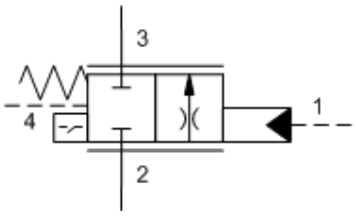
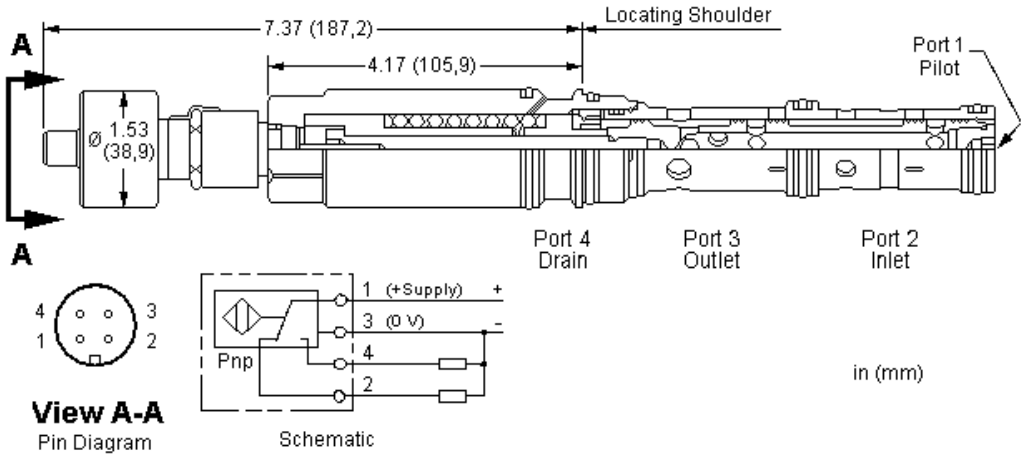
MODEL
FTEAZ

2-way, pilot-shifted, dual path, proportional throttle with position switch
SERIES 3 / CAPACITY: 25 gpm / CAVITY: T-53AD

sunhydraulics.com/model/FTEAZ





CONFIGURATION

C	Spool Configuration	Normally Closed
N	Seal Material	Buna-N

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

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

This valve incorporates a position switch to provide position confirmation.

TECHNICAL DATA

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

Cavity	T-53AD
Series	3
Capacity	25 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 in^3/min.@1000 psi
Pilot Volume Displacement	.10 in^3
Valve Hex Size	1 1/4 in.
Valve Installation Torque	150 - 160 lbf ft
Seal kit - Cartridge	Buna: 990053007
Seal kit - Cartridge	Viton: 990053006
Model Weight	3.75 lb.

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SWITCH SPECIFICATIONS

Supply Voltage	20-30 VDC
Operating Temperature Range	-25 to 80 °C
Vibration	≥ 50g, 0-500 impulses/sec
Shock	>50 g, 1ms
Reverse Polarity Protection	Yes
Maximum Output Load	≤ 400 mA, Duty Ratio 100%
Short Circuit Protection	Yes, Load Short Unlimited
Turn On Time	≤ 25 ms
Hysteresis	35 %
Thermal Shift - 0 to 80 °C ≤ ±	.004 in.
EMC	DIN EN 61000-6-1/2/3/4
Connector	M12 X 1 (4) Pin
Connector Environment Rating	IP65

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: FTEAZArray

SPOOL CONFIGURATION (C)	SEAL MATERIAL (N)
C Normally Closed	**N** Buna-N
H Normally Open	**V** Viton

TECHNICAL FEATURES

- This cartridge is supplied as a sealed, factory set unit and is not field serviceable. Any tampering will violate the product warranty.
- Position switch is CE approved.
- When torquing this cartridge into its cavity, a crow's foot wrench or similar will be required since the position switch precludes the use of a deep socket wrench.
- 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.
- An optional protective cover, with mounting hardware included, may be ordered separately. See kit number: 991-043.
- 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

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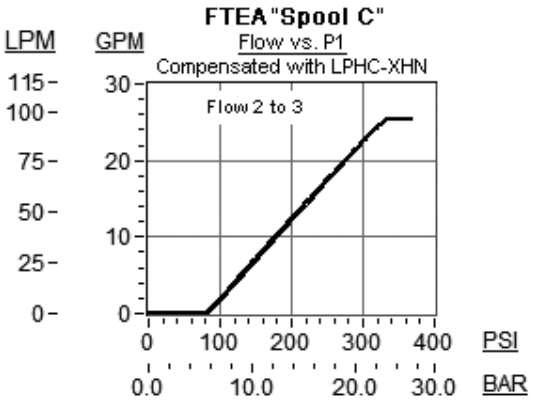

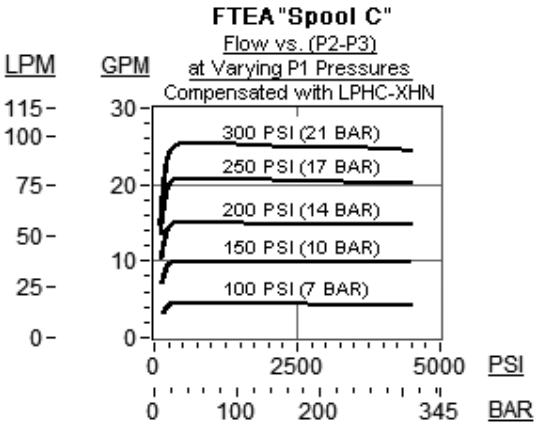

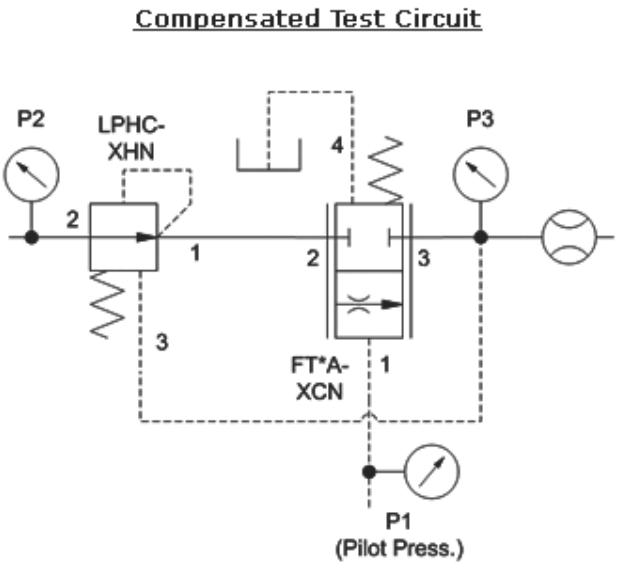

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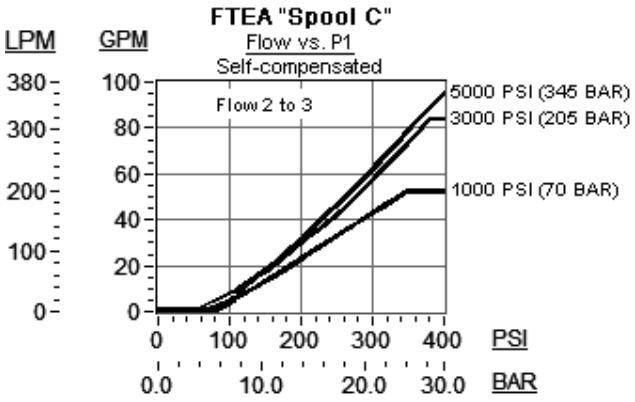
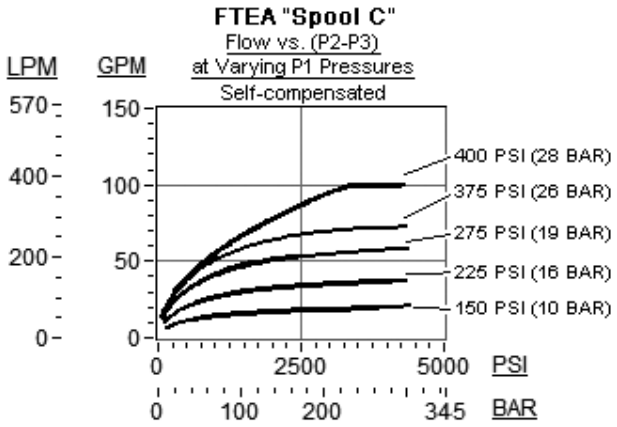
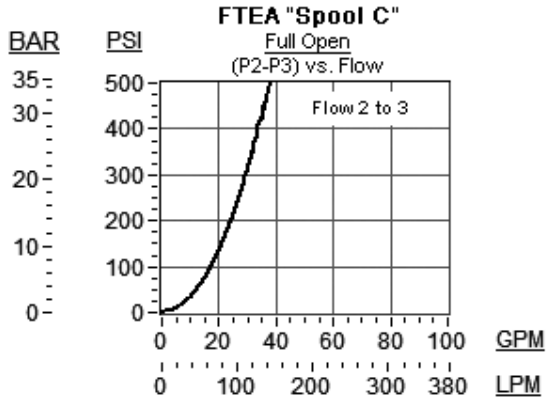
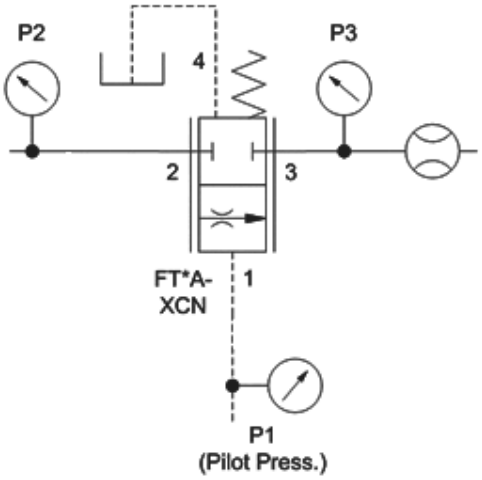






Self-Compensated Test Circuit



RELATED MODELS

- FTEA 2-way, pilot-shifted, dual path, proportional throttle

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