



# BALL VALVE

## MODEL BV1 STAINLESS STEEL

### STAINLESS STEEL BALL VALVE WITH TIGHT GLAND SEALING AND HANDLE LOCK FEATURE

#### Features

**Stainless steel full bore ball valve of three-piece design for steam, water and air.**

1. Valve seats made of heat resistant carbon fiber-filled PTFE.
2. Stem is double-sealed with a heat resistant carbon fiber-filled PTFE gland and two FPM O-rings.
3. All internal body surfaces machined.
4. Equipped with a handle lock feature which prevents handle operation resulting from accidental contact, etc.

#### Pressure Equipment Directive (PED)

Classification according to PED 2014/68/EU, fluid group 2

Size	Category	CE marking
½" to 3"	—*	Art. 4, Sec. 3 (sound engineering practice), CE marking not allowed

\* Manufactured in accordance with sound engineering practice



#### Specifications

Model	BV1	
Connection	Screwed	
Valve Port	Full Bore	
Size	½", ¾", 1", 1¼", 1½", 2", 2½", 3"	
Maximum Operating Pressure (barg) PMO	10	
Maximum Operating Temperature (°C) TMO	185	
Applicable Fluid*	Steam, Water, Air	

\*Do not use for toxic, flammable or otherwise hazardous fluids.

1 bar = 0.1 MPa

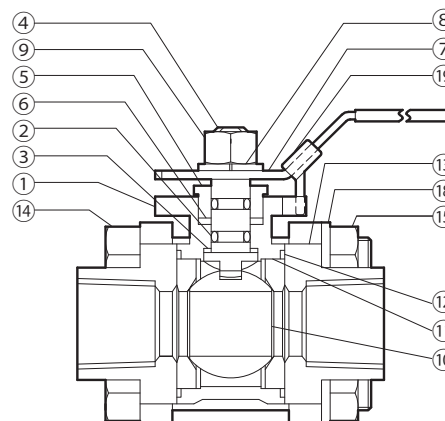
PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS): Maximum Allowable Pressure (barg) PMA: 10  
Maximum Allowable Temperature (°C) TMA: 185



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.

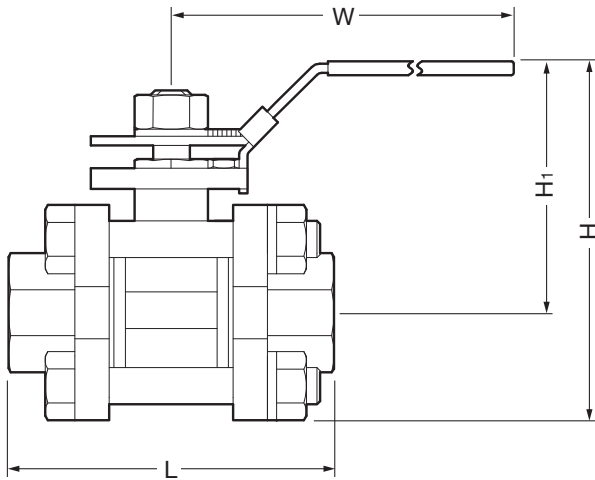
No.	Description	Material	DIN*	ASTM/AISI*
①	Body	Cast Stainless Steel A351 Gr.CF8	1.4312	—
②	Stem Seal O-Ring	Fluorine Rubber FPM	FPM	D2000HK
③	Thrust Washer	Carbon fiber-filled PTFE	PTFE	PTFE
④	Stem	Stainless Steel SUS304	1.4301	AISI304
⑤	Gland	Stainless Steel SUS304	1.4301	AISI304
⑥	Gland Packing	Carbon fiber-filled PTFE	PTFE	PTFE
⑦	Handle	Stainless Steel SUS304	1.4301	AISI304
⑧	Spring Washer	Stainless Steel SUS304	1.4301	AISI304
⑨	Handle Nut	Stainless Steel SUS304	1.4301	AISI304
⑩	Ball	Cast Stainless Steel A351 Gr.CF8	1.4312	—
⑪	Valve Seat	Carbon fiber-filled PTFE	PTFE	PTFE
⑫	Body Gasket	Fluorine Resin PTFE	PTFE	PTFE
⑬	Body End Cap	Cast Stainless Steel A351 Gr.CF8	1.4312	—
⑭	Body Bolt	Stainless Steel SUS304	1.4301	AISI304
⑮	Body Nut	Stainless Steel SUS304	1.4301	AISI304
⑯	Handle Stop Nut**	Stainless Steel SUS304	1.4301	AISI304
⑰	Stop Nut Bolt**	Stainless Steel SUS304	1.4301	AISI304
⑱	Spring Washer**	Stainless Steel SUS304	1.4301	AISI304
⑲	Lock Plate	Stainless Steel SUS304	1.4301	AISI304

\* Equivalent materials \*\* Sizes ½" to 2", shown on reverse



**Dimensions**

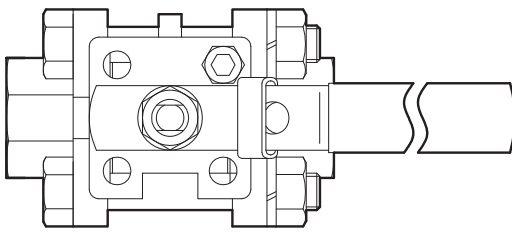
• **BV1** Screwed



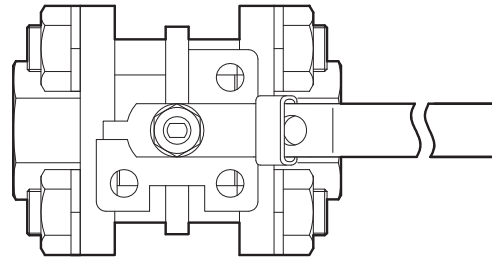
**BV1** Screwed\* (mm)

Size	L	H	H1	W	Weight (kg)
1/2"	71	80	55	100	0.6
3/4"	81	87	60	130	0.8
1"	90	101	72	150	1.1
1 1/4"	104	115	78		1.9
1 1/2"	116	127	86	180	2.6
2"	133	141	94		3.8
2 1/2"	168	194	135	260	7.4
3"	189	215	145		11

\* BSP DIN 2999, other standards available



Sizes 1/2" to 2"



Sizes 2 1/2" to 3"

**Handle Lock Feature**

Handle lock feature	Allows the handle to be secured in the open/closed positions by sliding the handle lock plate into the valve body.
---------------------	--

Note: For installations on vertical or horizontal piping where the handle is not on top, there may be cases in which the handle lock plate slides back, preventing use of the lock feature. In such cases, the lock plate should be secured with a pin, wire or lock, etc.

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

ISO 9001  
 ISO 14001

