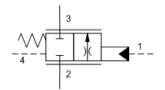


## MODEL FTFA

# 2-way, pilot shifted, dual path, proportional throttle CAPACITY: 200 L/min. | CAVITY: T-53AD



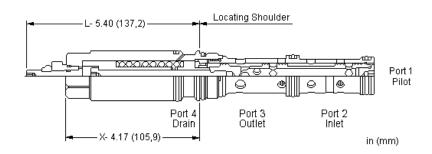
## CONFIGURATION

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

(none) Material/Coating Standard Material/Coating

#### NOTES

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



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.

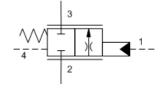
Pressure at port 4 directly opposes pressure at port 1.

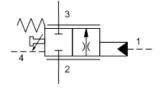
The valve uses a dual path design. Ports 2 and 3 incorporate a double port area.

## TECHNICAL DATA

| Cavity   | T-53AD             |  |
|--|--------------------|--|
| Series   | 3                  |  |
| Capacity   | 200 L/min.         |  |
| Minimum Pilot Pressure Required to Shift Valve                             | 4 bar              |  |
| Pilot Pressure Required for Full Shift at Rated Flow 20 bar                |                    |  |
| Maximum Operating Pressure   | 350 bar            |  |
| Maximum Valve Leakage at 110 SUS (24 cSt)                                  | 160 cc/min.@70 bar |  |
| Pilot Volume Displacement  | 1,6 cc             |  |
| Adjustment - Number of Counterclockwise Turns - Fully Closed to Fully Open | 5                  |  |
| Hysteresis   | ± 2 %              |  |
| Valve Hex Size   | 31,8 mm            |  |
| Valve Installation Torque  | 203 - 217 Nm       |  |
| Adjustment Screw Internal Hex Size   | 4 mm               |  |
| Locknut Hex Size   | 15 mm              |  |
| Locknut Torque   | 9 - 10 Nm          |  |
| Seal kit - Cartridge   | Buna: 990-053-007  |  |
| Seal kit - Cartridge   | Viton: 990-053-006 |  |
| Model Weight   | 1.31 kg.           |  |

## **SYMBOLS**

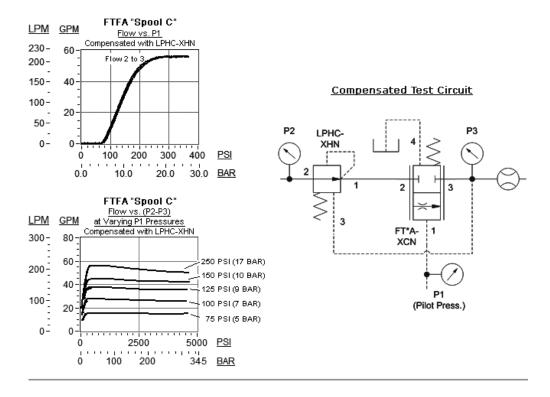


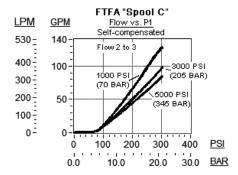


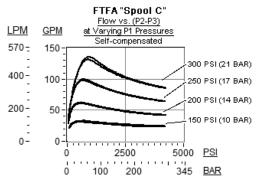
#### **TECHNICAL FEATURES**

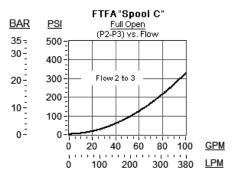
- These valves may be pressure compensated by an external, modulating, logic element. Use LR\_C-XHN for a bypass circuit or LP\_C-XHN for a restrictive circuit.
- The valve provides a degree of self-compensation and may be used as a flow control. To increase the accuracy of flow control, an external,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

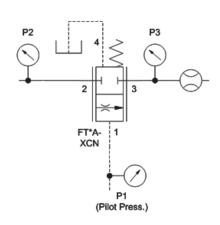








## Self-Compensated Test Circuit



## **CONFIGURATION OPTIONS**

## CONTROL

| Standard Options | L<br>X              | Stroke Adjustment  Not Adjustable |  |
|------------------|---------------------|-----------------------------------|--|
|                  | SPOOL CONFIGURATION |                                   |  |
| Standard Options | C                   | Normally Closed                   |  |
|                  | SEAL MATERIAL       |                                   |  |
| Standard Options | N                   | Buna-N                            |  |
|                  | ٧                   | Viton                             |  |
|                  | MATERIAL/COATING    |                                   |  |
| Standard Options |                     | Standard Material/Coating         |  |
|                  | /AD                 | Chainless Chael Dessivated        |  |

## RELATED MODELS

<u>FTFAZ</u>

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

Stainless Steel, Passivated

/AP