

# Normally open, balanced poppet, logic element - pilot-to-close

Capacity: **30 gpm (120 L/min.)** 

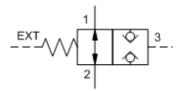
Functional Group:

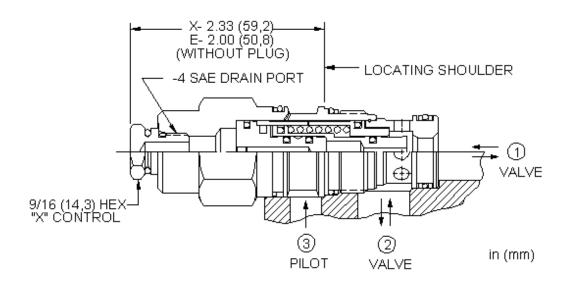
Products : Cartridges : Logic Element : Balanced Poppet, 3 Port : Normally Open, Direct Operated

Model: **DOFC** 

#### **Product Description**

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





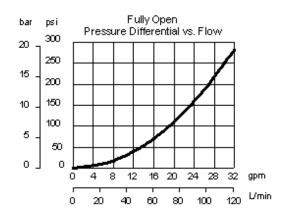
#### **Technical Features**

- 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).
- 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.
- 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).
- 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.

### **Technical Data**

	U.S. Units	Metric Units	
Cavity	T-2A		
Capacity	30 gpm	120 L/min.	
Minimum Pilot Pressure Required to Shift Valve	300 psi	20 bar	
Maximum Operating Pressure	5000 psi	350 bar	
Maximum Valve Leakage at 110 SUS (24 cSt)	5 drops/min.@5000 psi	0,3 cc/min.@350 bar	
Pilot Volume Displacement	.02 in <sup>3</sup>	0,33 cc	
Series (from Cavity)	Series 2		
Valve Hex Size	1 1/8 in.	28,6 mm	
Valve Installation Torque	45 - 50 lbf ft	60 - 70 Nm	
Seal Kits - Cartridge	Buna: 990-202-007		
Seal Kits - Cartridge	Viton: 990-202-006		
Model Weight	0.60 lb.	0.27 kg.	



## **DOFC-EHN**

Control	<b>Minimum Pilot Pressure</b>		Seal Material
Standard Options	Standard Options	Standa	ard Options
E External 4-SAE Drain Port	<b>H</b> 200 psi (14 bar)	N	Buna-N
<b>X</b> Standard Pilot, Atmospheric Vent		V	Viton