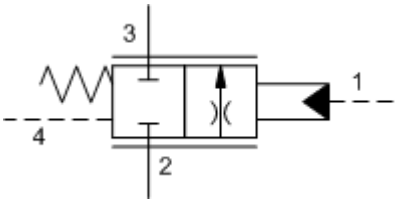

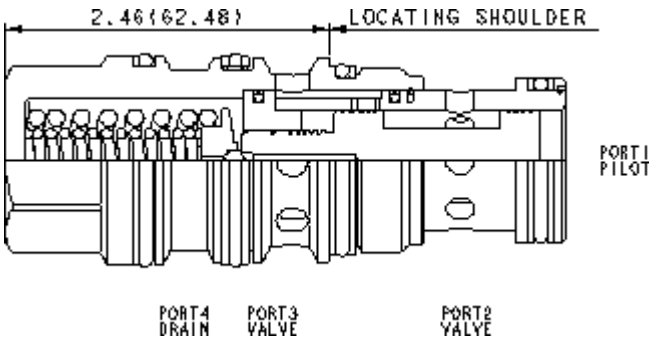

This valve is a 2-way, 2-position proportional throttle. Ports 2 and 3 are normally closed. Pilot pressure at port 1 creates a metering orifice between port 2 and 3 that is proportional to the pressure at 1. The force balance of the flow forces, spring and pilot pressure results in a degree of partial self-compensation as the load pressure changes. Pressure at port 4 directly opposes pressure at port 1.

TECHNICAL DATA

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

Cavity	T-23A
Series	3
Capacity	20 gpm
Maximum Operating Pressure	5000 psi
Maximum Valve Leakage at 110 SUS (24 cSt)	4 in^3/min.@1000 psi
Minimum Pilot Pressure to Operate	100 psi
Pilot Volume Displacement	.10 in^3
Hysteresis	± 2 %
Adjustment - No. of CW Turns from Min. to Max. setting	5
Valve Hex Size	1 1/4 in.
Valve Installation Torque	150 - 160 lbf ft
Adjustment Screw Internal Hex Size	5/32 in.
Locknut Hex Size	9/16 in.
Locknut Torque	80 - 90 lbf in.
Seal kit - Cartridge	Buna: 990-023-007
Seal kit - Cartridge	Polyurethane: 990-023-002
Seal kit - Cartridge	Viton: 990-023-006

OPTION SELECTION EXAMPLE: FKFAXCN

CONTROL	(X)	SPOOL CONFIGURATION	(C)	SEAL MATERIAL	(N)
X Not Adjustable		**C** Normally Closed		**N** Buna-N	
L Tuning Adjustment				**V** 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.
- Ports 1 and 4 should be limited to 500 psi (35 bar).
- Pressure at port 4 directly opposes pressure at port 1.
- An optional tuning adjustment (L control) is offered to vary the pilot pressure required to control flow. The tuning adjustment provides a means to manually increase or decrease flow at a given pilot pressure. The adjustment range is 50 - 250 psi (3,5 - 15 bar), 100 psi (7 bar) Standard Setting.
- 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