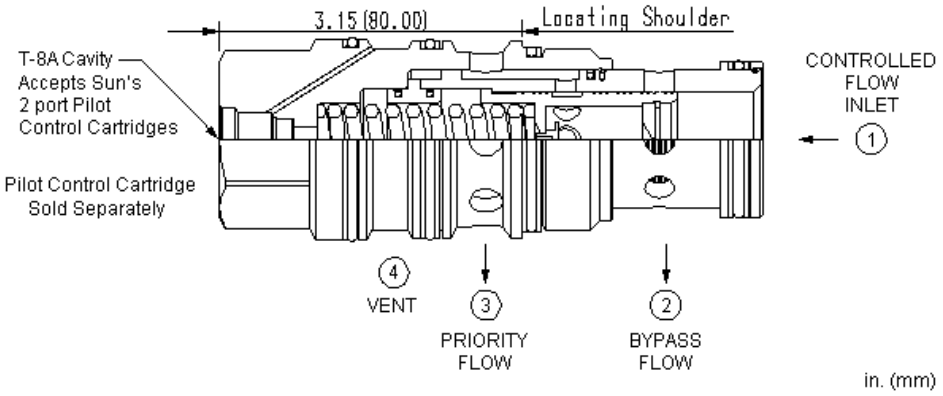
FVFA8

Ventable, fixed-orifice, bypass/restrictive, priority flow control valve with integral T-8A control cavity

CAPACITY: 50 gpm / CAVITY: T-24A

sunhydraulics.com/model/FVFA8





This valve is a ventable, bypass/restrictive, fixed-orifice, priority flow control with an integral pilot control cavity. The pilot control cavity will accept any T-8A pilot pressure or directional control cartridge. It takes an input flow at port 1 and uses it to satisfy the priority flow at port 3. If the input flow exceeds the priority flow requirement, the excess flow is bypassed out of port 2. Bypass flow may be used for a secondary circuit. Depending on which pilot control valve is installed in the T-8A cavity, priority flow can be selected electrically, manually, hydraulically or pneumatically.

TECHNICAL DATA

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

Cavity	T-24A
Series	4
Capacity	50 gpm
Maximum Operating Pressure	5000 psi
Maximum Input Flow	120 gpm
Nominal Vent Flow	46 in^3/min.
Pilot Control Cavity	T-8A
Pilot Control Valve Hex Size	7/8 in.
Pilot Control Valve Installation Torque	20 - 25 lbf ft
Valve Hex Size	1 5/8 in.
Valve Installation Torque	350 - 375 lbf ft
Model Weight	2.80 lb
Seal kit - Cartridge	Buna: 990-024-007
Seal kit - Cartridge	EPDM: 990-024-014
Seal kit - Cartridge	Polyurethane: 990-024-002
Seal kit - Cartridge	Viton: 990-024-006

NOTES:

- Compound cartridge (pilot and main stage) assembly information is provided for reference only. Cartridges must be ordered separately and assembled at point of use.

OPTION SELECTION EXAMPLE: FVFA8ANV

SETTING RANGE	(A)
A	Replaceable Orifice .2 - 50 gpm (1 - 200 L/min.)
B	Permanent Orifice .2 - 50 gpm (1 - 200 L/min.)

SEAL MATERIAL	(V)
V	Viton
E	EPDM
N	Buna-N

TECHNICAL FEATURES

- Customer must specify a flow rating. Factory set flow ratings are within +/- 10% of the requested setting.
- Using a pressure control in the T-8A pilot control cavity 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).
- NOTE: With the -8 control option, the main stage valve should first be installed to the correct torque value. The T-8A pilot control valve should then be installed into the main stage valve to its required torque value.
- Cartridges with EPDM seals are for use in systems with phosphate ester fluids. Exposure to petroleum based fluids, greases and lubricants will damage the seals.
- 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.
- The -8 control option allows the pilot control valve to be incorporated directly into the end of the cartridge via the T-8A cavity. These pilot control cartridges are sold separately and include electro-proportional, solenoid, air pilot, and hydraulic pilot operation. See Pilot Control Cartridges.
- 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