

## Vented pilot-to-open check valve

Capacity:  
**60 gpm (240 L/min.)**

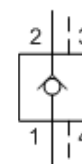
Functional Group:

**Products : Cartridges : Pilot-to-Open Check : 4-Port, Vented : Vented**

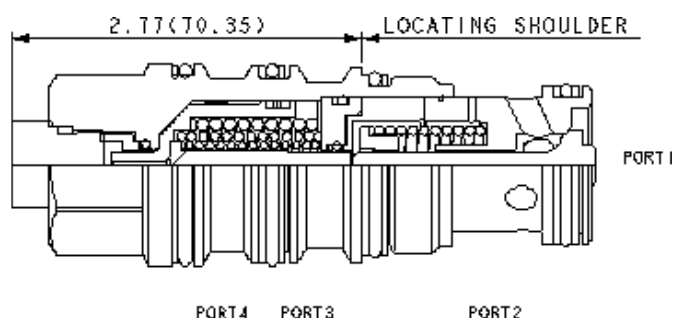
Model:  
**CVGV-XEN**

### Product Description

This valve is a pilot to open check valve. It has a sealed pilot, a steel seat, and is 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 to open the valve is directly proportional to the load pressure at port 1. The valve is insensitive to pressure at port 2 because the spring chamber is referenced to the vent (port 4).



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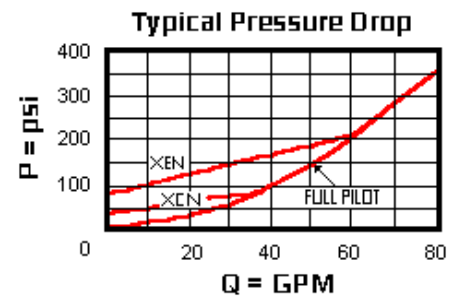
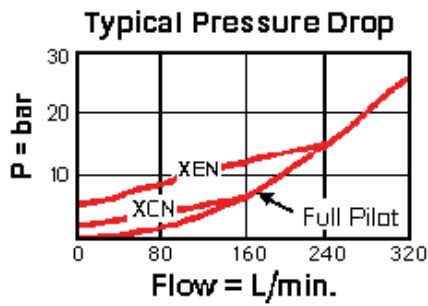


### Technical Features

- Pilot pressure as low as 75 psi (5 bar) higher than the pressure at the vent can prevent the valve from closing.
- 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.
- Port 4 (vent) should never be blocked as seal weepage will eventually cause valve to malfunction.
- Will accept pressure at port 4 (vent) but can not exceed 5000 psi (350 bar).
- Pilot-to-open check cartridges are locking valves, not motion control valves. For motion control applications, use counterbalance valves.
- Four-port pilot-to-open check cartridges and four-port counterbalance cartridges 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.
- Approximately 1 drop (0,07 cc) of fluid will pass from the pilot area to the vented spring chamber every 4000 cycles.
- 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-23A
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	203 - 217 Nm
Seal Kits - Cartridge		Buna: 990-023-007
Seal Kits - Cartridge		Viton: 990-023-006
Model Weight	1.48 lb.	0.67 kg.



## CVGV-XEN

### Control

**X** Standard Pilot

### Cracking Pressure

**E** 75 psi (5 bar)

### Seal Material

**N** Buna-N

### Material/Coating Modifier

**/AP** Stainless Steel,  
Passivated  
Control:X

*Our corrosion resistant product line is growing! If you are interested in a corrosion resistant option for this model, please contact Sun.*

If the modifier is /AP, 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.](#)

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