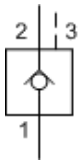
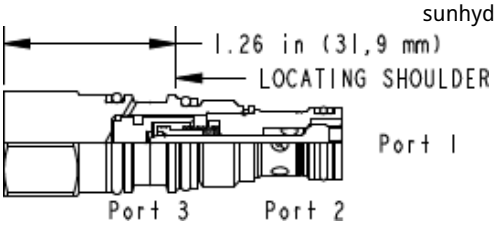
MODEL
CKBB

Pilot-to-open check valve with standard pilot
CAPACITY: 7.5 gpm / CAVITY: T-163A

sunhydraulics.com/model/CKBB





CONFIGURATION

X	Control	Standard Pilot
C	Cracking Pressure	30 psi (2 bar)
N	Seal Material	Buna-N
(none)	Material/Coating	

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 DATA

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

Cavity	T-163A
Series	0
Capacity	7.5 gpm
Maximum Operating Pressure	5000 psi
Pilot Ratio	3:1
Maximum Valve Leakage at 110 SUS (24 cSt)	1 drops/min.
Valve Hex Size	3/4 in.
Valve Installation Torque	20 - 25 lbf ft
Seal kit - Cartridge	Buna: 990163007
Seal kit - Cartridge	EPDM: 990163014
Seal kit - Cartridge	Polyurethane: 990163002
Seal kit - Cartridge	Viton: 990163006
Model Weight	0.20 lb.

CONFIGURATION OPTIONS

Model Code Example: CKBBXCN

CONTROL (X)	CRACKING PRESSURE (C)	SEAL MATERIAL (N)	MATERIAL/COATING
X Standard Pilot	**C** 30 psi (2 bar)	**N** Buna-N	Standard Material/Coating
L Manual Load Release	**E** 75 psi (5 bar)	**E** EPDM	**/AP** Stainless Steel, Passivated
		V Viton	**/LH** Mild Steel, Zinc-Nickel

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.
- Note: Available only with 30 psi or 75 psi (2 bar or 5 bar) check valve cracking pressures.
- 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.
- 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

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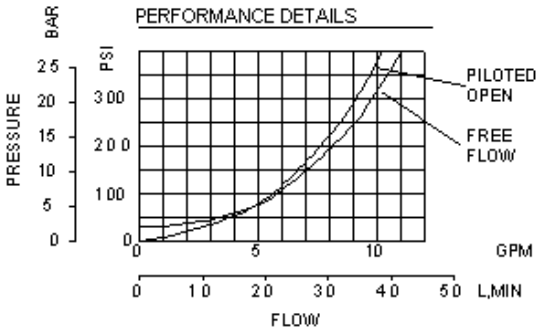

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