

BSV1 SERIES BELLOWS-SEALED VALVES

GENTEC® BSV1 series bellows-sealed valves is designed for high purity and vacuum equipment application



BSV12 Manual Bellows-Sealed Valve
(Round Hand Knob)



Type K Type G Type R



BSV14 Manual Bellows Sealed Valve
(Bar Handle)



BSV14 Pneumatic Bellows-Sealed Valve
(Normally Closed)

Features

- Manual and Pneumatic versions are available based on a common body design
- Panel and bottom mounting
- Working pressure up to 1000 psi (68.9bar)
- Valve stem tip options: Type K, Type G and Type R
K designates PCTFE stem tip
G designates nonrotating spherical stem tip
R designates regulating stem tip
- Reliable piston design for enhanced cycle life
- 100% Helium-leak tested

Specification

- Maximum Working Pressure:
1000 psi (6.89 MPa), Manual
500 psi (3.44 MPa), Actuation Normally Open
150 psi (1.0 MPa), Actuation Normally Closed
- Minimum Working Pressure: Vacuum
- Working Temperature:
-28°C ~ 93°C (-20°F ~ 200°F), Type K
-28°C ~ 482°C (-20°F ~ 900°F), Type G and Type R
- Inboard Leak Rate: 4×10^{-9} atm.cc/sec He
Outboard Leak Rate: 4×10^{-9} atm.cc/sec He
- Cv : 0.36 (BSV12) , 1.2 (BSV14)

Materials of Construction

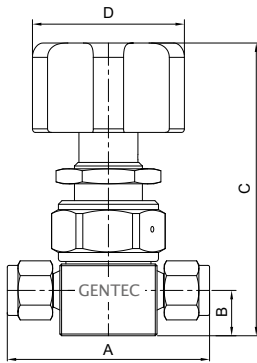
- Valve Body: 316
- Valve Stem tips: PCTFE (Type K),
316 (Type G and Type R)

Actuator Control Specification

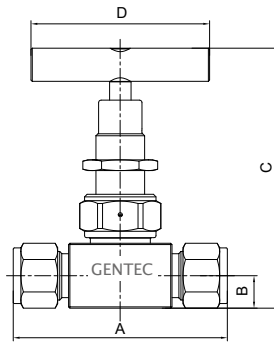
- Working Pressure: 70 ~ 125 psi (0.48 ~ 0.86 MPa)
- Inlet Connection: 1/8"NPT (F)
- Setting: Normally Open, Normally Closed

Internal Volume

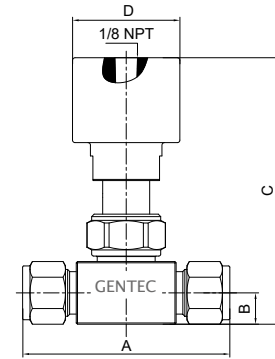
- 1.2 cc (BSV12)
- 3.7 cc (BSV14)

Dimensions (mm)


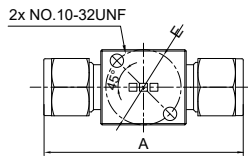
Hand Knob



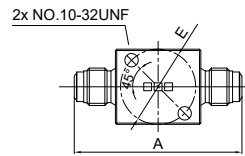
Bar Handle



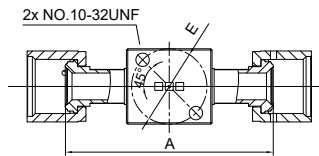
Pneumatic



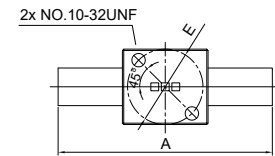
TF Tube Fitting



VM Face seal male



VSF Face seal swivel



TW Butt weld

Model No	Orifice(mm)	CV	End Connections	Dimensions, in.(mm)					Panel Mounting Hole Size (mm)
				A	B	C	D	E	
SS-BSV12NK-TF4	4.5	0.36	1/4" GENLOK	62.5	12.7	82.4	45	25.4	19
SS-BSV12BK-TF4	4.5	0.36	1/4" GENLOK	62.5	12.7	80.9	48	25.4	19
SS-BSV12BK-TW4	4.5	0.36	1/4" Weld Tube	42.7	12.7	80.9	48	25.4	19
SS-BSV12BK-VM4	4.5	0.36	1/4" FSR (M)	56.9	12.7	80.9	48	25.4	19
SS-BSV12BK-VSF4	4.5	0.36	1/4" FSR (F)	70.1	12.7	80.9	48	25.4	19
SS-BSV12PK-VSF4	4.5	0.36	1/4" FSR (F)	70.1	12.7	85.1	42	25.4	/
SS-BSV12PK-VSF4-NO	4.5	0.36	1/4" FSR (F)	70.1	12.7	85.1	42	25.4	/
SS-BSV14BK-TF8	7.7	1.2	1/2" GENLOK	83.8	12.7	101.9	70	28.7	19
SS-BSV14BK-TW8	7.7	1.2	1/2" Weld Tube	57.7	12.7	101.9	70	28.7	19
SS-BSV14BK-VM8	7.7	1.2	1/2" FSR (M)	76.2	11.7	101.9	70	28.7	19
SS-BSV14BK-VSF8	7.7	1.2	1/2" FSR (F)	79.2	14.5	101.9	70	28.7	19
SS-BSV14PK-VSF8	7.7	1.2	1/2" FSR (F)	79.2	14.5	110.6	43.5	28.7	/
SS-BSV14PK-VSF8-NO	7.7	1.2	1/2" FSR (F)	79.2	14.5	108	43.5	28.7	/

Ordering Information

SS	BSV1	2	N	K	- TF	4	- E	- NO
Body	Serial Number	Orifice	Driven Type	Seal Type	Inlet/Outlet Connection	Size	Size	Options
SS: 316	BSV1: Bellows-Sealed Valves	2: 4.5mm 4: 7.7mm	N: Round Hand Knob P: Pneumatic B: Bar handle * BSV14 Round Hand Knob is excluded	K: PCTFE R: Regulating stem tip G: Nonrotating spherical stem tip	TF: Tube Fitting VM: Face seal male (FSR fittings) VSF: Face seal swivel female (FSR fittings) TW: Butt weld	4: 1/4" 6: 3/8" 8: 1/2" 6m: 6mm 8m: 8mm 12: 12mm	None: Ra 15 μin E: Ra 10 μin	None: Standard NO: Normally Open

