



## CONFIGURATION

<b>X</b> Control	Not Adjustable
<b>C</b> Spool Configuration	Normally Closed
<b>N</b> 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 <sup>3</sup> /min. @1000 psi
Pilot Volume Displacement	.05 in <sup>3</sup>
Hysteresis	35 %
Valve Hex Size	1 1/8 in.
Valve Installation Torque	45 - 50 lbf ft
Seal kit - Cartridge	Buna: 990-152-007
Seal kit - Cartridge	Viton: 990-152-006

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

# OPTION SELECTION EXAMPLE: FTDAXCN

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

