

# 2-way, pilot shifted, proportional throttle

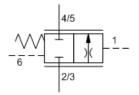
Capacity: 15 gpm (60 L/min.)

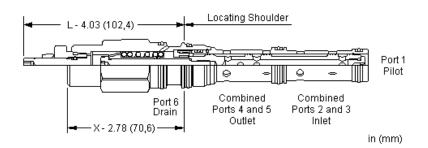
Model: FTCA

### Product Description

This valve is a 2-way, 2 position, proportional throttle. Ports 2/3 and 4/5 are normally closed. Pilot pressure at port 1 creates a metering orifice between port 2/3 and 4/5 that is proportional to the pressure at 1. The metering passage is self-compensating.

This valve uses a dual path design, Ports 2, 3, 4 and 5 are combined at the cartridge into ports 2/3 and 4/5. The paired port can be treated as an individual area.





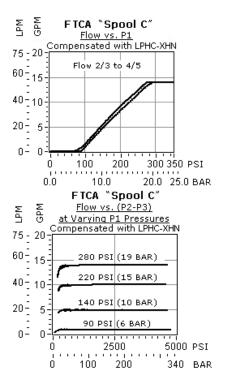
## Technical Features

- Ports 1 and 6 should be limited to 500 psi (35 bar)
- If the flow control need is absolute, a pressure compensator is needed.
  If the flow control need is not absolute, as with a joystick, self-compensation may suffice.
- Pressure at port 6 directly opposes pressure at port 1.
- The L control is a stroke adjustment that limits maximum flow.
- Accurate pressure compensated control requires that a constant pressure differential be maintained across the valve.
- 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.

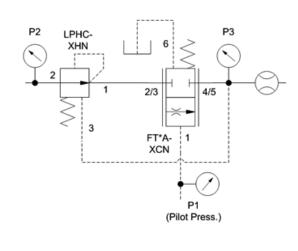
## Special Notes

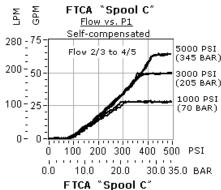
• When installed in Sun's standard T-52A line mount manifold, plug unused ports and expect higher pressure drops.

#### Technical Data U.S. Units Metric Units Cavity Capacity 15 gpm 60 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 2 in³/min.@1000 psi 30 cc/min.@70 bar Maximum Valve Leakage at 110 SUS (24 cSt) Pilot Volume Displacement .05 in<sup>3</sup> 0,82 cc Series (from Cavity) Hysteresis ± 2 % 1 1/8 in. Valve Hex Size 28.6 mm 60 - 70 Nm Valve Installation Torque Buna: 990-062-007 Seal Kits - Cartridge Seal Kits - Cartridge Viton: 990-052-006 Model Weight 1.08 lb 0.49 kg.



## **Compensated Test Circuit**

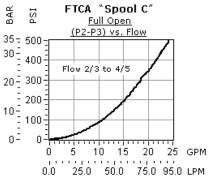




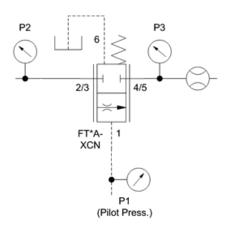
100

340 BAR

### GPM LPM Flow vs. (P2-P3) at Varying P1 Pressures 280 - 75 425 PSI (30 BAR) 200 [50 300 PSI (20 BAR) 100-20 200 PSI (14 BAR) 125 PSI (9 BAR) 0- 0-Ó 2500 5000 PSI 200 ó 100 340 BAR



## Self-Compensated Test Circuit



# FTCA-XCN

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