

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-RF		JIS B 2220 20K-RF*1	ASME B 16.5(1996) 150lb-RF
		JIS B 2220 10K-FF				
	Packing	Reinforced PTFE (conical)			Expanded graphite	Reinforced PTFE (conical)
Gasket	Reinforced PTFE			Expanded graphite	Reinforced PTFE	
Scope of use	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	—	3.1 Mpa	
	300°C or lower	—	1.0 Mpa	—	2.9 Mpa	
<input type="checkbox"/> 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 <input type="checkbox"/> 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.						
Test Pressure	Valve body pressure resistance	Water pressure	2.10 Mpa		5.10 Mpa	2.93 Mpa
		Valve seat leakage	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), coal 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	—		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°C.

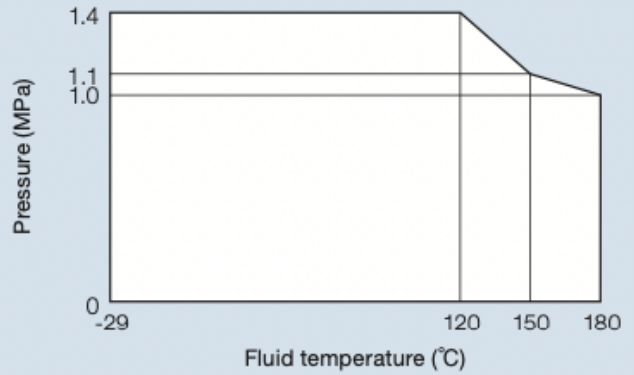
*3 Special customization is available for the conditions of use.

Pressure-Temperature Rating ASME B 16.34-1996

Operating temperature	150lb	
	CF8 (SCS13A)	CF8M (SCS14A)
-29~38°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



H-series 10K type

Product Code

UESG

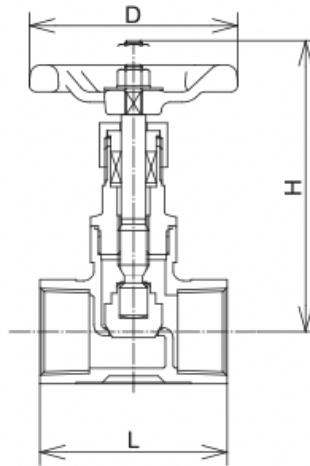
Screwed

Globe valve Short end-to-end dimension

H-series 10K type



Product Name	Material	Remarks
Body	SCS13A	
Cover	SCS13A	
Stem	SUS304	
Disc	SUS304	
Packing	Reinforced PTFE	Conical
Gasket	Reinforced PTFE	
Handle	ADC	



Nominal (B)	L	D	(Reference) H Fully open
1/4	44	60	105
3/8	48	60	105
1/2	52	60	105
3/4	60	60	105
1	72	80	124
1 1/4	80	100	135
1 1/2	90	100	150
2	100	100	170

Unit: mm