

3-way, 2-position, proportional directional valve

Capacity: 7 gpm (28 L/min.)

Functional Group:

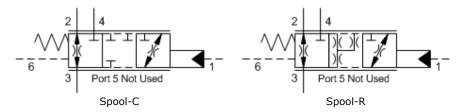
Products: Cartridges: Directional, Proportional: 3 Way: 3-way, 2-position

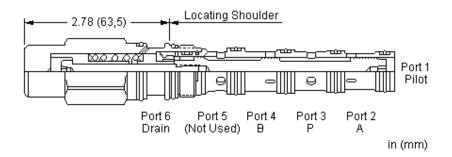
Model: FTCG

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.



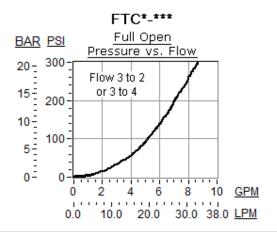


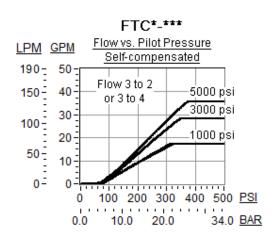
Technical Features

- Nominal operating pressures for port 1 and port 6 should not exceed 500 psi (35 bar).
- 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.
- 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.

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| | U.S. Units | Metric Units | |
|--|---------------------|--------------|--|
| Cavity | T-52A | | |
| Capacity | 7 gpm | 28 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 in³/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. | |





FTCG-XCN

| Control | | Spool Configuration | | Seal Material | |
|-------------------|----------------|----------------------------|----------------------|------------------|--------|
| Preferred Options | | Standard Options | | Standard Options | |
| x | Standard Pilot | С | Closed Crossover | N | Buna-N |
| | | R | Restricted Crossover | V | Viton |