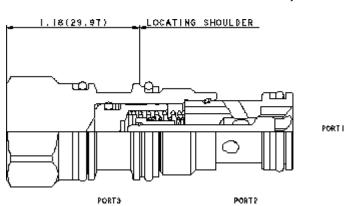


MODEL



sunhydraulics.com/model/CKCD





This valve is a pilot to open check valve. It has a sealed pilot, a steel seat, and is non-vented. It allows free flow from the valve (port 2) to the load (port 1) and blocks flow in the opposite direction. Pressure at the pilot (port 3) will open the valve from port 1 to port 2. Pilot pressure needed at port 3 to open the valve is directly proportional to the load pressure at port 1. Pressure at port 2 directly opposes pilot pressure.

Cavity	T-11A	
Series	1	
Capacity	15 gpm	
Maximum Operating Pressure	5000 psi	
Pilot Ratio	3:1	
Maximum Valve Leakage at 110 SUS (24 cSt)	1 drops/min.	
Valve Hex Size	7/8 in.	
Valve Installation Torque	30 - 35 lbf ft	
Model Weight	0.28 lb.	
Seal kit - Cartridge	Buna: 990-011-007	
Seal kit - Cartridge	EPDM: 990-011-014	
Seal kit - Cartridge	Polyurethane: 990-011-002	
Seal kit - Cartridge	Viton: 990-011-006	

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

OPTION SELECTION EXAMPLE: CKCDXCN

CONTROL (X)		CRACKING PRESSURE (C)		SEAL MATERIAL (N)		(N)	MATERIAL/COATING		
X Standard Pilot		C 30 psi (2 bar)		Ν	Buna-N			Standard Material/Coating	
B External 1/4 BSPP Pilot Port, Port 3 blocked	Port 3	A 4 psi (0,3 bar)		Е	EPDM		/AP	Stainless Steel, Passivated	
	B 15 psi (1 bar)		v	Viton		/LH	Mild Steel, Zinc-Nickel		
L Manual Load Release		D 50 psi (3,5 bar)							
P External 1/4 NPTF Pilot Port, Port 3 Blocked	Port 3	F 100 psi (7 bar)							
		G 150 psi (10,5 bar)							
		Z 1 psi (0,07 bar)							

TECHNICAL FEATURES

- This 3 port pilot-to-open check valve and 3 port counterbalance valves are physically interchangeable (i.e. same cavities, same flow path for a given frame size). However, cartridge extension dimensions from the mounting surface may vary.
- Provides hose break protection, prevents loads from drifting and positively locks pressurized loads.
- Extremely low leakage. The seat and poppet are heat treated for long life. If the load drifts due to the valve, the seat has probably been damaged by contamination and the valve should be replaced.
- Sealed pilot for use in circuits where cross port leakage is undesirable.
- Optional external porting out of the hex end of the cartridge is available for external piloting. In this configuration, port 3 is blocked. See Control options E, and P.
- Pilot-to-open check cartridges are locking valves, not motion control valves. For motion control applications, use counterbalance valves.
- For models with manual load release control option, turn load release clockwise to release load.
- 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.
- Corrosion resistant cartridge valves are intended for use in corrosive environments and are identified by the model code suffix /AP for external stainless steel components, or /LH for external zinc-nickel plated components. See the CONFIGURATION section for all options. For further details, please see the Materials of Construction page located under TECH RESOURCES.

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 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.

Typical Pressure Drop Typical Pressure Drop 400 30 25 300 15d = = bar 20 200 15 п. •EN 10 100 ۰. EN FULL PILO FULL PILOT 5 ٥ 5 10 15 20 40 60 20 Q = GPM Q = L/min

PERFORMANCE CURVES