

NEW PRODUCT

BV31 SERIES HIGH PRESSURE BALL VALVE



Straight Pattern



Angle Pattern



3-Way Valve

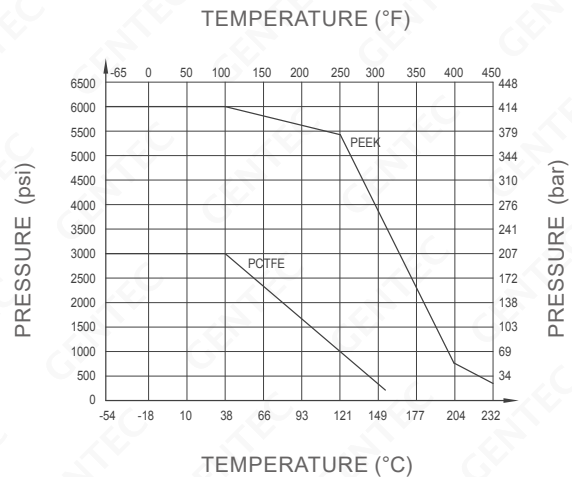
GENTEC® BV31 series High Pressure Ball Valve is made of high quality raw materials and can be used up to 6000 psi. It is mainly used in natural gas, petroleum and petrochemical, experimental analysis and other industries. Specially treated stems and special-material seals greatly increase valve sealing performance and service life.

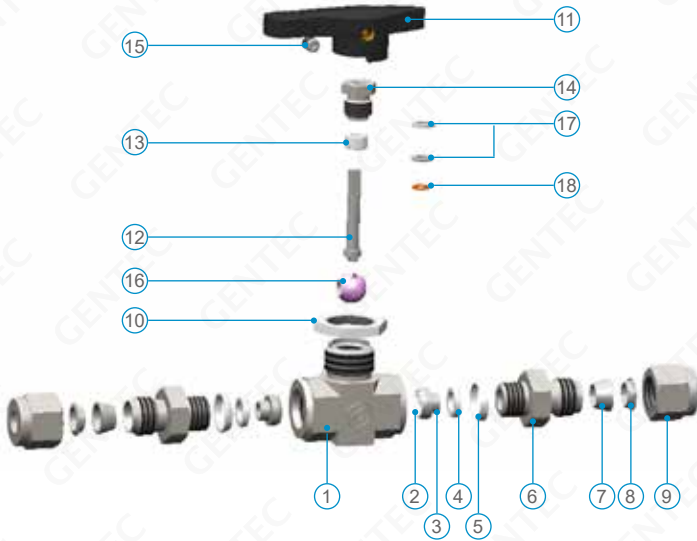
Features

- Maximum operating pressure: 6000 psi (415bar)
- Operating temperature: -65.2°F ~ 449.6°F (-54°C ~ 232°C)
- Handle indicates the flow direction
- End connections: GENLOK and NPT
- Valve Pattern: Straight, Angle and 3-Way
- Panel mounting available
- Low torque design
- Cleaned and degreased for oxygen service according to CGA G-4.1 and ASTM G93 Class C, respectively
- Every valve is factory tested for leakage with Nitrogen at 6000 psi

Note: For angle or 3-way ball valves, gas medium can only enter from the bottom.

Temperature Pressure Curve

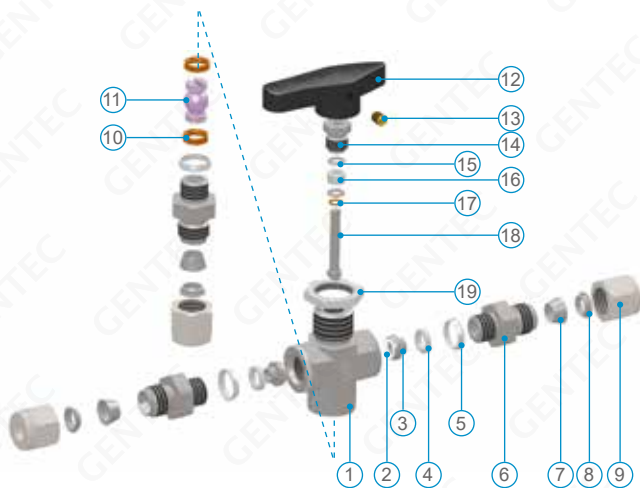
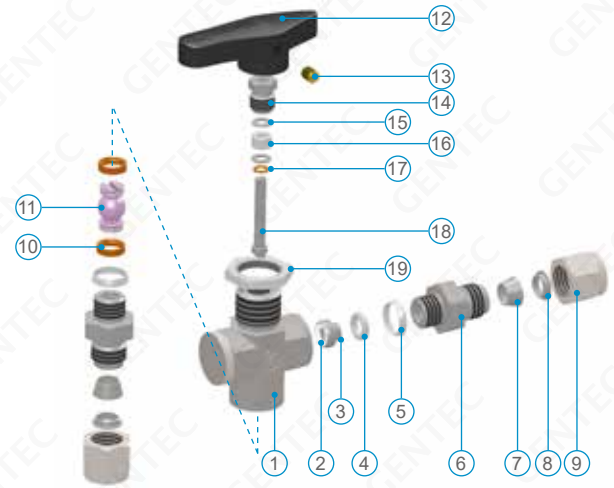


Materials of Construction

Straight Pattern

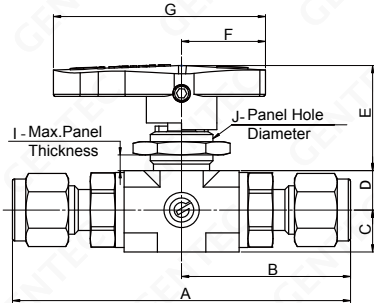
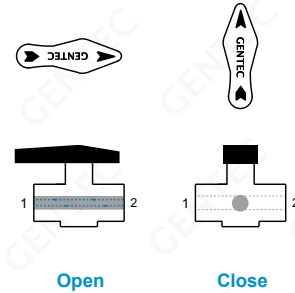
Components	Material	Components	Material
1 Valve Body	316	10 Panel Nut	316
2 O-Ring	PCTFE, PEEK	11 Handle	Nylon, Aluminium Alloy
3 Retaining Ring	316	12 Valve Stem	316
4 Adjusting Ring	PTFE	13 Bushing	PTFE
5 O-Ring	PTFE	14 Packing Bolt	316
6 Flange	316	15 Screw	304
7 Front Ferrules	316	16 Ball Core	316
8 Back Ferrules	316	17 Washer	316
9 Ferrule Nut	316	18 Valve Stem Washer	PEEK

Angle Pattern

Components	Material	Components	Material
1 Valve Body	316	11 Ball Core	316
2 O-Ring	PCTFE, PEEK	12 Handle	Nylon, Aluminium Alloy
3 Retaining Ring	316	13 Screw	304
4 Adjusting Ring	PTFE	14 Locking Screw	316
5 O-Ring	PTFE	15 Washer	316
6 Flange	316	16 Bushing	PTFE
7 Front Ferrules	316	17 Valve Stem Washer	PEEK
8 Back Ferrules	316	18 Valve Stem	316
9 Ferrule Nut	316	19 Panel Nut	316
10 Support ring	PEEK		


3-Way Valve

Components	Material	Components	Material
1 Valve Body	316	11 Ball Core	316
2 O-Ring	PCTFE, PEEK	12 Handle	Nylon, Aluminium Alloy
3 Retaining Ring	316	13 Screw	304
4 Adjusting Ring	PTFE	14 Locking Screw	316
5 O-Ring	PTFE	15 Washer	316
6 Flange	316	16 Bushing	PTFE
7 Front Ferrules	316	17 Valve Stem Washer	PEEK
8 Back Ferrules	316	18 Valve Stem	316
9 Ferrule Nut	316	19 Panel Nut	316
10 Support ring	PEEK		

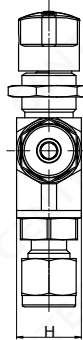
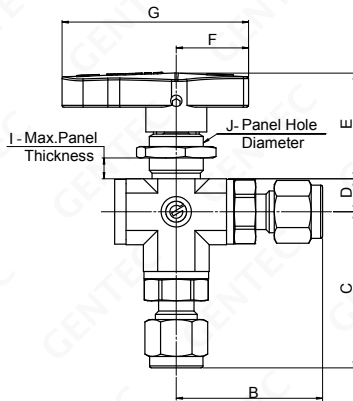
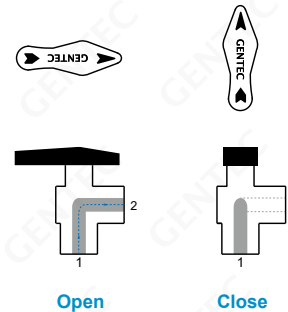
Dimensions (mm)
Straight Pattern

Flow Path Designator


Model Number	Orifice (mm)	Cv	Inlet / Outlet Connection	Dimensions (mm)										
				A	B	C	D	E	F	G	H	I	J	
SS-BV315-TF2	2.4	0.2	1/8" GENLOK	58.8	29.4									
SS-BV315-TF3M			3mm GENLOK	60.4	30.2									
SS-BV315-FNT2	4.2	0.9	1/8" Female NPT	57.2	28.6									
SS-BV315-NT2			1/8" Male NPT	59.2	29.6	9.5	8.9	23.8	19	48	17	6.3	14.2	
SS-BV315-TF4			1/4" GENLOK	76.5	38.25									
SS-BV315-TF6M			6mm GENLOK	78.3	39.15									
SS-BV315-NT4			1/4" Male NPT	65.4	32.7									
SS-BV316-TF6	6.4	2.3	3/8" GENLOK	92.0	46.0									
SS-BV316-TF8M			8mm GENLOK	91.3	45.65									
SS-BV316-TF10M			10mm GENLOK	92.8	46.4	12.5	12.2	31.8	23	62	23	8.3	19	
SS-BV316-NT6			3/8" Male NPT	78.2	39.1									
SS-BV316-NT4			1/4" Male NPT	72.6	36.3									
SS-BV316-FNT4			1/4" Female NPT	72.6	36.3									
SS-BV318-TF8	10.3	6.4	1/2" GENLOK	118.8	59.4									
SS-BV318-TF12			3/4" GENLOK											
SS-BV318-TF12M			12mm GENLOK											
SS-BV318-TF14M			14mm GENLOK	118.3	59.15									
SS-BV318-TF16M			16mm GENLOK											
SS-BV318-TF18M			18mm GENLOK											
SS-BV318-TF22M			22mm GENLOK	122.4	61.2	19	17.6	39.3	28	83	32	9.8	22.1	
SS-BV318-FNT12			3/4" Female NPT	109.2	54.6									
SS-BV318-FNT8			1/2" Female NPT	99.0	49.5									
SS-BV318-NT8			3/8" Female NPT	99.0	49.5									
SS-BV318-NT12			1/2" Male NPT	112.8	56.4									
SS-BV318-NT12			3/4" Male NPT	112.8	56.4									

Ordering Information

Ex:	SS	- BV31	6	- NT4	- K	B	
	Body	Serial Number	Orifice	Valve Pattern	Inlet / Outlet Connection	Sealing Gasket	Options
	SS: 316	BV31	5: 2.4, 4.2 mm 6: 6.4 mm 8: 10.3 mm	Blank: Straight	NT4: 1/4" Male NPT TF12: 3/4" GENLOK	K: PCTFE E: PEEK	Blank: Standard B: Metal Handle D: Special Cleaning

*: For more connection options contact GENTEC.

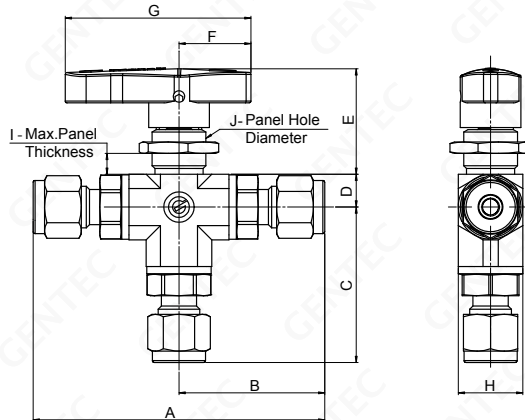
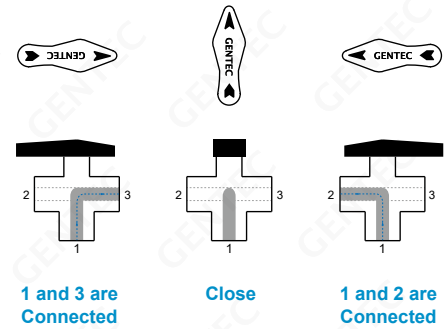
Dimensions (mm)
Angle Pattern

Flow Path Designator


Model Number	Orifice (mm)	Cv	Inlet / Outlet Connection	Dimensions (mm)								
				B	C	D	E	F	G	H	I	J
SS-BV315A-FNT2	4.2	0.9	1/8" Female NPT	28.8	31.3	8.7	27.9	19.0	49.0	17.0	6.3	14.2
SS-BV315A-NT2			1/8" Male NPT	29.8	32.3							
SS-BV315A-NT4			1/4" Male NPT	32.9	35.4							
SS-BV315A-TF4			1/4" GENLOK	37.5	41.0							
SS-BV315A-TF6M			6mm GENLOK									
SS-BV316A-TF6	6.4	2.3	3/8" GENLOK	46.5	51.0	15.2	32.6	23.0	62.0	23.0	8.3	19.0
SS-BV316A-TF8M			8mm GENLOK	44.5	49.0							
SS-BV316A-TF10M			10mm GENLOK	44.0	48.5							
SS-BV316A-FNT4			1/4" Female NPT	38.4	42.9							
SS-BV316A-NT4			1/4" Male NPT	41.2	45.7							
SS-BV316A-NT6	3/8" Male NPT											
SS-BV318A-TF8	10.3	6.4	1/2" GENLOK	58.0	65.7	22.6	38.9	28.0	83.0	32.0	9.8	22.1
SS-BV318A-TF12			3/4" GENLOK	60.4	68.1							
SS-BV318A-TF12M			12mm GENLOK									
SS-BV318A-TF14M			14mm GENLOK									
SS-BV318A-TF16M			16mm GENLOK									
SS-BV318A-TF18M			18mm GENLOK	50.7	58.4							
SS-BV318A-FNT6			3/8" Female NPT									
SS-BV318A-FNT8			1/2" Female NPT	55.8	63.5							
SS-BV318A-FNT12			3/4" Female NPT									
SS-BV318A-NT8			1/2" Male NPT	61.8	69.5							
SS-BV318A-NT12	3/4" Male NPT											

Ordering Information

Ex:	SS	- BV31	6	A	- NT4	- K	B
	Body	Serial Number	Orifice	Valve Pattern	Inlet / Outlet Connection	Sealing Gasket	Options
	SS: 316	BV31	5: 4.2 mm 6: 6.4 mm 8: 10.3 mm	A: Angle	NT4: 1/4" Male NPT TF12: 3/4" GENLOK	K: PCTFE E: PEEK	Blank: Standard B: Metal Handle D: Special Cleaning

*: For more connection options contact GENTEC.

Dimensions (mm)
3-Way Valve

Flow Path Designator


Model Number	Orifice (mm)	Cv	Inlet / Outlet Connection	Dimensions (mm)									
				A	B	C	D	E	F	G	H	I	J
SS-BV315T-FNT2	4.2	0.9	1/8" Female NPT	57.6	28.8	31.3	8.7	27.9	19.0	49.0	17.0	6.3	14.2
SS-BV315T-NT2			1/8" Male NPT	59.6	29.8	32.3							
SS-BV315T-NT4			1/4" Male NPT	65.8	32.9	35.4							
SS-BV315T-TF4			1/4" GENLOK	75.0	37.5	41.0							
SS-BV315T-TF6M			6mm GENLOK										
SS-BV316T-TF6	6.4	2.3	3/8" GENLOK	93.0	46.5	51.0	15.2	32.6	23.0	62.0	23.0	8.3	19.0
SS-BV316T-TF8M			8mm GENLOK	89.0	44.5	49.0							
SS-BV316T-TF10M			10mm GENLOK	88.0	44.0	48.5							
SS-BV316T-FNT4			1/4" Female NPT	76.8	38.4	42.9							
SS-BV316T-NT4			1/4" Male NPT	82.4	41.2	45.7							
SS-BV316T-NT6			3/8" Male NPT										
SS-BV318T-TF8	10.3	6.4	1/2" GENLOK	116.0	58.0	65.7	22.6	38.9	28.0	83.0	32.0	9.8	22.1
SS-BV318T-TF12			3/4" GENLOK	120.8	60.4	68.1							
SS-BV318T-TF12M			12mm GENLOK										
SS-BV318T-TF14M			14mm GENLOK										
SS-BV318T-TF16M			16mm GENLOK										
SS-BV318T-TF18M			18mm GENLOK	101.4	50.7	58.4							
SS-BV318T-FNT6			3/8" Female NPT	111.6	55.8	63.5							
SS-BV318T-FNT8			1/2" Female NPT										
SS-BV318T-FNT12			3/4" Female NPT	123.6	61.8	69.5							
SS-BV318T-NT8			1/2" Male NPT										
SS-BV318T-NT12			3/4" Male NPT										

Ordering Information

Ex:	SS	- BV31	6	T	- NT4	- K	B
	Body	Serial Number	Orifice	Valve Pattern	Inlet / Outlet Connection	Sealing Gasket	Options
	SS: 316	BV31	5: 4.2 mm 6: 6.4 mm 8: 10.3 mm	T: 3-Way	NT4: 1/4" Male NPT TF12: 3/4" GENLOK	K: PCTFE E: PEEK	Blank: Standard B: Metal Handle D: Special Cleaning

*: For more connection options contact GENTEC.

