RegO® Goddard – 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 the identical with the SK Series and SKB Series

Features

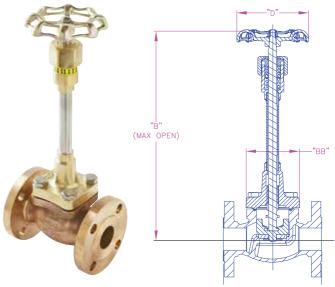
- Superior Flow: Provides high Cv for rapid and reliable loading and unloading.
- V-Ring spring loaded packing: provides extended service life without constant packing adjustment.
- Conical PCTFE Seat: provides exceptional flow; bubble tight seal; less chance of debris trapped in the seat and longer service life.
- 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 Bar)
- 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 Liquid Oxygen Service per CGA G-4.1

Materials

| Body | Bronze ASTM B61 C92200 |
|---------------|---|
| Upper Bonnet | Brass ASTM B16 C36000 |
| Lower Bonnet | Brass ASTM B283 C37700 |
| Stem | Stainless Steel ASTM A582 S30300 |
| Spring | Stainless Steel ASTM A313 S30200 |
| Packing | ASTM |
| Gasket | PTFE 25% Glass Fill |
| Seat Disc | PCTFE ASTM D1430 |
| Seat Retainer | Brass ASTM B16 |
| Bonnet Screws | ASTM B16 C36000 |
| Handwheel | . Chromated Coated Ductile Iron ASTM A395 |

(MAX OPEN)

BB9412S



BB9412F

Ordering Information

| Part Number | Size Inches | Size mm | Connection | Α | В | D | ВВ | Cv | Weight |
|-------------|----------------|------------|--------------------|--------------|-------|------|------|------|--------|
| BB9402S | 1/4" | 8 | | 2.68 | 3.00 | 2.00 | 0.00 | 1.7 | |
| BB9404S | 1/2" | 15 | 1 | 2.88 3.55 | | 2.00 | 5.0 | 8.30 | |
| BB9406S | 3/4" | 20 | Silver Brazed Tube | | 4.00 | 2.66 | 9.4 | | |
| BB9408S | 1" | 25 | Sliver Brazed Tube | 3.75 | 75 | 4.00 | 2.66 | 14 | |
| BB9412S | 1½" | 40 | | 4.78 | 14.60 | 4.75 | 3.44 | 28.3 | 12.90 |
| BB9416S | 2" | 50 | | 5.88 | 16.21 | 5.25 | 4.06 | 53 | 21.60 |
| BB9402T | 1/4" | 8 | Threaded NPT | 2.68 | 3.00 | 2.00 | 2.00 | 1.7 | 8.30 |
| BB9404T | 1/2" | 15 | | 2.88 | | 3.00 | | 5.0 | |
| BB9406T | 3/4" | 20 | | 3.55 | 14.40 | 4.00 | 2.66 | 9.4 | 0.30 |
| BB9408T | 1" | 25 | | 3.75 | 4.00 | 2.66 | 14 | 1 | |
| BB9412T | 1½" | 40 | | 4.78 | 14.60 | 4.75 | 3.44 | 28.3 | 12.90 |
| 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 |



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

- CTFE 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 CWP. (-196°C)
- Working temperature range is -320°F to +165°F. (196°C to +79°C)
- · 100% Factory Tested

Materials

| Body | |
|----------------------------------|--------------------|
| Body and Bonnet | Brass |
| Seat Disc | PCTFE |
| Seat Retainer Assembly | Brass |
| Stem and Bonnet Extension Tube | Stainless Steel |
| Packing Spring, Washer | Stainless Steel |
| Jam Ring and Pressure Seal Rings | PTFE |
| Upper Bonnet, Packing Gland | Brass |
| HandwheelAluminum for up | to 1" valve size, |
| Coated Malleable In | on for larger size |

Bonnet Design

Union Bonnet for $\frac{1}{2}$ ", $\frac{3}{4}$ ", 1" valve sizes and on both the 1" model BKA8408S and $\frac{1}{2}$ " model BKA8412S angle valves. Bolted Bonnet design is used on the BK9410 (1 $\frac{1}{4}$), BK9412 (1 $\frac{1}{2}$ "), and BK9416 (2") models.



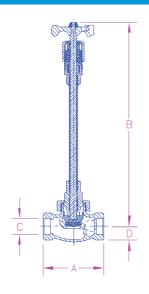




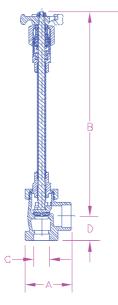
BKA9408AA



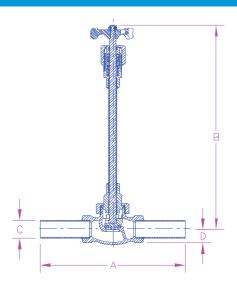
Extended Bonnet Cryogenic Globe Valves BK and BKA Series Valves







Angle Globe Valve



Straight Globe Valve with Pipe Stubs

Ordering Information

| Part Number | Body Style | A Length | B Max Open (Approx) | C Inlet / Outlet Connections | D | C _V Factor |
|--------------|------------|---|-----------------------------------|-----------------------------------|--------------------|-----------------------|
| BK8404S | | 3 11/16" | 9 ⁵ / ₃₂ " | .631"634" | | 4.7 |
| BK8404T |] | | | ½" F.NPT | 1" | |
| BK8404ST |] | | | .631"634"x ½" F.NPT | | |
| BK9404S | | | 14 ¹ /2" | .631"634" | 1" | 4.7 |
| BK9404T | Straight | | | ½" F.NPT | | |
| BK9404AA | | 9 11/16" | | ½" Sch5 Pipe | | |
| BK9404PT-F30 | | 6 ¹¹ /16" | | ½" Sch5 Pipe x ½" F.NPT | | |
| BK9404ST | 1 [| 3 11/16" | 1 | .631"634"x½" F.NPT | | |
| BK8406S |] [| | 9 5/32" | .881"884" | 1" | 6.7 |
| BK8406T | 1 | 3 ¹¹ /16" | | ¾" F.NPT | 1" | |
| BK9406S | 1 | 3 11/16 | 14 ¹ /2" | .881"-884" | 1" | 6.7 |
| BK9406T | 1 | | | ³⁄₄" F.NPT | | |
| BK9406AA | | 9.69 | 14.9 | | | |
| BK8408S | | 4 ⁵ / ₁₆ " | 9 ¹ /8" | 1.131"-1.134" | 4 1/-" | 11.2 |
| BK8408T | 1 | | | 1" F.NPT | 1 ¹ /8" | |
| BK9408S | 1 | | 14 1/2" | 1.131"-1.134" | | |
| BK9408T | 1 | | | 1" F.NPT | 1 '/8 | |
| BK9408AA | 1 | 10 ⁵ /16" | 14 1/2 | 1" Sch10 Pipe | 1 ¹ /6" | |
| BK9408PT-F30 |] [| 7 ⁵ /16" | 7 | 1" Sch5 Pipe x 1" F.NPT | 1 ¹ /8" | |
| BK9410S* | Straight | | 16 ⁷ / ₁₆ " | 1.378"-1.380" | | 17.5 |
| BK9412S* | 1 | 5 ¹³ /16" | 16 ⁹ / ₁₆ " | 1.631"-1.634" | | 25.1 |
| BK9412T* | 1 | | | 1½" F.NPT | 1 ¹ /2" | |
| BK9412AA | 1 [| 11 ³ /16" | | 1½" Sch10 Pipe | | |
| BK9412PT-F30 |] [| 8 ³ /16" | | 1½" Sch5 Pipe x 1½" F.NPT | | |
| BK9416S* | 1 [| 6" | | 2.131" - 2.134" | 4.54.7 | 41 |
| BK9416AA | 1 | 11.88" | 16" | 2" Sch5 Pipe | 1 ⁵ /8" | |
| BK9416T* | 6" | | 16" | 2" F.NPT | 4.5/-" | 144 |
| BK9416PT-F30 | Straight | 9" | 7 16 | 2" Sch5 Pipe x 2" F.NPT | 1 ⁵ /8" | 41 |
| BKA8408S | | 9 5/11" | | 4 404" 4 404" 4 604" 4 604" | , | 14.5 |
| BKA9408S | Angle | 3 1/4" | 14 ⁵ /8" | 1.131" - 1.134" x 1.631" - 1.634" | 1 ³ /4" | 14.5 |
| BKA8412S | 1 | 4 1/4" | 13" | 1.631"-1.634" | | 30.0 |

^{*} Valves with bolted bonnet design.

