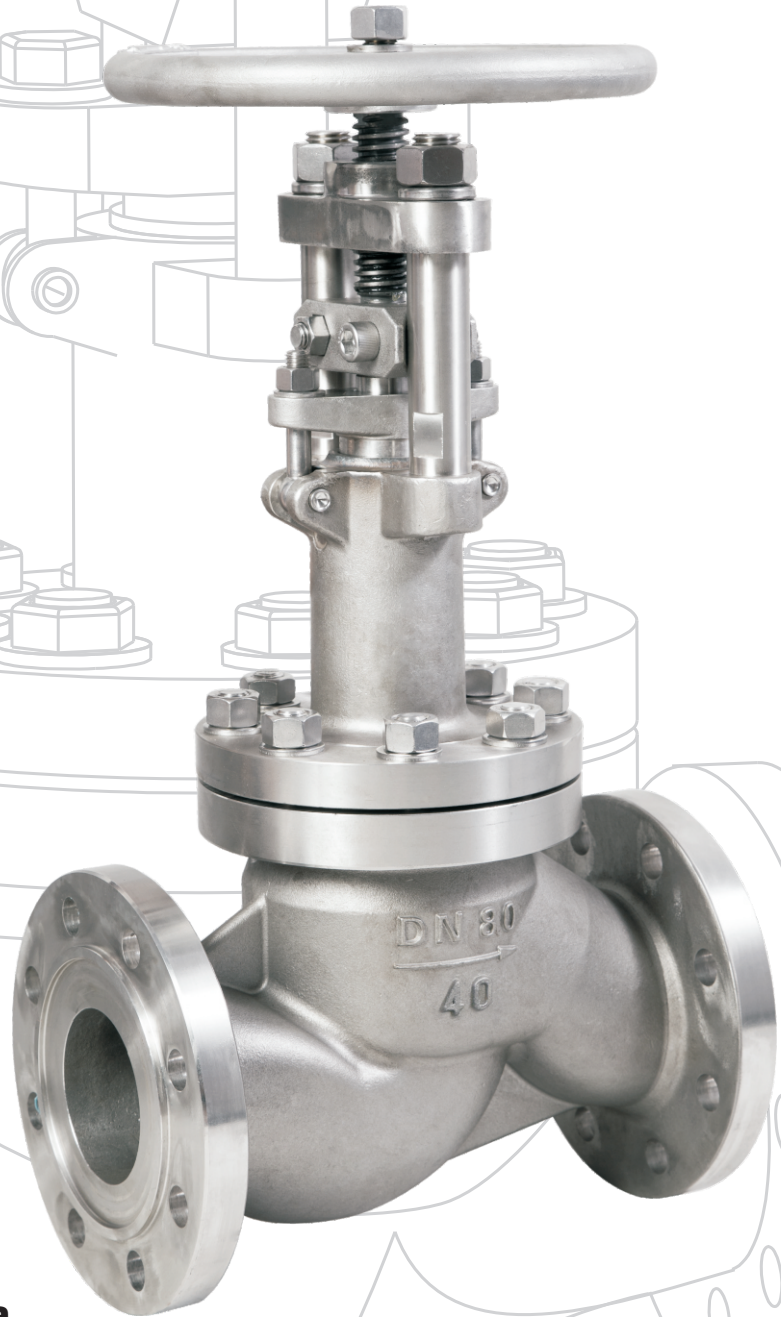




**Bellows Sealed Globe Valve is designed for critical applications involving ammonia media**

**PN16-64**

Series J : Buttwelded, Socketwelded, Flange  
GB/T26478-2011



# Bellows Sealed Globe Valve is designed for critical applications involving ammonia media

Series J

## Features

1. The valve provides superior protection for use in chemical applications and power plants, especially in transmission of ammonia, either in liquid or gas form, or dissolved in water. They are commonly used on the following processes and production units: municipal sewage, carbamide process, synthetic fibre, curry, medication, plastic, colouring.
2. Zero leakage is ensured with advanced processing technics and sophisticated testing methods, including optical interferometry inspection. Each valve has to go through Helium leak test 100%, besides water, gas, pressure and airproof tests.
3. The stem subassembly is auto welded to the lower part of the valve, which has built up a metal barrier between the line medium and the atmosphere. The sealing surfaces of disc and valve body are finely lapped by a planetary lapping equipment with automatic frequency regulation, ensuring perfect sealing of the contact surfaces. The stem subassembly is 100% seal tested. In addition, there is a gland packing with flexible graphite material at the upper part of the stem. This has further ensured product quality, safety and reliability.
4. The key part-multiple walled metal bellows are hydraulically formed, full enclosure design, has no need for internal flushing. It will offer maximum service life, maintenance free and reduce the operating cost.

## Zero emissions

### — Bellows subassembly

It's a fully enclosure type structure to avoid direct contact with the fluid being transmitted. So it could offer maximum service life, maintenance free, and reduce the operating cost.

### — Gland packing

The gland packing, stuffed with flexible graphite material, served as an extra protection to prevent from leaking, particularly at high temperature applications.

### — Position limit

Position limit on upper stem shall provide effective protection from flexible bellows variability, and ensure the safe use of the valve.

## Protection of stem and bellows

### — Non-rotating block

Prevent lateral torsional bellows.

### — Packing sleeve

For packing compression, no maintenance.

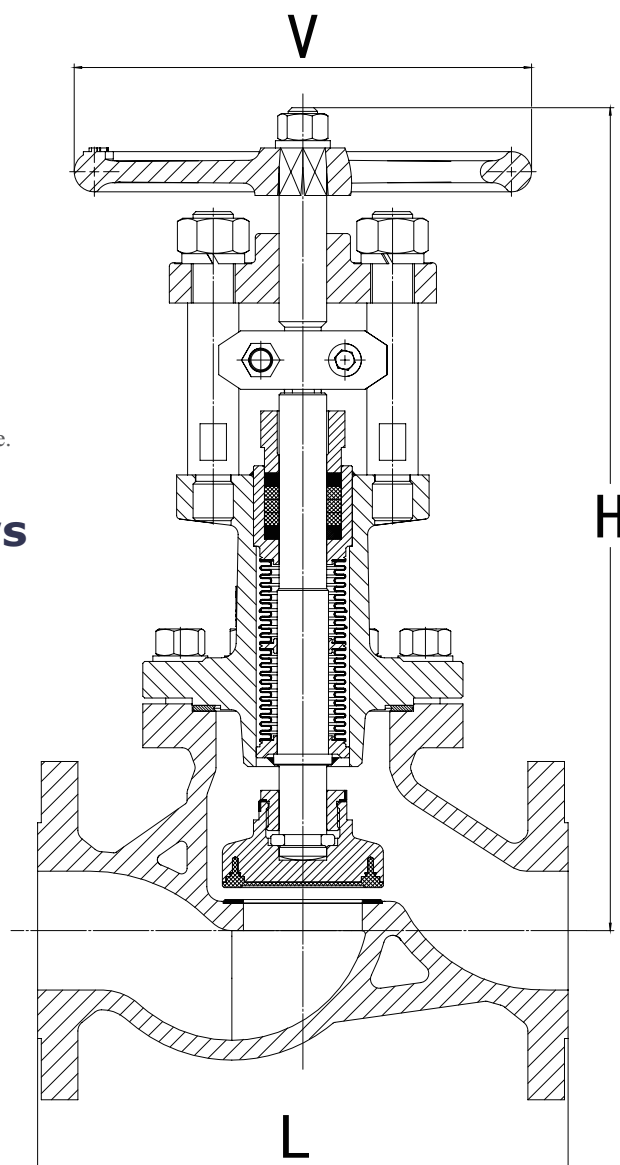
## Excellent process and design

### — Metal sealing: The sealing surfaces between disc and seat are finely lapped, ensuring perfect sealing.

### — Elastic sealing: PTFE material is applied for corrosion protection.

### — Hinged connection: Hinged connection between disc and stem has increased sealing of the connecting surfaces and thus zero emissions are ensured.

### — Unique channel design: The unique computerize simulated valve chamber design offers very low flow resistance. The flow rate could be increased by 10-15% as compared with valves of similar size.



Nominal pressure(MPa)		1.6	2.5	4.0	6.4
Test pressure(MPa)	Shell test	2.4	3.75	6.0	9.6
	Top sealing test	/	/	/	/
	Hydraulic pressure test	1.76	2.75	4.4	7.04
	Air pressure test	0.6	0.6	0.6	0.6
Working temperature		-71℃~425℃			

## Design standards

Design and Manufacture : GB/T 26478 API602

Face to Face dimension : GB/T 12221

Connect dimension : GB/T 12224 (Butt welded) ASME B16.11 (Socket welded) GB/T 9113 HG/T 20592 (Flange)

Pressure & Temperature : GB/T 9131

Test & Inspect : GB/T 9092

Helium spectrometry : API 602

**Wanlong applies the TSX71002520141087 certificate, accord with the require of TSG D7002**

## Excellent services in power industry

With the strong demand from Chinese government for clean environment, more and more coal-fired power plants undertake the responsibility of environmental protection by installing special facilities to reduce discharge of NOx into the air.

Liquid ammonia is a key element used in solution of DeNOx. However, it is flammable, explosive and very dangerous. The problems often found in valve operation during DeNOx include leakage in valve body or gland packing, internal bleeding, and corrosion or distortion of the stem. These can severely threat people's safety.

Wanlong's bellows sealed globe valve provides the best choice and outstanding performance in DeNOx application. It is environment friendly, maintenance free and zero leakage.



- Power improvement: Ammonia area of a power plant has a leaking problem, they contact with Wanlong, and discuss about this, we help to solve the problems, make a safe condition.

- Exchange ball valve: Due to the characteristics of Ammonia, a unsafe problem will be happened when the temperature changes in using ball valve and at low temperature the packing seal will be impacted, Wanlong customize for the client, exchange the ball valve, enhance the customer intimacy.

- Help to the engineering: Due to the valve is leaking frequently, the engineering want to find a valve brand with excellent quality, by the positive cooperation of Wanlong sales, provides the engineering of great supplement.

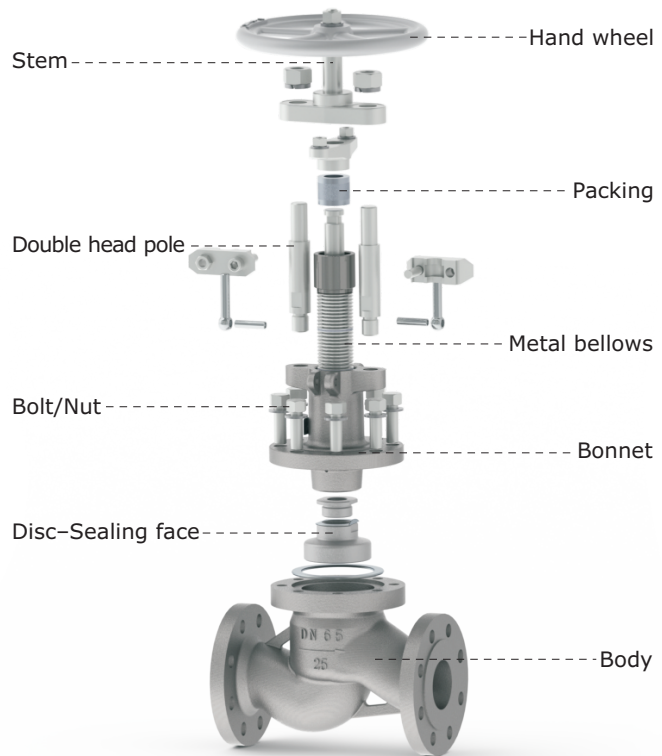
# Main Parts and Material

Pressure: PN16~40

Size: DN15-DN300

End Connection: BW SW RF MF

**Note:** Please provide detailed information about valves to be ordered, including media, pressure-temperature ratings, end connection. When actuators are required, please advise supply pressure, operating speed, parts and accessories, control element type, etc. Consult WL to learn more.



Description	WCB	304/316 SS	LCB/LCC
Hand wheel	ASTM A216 WCB	ASTM A351 CF3/CF3M/CF8/CF8M	ASTM A216 WCB
Body	ASTM A105 A105 (For DN15-DN50) ASTM A216 WCB (For DN65-DN300)	ASTM A351 CF3/CF3M/CF8/CF8M	ASTM A352 LCB/LCC
Metal bellows	ASTM A276 304	ASTM A276 304/316	ASTM A276 304
Bonnet	ASTM A216 WCB	ASTM A351 CF3/CF3M /CF8/CF8M	ASTM A352 LCB/LCC
Disc – Sealing face	Hard alloy	Hard alloy	PTFE
Stem	ASTM A276 410 ASTM A276 420	ASTM A276 304/316	ASTM A276 304
Double head pole	ASTM A29 1035	ASTM A29 1035	ASTM A276 304
Packing	Flexible Graphite	Flexible Graphite	PTFE
Bolt/Nut	ASTM A193/A194 ASTM A182	ASTM A193/A194 ASTM A182	ASTM A182

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