GOURD BRAND

Stainless Steel Valves

Features

- Use of austenite-based (Cr-Ni-based) stainless steel, which offers superior corrosion resistance and durability.
- A lineup of two series of valves (H-series and S-series) that take into account the lifecycle and serve various applications and purposes.
- Consideration was given to strength balance in the design of these valves. Lost wax casting is employed in the H-series valves to help improve the aesthetic appearance of the overall device.

Production Standard

Series		H-series	S-series			
Class		10K	10K(Metal seat)	10K(Soft seat)	20K	150lb
Specification standard	End-to-end dimensions	Hitachi Valve standard/JIS B 2011	JIS B 2002			ASME B 16.10
	Thickness	Hitachi Valve standard	ASME B 16.34 (1996)			
	Connection	JIS B 0203 Taper pipe threads JIS B 2220 10K-FF	JIS B 2220 10K-RF		JIS B 2220 20K-RF*1	ASME B 16.5(1996) 150lb-RF
	Packing	Reinforced PTFE (conical)			Expanded graphite	Reinforced PTFE (conical)
	Gasket	Reinforced PTFE			Expanded graphite	Reinforced PTFE
Scope of use	120℃ or lower	1.4 MPa			3.4 MPa	In accordance with ASME B16.34 (1996)*2
	150℃ or lower	1.1 MPa	—		—	
	180℃ or lower	1.0 MPa	—	1.28 Mpa	—	
	220℃ or lower	—	1.2 MPa	—	3.1 Mpa	
	300℃ or lower	—	1.0 Mpa	—	2.9 Mpa	

☐ H-series Oil is used : 1. Usable oil: Heavy oil (A/ B/ C), lubricant oil, turbine oil (#90 or above), coal tar, and pitch
2. Unusable oil: Crude oil, naphtha, gasoline, kerosene, light oil, turbine oil (#80 or lower), and heat-transfer oil

☐ S-series Gasket and packing materials of a 10K/150lb valve will be replaced (with expanded graphite) if the valve is to be used at temperatures greater than 180℃.

Test Pressure	Valve body pressure resistance	Water pressure	2.10 Mpa	5.10 Mpa	2.93 Mpa
	Valve seat leakage	Water pressure	1.54 Mpa	3.74 Mpa	2.09 MPa
		Air pressure	0.59 Mpa		

Note: The water pressure test of the check valve to check for seat leakage shall be conducted by applying the specified pressure and then reducing the pressure to one-third.

*1 Excludes the thickness of the flange (t). (125A or higher)
*2 For details, see "Pressure-temperature ratings ASME B 16.34 (1996)."

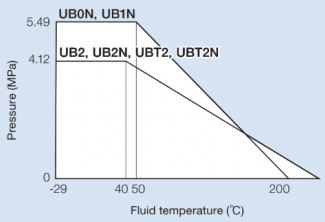
Series		Mini ball valve		Ball valve (general-purpose, for high temperatures, floating type)				Ball valve (general-purpose, trunnion type)	
Class		600 Type	800 Type	10K	20K	150lb	300lb	10K	150lb
Specification standard	End-to-end dimensions	Hitachi Valve standard		JIS B 2002		ASME B 16.10		JIS B 2002	ASME B 16.10
	Thickness	Hitachi Valve standard		ASME B 16.34(1996)					
	Connection	JIS B 0203 Taper pipe threads		JIS B 2220 10K-RF	JIS 2220 20K-RF	ASME B 16-5(1996) 150lb-RF	ASME B 16-5(1996) 300lb-RF	JIS B 2220 10K-RF	ASME B 16-5(1996) 150lb-RF
	Packing	Reinforced PTFE	PTFE	PTFE					
	Seat	Reinforced PTFE	Reinforced PTFE	Special PTFE (FT seat *1: general-purpose, P seat*2: for high temperatures)				PTFE	
	Retainer O-ring	—	—	—	—	—	—	FKM*3	
Scope of use		See "Mini ball valve," "Ball valve (floating)," and "Ball valve (trunnion)" in the section "Pressure-Temperature Range" on page 3.							
		Caution: 1.Usable: Heavy oil (A/ B/ C), lubricant oil, turbine oil (#90 or higher), coat tar, and pitch 2.Unusable: Crude oil, naphtha, gasoline, kerosene, turbine oil (#80 or lower), and heat-transfer oil							
Test Pressure	Valve body pressure resistance	Water pressure	6.3 MPa	8.3 MPa	2.10 MPa	5.10 MPa	2.85 MPa	5.88 MPa	2.10 MPa	2.85 MPa
	Valve seat leakage	Water pressure	—		1.54 MPa	3.74 MPa	2.09 MPa	4.31 MPa	1.54 MPa	2.09 MPa
		Air pressure	0.59 MPa							

*1 The special PTFE (FT seat) combines the excellent properties of PTFE and PFA.
*2 The special PTFE (P seat) consists of multiple PTFE monomers, including a carbon-based reinforcing material, and can be used for fluids at temperatures of up to 300℃.
*3 Special customization is available for the conditions of use.

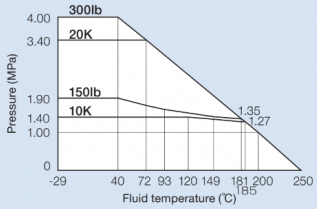
Pressure-Temperature Rating ASME B 16.34-1996

Operating temperature	150lb	
	CF8 (SCS13A)	CF8M (SCS14A)
−29～38℃	1.90 MPa	1.90 MPa
93℃	1.59 MPa	1.62 MPa
149℃	1.41 MPa	1.48 MPa
204℃	1.31 MPa	1.34 MPa
260℃	1.17 MPa	1.17 MPa
316℃	0.97 MPa	0.97 MPa
343℃	0.86 MPa	0.86 MPa
371℃	0.76 MPa	0.76 MPa
399℃	0.66 MPa	0.66 MPa

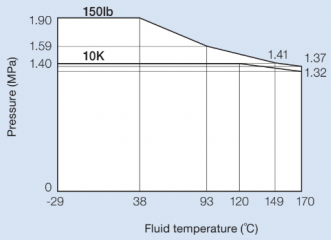
● Mini ball valve



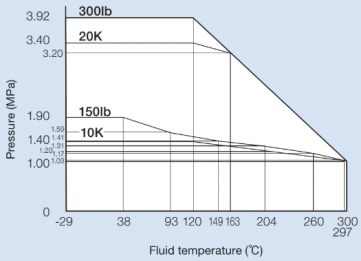
● Ball valve (floating)



● Ball valve (trunnion)



● Ball valve (for high temperatures)

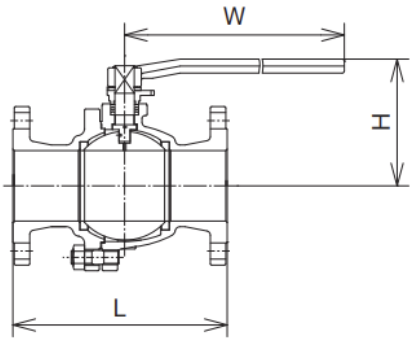


Product Code

BU10F1P/BU10F1PM/BU10F1PO Flanged Ball valves For high temperatures

Product Name	Material			Remarks
	BU10F1B	BU10F1BM	BU10F1B0*	
Body	SCS13A	SCS14A	SCS16A	
Ball	SCS13A	SCS14A	SCS16A	
Stem	SUS304	SUS316	SUS316L	
Seat ring	Special PTFE			P seat
Packing	Expanded graphite			
Handle	FCMB340			100A or lower
	SCS13A+SGP			125A or higher

* Contact us for details about the product size.



Nominal (A)	L	W	(Reference) H
15	108	120	79
20	117	120	82
25	127	150	94
32	140	150	100
40	165	220	112
50	178	220	120
65	190	220	134
80	203	400	163
100	229	400	178
125	356	750	255
150	394	1,000	285
200	457	1,000	345

Unit: mm