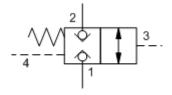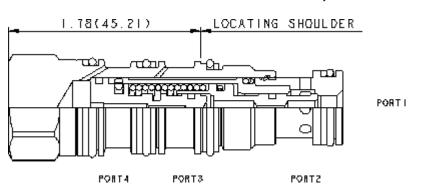**sun hydraulics**
A HELIOS COMPANY

MODEL
DKDS

Normally closed, balanced poppet, logic element - pilot-to-open
CAPACITY: 15 gpm / CAVITY: T-21A
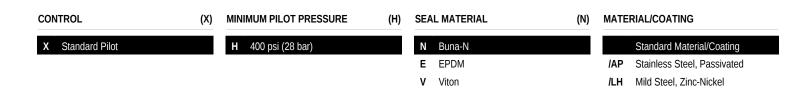
sunhydraulics.com/model/DKDS

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 in³
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

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