

# Extended Bonnet Cryogenic Globe Valves

## BK and BKA Series Valves

### Application

The BK and BKA Series valves are designed exclusively for the handling of cryogenic liquids on bulk storage tanks, transports, and pipelines. These globe valves provide positive shutoff and offer a long, low-maintenance service life. The valves are available with a variety of inlet and outlet connections and stem lengths. Certain BK valves are offered with brazed-in schedule 5 and schedule 10 Stainless Steel Pipe Stubs.

### Features

- PCTFE seat disc and swivel seat design offer positive shutoff, minimal seat wear, and a long service life
- Unique spring-loaded upper packing provides extended service life without constant packing adjustment
- One piece slip-on seat assembly for easy replacement
- Each valve is cleaned and packaged for oxygen service per CGA G-4.1
- Maximum working pressure is 600 psig (41.37 barg) MAWP (-196°C)
- Working temperature range is -320°F to +165°F (196°C to +79°C)
- 100% Factory Tested

### Materials

Body .....	ASTM B61
Upper Bonnet .....	ASTM B16
Lower Bonnet .....	Brass ASTM B16 for up to 1" Valve Size
.....	BRASS ASTM B283 For Larger Sizes
Seat Disc .....	PCTFE
Seat Retainer Assembly .....	Brass ASTM B16
Stem and Bonnet Extension Tube .....	Stainless Steel ASTM A582
Spring .....	Stainless Steel ASTM AB13
Jam Ring and Pressure Seal Rings.....	PTFE
Handwheel.....	Aluminum for up to 1" valve size,
.....	Coated Malleable Iron for larger size

### Bonnet Design

Union Bonnet for 1/2", 3/4", 1" valve sizes and on both the 1" model BKA8408S and 1 1/2" model BKA8412S angle valves. Bolted Bonnet design is used on the BK9416 (2") models.



**BK8408T**



**BK9412S**



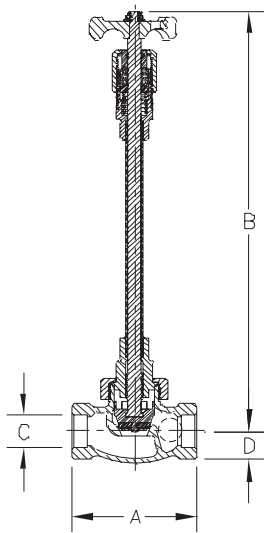
**BK9408AA**



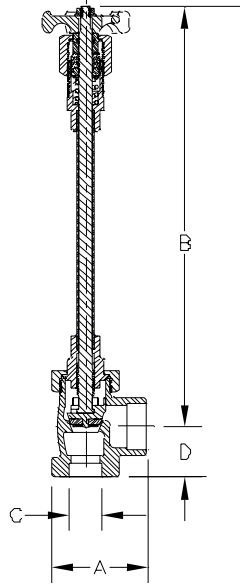
**BKA8412S**

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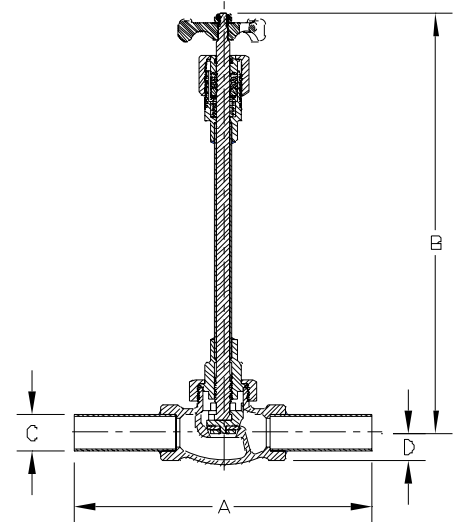
## BK and BKA Series Valves



Straight Globe Valve



Angle Globe Valve



Straight Globe Valve with Pipe Stubs

### Ordering Information

Part Number	Body Style	A Length Inches (mm)	B Max Open (Approx) Inches (mm)	C Inlet / Outlet Connections INCHES (MM)	D Inches (mm)	C <sub>v</sub> (Kv)
BK8404S	Straight	3 11/16" (94)	9 5/32" (233)	.631"-.634" (16.02-16.10)	1" (25)	4.7 (4.06)
BK8404T				1/2" F.NPT (12.7)		
BK8404ST				.631"-.634"x 1/2" F.NPT (16.02-16.10x12.7)		
BK9404S				.631"-.634" (16.02-16.10)		
BK9404T				1/2" F.NPT (12.7)		
BK9404AA				1/2" SCH10 Pipe (12.7)		
BK9404PT-F30		1/2" Sch5 Pipe x 1/2" F.NPT (12.7)				
BK9404ST		.631"-.634"x1/2" F.NPT (16.02-16.10x12.7)				
BK8406S		3 11/16" (94)	9 5/32" (233)	.881"-.884" (22.37-22.45)		
BK8406T				3/4" F.NPT (19)		
BK9406S				.881"-.884" (22.37-22.45)		
BK9406T		15" (381)	3/4" F.NPT (19)			
BK9406AA		9 11/16" (246)	14.9 (378)	3/4" SCH10 Pipe (19)		
BK8408S		4 5/16" (109)	9 1/8" (232)	1.131"-1.134" (28.72-28.80)	1 1/8" (28)	11.2 (9.68)
BK8408T				1" F.NPT (25)		
BK9408S				1.131"-1.134" (28.72-28.80)		
BK9408T				1" F.NPT (25)		
BK9408AA				1" Sch10 Pipe (25)		
BK9408PT-F30				1" Sch5 Pipe x 1" F.NPT (25)		
BK9412AA		11 3/16" (284)	16 9/16" (420)	1 1/2" Sch10 Pipe (38)	1 1/2" (38)	25.1 (21.71)
BK9412PT-F30		8 3/16" (208)		1 1/2" Sch5 Pipe x 1 1/2" F.NPT (38)		
BK9416S*		6" (152)		2.131" - 2.134" (54.12-54.20)		
BK9416AA		11.88" (302)	16" (406)	2" SCH10 Pipe (51)	1 5/8" (41)	41 (35.46)
BK9416T*		6" (152)		2" F.NPT (51)		
BK9416PT-F30	9" (229)	2" Sch5 Pipe x 2" F.NPT (51)				
BKA8408S	Angle	3 1/4" (82)	9 5/11" (240)	1.131"-1.134" x 1.631"-1.634" (28.72-28.80 x 41.42-41.50)	1 3/4" (44)	14.5 (12.54)
BKA9408S		14 5/8" (371)				
BKA8412S		4 1/4" (108)	13" (330)			

\* Valves with bolted bonnet design.  
BB Available for 1 1/2".