

CV01 SERIES CHECK VALVES

GENTEC® CV01 Series Check Valves are developed for use with integrated gas systems (IGS). These modular design check valves are easy to assemble, compact, and lightweight.



Top Mount Check Valve
SLVV-CV01-11C2-R-S1



Modular Check Valve
SLVV-CV01M-11C2-R-S1



Modular Check Valve
SLVV-CV01M-11C3-R-S1



Purge Check Valve
SLVV-CV01P-11C1-VM4-R-W-S1

Features

- Assembled and packaged for Ultra-high purity semiconductor applications
- 316L VIM VAR, 316L VAR stainless steel
- Compact Design, Small footprint
- 100% Helium-leak tested
- 1.125" C-Seal or 1.125" W-Seal

Seal Materials

- FKM: -9.4 ~ 88°F (-23 ~ 190°C)
- FFKM: -40 ~ 149°F (-40 ~ 300°C)
- EPDM: -49 ~ 65°F (-45 ~ 148°C)

Cracking and Reseating Pressures

- Nominal Cracking Pressure*: 0.33 psi
- Reseating Pressure ≤ 6 psi
- Tested at 70°F (20°C), Air

*: When a valve has not been opened for a period of time, its initial cracking pressure may be higher than the set cracking pressure.

Specifications

- CV
 - Top Mount Check Valve (CV): Cv=0.3
 - Purge Check Valve (CVP): Cv=0.3
 - Modular Check Valve (CVM): Cv=0.2
- Maximum leak Rate:
 - Inboard leakage: 3×10^{-11} atm cc/sec He
 - Across seat leakage: 1×10^{-9} atm cc/sec He

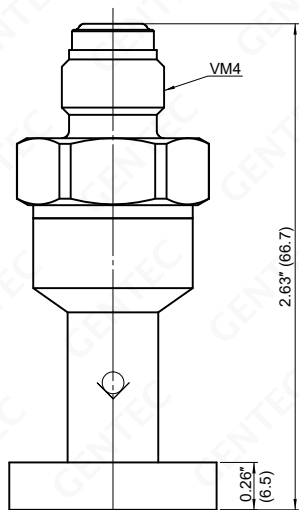
Operating Conditions

- Maximum Operating Pressure: 150 psi
- Minimum Operating Pressure: vacuum
- Temperature: 14°F~176°F (-10°C~80°C)

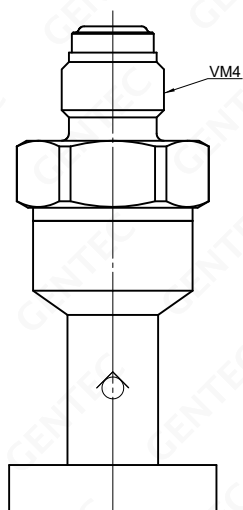
Wetted Surface

- Ra: 5 µin
- Wetted Components processed according to GENTEC Ultra High Purity Process Specification (GC-S1)

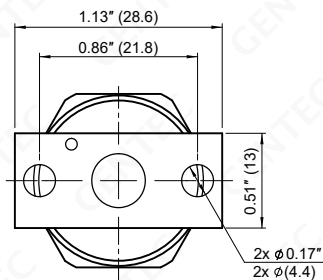
Dimensions



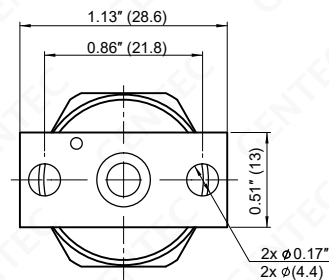
SLVV-CV01P-11C1-VM4-R-S1



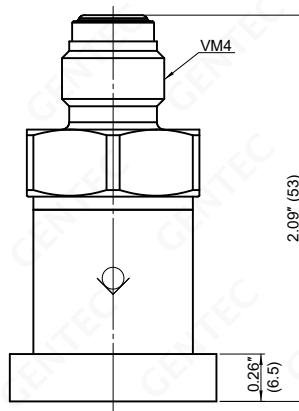
SLVV-CV01P-11C1-VM4I-R-S1



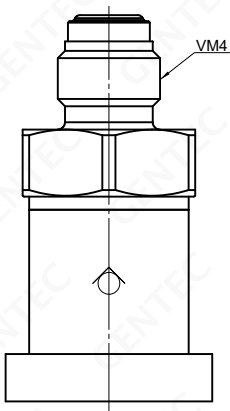
W-Seal (Single hole)



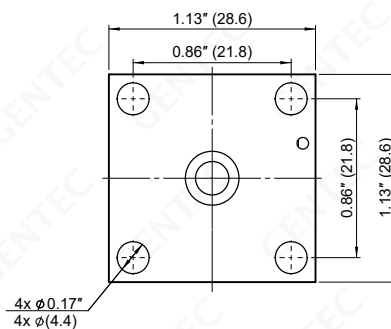
C-Seal (Single hole)



SLVV-CV01P-11C1-VM4-R-W-S1



SLVV-CV01P-11C1-VM4I-R-W-S1



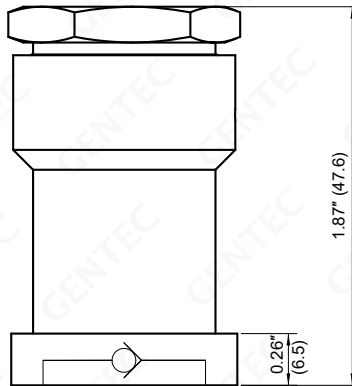
C-Seal (Single hole)

Dimensions: in. (mm)

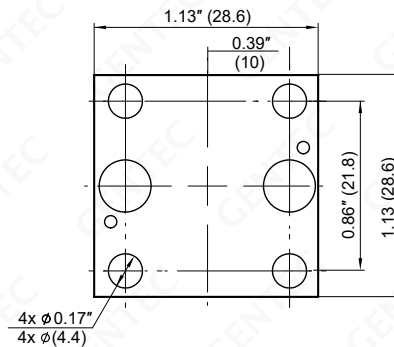
Ordering Information

Ex: SLVV	- CV01	P	- 11C1	- VM4	- R	- W	- S1
Body	Series Number	Model	Connection Type	Inlet/Outlet Connection	Seal Material	Options	Process Standard
SLVV: 316L VIM VAR SLV: 316L VAR	CV01	P: Purge	11C1: 1.125" C-Seal, Single hole 11W1: 1.125" W-Seal, Single hole Other connection styles are available	VM4 Outlet connection VM4I Inlet connection	R: FKM Y: EPDM Q: FFKM	None: Standard W: Wide	S1: Ultra-high purity process

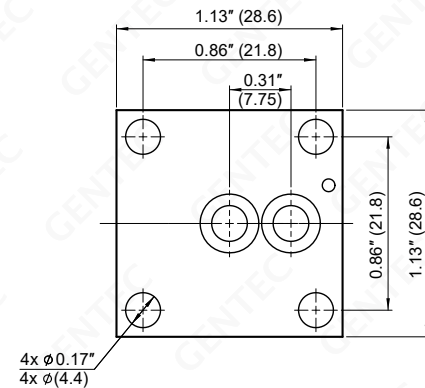
Dimensions



SLVV-CV01-11C2-R-S1



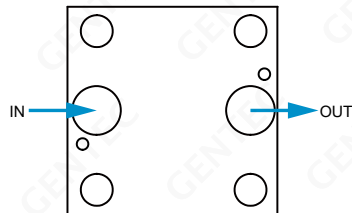
W-Seal (two holes)



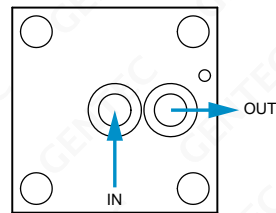
C-Seal (two holes)

Dimensions: in. (mm)

Inlet and Outlet



W-Seal (two holes)

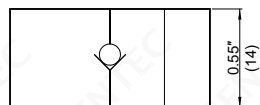


C-Seal (two holes)

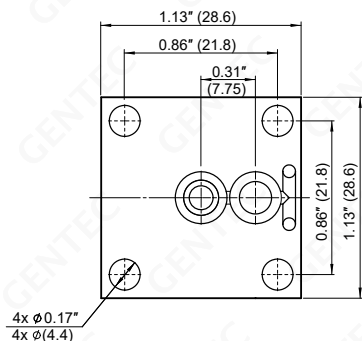
Ordering Information

Ex: SLVV		- CV01	- 11C2	- R	- S1
Body	Series Number	Model	Connection Type	Seal Material	Process Standard
SLVV: 316L VIM VAR SLV: 316L VAR	CV01	None: Top Mount	11C2: 1.125" C-Seal, two holes 11W2: 1.125" W-Seal, two holes Other connection styles are available	R: FKM Y: EPDM Q: FFKM	S1: Ultra-high purity process

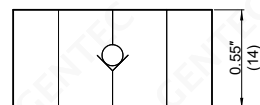
Dimensions



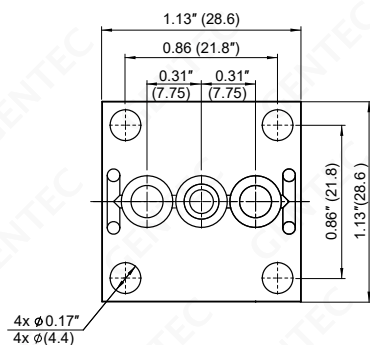
SLVV-CV01M-11C2-R-S1



C-Seal (two holes)



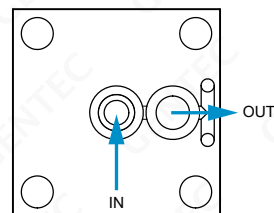
SLVV-CV01M-11C3-R-S1



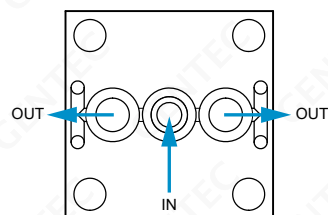
C-Seal (three holes)

Dimensions: in. (mm)

Inlet and Outlet



C-Seal (two holes)



C-Seal (three holes)

Ordering Information

Ex: SLVV	- CV01	M	- 11C2	- R	- S1
Body	Series Number	Model	Connection Type	Seal Material	Process Standard
SLVV: 316L VIM VAR SLV: 316L VAR	CV01	M: Modular	11C2: 1.125" C-Seal, two holes 11C3: 1.125" C-Seal, three holes Other connection styles are available	R: FKM Y: EPDM Q: FFKM	S1: Ultra-high purity process