



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		
	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-RF	JIS B 2220 20K-RF ¹⁾	ASME B 16.5(1996) 150lb-RF	
	Packing	Reinforced PTFE (conical)		Expanded graphite	Reinforced PTFE (conical)	
Scope of use	Gasket	Reinforced PTFE		Expanded graphite	Reinforced PTFE	
	120°C or lower	1.4 MPa		3.4 MPa		
	150°C or lower	1.1 MPa		—		
	180°C or lower	1.0 MPa		1.28 MPa		
	220°C or lower	—		1.2 MPa		
300°C or lower	—		1.0 MPa			
						In accordance with ASME B16.34 (1996) ²⁾
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	—	

¹⁾ Excludes the thickness of the flange (I), (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)			
	600 Type	800 Type	10K	20K	150lb	300lb	10K	150lb		
Specification standard	Classes		JIS B 2002				JIS B 2002			
	End-to-end dimensions	Hitachi Valve standard	Hitachi Valve standard				ASME B 16.10			
	Thickness	Hitachi Valve standard	ASME B 16.34(1996)				ASME B 16.10			
	Connection	JIS B 0203 Taper pipe threads	JIS B 2220 10K-RF	JIS B 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		
Scope of use	Packing	Reinforced PTFE	PTFE				PTFE			
	Seat	Reinforced PTFE	Special PTFE (FT seat) ¹⁾ ; general-purpose, P seat ²⁾ ; for high temperatures				PTFE			
	Retainer O-ring	—	—				FKM ³⁾			
Caution: 1.Usable: Heavy oil (A/B/C), lubricant oil, turbine oil (#90 or higher), coal tar, and pitch 2.Unusable: Crude oil, naphtha, gasoline, kerosene, light oil, turbine oil (#80 or lower), and heat-transfer oil 3.Special customization is available for the conditions of use.										
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	2.09 MPa
		Air pressure	—	—	0.59 MPa	—	—	—	—	—

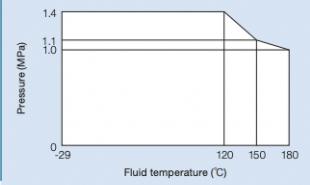
¹⁾ The special PTFE (FT seat) combines the excellent properties of PTFE and PFA.
²⁾ The special PTFE (P seat) consists of multiple PTFE monomers, including a carbon-based reinforcing material, and can be used for fluids at temperatures of up to 300°C.
³⁾ Special customization is available for the conditions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

Pressure-Temperature Rating ASME B 16.34-1996

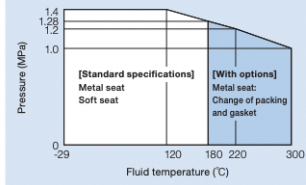
Operating temperature	150lb	
	CF8 (SCS13A)	CF8M (SCS14A)
-29 ~ -35°C	1.90 MPa	1.90 MPa
93°C	1.59 MPa	1.62 MPa
149°C	1.41 MPa	1.48 MPa
204°C	1.31 MPa	1.34 MPa
260°C	1.17 MPa	1.17 MPa
316°C	0.97 MPa	0.97 MPa
343°C	0.86 MPa	0.86 MPa
371°C	0.76 MPa	0.76 MPa
399°C	0.66 MPa	0.66 MPa

Pressure-Temperature Range

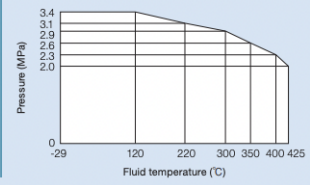
H-series



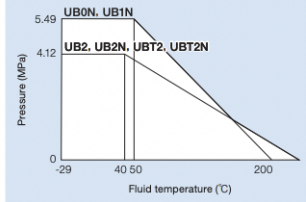
S-series 10K



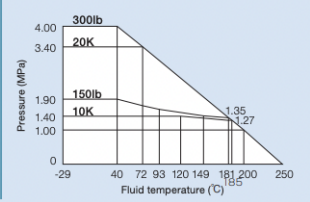
S-series 20K



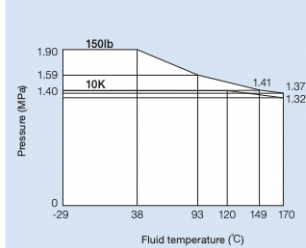
Mini ball valve



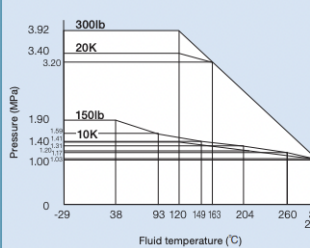
Ball valve (floating)



Ball valve (trunnion)



Ball valve (for high temperatures)



Product Code

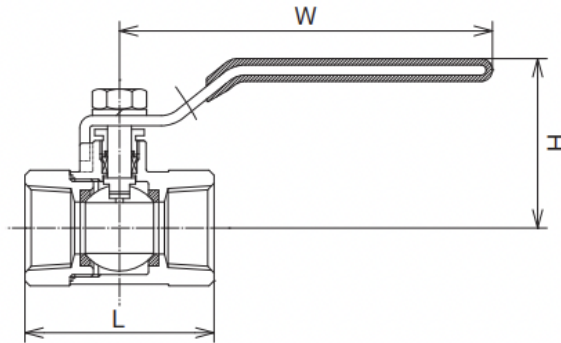
UB1N

800 model screwed

Mini ball valve 1-stage reduced bore



Product Name	Material	Remarks
Body	SCS14A	
Ball	SCS14A	
Stem	SUS316	
Seat ring	Reinforced PTFE	
Packing	PTFE	
Handle	SUS304	PVC coating



Nominal (B)	L	W	(Reference) H
1/4	59	103	49
3/8	59	103	49
1/2	59	103	49
3/4	66.5	103	54
1	77	109	63
1 1/4	92	145	78
1 1/2	101	145	82
2	122	180	93

Unit: mm