

3-way, 2-position, proportional directional valve

Capacity:
18 gpm (70 L/min.)

Functional Group:

Products : Cartridges : Directional, Proportional : 3 Way : 3-way, 2-position

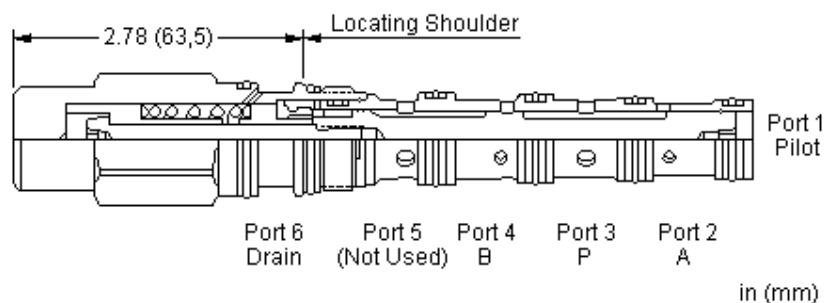
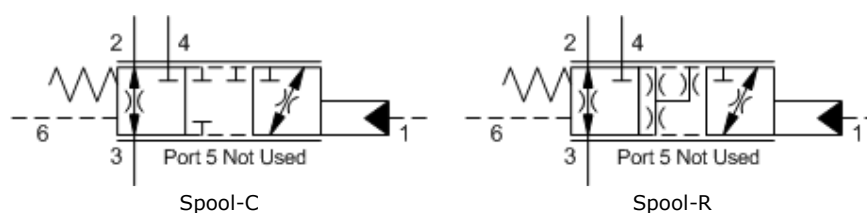
Model:

FTDG

Product Description

This valve is a 3-way, 2 position, proportional directional valve. In the spring biased position, a metered path is open between 2 and 3 with port 4 blocked. Pilot pressure at port 1 creates a metering orifice between 3 and 4 that is proportional to the pressure at 1. The force balance of the flow forces, spring and pilot pressure results in a degree of partial self compensation as the load pressure changes. The spring chamber is drained through port 6 and port 5 is not used.

Depending on the spool specified, ports 2, 3, and 4 are either closed or restricted during transition.

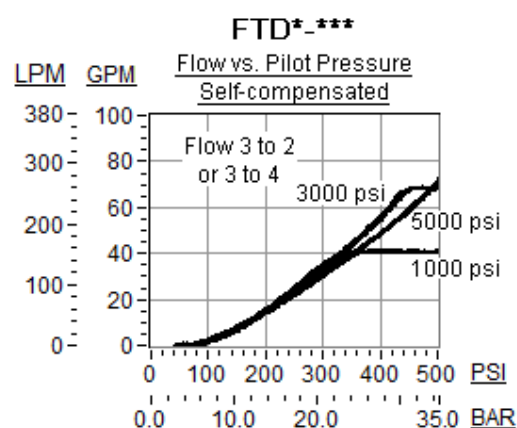
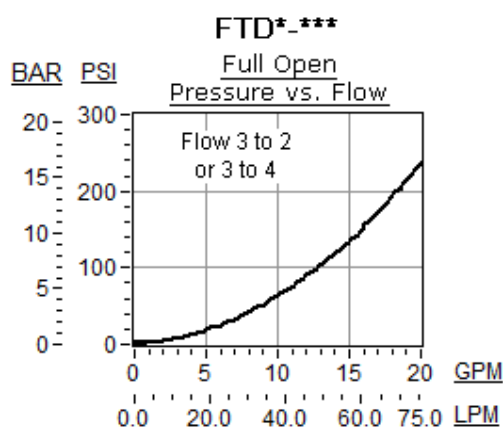


Technical Features

- Nominal operating pressures for port 1 and port 6 should not exceed 500 psi (35 bar).
- 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.
- Using 2 3-ways to create a 4-way allows one to choose existing flow ranges instead of cutting a special spool.
- Pressure at ports 1 and 6 directly oppose each other.
- 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.
- 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	1.11 lb.	0.50 kg.

**FTDG-XCN****Control****Standard Options****X** Standard Pilot**Spool Configuration****Standard Options**

C Closed Crossover
R Restricted Crossover

Seal Material**Standard Options**

N Buna-N
V Viton