

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	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		In accordance with ASME B16.34 (1996) ²⁾
	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			
Test Pressure	Valve body pressure resistance	Water pressure	2.10 Mpa	5.10 Mpa	2.93 Mpa	2.09 Mpa
	Valve seat leakage	Water pressure	1.54 Mpa	3.74 Mpa	2.09 Mpa	2.09 Mpa
		Air pressure	0.59 Mpa			

¹⁾ 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
²⁾ 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°C.

³⁾ Excludes the thickness of the flange (l), (125A or higher)
⁴⁾ 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	Hitachi Valve standard		JIS B 2002		ASME B 16.10		JIS B 2002	ASME B 16.10	
	End-to-end dimensions	Hitachi Valve standard		JIS B 2002		ASME B 16.34(1996)		JIS B 2002	ASME B 16.10	
	Thickness	Hitachi Valve standard		JIS B 2002		ASME B 16.34(1996)		JIS B 2002	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				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⁾		
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							

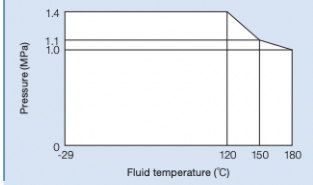
¹⁾ The special PTFE (FT seat) combines the excellent properties of PTFE and PFA.
²⁾ The special PTFE (P seat) consists of multiple PTFE monomers, including a carbon-based reinforcing material, and can be used for fluids at temperatures of up to 300°C.
³⁾ Special customization is available for the conditions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

Pressure-Temperature Rating ASME B 16.34-1996

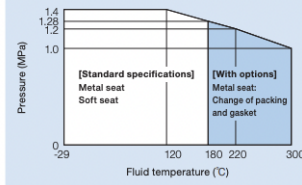
Operating temperature	150lb	
	CF8 (SCS13A)	CF8M (SCS14A)
-29 ~ -35°C	1.90 MPa	1.90 MPa
93°C	1.59 MPa	1.62 MPa
149°C	1.41 MPa	1.48 MPa
204°C	1.31 MPa	1.34 MPa
260°C	1.17 MPa	1.17 MPa
316°C	0.97 MPa	0.97 MPa
343°C	0.86 MPa	0.86 MPa
371°C	0.76 MPa	0.76 MPa
399°C	0.66 MPa	0.66 MPa

Pressure-Temperature Range

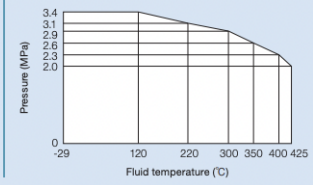
H-series



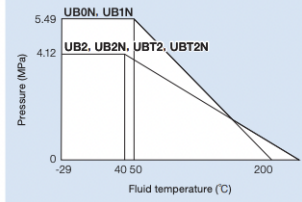
S-series 10K



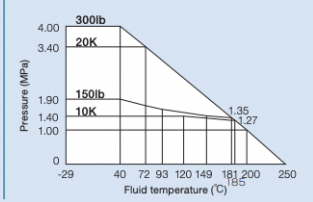
S-series 20K



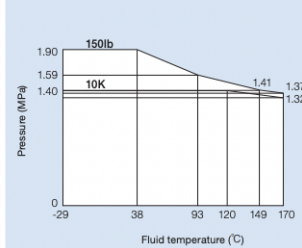
Mini ball valve



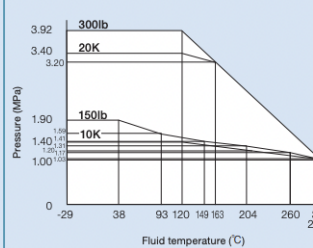
Ball valve (floating)



Ball valve (trunnion)



Ball valve (for high temperatures)



Product Code

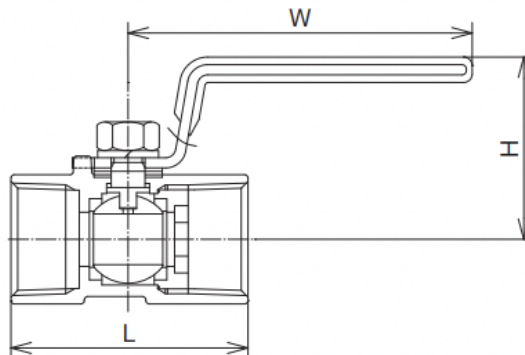
UB2N

600 model screwed

Mini ball valve 2-stage reduced bore



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



Nominal (B)	L	W	(Reference) H
1/4	40.5	58	28
3/8	46	70	29
1/2	56.5	85	37
3/4	63	85	40
1	70	100	49
1 1/4	81	100	54
1 1/2	88	125	62
2	107	125	68

Unit: mm