



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 Welded	Flanged
Size (mm)	15, 20, 25, 40, 50		
Maximum Operating Pressure (MPaG) PMO	5.0		2.1
Maximum Operating Temperature (°C) TMO	400		

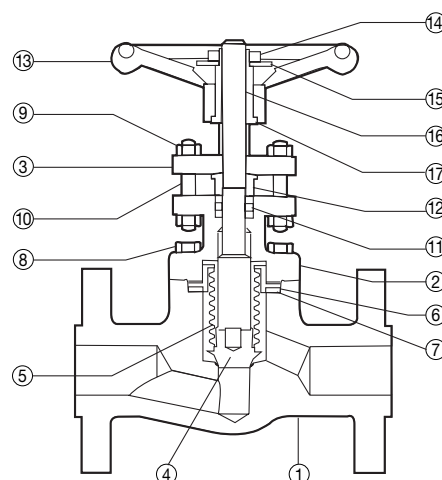
PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS): Maximum Allowable Pressure (MPaG) PMA: 5.7 1 MPa = 10.197 kg/cm²
Maximum Allowable Temperature (°C) TMA: 427



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.

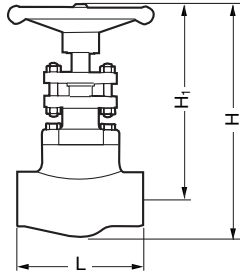
No.	Description	Material	JIS*	ASTM/AISI
1	Body	Carbon Steel	—	A105
2	Bonnet	Carbon Steel	—	A105
3	Gland Flange	Carbon Steel	—	A105
4	Valve Plug	Stainless Steel	SUS410	AISI410
5	Bellows	Stainless Steel	SUS321	AISI321
6	Bonnet Gasket	Graphite	—	—
7	Bonnet Gasket	Stainless Steel/Graphite	SUS316	AISI316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

* Equivalent Material



Dimensions

● **BE3L Screwed**

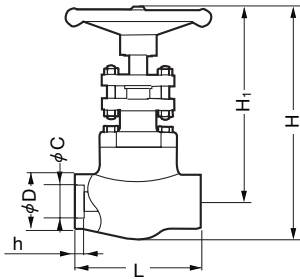


BE3L Screwed* (mm)

Size	L	H**	H ₁ **	Weight (kg)
15	80	155	136	1.7
20	90	165	144	2.3
25	110	190	167	3.6
40	155	260	220	7.5
50	170	280	230	12

* Rc(PT), other standards available ** At full open position

● **BE3L Socket Welded**

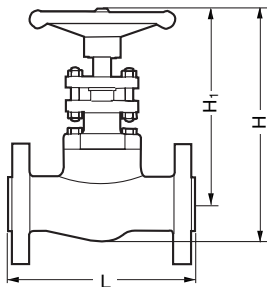


BE3L Socket Welded* (mm)

Size	D	C	h	L	H**	H ₁ **	Weight (kg)
15	32	22.2	12	80	155	136	1.7
20	38	27.7	14	90	165	144	2.3
25	48	34.5	16	110	190	167	3.6
40	65	49.1	19	155	260	220	7.5
50	78	61.1	22	170	280	230	12

* JIS, ASME standards available ** At full open position

● **BE3L Flanged**



BE3L Flanged* (mm)

Size	L (ASME Class)		H**	H ₁ **	Weight (approx. kg)
	150RF	300RF			
15	152	152	162	136	4.0
20	178	178			5.0
25	203	203	195	167	7.3
40	229	229	265	220	14
50	267	267	290	230	19

* JIS 10KFF, 20KRF also available ** At full open position

Cv Values

	Nominal Valve Size (mm)				
	15	20	25	40	50
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

ISO 9001/ISO 14001

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

