



This valve is a 4-way, 3-position proportional directional valve. Work ports 2 and 4 are drained to 5 in the center position and port 3 is closed. Pilot pressure at port 1 opposes the spring and creates a variable metering orifice between ports 3 and 4 that is proportional to the pressure at 1. Piloting 6 opens 3 to 2. 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 ports 1 and 6 directly oppose each other.

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

Cavity	T-52A
Series	2
Capacity	7 gpm
Maximum Operating Pressure	5000 psi
Pilot Pressure Required to Shift Valve	60 - 130 psi
Pilot Pressure Required for Full Shift at Rated Flow	290 - 340 psi
Maximum Valve Leakage at 110 SUS (24 cSt)	5.5 in ³ /min. @1000 psi
Pilot Volume Displacement	.04 in ³
Hysteresis at 50% command	±35%
Compensated Flow (using LPJCHN)	7 - 10 gpm
Valve Hex Size	1 1/8 in.
Valve Installation Torque	45 - 50 lbf ft
Model Weight	1.07 lb.
Seal kit - Cartridge	Buna: 990-052-007
Seal kit - Cartridge	Viton: 990-052-006

OPTION SELECTION EXAMPLE: FTCCXYN

CONTROL	(X) SPOOL CONFIGURATION	(Y) SEAL MATERIAL	(N) MATERIAL/COATING
X Not Adjustable	Y A and B to T Center W A and B Bleed to T Center	N Buna-N V Viton	Standard Material/Coating IAP Stainless Steel, Passivated

TECHNICAL FEATURES

- Pilot ports 1 and 6 will accept 5000 psi (350 bar), however, pressures over 500 psi (35 bar) do not increase flow since at this point the spool will be fully shifted.
- The valve exhibits a degree of self compensation. If more precise regulation of flow is required, then a separate compensator should be considered. This may be achieved by the use of a bypass compensator, model LR*C-XHN, or a restrictive compensator, model LP*C-XHN.
- Pressure at ports 1 and 6 directly oppose each other.
- 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

