

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

Capacity: 15 gpm (60 L/min.)

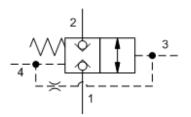
Functional Group:

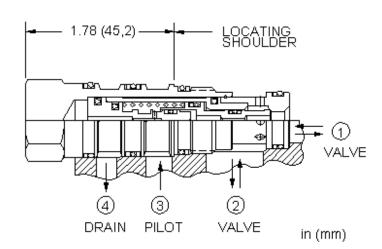
Products: Cartridges: Logic Element: Balanced Poppet: Normally Closed, Vent to Operate

Model: **DKDR** 

#### **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.



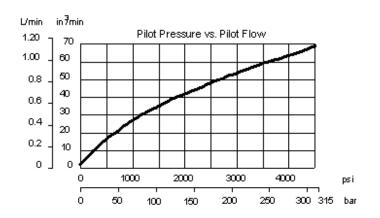


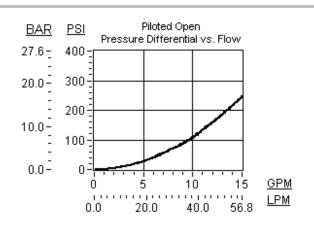
#### **Technical Features**

- 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-21A		
Capacity	15 gpm	60 L/min.	
Minimum Pilot Pressure Required to Shift Valve	400 psi	28 bar	
Control Pilot Flow	15 - 30 in³/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 1		
Valve Hex Size	7/8 in.	22,2 mm	
Valve Installation Torque	30 - 35 lbf ft	40 - 50 Nm	
Seal Kits - Cartridge	Buna: 990-021-007		
Seal Kits - Cartridge	Viton: 990-021-006		
Model Weight	0.57 lb.	0.26 kg.	





### **DKDR-XHN**

	Control	<b>Minimum Pilot Pressure</b>		Seal Material	Material/Coating Modifier
Sta	ndard Options	Standard Options	Stand	ard Options	Preferred Options
x	Vent to Operate	<b>H</b> 400 psi (28 bar)	N V	Buna-N Viton	No modifier (standard material with no special coating) Special Options

/AP Stainless Steel, Passivated

Control: X

Our corrosion resistant product line is growing! If you are interested in a corrosion resistant option for this model, please contact Sun.

When the modifier is /AP, the control must be  $\boldsymbol{X}$ 

## **Related Models**

DKDR8