

Bellows Sealed Globe Valves



Engineering
GREAT Solutions

**1/4" to 4" carbon or
stainless steel body**

Bellows Sealed Globe Valves

For more than 60 years, Our Bellows Sealed Globe Valves have been specified and installed in nuclear power plants throughout the world. Specially designed for nuclear duties, these high integrity valves are available in ¼" to 4" nominal bore size in carbon or stainless steel.

Key features

Bellows Sealed Globe Valves are designed and engineered to provide long-lasting trouble free service. They can be supplied according to all ANSI Class ratings, up to and including ANSI Class 2500. The valves can then be customized based on the required hardfacing material and the end connection type.

> Size: ¼" to 4"

> Up to ANSI class 2500

> Stainless steel and carbon steel

> Threaded, flanged or welded connections

> ASME qualified

> N & NPT stamp holder

> Manual, pneumatic, or electric actuation

> Most bellows have been qualified up to to 10,000 cycles, with some unique 1,000,000 cycle qualification on a limited number of bellows

> All valves are 100% helium leak tested at leak rates less than 1×10^{-6}



Threaded, welded or flanged connections

Benefits

> Flexible metallic bellows replaces the function of the conventional gland, reducing maintenance frequency and operation cost

> Bellows is multi-ply, welded seam construction from Inconel 625 material, which provides long life

> Bellows is welded to stem and bonnet to ensure zero leakage through gland, which eliminates harmful chemicals being released into the atmosphere

> Screwed and seal welded joints replace flanged joints to ensure zero leakage (the valve is thus hermetically sealed)

> Valve seating can be refurbished by simply lapping the body seat and replacing the disc, which can be performed in the field or end users shop

> Vacuum brazed body seat replaces conventional threaded seat, thus eliminating a potential leak path and reducing maintenance



We are the next generation ready to embrace the nuclear renaissance

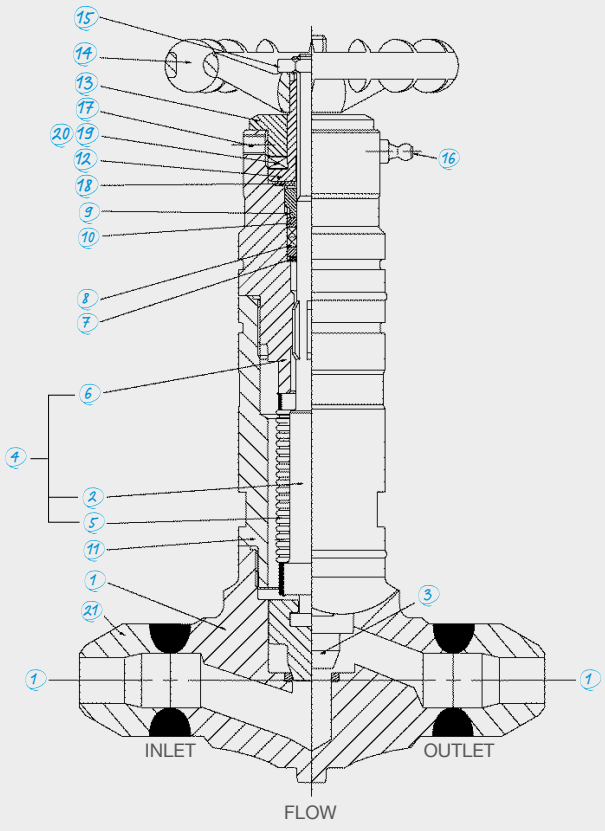
Optional extras

- > Flanged ends
- > Socket weld ends
- > One-piece bodies
- > Y-type bodies
- > Angle bodies
- > Extension spindles
- > Electric actuators
- > Pneumatic actuators
- > Gear operators
- > Locking device
- > Fitted with limit switches
- > Interlock systems

Full valve selection
available on our website

www.IMI-Critical.com

Product components



The diagram shows a detailed cross-section of a BSGV valve. It features a central stem (2) with a disc (3) at the bottom. The stem is supported by a Bonnet Bellows Stem Assy (4) and a Bellows Unit (5). The bonnet (6) is secured with a Steel Packing Ring (7) and Packing Rings (8). The valve body is connected via a Body Connector (11) and Yoke Sleeve (12). The handwheel (14) is attached to the stem with a Handwheel Nut (15). The valve has INLET and OUTLET ports and a central FLOW direction. Numbered callouts (1-21) identify various components as listed in the table.

Typical components of BSGV

Item	Description	Qty
1	Body Hardfaced	1
2	Stem	1
3	Disc	1
4	Bonnet Bellows Stem Assy	1
5	Bellows Unit	1
6	Bonnet	1
7	Steel Packing Ring	1
8	Packing Ring	2
9	Packing Retainer Ring	1
10	Anti-Extrusion Rings	2
11	Body Connector	1
12	Yoke Sleeve	1
13	Yoke Sleeve Retainer	1
14	Handwheel	1
15	Handwheel Nut	1
16	Grease Nipple	1
17	Lockscrew	1
18	Lower Thrust Plate	1
19	Bearing	1
20	Bearing Thrust Plate	2
21	End Stub	2

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