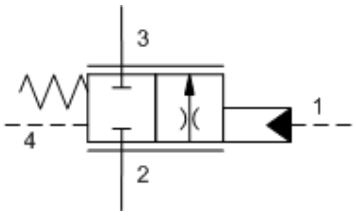

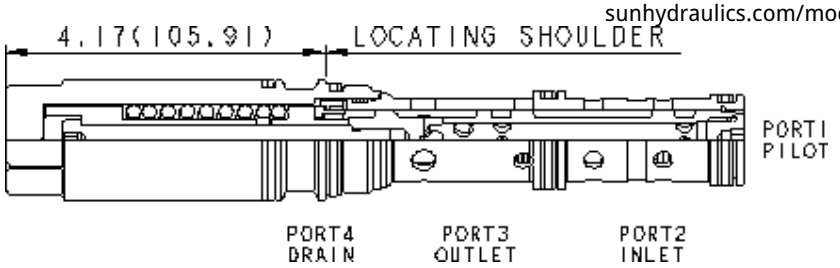

CONFIGURATION

X	Control	Not Adjustable
C	Spool Configuration	Normally Closed
N	Seal Material	Buna-N
(none)	Material/Coating	

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-53AD
Series	3
Capacity	50 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)	10 in³/min.@1000 psi
Pilot Volume Displacement	.10 in³
Adjustment - No. of CCW Turns from Fully Closed to Fully Open	5
Hysteresis	35 %
Valve Hex Size	1 1/4 in.
Valve Installation Torque	150 - 160 lbf ft
Adjustment Screw Internal Hex Size	5/32 in.
Locknut Hex Size	9/16 in.
Locknut Torque	80 - 90 lbf in.
Seal kit - Cartridge	Buna: 990053007
Seal kit - Cartridge	Viton: 990053006
Model Weight	2.88 lb.

NOTES

When installed in Sun's standard T-53A line mount manifold, plug unused ports and expect higher pressure drops.

CONFIGURATION OPTIONS

Model Code Example: FTFAArray

CONTROL (X)	SPOOL CONFIGURATION (C)	SEAL MATERIAL (N)	MATERIAL/COATING
X Not Adjustable	**C** Normally Closed	**N** Buna-N	Standard Material/Coating
L Stroke Adjustment		**V** Viton	**/AP** Stainless Steel, Passivated
			/LH Mild Steel, Zinc-Nickel

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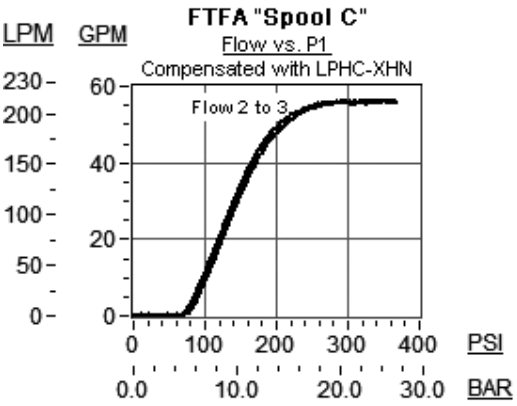
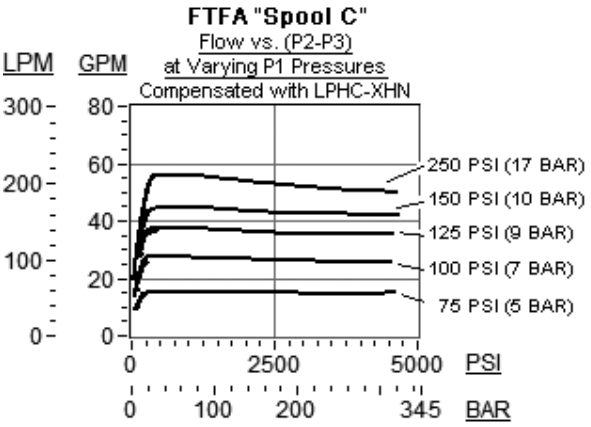
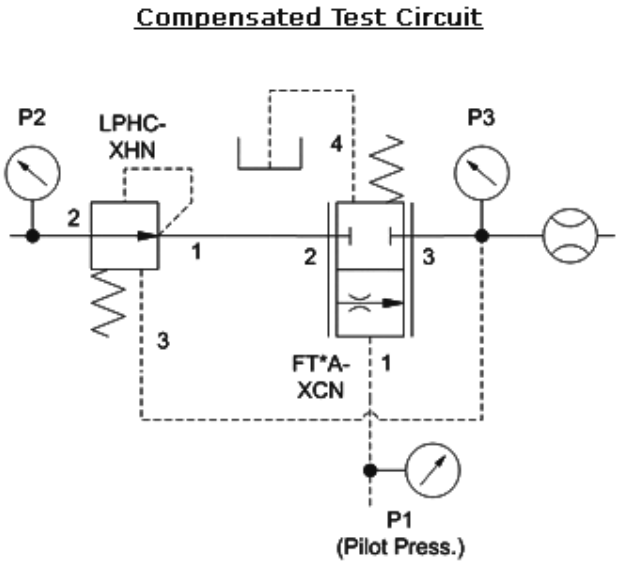
TECHNICAL FEATURES

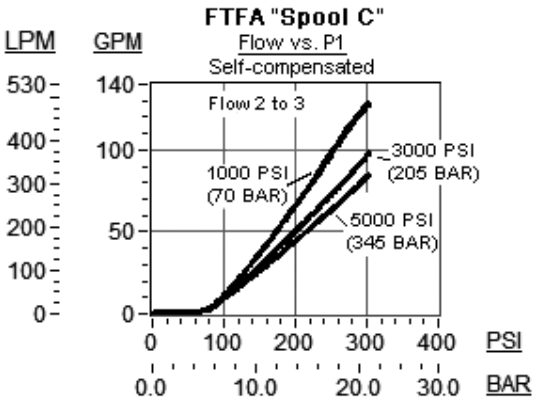
- These valves may be pressure compensated by an external, modulating, logic element. Use LR_C-XHN for a bypass circuit or LP_C-XHN for a restrictive circuit.
- The valve provides a degree of self-compensation and may be used as a flow control. To increase the accuracy of flow control, an external, modulating, 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.

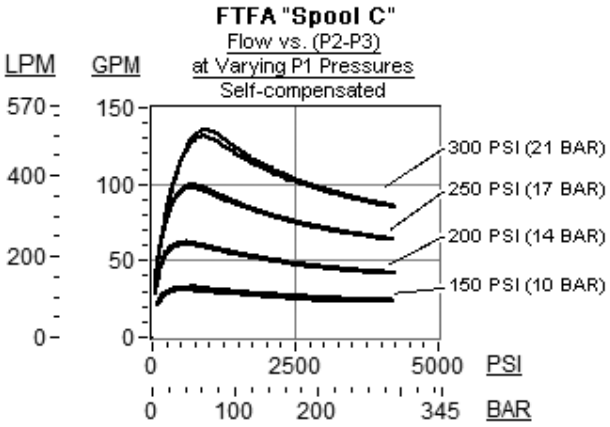
PERFORMANCE CURVES

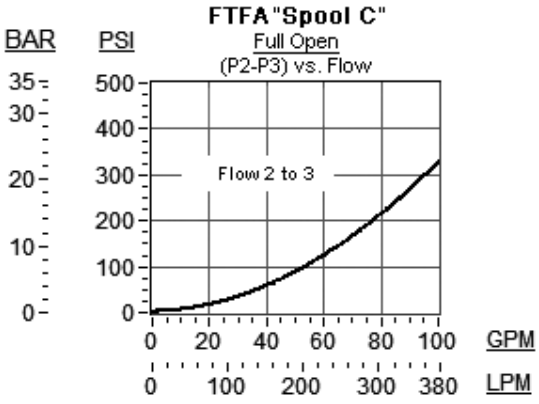




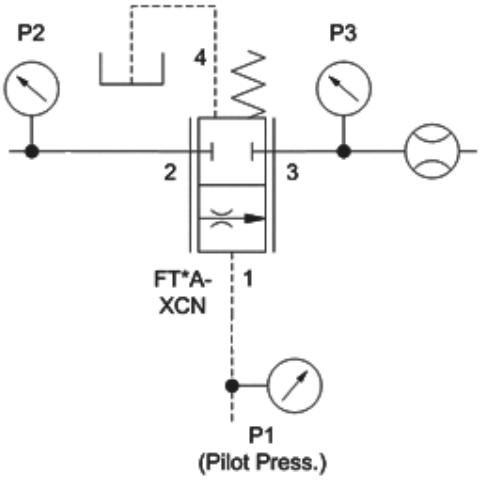








Self-Compensated Test Circuit



RELATED MODELS

- FTFAZ 2-way, pilot-shifted, dual path, proportional throttle with position switch

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