

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 (28 L/min.)

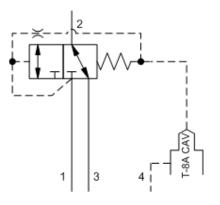
Functional Group:

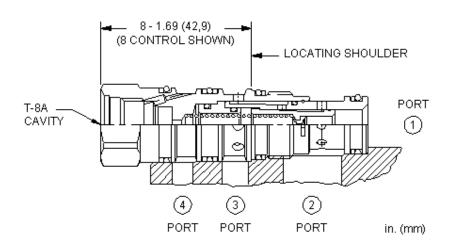
Products: Cartridges: Directional; DP**, DR**, DV**: 3 Way - 4 Port - 1 Blocked, 2 to 3 Open: Integral T-8A Control Cavity

Model: **DVBO**

Product Description

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.



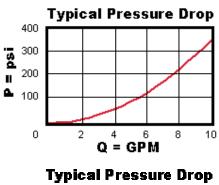


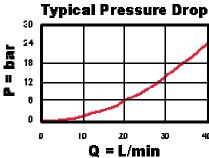
Technical Features

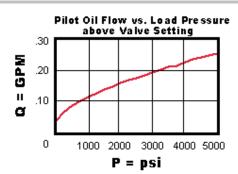
- Port 3 can be used as a work port.
- The flow path between port 2 and port 3 is bidirectional.
- NOTE: The main stage valve should first be installed to the correct torque value followed by the T-8A pilot control section into the main stage valve to its required torque value.
- This valve is not bistable; it is capable of modulating between the two positions shown.
- The flow path between port 1 and port 2 is bidirectional.

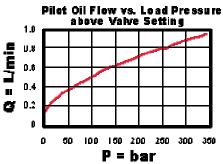
- There must be a pressure source at port 1, relative to port 4, to shift the valve.
- The -8 control option allows the pilot control valve to be incorporated directly into the end of the directional cartridge via the T-8A cavity. These pilot control cartridges are sold separately and include solenoid 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.

| Technical Data | | | |
|---|----------------------------------|--------------------|--|
| | U.S. Units | Metric Units | |
| Cavity | T-21A | | |
| Capacity | 7 gpm | 28 L/min. | |
| Control Pilot Flow | 7 - 10 in³/min. | 0,11 - 0,16 L/min. | |
| Maximum Operating Pressure | 5000 psi | 350 bar | |
| Maximum Valve Leakage at 110 SUS (24 cSt) | 2 in ³ /min.@1000 psi | 30 cc/min.@70 bar | |
| Pilot Control Cavity | T-8A | | |
| Series (from Cavity) | Series 1 | | |
| Valve Hex Size | 7/8 in. | 22,2 mm | |
| Valve Installation Torque | 30 - 35 lbf ft | 40 - 50 Nm | |
| Seal Kits - Cartridge | Buna: 990-021-007 | | |
| Seal Kits - Cartridge | Viton: 990-021-006 | | |
| Model Weight | 0.29 lb. | 0.13 kg. | |









DVBO-8FN

| | Control | - | Minimum Control Pressure | | Seal Material |
|-----------------------------------|-------------|------------------|--------------------------|---|---------------|
| Standard Options Standard Options | | Standard Options | | | |
| 8 | T-8A Cavity | F | 100 psi (7 bar) | N | Buna-N |
| | | | | V | Viton |