



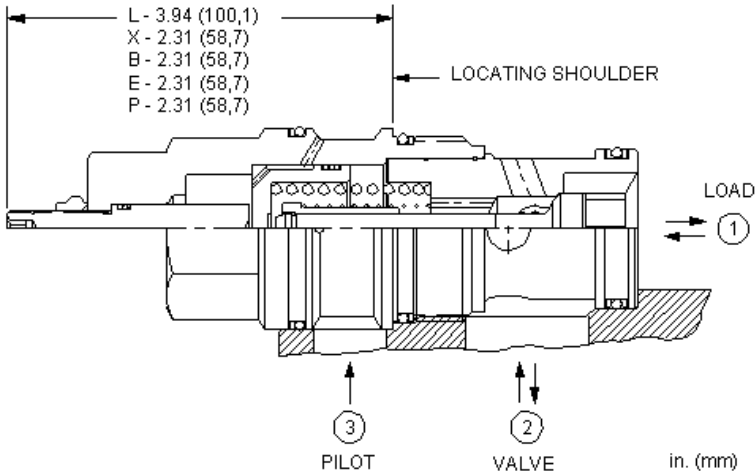
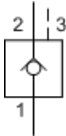
Pilot-to-open check valve with standard pilot

Capacity:
120 gpm (480 L/min.)

Model:
CK1B

Product Description

This valve is a pilot to open check valve. It has a non-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.



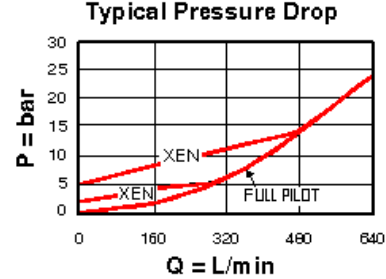
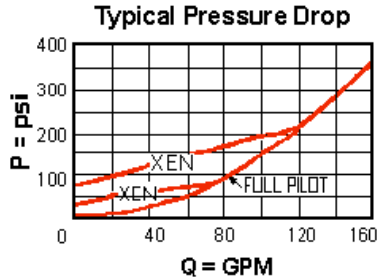
Technical Features

- Provides hose break protection, prevents loads from drifting and positively locks pressurized loads.
- Standard unsealed pilot allows air trapped in the pilot line to be purged from the circuit.
- 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.
- 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.
- Corrosion resistant cartridge valves are intended for use in corrosive environments and are identified by the model code suffix /AP (see Option Selection below). External parts are made from stainless steel with titanium or brass components, where applicable. Internal parts are made from carbon steel leaded alloy, the same as standard valves. For further details, please see the Materials of Construction page.
- 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-19A
Capacity	120 gpm	480 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 4	
Valve Hex Size	1 5/8 in.	41,3 mm
Valve Installation Torque	350 - 375 lbf ft	475 - 500 Nm
Seal Kits - Cartridge	Buna: 990-019-007	
Seal Kits - Cartridge	Viton: 990-019-006	
Model Weight	2.65 lb.	1.20 kg.



CK1B-XCN

Control	Cracking Pressure	Seal Material	Material/Coating Modifier
Preferred Options	Preferred Options	Preferred Options	Preferred Options
X Standard Pilot Standard Options	C 30 psi (2 bar) Standard Options	N Buna-N Standard Options	No modifier (standard material with no special coating) Special Options
L Manual Load Release	A 4 psi (0,3 bar) B 15 psi (1 bar) D 50 psi (3,5 bar) E 75 psi (5 bar) F 100 psi (7 bar)	V Viton	/AP Stainless Steel, Passivated Control:X <i>Our stainless product line is growing! If you are interested in a stainless option for this model which is not shown please contact Sun.</i>

Additional Options

Control	Cracking Pressure	Seal Material
E External 4-SAE Pilot Port, Port 3 Blocked G Slow Acting Pilot P External 1/4 NPTF Pilot Port, Port 3 Blocked	Z 1 psi (0,07 bar)	
When the modifier is /AP, the control must be X		