



# BELLOWS SEALED VALVE

## MODEL BE3L

### Features

**Compact forged steel globe valve for steam, hot water, heat transfer fluid, etc. Suitable for use with small-process equipment.**

1. Maintenance-free globe valve with bellows sealed stem.
2. No-leak gland with triple seals: bellows, gland packing and stem seal at full-open position.
3. No need to tighten or replace gland packing.
4. Good seal with stellite hardened surfaces on valve plug and valve seat.
5. Smooth handwheel operation.
6. Durable stainless steel bellows tested to withstand 10 000 cycles.
7. Compact forged steel body.



### Specifications

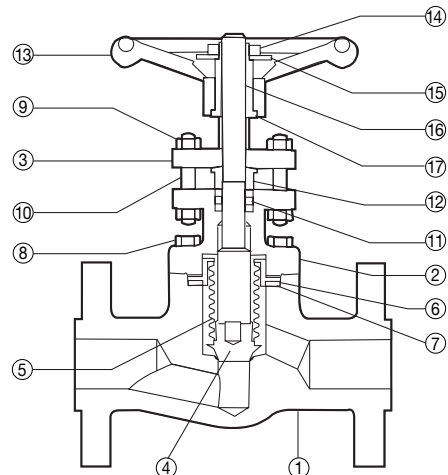
Model		BE3L		
Connection		Screwed	Socket Weld	Flanged
Size (in)		1/2, 3/4, 1, 1 1/2, 2		
Maximum Operating Pressure (psig)	PMO	710		
Maximum Operating Temperature (°F)	TMO	752		
Maximum Allowable Pressure (psig)	PMA	825		
Maximum Allowable Temperature (°F)	TMA	800		



**CAUTION** To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside of the specification range. Local regulations may restrict the use of this product to below the conditions quoted.

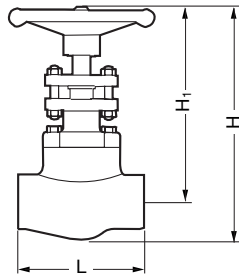
No.	Description	Material	ASTM/AISI*	JIS
1	Body	Carbon Steel	A105	—
2	Bonnet	Carbon Steel	A105	—
3	Gland Flange	Carbon Steel	A105	—
4	Valve Plug	Stainless Steel	AISI410	SUS410
5	Bellows	Stainless Steel	AISI321	SUS321
6	Bonnet Gasket	Graphite	—	—
7	Bonnet Gasket	Stainless Steel/Graphite	AISI316	SUS316
8	Bonnet Bolt	Alloy Steel	A193 Gr. B7	SNB7
9	Gland Nut	Carbon Steel	AISI1035	S35C
10	Gland Bolt	Stainless Steel	AISI410	SUS410
11	Gland Packing	Graphite	—	—
12	Gland Bushing	Stainless Steel	AISI410	SUS410
13	Handwheel	Carbon Steel	AISI1025	S25C
14	Lock Nut	Carbon Steel	AISI1025	S25C
15	Nameplate	Aluminum	B209	Al
16	Valve Stem	Stainless Steel	AISI410	SUS410
17	Stem Nut	Stainless Steel	AISI416	SUS416

\* Equivalent



**Dimensions**

● **BE3L Screwed**

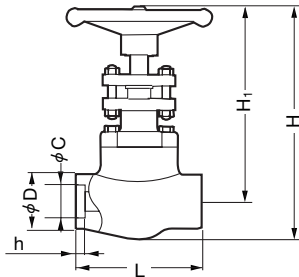


**BE3L Screwed\*** (in)

Size	L	H**	H <sub>1</sub> **	Weight (lb)
1/2	3 1/8	6 1/8	5 3/8	3.7
3/4	3 9/16	6 1/2	5 1/16	5.1
1	4 5/16	7 1/2	6 9/16	7.9
1 1/2	6 1/8	10 1/4	8 1/16	15
2	6 1/16	11	9 1/16	26

\* NPT, other standards available \*\* At full open position

● **BE3L Socket Weld**

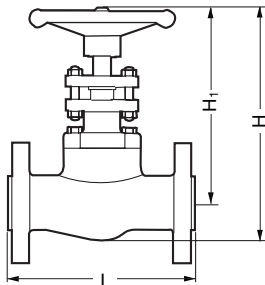


**BE3L Socket Weld** (in)

Size	D	C	h	L	H*	H <sub>1</sub> *	Weight (lb)
1/2	1 1/4	7/8	1 5/32	3 1/8	6 1/8	5 3/8	3.7
3/4	1 1/2	1 1/16	3 5/64	3 9/16	6 1/2	5 1/16	5.1
1	1 7/8	1 3/8	5/8	4 5/16	7 1/2	6 9/16	7.9
1 1/2	2 9/16	1 15/16	3/4	6 1/8	10 1/4	8 1/16	15
2	3 1/16	2 3/8	7/8	6 1/16	11	9 1/16	26

\* At full open position

● **BE3L Flanged**



**BE3L Flanged\*** (in)

Size	L (ASME Class)		H*	H <sub>1</sub> *	Weight (approx. lb)
	150RF	300RF			
1/2	6	6	6 3/8	5 3/8	8.8
3/4	7	7			11
1	8	8	7 1/16	6 9/16	16
1 1/2	9	9	10 7/16	8 1/16	31
2	10 1/2	10 1/2	11 7/16	9 1/16	42

\* At full open position

**Cv Values**

	Nominal Valve Size (in)				
	1/2	3/4	1	1 1/2	2
Cv (US)	1.6	3.2	5.0	14	24
Cv (UK)	1.4	2.6	4.2	12	20
Kvs (DIN)	1.4	2.7	4.3	12	21

Note: BE3L is a reduced port valve

**TLV CORPORATION**

13901 South Lakes Drive, Charlotte, NC 28273-6790  
 Phone: 704-597-9070 Fax: 704-583-1610  
 E-mail: [tlv@tlvengineering.com](mailto:tlv@tlvengineering.com)  
 For Technical Service 1-800 "TLV TRAP"



Manufacturer  
**TLV® CO., LTD.**  
 Kakogawa, Japan  
 is approved by LRQA Ltd. to ISO 9001/14001

ISO 9001/ISO 14001

