

BSV102 SERIES BELLOWS VALVES

The GENTEC® BSV102 Series bellows valve is designed for large-scale, high-purity gas delivery systems in the semiconductor industry. It meets the demands of critical process applications by combining high flow capacity and low pressure drop with superior leak-tightness and safety in gas conveyance.



» SS-BSV102M-TW16-K-S1

Features

- Y-type body design
- Stainless steel bellows welded construction
- Optional body configuration with purge port
- Cleaned, assembled and packaged for ultra-high purity semiconductor applications
- Fully internal electropolished
- 100% Helium-leak tested

Materials

- Body and Bellow: 316L
- Seat: PCTFE
- Sealing Valve Cover: Ni200
- Knob: Anodized aluminum
- O-ring: Fluorine rubber

Specifications

- Flow Capacity: $C_v=11.5 \sim 20$
- Maximum Leak Rate:
Body Leak Rate: 1×10^{-9} atm cc/sec He
Valve Seat Leak Rate: 1×10^{-9} atm cc/sec He
- Proof Pressure: 150% of maximum working pressure
- Burst Pressure: 400% of maximum working pressure

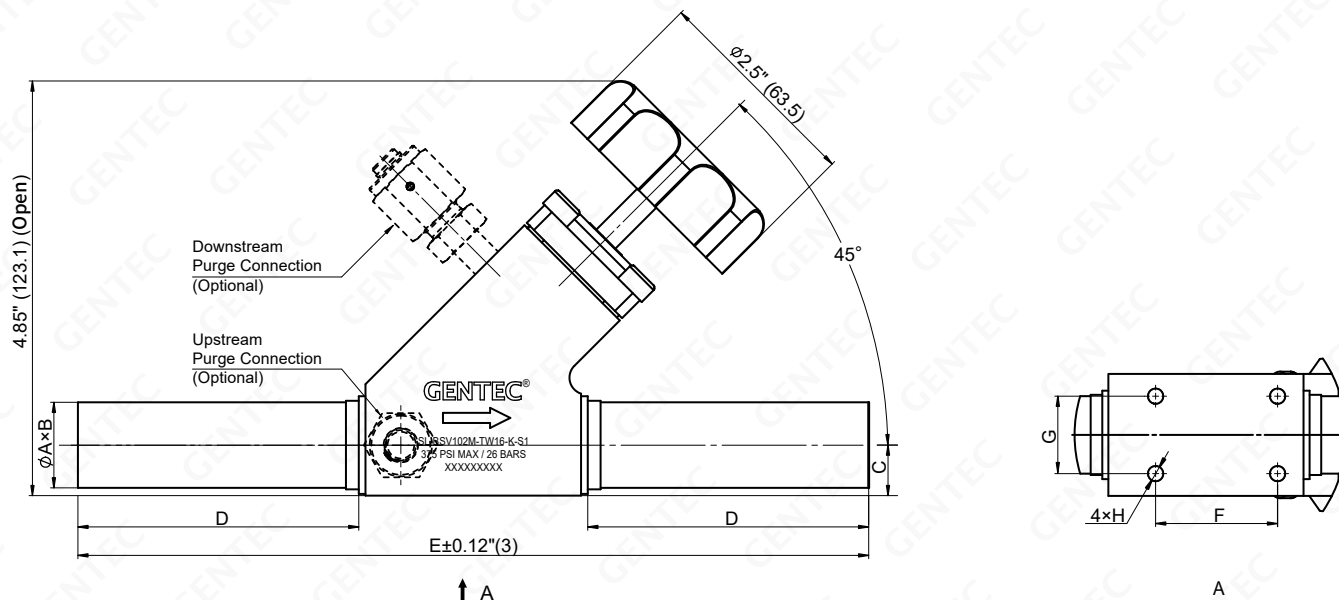
Operating Conditions

- Maximum Operating Pressure: 375 psi (25.8 bar)
- Minimum Operating Pressure: vacuum
- Temperature: $-22^{\circ}\text{F} \sim 180^{\circ}\text{F}$ ($-30^{\circ}\text{C} \sim 82^{\circ}\text{C}$)

Wetted Surface

- Wetted Surface: Ra 10 μin

Dimensions



Model	Orifice in.(mm)	Cv	Dimensions in.(mm)							
			A	B	C	D	E	F	G	H
SL-BSV102M-TW12	0.94 (24)	11.5	0.75 (19.1)	0.065 (1.65)	0.59 (15.0)	3.28 (83.4)	9.25 (235.0)	1.57 (40.0)	1.00 (25.4)	M6
SL-BSV102M-TW16		20	1.00 (25.4)	0.065 (1.65)	0.59 (15.0)	3.28 (83.4)	9.25 (235.0)	1.57 (40.0)	1.00 (25.4)	M6

Ordering Information

EX:	SL	- BSV102	M	- TW16	- K	- PC1	- S1
	Body	Valve Series	Valve Type	Inlet / Outlet Connection	Seat material	Purge Connection	Process Standard
	SL: 316L	BSV102: 3/4"	M: Manual	TW12: 3/4" weld stub TW16: 1" weld stub VSF12: 3/4" swivel female FSR* VSF16: 1" swivel female FSR* VSM12: 3/4" swivel male FSR* VSM16: 1" swivel male FSR* When Inlet and Outlet Connections are the same, please write a connection code.	K: PCTFE V: Vespel®	None: No purge ports PC1: VSM4 purge connection, downstream PC2: VSM4 purge connections, upstream & downstream PC3: VSM4 purge connection, upstream	S1: UHP Process Standard S2: Photovoltaic Process Standard

* VSF, VSM connection type please contact GENTEC.