



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

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

Cavity	T-21A
Series	1
Capacity	15 gpm
Maximum Operating Pressure	5000 psi
Minimum Pilot Pressure Required to Shift Valve	400 psi
Maximum Valve Leakage at 110 SUS (24 cSt)	10 drops/min.@5000 psi
Pilot Passage into Valve	.03 in.
Pilot Volume Displacement	.01 in <sup>3</sup>
Valve Hex Size	7/8 in.
Valve Installation Torque	30 - 35 lbf ft
Model Weight	0.35 lb.
Seal kit - Cartridge	Buna: 990-021-007
Seal kit - Cartridge	EPDM: 990-021-014
Seal kit - Cartridge	Polyurethane: 990-021-002
Seal kit - Cartridge	Viton: 990-021-006

## OPTION SELECTION EXAMPLE: DKDSXHN

CONTROL	(X) MINIMUM PILOT PRESSURE	(H) SEAL MATERIAL	(N) MATERIAL/COATING
<b>X</b> Standard Pilot	<b>H</b> 400 psi (28 bar)	<b>N</b> Buna-N	Standard Material/Coating
		<b>E</b> EPDM	<b>/AP</b> Stainless Steel, Passivated
		<b>V</b> Viton	<b>/LH</b> Mild Steel, Zinc-Nickel

### 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 400 psi (30 bar).
- Cartridges configured with EPDM seals are for use in systems with phosphate ester fluids. Exposure to petroleum based fluids, greases and lubricants will damage the seals.
- 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).
- Valve will reseal when the pilot pressure falls below 145 psi (10 bar).
- 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

