

DV02 SERIES PNEUMATIC DIAPHRAGM VALVES

GENTEC® DV02 Series Pneumatic Diaphragm Valves are developed for use with integrated gas systems (IGS).



N.O. Normally Open
SLVV-DV02P-11W2-NO-S1



N.C. Normally Closed
SLVV-DV02P-11W2-IS-S1
With Position Sensor

Features

- Assembled and packaged for Ultra-high purity semiconductor applications
- Compact Design
- Pneumatic Actuator: NC or NO
- Optional position sensor
- Cobalt-based superalloy diaphragm
- 100% Helium-leak tested
- 1.125" C-Seal or 1.125" W-Seal

Materials

- Body: 316L VIM VAR, 316L VAR
- Seat: PCTFE
- Diaphragm: Co-Ni Super Alloy

Specifications

- Flow capacity: $C_v=0.3$
- 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: $-10^{\circ}\text{C} \sim 80^{\circ}\text{C}$ ($14^{\circ}\text{F} \sim 176^{\circ}\text{F}$)

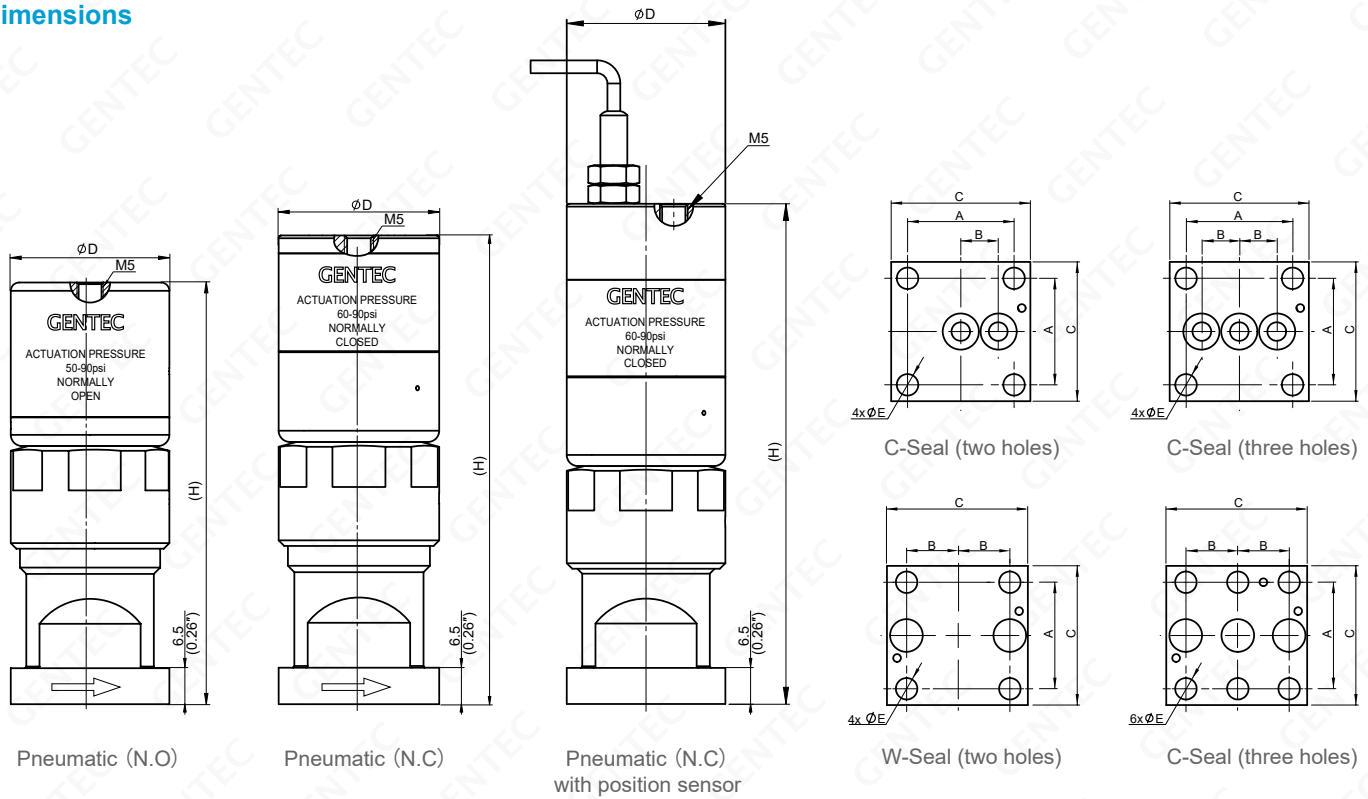
Actuator Specifications

- Operating pressure: 60~90 psi
- Inlet Connection: M5 (F)
- Normally: closed, open

Wetted Surface

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

Dimensions

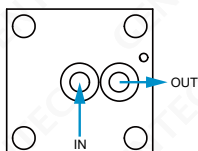


Dimensions: in. (mm)

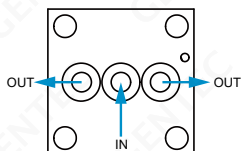
Actuation	Dimensions					
	A	B	C	D	E	H
Pneumatic (N.C) (C-Seal)	0.86" (21.8)	0.31" (7.75)	1.13" (28.6)	1.13" (28.6)	0.17" (4.4)	3.29" (83.5)
Pneumatic (N.C) (C-Seal) with position sensor	0.86" (21.8)	0.31" (7.75)	1.13" (28.6)	1.13" (28.6)	0.17" (4.4)	3.55" (90.2)
Pneumatic (N.O) (C-Seal)	0.86" (21.8)	0.31" (7.75)	1.13" (28.6)	1.13" (28.6)	0.17" (4.4)	3.00" (76.1)
Pneumatic (N.C) (W-Seal)	0.86" (21.8)	0.39" (10.0)	1.13" (28.6)	1.13" (28.6)	0.17" (4.4)	3.14" (79.7)
Pneumatic (N.C) (W-Seal) with position sensor	0.86" (21.8)	0.39" (10.0)	1.13" (28.6)	1.13" (28.6)	0.17" (4.4)	3.55" (90.2)
Pneumatic (N.O) (W-Seal)	0.86" (21.8)	0.39" (10.0)	1.13" (28.6)	1.13" (28.6)	0.17" (4.4)	2.85" (72.3)

Position Sensor Technical Information	
Model	SN05Z-1B2PA-K35(PNP-NO)
The set distance	0~0.84mm
Operating temperature	-25°C ~ 70°C (-13°F ~ 158°F)
Proximity sensor length	35mm
Connection method	Wire lead-out type (wire length 2m)

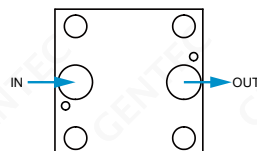
Inlet and Outlet



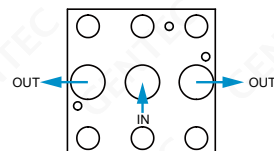
C-Seal (two holes)



C-Seal (three holes)



W-Seal (two holes)



C-Seal (three holes)

Ordering Information

Ex: SLVV	- DV02	P -	- 11C2	- NO	- IS	- S1
Body	Series Number	Actuation	Connection Type	Options	Options	Process Standard
SLVV: 316L VIM VAR SLV: 316L VAR	DV02	P: Pneumatic	11C2: 1.125" C-Seal, two holes 11C3: 1.125" C-Seal, three holes 11W2: 1.125" W-Seal, two holes 11W3: 1.125" W-Seal, three holes Other connection styles are available	Blank: Normally closed (Standard) NO: Normally open	Blank: Standard IS: With position sensor	S1: Ultra-high purity process