

# 3-way, 3-position, proportional directional valve with center bleed down

Capacity: 7 gpm (28 L/min.)

Functional Group:

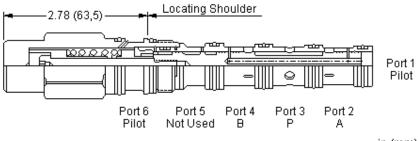
Products: Cartridges: Directional, Proportional: 3 Way: 3-way, 3-position with Center Bleed Down

Model: FTCH

#### **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.

Port 5 is not used.



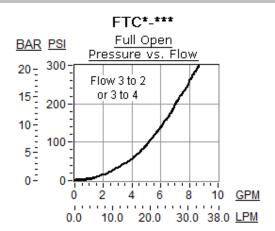
#### in (mm)

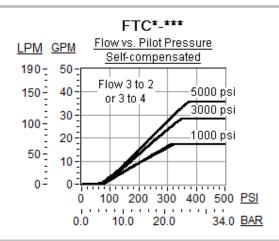
## **Technical Features**

- 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	7 gpm	28 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 in³/min.	30 cc/min.	
Pilot Volume Displacement	.04 in <sup>3</sup>	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	
Model Weight	1.00 lb	0,45 kg	
Seal Kits - Cartridge	Buna: 990-052-007		
Seal Kits - Cartridge	Viton: 990-052-006		





## **FTCH-XCN**

	Control	<b>Spool Configuration</b>		Seal Material	
Sta	ndard Options	Standard Options		Standard Options	
X	Not Adjustable	C Normally Closed	N V	Buna-N Viton	