

Normally open, balanced poppet, logic element with integral T-8A control cavity - vent-to-close

Capacity:
30 gpm (120
L/min.)

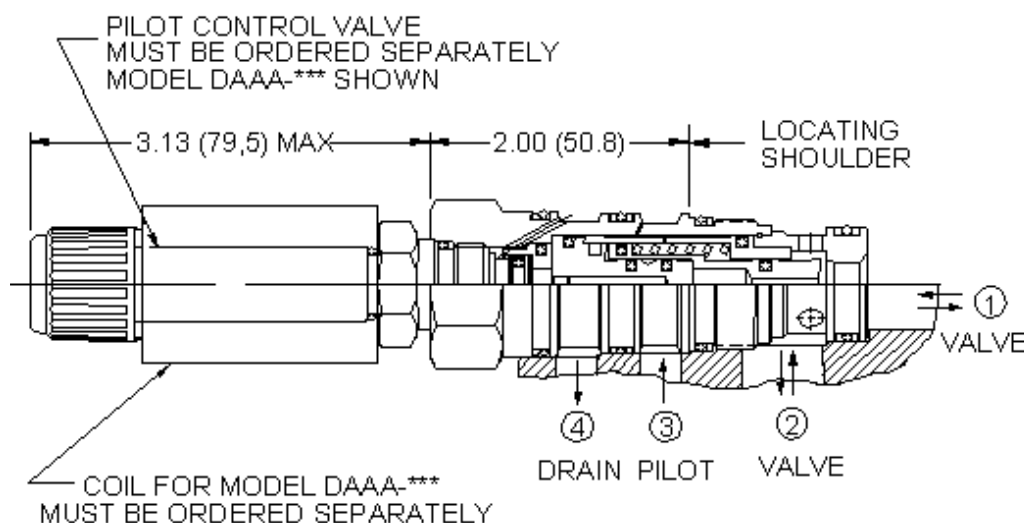
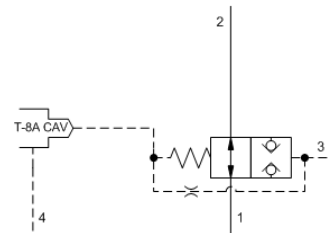
Functional Group:

Products : Cartridges : Logic Element : Balanced Poppet : Normally Open, Vent to Operate, with Integral Pilot Control Cavity

Model:
DOFR8

Product Description

This is a normally open, balanced poppet, switching element with an integral T-8A control cavity. With a 2-way valve in the closed position installed in the T-8A control cavity, the poppet remains open. Opening the 2-way valve shifts the poppet to the closed position, provided there is sufficient pressure at port 3.

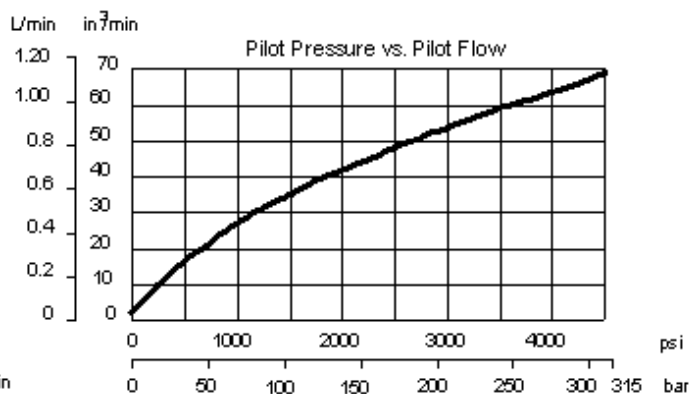
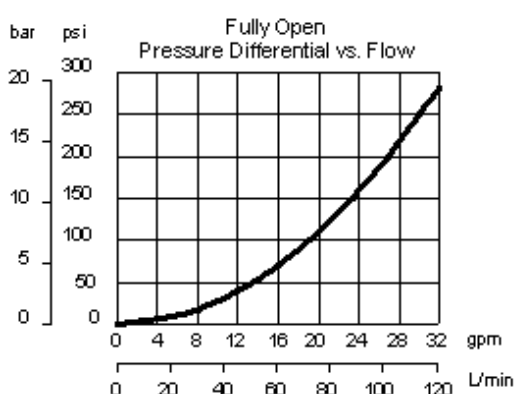


Technical Features

- Unique balanced construction provides predictable switching with 5000 psi (350 bar) at port 1 and port 2. Switching will only occur when both a minimum pilot pressure of 400 psi (30 bar) is present and pilot control valve is open.
- Valve will open when the pilot pressure falls below 145 psi (10 bar).
- These valves are hydraulically balanced between port 1 and port 2.
- Port 1 and port 2 are fully sealed from port 3 and port 4. Ports 3 and 4 are positively sealed.
- Any backpressure at the drain port is directly additive to the required pilot pressure for reliable operation.
- 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).
- NOTE: With the -8 control option, the main stage valve should first be installed to the correct torque value. The T-8A pilot control valve should then be installed into the main stage valve to its required torque value.
- The -8 control option allows the pilot control valve to be incorporated directly into the end of the logic cartridge via the T-8A cavity. These pilot control cartridges are sold separately and include electro-proportional, solenoid, air pilot, and hydraulic pilot operation. See Pilot Control Cartridges.
- 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-22A	
Capacity	30 gpm	120 L/min.
Minimum Pilot Pressure Required to Shift Valve	300 psi	20 bar
Control Pilot Flow	15 - 30 in ³ /min.	0,25 - 0,50 L/min.
Maximum Operating Pressure	5000 psi	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	10 drops/min.@5000 psi	0,7 cc/min.@350 bar
Pilot Control Cavity	T-8A	
Pilot Control Valve Hex Size	7/8 in.	22,2 mm
Pilot Control Valve Installation Torque	20 - 25 lbf ft	27 - 33 Nm
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: 990-022-007	
Seal Kits - Cartridge	Viton: 990-022-006	
Model Weight	0.58 lb.	0.26 kg.

**DOFR-8HN****Minimum Pilot Pressure****Standard Options****H** 200 psi (14 bar)**Seal Material****Standard Options****N** Buna-N**V** Viton**Related Models**[DOFR](#)**Related Documents:**

- [The T-8A Cavity Concept](#)