

Pilot-to-close, spring biased open, unbalanced poppet logic element

Capacity:
300 gpm (1100 L/min.)

Functional Group:

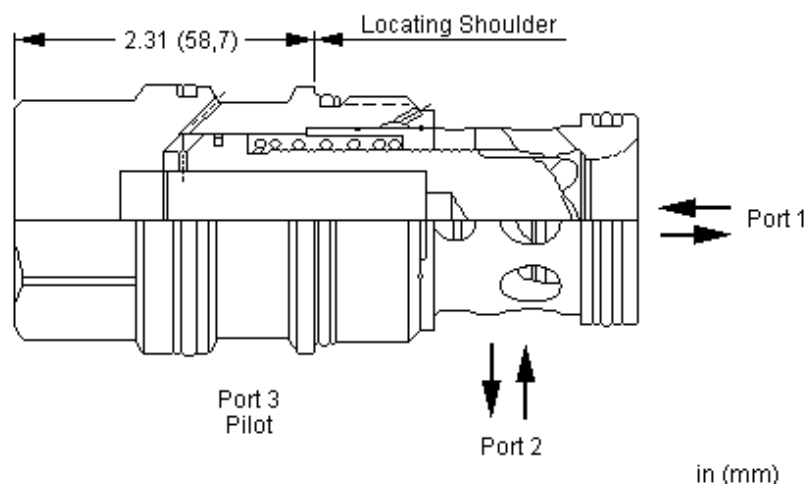
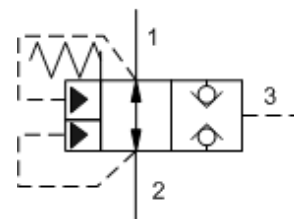
Products : Cartridges : Logic Element : Unbalanced Poppet : Pilot-to-close, Spring Biased Open

Model:

LOKO

Product Description

These unbalanced, pilot-to-close logic valves are 2-way switching elements that are spring biased open. Pressure at either work port 1 or 2 will tend to keep the valve open while pressure at port 3 will tend to close it. The force generated at port 3 must be greater than the sum of the forces acting at port 1 and port 2 plus the spring force for the valve to close. NOTE: The pilot area (port 3) is 1.8 times the area at port 1 and 2.25 times the area at port 2.



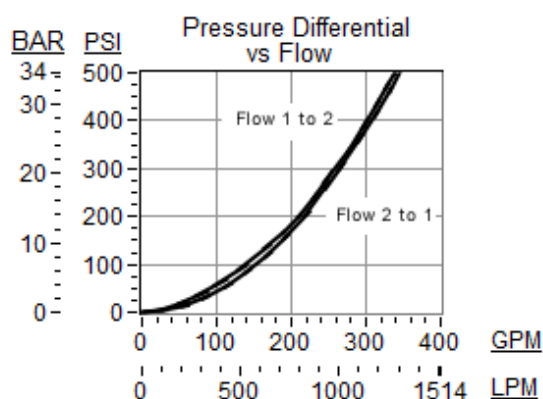
Technical Features

- These valves will work in Sun's standard T-19A cavity at lower capacity. To realize the full stated capacity, the T-19AU cavity should be used.
- These valves have positive seals between port 2 and the pilot area.
- All ports will accept 5000 psi (350 bar).
- Corrosion resistant cartridge valves are intended for use in corrosive environments and are identified by the model code suffix /AP (see Option Selection below). The bodies of these valves are made from high strength lean duplex stainless steel. Adjustment screws are made from titanium or silicon brass, depending on the model. Lock nuts, retaining wires, and assorted controls are made from 316 stainless steel. Internal parts are made from carbon steel leaded alloy, the same as standard valves.
- Because these valves are unbalanced, operation is pressure dependent. Opening and closing of the poppet are functions of the force balances on three areas: Port 1 = 100%, Port 2 = 80%, and the Pilot Area = 180%.
- 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.
- These valves are pressure responsive at all ports, therefore it is essential to consider all aspects of system operation through a complete cycle. Pressure changes at any one port may cause a valve to switch from a closed to an open position, or vice versa. All possible pressure changes in the complete circuit must be considered to assure a safe, functional system design.

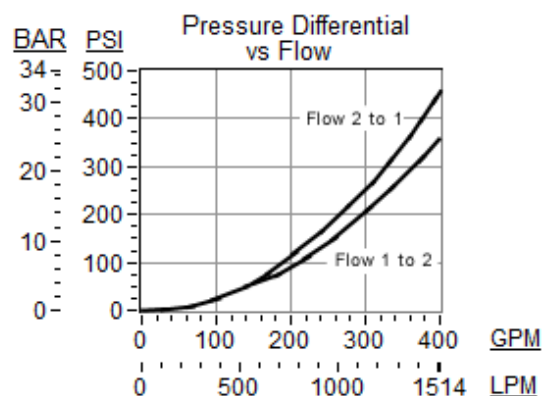
Technical Data

	U.S. Units	Metric Units
Cavity	T-19AU	
Capacity	300 gpm	1100 L/min.
Area Ratio, A3 to A1	1.8:1	
Area Ratio, A3 to A2	2.25:1	
Maximum Operating Pressure	5000 psi	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	10 drops/min.	0,7 cc/min.
Pilot Passage into Valve	.09 in.	2,3 mm
Pilot Volume Displacement	.47 in ³	7,7 cc
Series (from Cavity)	Series 4	
Valve Hex Size	1 5/8 in.	41,3 mm
Valve Installation Torque	350 - 375 lbf ft	475 - 500 Nm
Seal Kits - Cartridge	Buna: 990-019-007	
Seal Kits - Cartridge	Viton: 990-019-006	
Model Weight	2.49 lb.	1.13 kg.

Model LOKO installed in T-19A Cavity



Model LOKO installed in T-19AU Cavity

**LOKO-XDN****Control****Minimum Pilot Pressure****Seal Material****Standard Options****Standard Options****Standard Options****X** Not Adjustable**D** 50 psi (3,5 bar)**N** Buna-N**V** Viton**Additional Options****Control****Minimum Pilot Pressure****Seal Material****E** External 4-SAE Pilot Port, Port 3 Blocked**P** External 1/4 NPTF Pilot Port, Port 3 Blocked