

# Normally closed, balanced poppet, logic element - vent-to-open

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

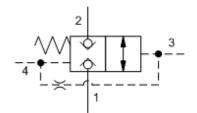
Functional Group:

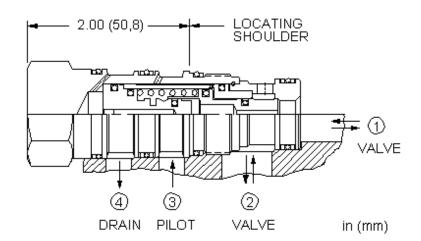
Products : Cartridges : Logic Element : Balanced Poppet : Normally Closed, Vent to Operate

Model: **DKFR** 

#### **Product Description**

This is a normally closed, balanced poppet, switching element. When the vent port (port 4) is blocked, the poppet remains in the closed position. Venting port 4 shifts it to the open position, provided there is sufficient pressure at port 3.



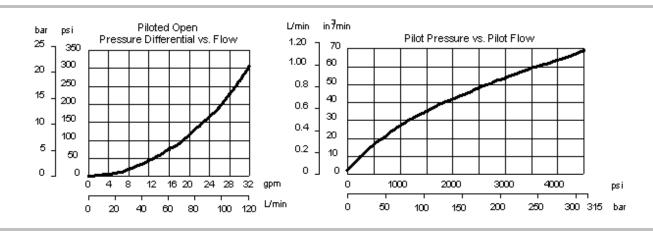


#### **Technical Features**

- Unique balanced construction provides predictable switching with 5000 psi (350 bar) at both ports 1 and 2, with the vent (port 4) open and a minimum pilot pressure of 400 psi (30 bar) at port 3.
- Port 1 and port 2 are fully sealed from port 3 and port 4. Ports 3 and 4 are positively sealed.
- 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 reseat when the pilot pressure falls below 145 psi (10 bar).
- Port 4 may be externally connected to a pilot switching valve. The pilot valve should have a leakage rate of less than 10 drops/min. and be able to satisfy the pilot flow requirements. Sun model DAA\*\_\*\*\*\* solenoid pilot valve is ideal for this application.
- 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 <sup>3</sup> /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	
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	0.63 lb.	0.29 kg.	



## **DKFR-XHN**

Control		Minimum Pilot Pressure		Seal Material	
Standard Options		Standard Options		Standard Options	
X	Vent to Operate	н	300 psi (20 bar)	N	Buna-N
				V	Viton

### **Related Models**

DKFR8