



3-way, 3-position, proportional directional valve with center bleed down and load sense

Functional Group:

Products : Cartridges : Directional, Proportional : 3 Way : 3-way, 3-position with Center Bleed Down and Load Sense

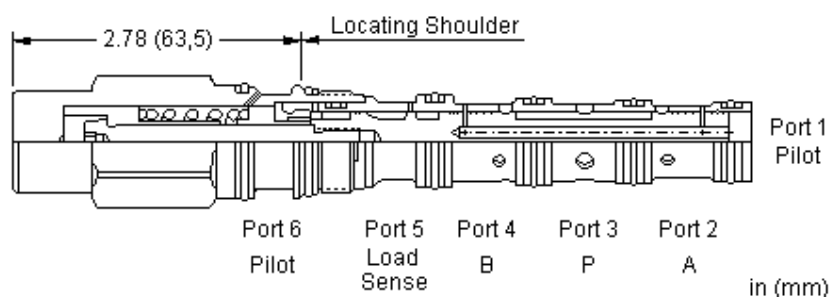
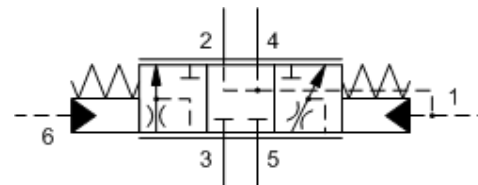
Capacity:
18 gpm (70 L/min.)

Model:
FTDK

Product Description

This valve is a 3-way, 3 position, proportional directional valve. Port 3 is closed in the center position and port 2 and port 4 are drained to port 1. 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.

Load sense is available at port 5 when the spool is shifted to either port 2 or 4.

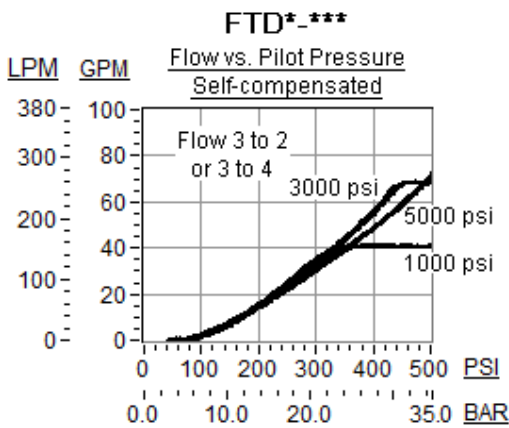
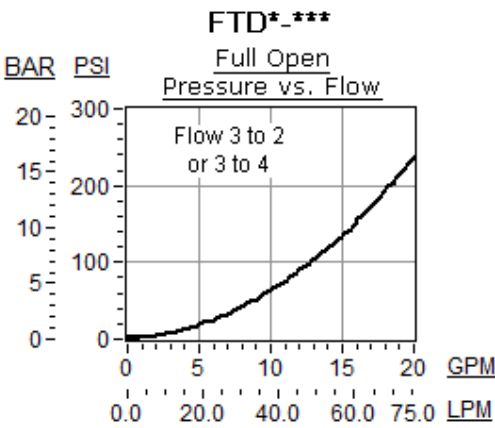


Technical Features

- Nominal operating pressures for port 1 and port 6 should not exceed 500 psi (35 bar).
- 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.
- Pressure at ports 1 and 6 directly oppose each other.
- 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	80 psi	5,5 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.



FTDK-XCN

Control

Standard Options

X Not Adjustable

Spool Configuration

Standard Options

C Normally Closed

Seal Material

Standard Options

N Buna-N
V Viton