



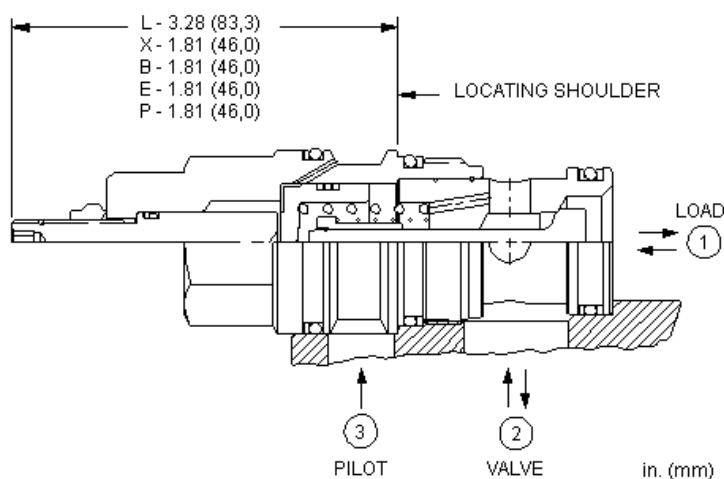
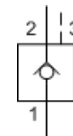
## Pilot-to-open check valve with standard pilot

Capacity:  
60 gpm (240 L/min.)

Model:  
CKGB

### 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.



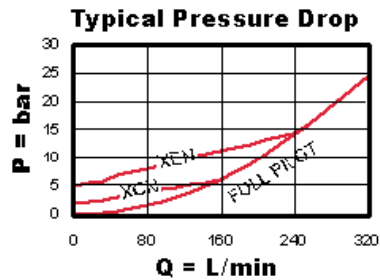
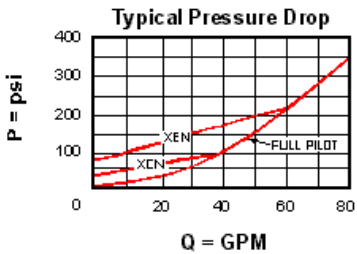
### Technical Features

- 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-17A        |              |
| Capacity                                  | 60 gpm       | 240 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 3           |              |
| Valve Hex Size            | 1 1/4 in.          | 31,8 mm      |
| Valve Installation Torque | 150 - 160 lbf ft   | 200 - 215 Nm |
| Seal Kits - Cartridge     | Buna: 990-017-007  |              |
| Seal Kits - Cartridge     | Viton: 990-017-006 |              |
| Model Weight              | 1.16 lb.           | 0.53 kg.     |



CKGB-XCN

| Control                              | Cracking Pressure                                                                                    | Seal Material                | Material/Coating Modifier                                                                                                                                                                        |
|--------------------------------------|------------------------------------------------------------------------------------------------------|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Preferred Options                    | Preferred Options                                                                                    | Preferred Options            | Preferred Options                                                                                                                                                                                |
| X Standard Pilot<br>Standard Options | C 30 psi (2 bar)<br>Standard Options                                                                 | N Buna-N<br>Standard Options | No modifier (standard material with no special coating)<br>Special Options                                                                                                                       |
| L Manual Load Release                | A 4 psi (0,3 bar)<br>B 15 psi (1 bar)<br>D 50 psi (3,5 bar)<br>E 75 psi (5 bar)<br>F 100 psi (7 bar) | V Viton                      | / AP Stainless Steel, Passivated<br>Control:X<br><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 |
|-------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|---------------|
| B External 1/4 BSPP Pilot Port, Port 3 blocked<br>E External 4-SAE Pilot Port, Port 3 Blocked<br>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