

## Pilot-to-open check valve with sealed pilot

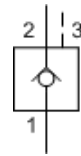
Capacity:  
30 gpm (120 L/min.)

Functional Group:

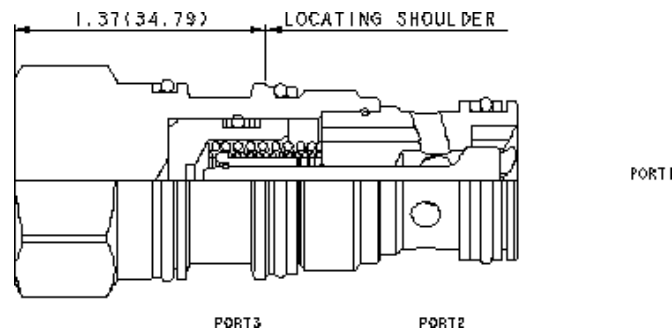
Products : Cartridges : Pilot-to-Open Check : 3-Port, Non-Vented : Sealed Pilot, Steel Seat

### Product Description

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.



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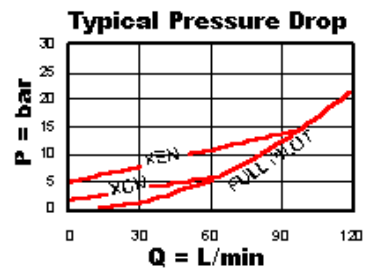
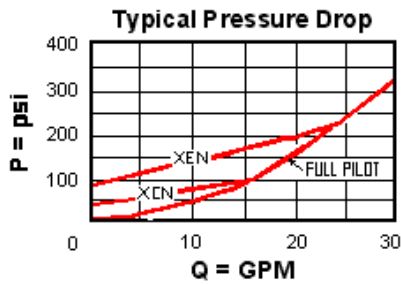
### Technical Features

- 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.
- 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.
- For models with manual load release control option, turn load release clockwise to release load.
- Stainless steel cartridge options P or W are intended for use within corrosive environments with all external components manufactured in stainless steel or titanium. Internal working components remain the same as the standard valves.
- 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-2A
Capacity	30 gpm	120 L/min.
Pilot Ratio		3:1
Maximum Operating Pressure	5000 psi	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	1 drops/min.	0,07 cc/min.
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: 990-202-007	
Seal Kits - Cartridge	Viton: 990-202-006	
Model Weight	0.53 lb.	0.24 kg.



## CKED-XCN

Control	Cracking Pressure	External Material/Seal Material
X Standard Pilot	C 30 psi (2 bar) +0.00	N Buna-N +0.00
B External 1/4 BSPP Pilot Port, Port 3 blocked	+4.00	Z 1 psi (0,07 bar) +3.00
D Manual Load Release	+4.00	
E External 4-SAE Pilot Port, Port 3 Blocked	+4.00	
G Slow Acting Pilot	+3.00	
M External M12 O-Ring Pilot Port, Port 3 Blocked	+4.00	
P External 1/4 NPTF Pilot Port, Port 3 Blocked	+4.00	

If the material/seal is P, the control must be X  
If the material/seal is W, the control must be X

Related Documents (opens in new window):

- [Explanation of Sun cartridge control options - US units.](#)
- [Explanation of Sun cartridge control options - metric units.](#)

Special Notes

- No Special Notes Available for selected model.