

2-way, pilot shifted, proportional throttle

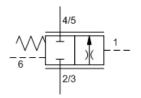
Capacity: 30 gpm (120 L/min.)

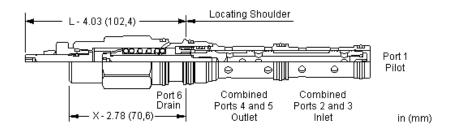
Model: FTDA

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

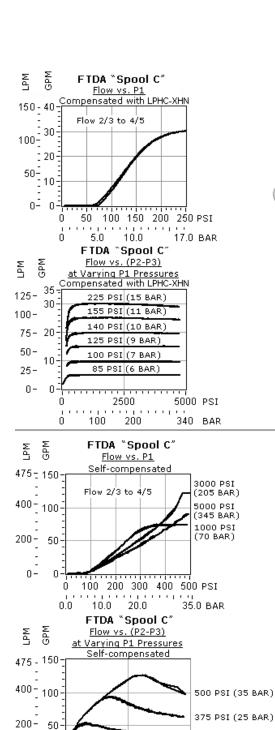
- Ports 1 and 6 should be limited to 500 psi (35 bar).
- If the flow control need is absolute, a pressure compensator is needed.
 If the flow control need is not absolute, as with a joystick, self-compensation may suffice.
- Pressure at port 6 directly opposes pressure at port 1.
- The L control is a 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

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	U.S. Units	Metric Units
Cavity	T-52A	
Capacity	30 gpm	120 L/min.
Minimum Pilot Pressure Required to Shift Valve	75 psi	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.@1000 psi	30 cc/min.@70 bar
Pilot Volume Displacement	.05 in ³	0,82 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: 990-062-007	
Seal Kits - Cartridge	Viton: 990-052-006	
Model Weight	1.07 lb.	0.49 kg.



2500

100 200

Flow 2/3 to 4/5

10 20 30

100

50 1

FTDA "Spool C"

<u>Full Open</u> (P2-P3) vs. Flow

0- 0-**F**

BAR

PSI

35 ± 500 ± 30 ± 400 ± 400 ±

20 - 300 -

10-

0- 0

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250 PSI (17 BAR) 125 PSI (8 BAR)

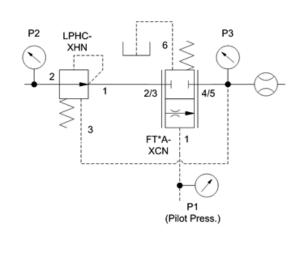
5000 PSI

340 BAR

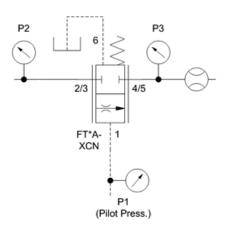
40 50 GPM

150 190 LPM

Compensated Test Circuit



Self-Compensated Test Circuit



FTDA-XCN

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