

# 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

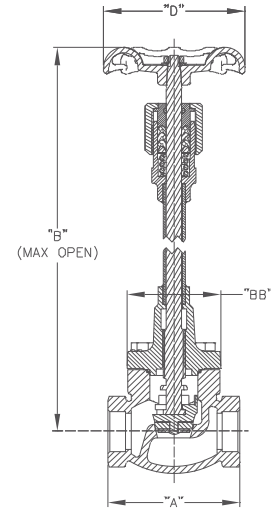
- Superior Flow: Provides high Cv for rapid and reliable loading and unloading.
- V-Ring spring loaded packing: provides extended service life without constant packing adjustment.
- Conical PCTFE Seat: provides exceptional flow; bubble tight seal; less chance of debris trapped in the seat and longer 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 psi (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

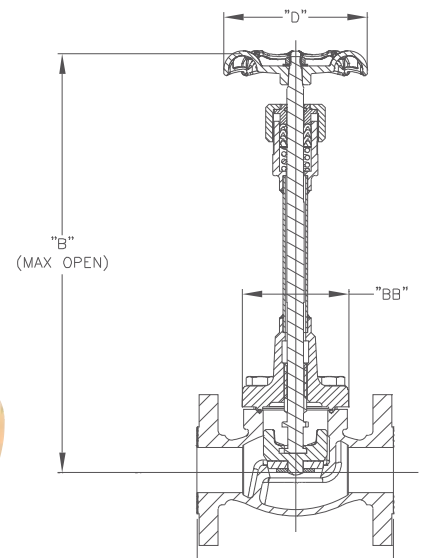
Body ..... Bronze ASTM B61  
 Upper Bonnet ..... Brass ASTM B16  
 Lower Bonnet ..... Brass ASTM B283  
 Stem ..... Stainless Steel ASTM A582  
 Spring ..... Stainless Steel ASTM A313  
 Packing ..... PTFE  
 Gasket ..... PTFE 25% Glass Fill  
 Seat Disc ..... PCTFE ASTM D1430  
 Seat Retainer .....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



**BB9412T**



**BB9412F**



## Ordering Information

Part Number	Size Inches	Size mm	Connection	A	B	D	BB	Cv	Weight lbs.
BB9402S	¼"	8	Silver Brazed Tube	2.68	14.40	3.00	2.00	1.7	8.30
BB9404S	½"	15		2.88				5.0	
BB9406S	20	3.55		9.4					
BB9408S	1"	25		3.75		14			
BB9412S	1½"	40		4.78	14.60	4.75	3.44	28.3	
BB9416S	2"	50	5.88	16.21	5.25	4.06	53	21.60	
BB9402T	¼"	8	Threaded NPT	2.68	14.40	3.00	2.00	1.7	8.30
BB9404T	½"	15		2.88				5.0	
BB9406T	20	3.55		9.4					
BB9408T	1"	25		3.75		14			
BB9412T	1½"	40		4.78	14.60	4.75	3.44	28.3	
BB9416T	2"	50	5.88	16.21	5.25	4.06	53	21.60	
BB9412F	1½"	40	Flanged RF	6.50	14.60	4.75	3.44	28.3	18.56
BB9416F	2"	50		8.00	16.21	5.25	4.06	53	30.00

# 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

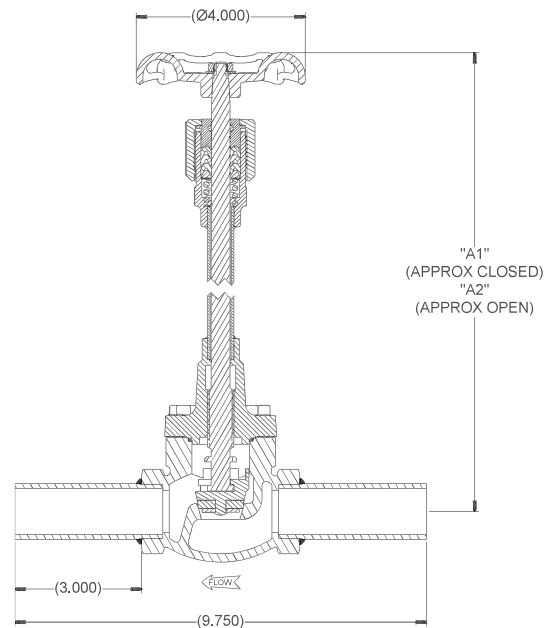
- Superior Flow: Provides high Cv for rapid and reliable loading and unloading.
- V-Ring spring loaded packing: provides extended service life without constant packing adjustment.
- Conical PCTFE Seat: provides exceptional flow; bubble tight seal; less chance of debris trapped in the seat and longer service life.
- Connections: SS pipe extension SCH 10 and SCH 40.
- Sizes: ½" to 2".
- Bonnet Type: Bolted.
- Pressure Rating: 720 psi (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



**BBS9404AA**



## Ordering Information

Part Number	Size Inches	Size mm	Connection	A1	A2	B	C	D	Cv	Weight lbs.	
BBS9404AA	½"	15	SCH 10 Pipe	13.9	14.4	3.00	8.88	8.88	5	9.13	
BBS9406AA	¾"	20		13.9	14.4	4.00	9.55	2.65	9.4		
BBS9408AA	1"	25		13.9	14.4	4.00	9.75	2.65	14		
BBS9412AA	½"	40		13.9	14.4	4.75	10.79	3.55	28.3		14.19
BBS9416AA	2"	50		15.27	16.21	5.25	11.88	4.05	53		23.76
BBS9404BB	½"	15	SCH 40 Pipe	13.9	14.4	3.00	8.88	8.88	5	9.22	
BBS9406BB	¾"	20		13.9	14.4	4.00	9.55	2.65	9.4		
BBS9408BB	1"	25		13.9	14.4	4.00	9.75	2.65	14		
BBS9412BB	½"	40		13.9	14.4	4.75	10.79	3.55	28.3		14.48
BBS9416BB	2"	50		15.27	16.21	5.25	11.88	4.05	53		24.19

# Bronze Globe Valve Short Stem for Cryogenic Service BBS 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.

## Features

- Superior Flow: Provides high Cv for rapid and reliable loading and unloading.
- Designed with the unique Kold-Seal.
- 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.
- Sizes: ¼" 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 mm	Connection	A1	A2	B	C	D	E	F	C	Weight lbs.	
BBS9402S	¼"	15	Silver Brazed Tube	5.75	6.24	3.00	8	2.00	0.380	0.300	1.7	5.2	
BBS9404S	½"			5.75	6.24	3.00	2.88	2.00	0.629	0.400	5.0		
BBS9406S	¾"			20	6.07	6.6	4.00	3.55	2.60	0.880	0.400		9.4
BBS9408S	1"			25	6.07	6.6	4.00	3.75	2.60	1.130	0.500		14
BBS9412S	1½"			40	7.2	7.93	4.75	4.79	3.47	1.631	0.563		28.3
BBS9416S	2"	50	8.85	9.84	4.75	5.87	3.96	0.380	0.300	53	11.96		
BBS9402T	¼"	8	Threaded NPT	5.75	6.24	3.00	8	2.00	0.380	0.300	1.7	5.2	
BBS9404T	½"	15		5.75	6.24	3.00	2.88	2.00	0.629	0.400	5.0		
BBS9406T	¾"	20		6.07	6.6	4.00	3.55	2.60	0.880	0.400	9.4		
BBS9408T	1"	25		6.07	6.6	4.00	3.75	2.60	1.130	0.500	14		
BBS9412T	1½"	40		7.2	7.93	4.75	4.79	3.47	1.631	0.563	28.3		7.25
BBS9416T	2"	50		8.85	9.84	4.75	5.87	3.96	2.130	0.630	53		11.96



BBS9404S

