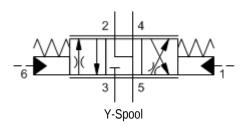


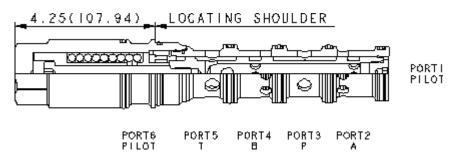
4-way, 3-position, meter in proportional directional valve

CAPACITY: 80 gpm / CAVITY: T-54A



sunhydraulics.com/model/FTHC





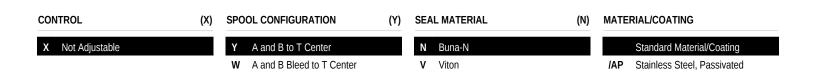
This valve is a 4-way, 3-position proportional directional valve. Work ports 2 and 4 are drained to 5 in the center position and port 3 is closed. Pilot pressure at port 1 opposes the spring and creates a variable metering orifice between ports 3 and 4 that is proportional to the pressure at 1. Piloting 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-54A                     |
|---|---------------------------|
| Series                                    | 4                         |
| Capacity                                  | 80 gpm                    |
| Maximum Operating Pressure                | 5000 psi                  |
| Pilot Pressure Required to Shift Valve    | 50 - 120 psi              |
| Maximum Pilot Pressure                    | 500 psi                   |
| Maximum Valve Leakage at 110 SUS (24 cSt) | 14 in³/min.@1000 psi      |
| Pilot Volume Displacement                 | .26 in <sup>3</sup>       |
| Hysteresis at 50% command                 | ±35%                      |
| Valve Hex Size                            | 1 5/8 in.                 |
| Valve Installation Torque                 | 350 - 375 lbf ft          |
| Seal kit - Cartridge                      | Buna: 990-054-007         |
| Seal kit - Cartridge                      | Polyurethane: 990-054-002 |
| Seal kit - Cartridge                      | Viton: 990-054-006        |

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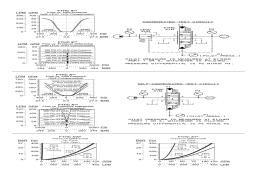
## **OPTION SELECTION EXAMPLE: FTHCXYN**



## **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.
- 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.
- 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



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