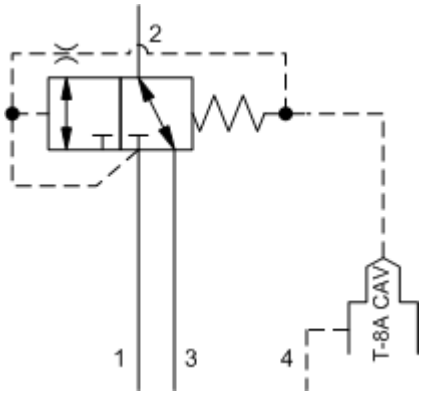
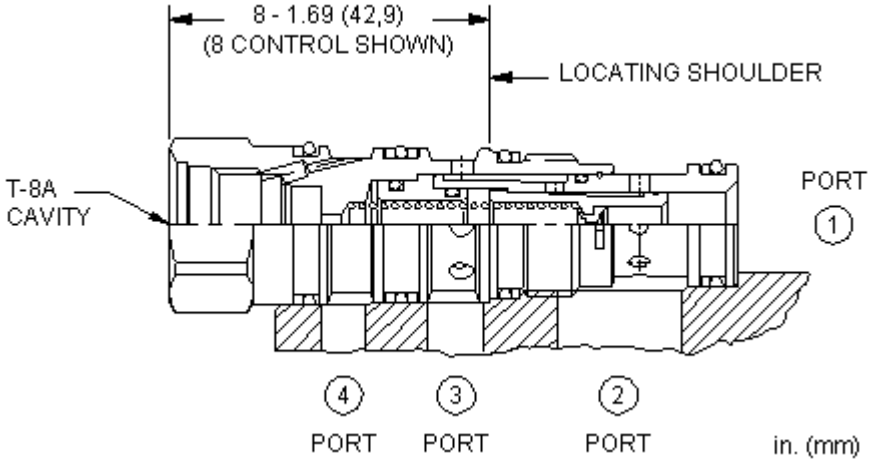
3-way, vent-to-operate, directional valve with drain to port 4 and integral T-8A control cavity (1 blocked, 2 to 3 open)

CAPACITY: 7 gpm / CAVITY: T-21A

sunhydraulics.com/model/DVBO





This valve is a, 3-way directional cartridge (1 blocked, 2 to 3 open) that incorporates an integral pilot control cavity. It may be used by itself or to actuate larger pilot-operated directional cartridges or logic elements. The valve shifts when there is flow through the pilot control cartridge installed in the T-8A cavity.

TECHNICAL DATA

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

Cavity	T-21A
Series	1
Capacity	7 gpm
Maximum Operating Pressure	5000 psi
Control Pilot Flow	7 - 10 in^3/min.
Maximum Valve Leakage at 110 SUS (24 cSt)	2 in^3/min.@1000 psi
Pilot Control Cavity	T-8A
Valve Hex Size	7/8 in.
Valve Installation Torque	30 - 35 lbf ft
Model Weight	.50 lb
Seal kit - Cartridge	Buna: 990-021-007
Seal kit - Cartridge	Polyurethane: 990-021-002
Seal kit - Cartridge	Viton: 990-021-006

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: DVBO8NV

CONTROL	(8)
8 T-8A Cavity	

SEAL MATERIAL	(N)
N Buna-N	
V Viton	

TECHNICAL FEATURES

- Port 3 can be used as a work port.
- The flow path between port 2 and port 3 is bidirectional.
- 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.
- This valve is not bistable; it is capable of modulating between the two positions shown.
- The flow path between port 1 and port 2 is bidirectional.
- There must be a pressure source at port 1, relative to port 4, to shift the valve.
- The -8 control option allows the pilot control valve to be incorporated directly into the end of the directional cartridge via the T-8A cavity. These pilot control cartridges are sold separately and include solenoid operation, air pilot operation, and hydraulic pilot operation. See Pilot Control Cartridges.
- Leakage listed in technical data is for each path.
- 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