



3-way, 3-position, proportional directional valve

Capacity:
18 gpm (70 L/min.)

Functional Group:

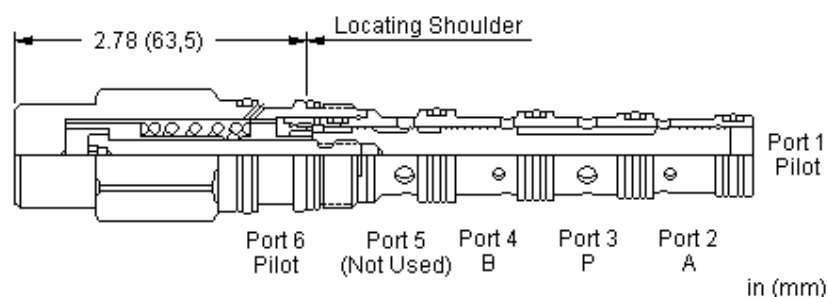
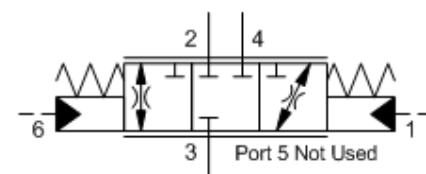
Products : Cartridges : Directional, Proportional : 3 Way : 3-way, 3-position

Model:

FTDB

Product Description

This valve is a 3-way, 3 position, proportional directional valve. Ports 2, 3, and 4 are closed in the center position. Pilot pressure at port 1 creates a metering orifice between ports 3 and 4 that is proportional to the pressure at 1. Piloting 6 opens 3 to 2. The force balance of the flow forces, spring and pilot pressure results in a degree of partial self compensation as the load pressure changes. Port 5 is not used.

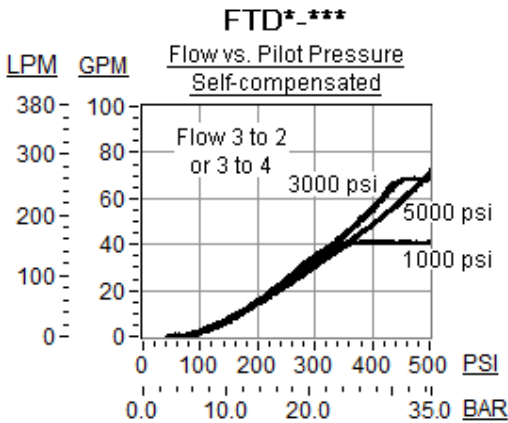
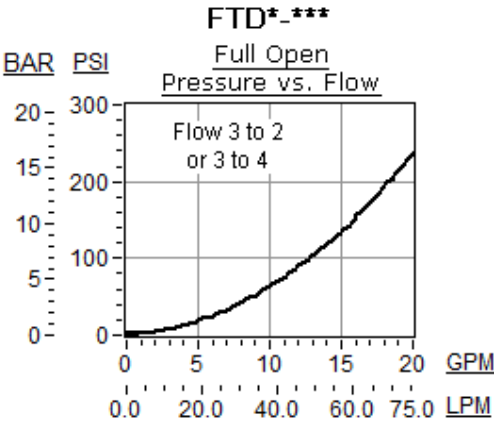


Technical Features

- Using 2 3-ways to create a 4-way allows one to choose existing flow ranges instead of cutting a special spool.
- These valves may be pressure compensated by an external, modulating, logic element. Use LR_C-XHN for a bypass circuit or LP_C-XHN for a restrictive circuit.
- The valve provides a degree of self-compensation and may be used as a flow control. To increase the accuracy of flow control, an external, modulating, logic element can be used to maintain a constant flow over a wider range of flows and pressures. See performance curves for additional information.
- All ports will accept 5000 psi (350 bar).
- 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-52A	
Capacity	18 gpm	70 L/min.
Minimum Pilot Pressure Required to Shift Valve	50 psi	3,5 bar
Pilot Pressure Required for Full Shift at Rated Flow	300 psi	20 bar
Maximum Operating Pressure	5000 psi	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	2 in ³ /min.	30 cc/min.
Pilot Volume Displacement	.04 in ³	0,66 cc
Series (from Cavity)	Series 2	
Hysteresis	± 2 %	
Valve Hex Size	1 1/8 in.	28,6 mm
Valve Installation Torque	45 - 50 lbf ft	60 - 70 Nm
Seal Kits - Cartridge	Buna: 990-052-007	
Seal Kits - Cartridge	Viton: 990-052-006	
Model Weight	1.12 lb.	0.51 kg.



FTDB-XCN

Control	Spool Configuration	Seal Material
Standard Options	Standard Options	Standard Options
X Not Adjustable	C Normally Closed	N Buna-N
		V Viton