

CONFIGURATION

X Control	Not Adjustable
C Spool Configuration	Normally Closed
N Seal Material	Buna-N

This valve is a 2-way, 2-position proportional throttle. Ports 2 and 3 are normally closed. Pilot pressure at port 1 opposes the spring and creates a variable metering orifice between port 2 and 3 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.

Pressure at port 4 directly opposes pressure at port 1.

The valve uses a dual-path design. Ports 2 and 3 incorporate a double-port area.

TECHNICAL DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Cavity	T-52AD
Series	2
Capacity	30 gpm
Maximum Operating Pressure	5000 psi
Pilot Pressure Required to Shift Valve	50 - 120 psi
Pilot Pressure Required for Full Shift at Rated Flow	290 - 340 psi
Maximum Valve Leakage at 110 SUS (24 cSt)	5 in ³ /min.@1000 psi
Pilot Volume Displacement	.05 in ³
Hysteresis	35 %
Valve Hex Size	1 1/8 in.
Valve Installation Torque	45 - 50 lbf ft
Seal kit - Cartridge	Buna: 990152007
Seal kit - Cartridge	Viton: 990152006
Model Weight	1.04 lb.

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

CONFIGURATION OPTIONS

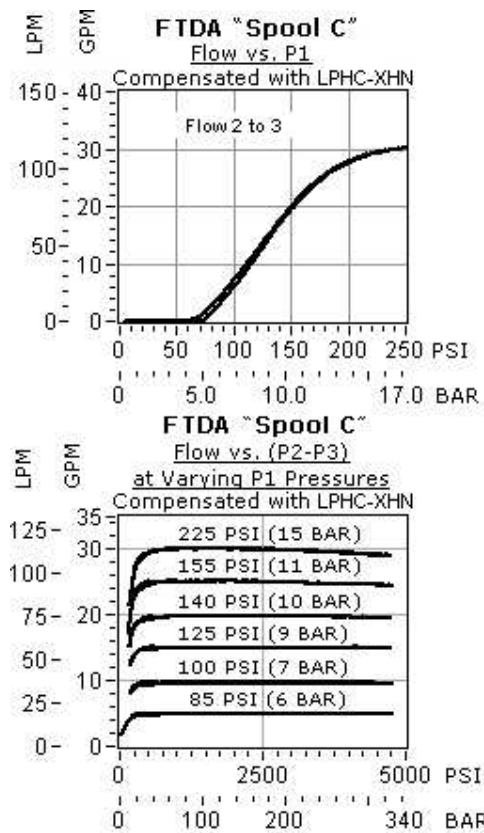
Model Code Example: FTDAArray

CONTROL	(X) SPOOL CONFIGURATION	(C) SEAL MATERIAL	(N)
X Not Adjustable	C Normally Closed	N Buna-N	
L Stroke Adjustment		V Viton	

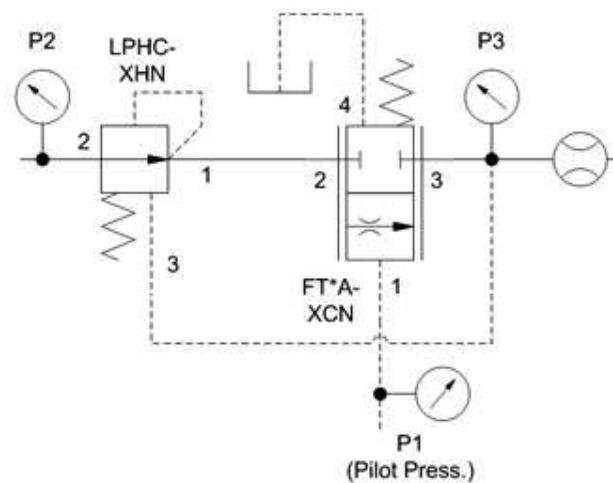
TECHNICAL FEATURES

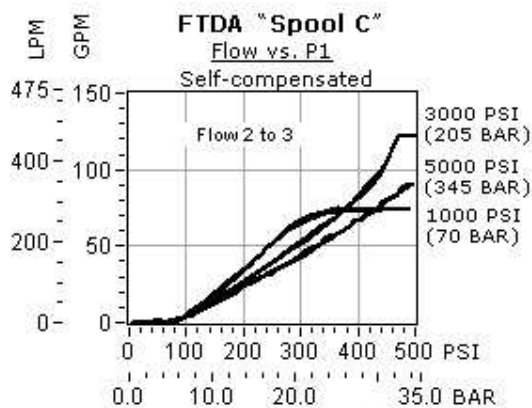
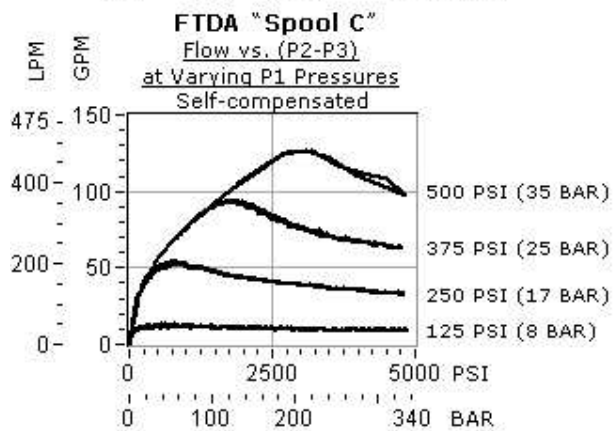
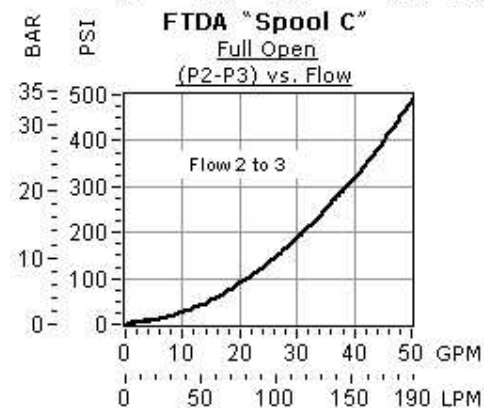
- These valves may be pressure compensated by an external, modulating, logic element. Use LR_C-XHN for a bypass circuit or LP_C-XHN for a restrictive circuit.
- The valve provides a degree of self-compensation and may be used as a flow control. To increase the accuracy of flow control, an external, modulating, logic element can be used to maintain a constant flow over a wider range of flows and pressures. See performance curves for additional information.
- The optional L control is a stroke adjustment that limits maximum flow.
- Ports 1 and 4 should be limited to 500 psi (35 bar).
- Pressure at port 4 directly opposes pressure at port 1.
- 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.

PERFORMANCE CURVES

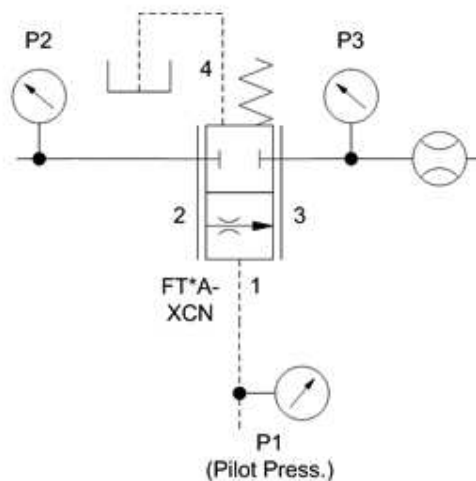


Compensated Test Circuit





Self-Compensated Test Circuit



RELATED MODELS

- [FTDAZ](#) 2-way, pilot-shifted, dual path, proportional throttle with position switch