

# Bronze Globe Valve for Cryogenic Service

## BB Series

### Application

The BB Series globe valves are designed for handling of cryogenic liquids through bulk tanks, trucks, trailers, ISO-containers and piping configurations. Our time tested spring loaded stem packing and superior seat design provide for long life and easy maintenance. Internal components are identical with the SKB Series. The BB Series globe valves are offered with brazed-in schedule 10 and 40 stainless steel pipe stubs. Also available in short stem version.

### Features

- Superior Flow: Provides high Cv for rapid and reliable loading and unloading
- V-Ring spring loaded packing: provides extended service life without constant packing adjustment
- Conical PCTFE Seat: provides exceptional flow; bubble tight seal; less chance of debris trapped in the seat and longer service life
- Ideal for loading & unloading cryogenic bulk tanks and trucks. The 1½" & 2" valves are designed to be operator friendly, opening and closing completely with only four 360° rotations
- Connections: NPT, SBT & Flange
- Sizes: ¼" to 2"
- Bonnet Type: Bolted
- Pressure Rating: 720 psig (50 barg)
- Temperature Rating: -325°F (-198°C) to +150°F (+65°C)
- Service: Liquefied & Vaporized Atmospheric Gases and LNG for Trailers, Bulk Tanks, Iso-Containers and Piping Configurations.
- Cleaned for Oxygen Service per CGA G-4.1

### Materials

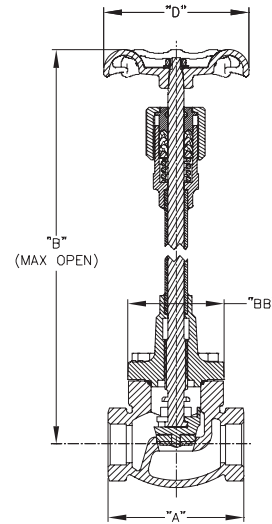
Body .....	Bronze ASTM B61
Upper Bonnet .....	Brass ASTM B16
Lower Bonnet .....	Brass ASTM B283
Stem .....	Stainless Steel ASTM A582
Spring .....	Stainless Steel ASTM A313
Packing .....	PTFE
Gasket .....	PTFE 25% Glass Fill
Seat Disc .....	PCTFE ASTM D1430
Seat Retainer .....	Brass ASTM B16
Bonnet Screws .....	Stainless Steel ASTM A320
Handwheel .....	Chromated Coated Ductile Iron ASTM A395

### Ordering Information

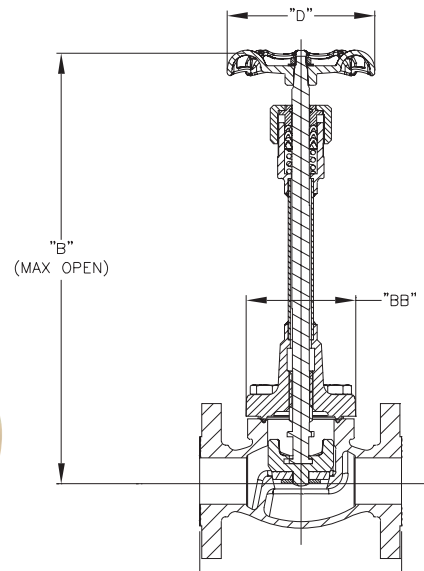
Part Number	Size Inches	Size DN	Connection	A		B		D		BB		Cv	Kv	Weight lbs.	Weight kg.				
				Inches	mm	Inches	mm	Inches	mm	Inches	mm								
BB9402S	¼"	8	Silver Brazed Tube	2.68	68	14.40	366	3.00	76	2.00	51	1.7	1.47	8.30	3.7				
BB9404S	½"	15		5.0	4.30														
BB9406S	¾"	20		9.4	8.1														
BB9408S	1"	25		14.0	12.10														
BB9412S	1½"	40	Threaded NPT	4.78	121	14.60	371	4.75	121	3.44	87	28.3	21.60	12.90	5.8				
BB9416S	2"	50		53.0	47.41														
BB9402T	¼"	8		2.68	68			14.40	366	3.00	76	2.00	51			1.7	1.47	8.30	3.7
BB9404T	½"	15		5.0	4.30														
BB9406T	¾"	20	9.4	8.1															
BB9408T	1"	25	14.0	12.10															
BB9412T	1½"	40	Flanged RF	4.78	121	14.60	371	4.75	121	3.44	87	28.3	21.60	12.90	5.8				
BB9416T	2"	50		53.0	47.41														
BB9412F	1½"	40		6.50	165			14.60	371	4.75	121	3.44	87			28.3	21.60	18.56	8.4
BB9416F	2"	50		8.00	203											5.25	133		



BB9412T



BB9412F



# Bronze Globe Valve for Cryogenic Service with Pipe Ends

## BB Series



### Application

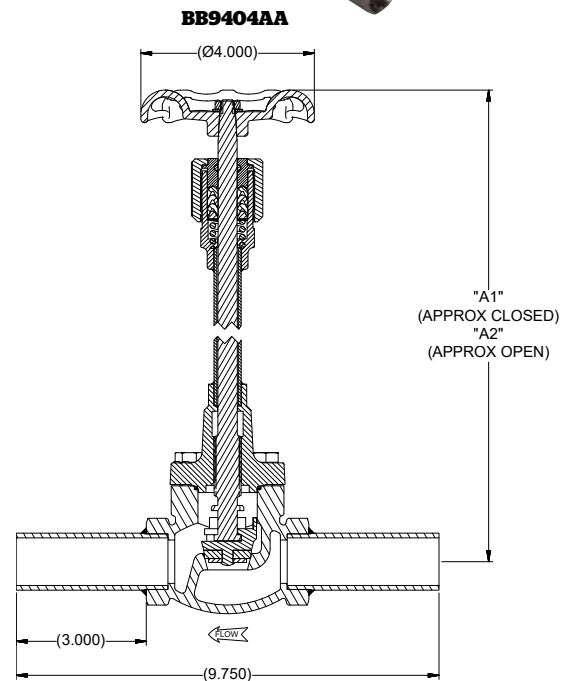
The BB Series globe valves with pipe ends are designed for handling of cryogenic liquids through bulk tanks, trucks, trailers, ISO containers and piping configurations. Our time tested spring loaded stem packing and superior seat design provide for long life and easy maintenance. Internal components are identical with the SKB Series.

### Features

- Superior Flow: Provides high Cv for rapid and reliable loading and unloading
- V-Ring spring loaded packing: provides extended service life without constant packing adjustment
- Conical PCTFE Seat: provides exceptional flow; bubble tight seal; less chance of debris trapped in the seat and longer service life
- Connections: SS pipe extension SCH 10 and SCH 40
- Sizes: ½" to 2"
- Bonnet Type: Bolted
- Pressure Rating: 720 psig (50 barg)
- Temperature Rating: -320°F (-196°C) to +150°F (+65°C)
- Service: Liquefied & Vaporized Atmospheric Gases and LNG for Trailers, Bulk Tanks, Iso-Containers and Piping Configurations
- Cleaned for Oxygen Service per CGA G-4.1

### Materials

Body .....	Bronze ASTM B61
Upper Bonnet .....	Brass ASTM B16
Lower Bonnet .....	Brass ASTM B283
Stem .....	Stainless Steel ASTM A582
Spring .....	Stainless Steel ASTM A313
Packing .....	PTFE
Gasket .....	PTFE 25% Glass Fill
Seat Disc .....	PCTFE ASTM D1430
Seat Retainer .....	Brass ASTM B16
Bonnet Screws .....	Stainless Steel ASTM A320
Handwheel .....	Chromated Coated Ductile Iron ASTM A395



### Ordering Information

Part Number	Size Inches	Size DN	Connection	A1		A2		B		C		D		Cv (Kv)	Weight lbs.	Weight Kg.
				Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm			
BB9404AA	½"	15	SCH 10 Pipe	13.9	353.06	14.4	365.76	3.00	76.2	8.88	225.55	2.00	50.8	5.0 (4.30)	9.13	4.14
BB9406AA	¾"	20						4.00	101.6	9.55	242.57	2.60	66.04	9.4 (8.10)		
BB9408AA	1"	25						9.75	247.65	2.68	68.07	14.0 (12.10)				
BB9412AA	½"	40						4.75	120.65	10.79	274.06	3.47	88.13	28.3 (21.60)		
BB9416AA	2"	50	15.27	387.85	16.21	411.73	5.25	133.35	11.88	301.75	3.26	82.80	53.0 (45.80)	23.76	10.77	
BB9404BB	1½"	15	SCH 40 Pipe	13.9	353.06	14.4	365.76	3.00	76.2	8.88	225.55	2.00	50.8	5.0 (4.30)	9.22	4.18
BB9406BB	¾"	20						4.00	101.6	9.55	242.57	2.60	66.04	9.4 (8.10)		
BB9408BB	1"	25						9.75	247.65	2.68	68.07	14.0 (12.10)				
BB9412BB	½"	40						4.75	120.65	10.79	274.06	3.47	88.13	28.3 (21.60)		
BB9416BB	2"	50	15.27	387.85	16.21	411.73	5.25	133.35	11.88	301.75	3.26	82.80	53.0 (45.80)	24.19	10.97	