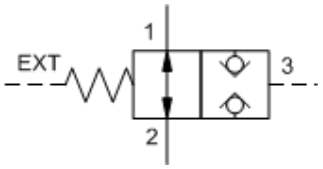
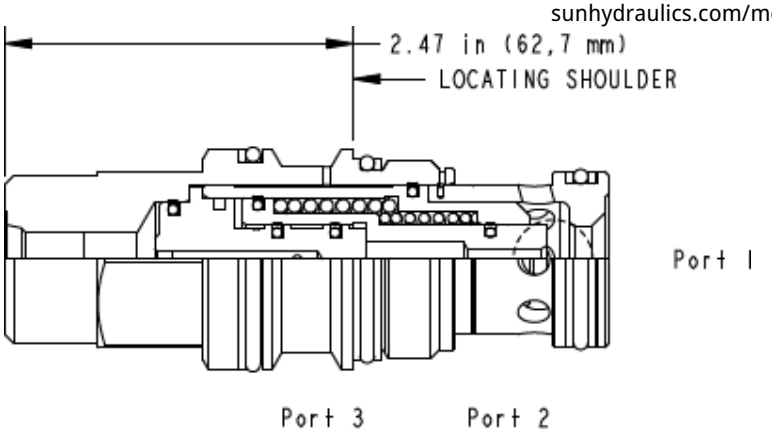
MODEL
DOHC

Normally open, balanced poppet, logic element - pilot-to-close
SERIES 3 / CAPACITY: 60 gpm / CAPACITY: T-17A

sunhydraulics.com/model/DOHC





CONFIGURATION

E	Control	External 4-SAE Drain Port
H	Minimum Pilot Pressure	300 psi (20 bar)
N	Seal Material	Buna-N
(none)	Material/Coating	

This is a normally open, balanced poppet, switching element. Pilot pressure at port 3 shifts the valve to the closed position.

TECHNICAL DATA

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

Cavity	T-17A
Series	3
Capacity	60 gpm
Maximum Operating Pressure	5000 psi
Minimum Pilot Pressure Required to Shift Valve	300 psi
Maximum Valve Leakage at 110 SUS (24 cSt)	10 drops/min.@5000 psi
Pilot Volume Displacement	.05 in³
Valve Hex Size	1 1/4 in.
Valve Installation Torque	150 - 160 lbf ft
Seal kit - Cartridge	Buna: 990017007
Seal kit - Cartridge	Polyurethane: 990017002
Seal kit - Cartridge	Viton: 990017006
Model Weight	1.33 lb.

CONFIGURATION OPTIONS

Model Code Example: DOHCArray

CONTROL (E)	MINIMUM PILOT PRESSURE (H)	SEAL MATERIAL (N)	MATERIAL/COATING
E External 4-SAE Drain Port	**H** 300 psi (20 bar)	**N** Buna-N	Standard Material/Coating
X Standard Pilot, Atmospheric Vent		**E** EPDM	**/LH** Mild Steel, Zinc-Nickel
		V Viton	

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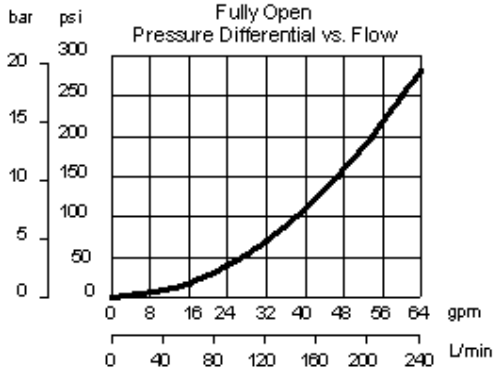
TECHNICAL FEATURES

- Unique balanced construction provides predictable switching with 5000 psi (350 bar) at both ports 1 and 2, with the external drain open and a minimum pilot pressure of 300 psi (20 bar).
- Leakage rate between port 1 and port 2 is very low, typically less than 10 drops/min. at 5000 psi (0,7 cc/min at 350 bar).
- Valve will open when the pilot pressure falls below 145 psi (10 bar).
- These 3-port balanced logic valves use the same cavity as unbalanced logic valves of the same frame size and can be considered functional replacements.
- Available in external atmospheric vent (X control) or static external drain (E control) configurations.
- Three-port vented logic elements with the X control are atmospherically referenced and considered problem solvers for existing circuits using non-vented valves. Over time, these valves will eventually leak externally and/or allow moisture into the spring chamber. Four-port valves are recommended for new applications. Alternately, the external vent port can be connected to drain if the static drain port option (control option E) is selected. Removing the vent plug will convert an X control to an E control.
- These valves are hydraulically balanced between port 1 and port 2.
- Port 1 and port 2 are fully sealed from port 3.
- All ports will accept 5000 psi (350 bar).
- 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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