

History

1910 The Tobata Foundry Co., which later became the Tobata Works, established. This was the first modern malleables manufacturing facility in Japan.
1922 Kizugawa Manufacturing, which later became the Kuwana Works, established as a plant specializing in fittings. Purchased in 1926 by the Tobata Foundry Co.
1935 Name of the Tobata Foundry Co. changed to Kokusan Industries, Ltd.
1937 Kokusan Industries, Ltd. purchased by Hitachi, Ltd.
1956 Hitachi Metals Industries, Ltd. established (Capital: ¥1 billion provided by Hitachi, Ltd.).
Hitachi, Ltd., transferred its metals business and five plants to Hitachi Metals Industries, Ltd.
(Tobata, Fukagawa, Kuwana, Wakamatsu, and Yasugi), and business activities began.
1965 Hitachi Metals America, Ltd., established in the United States.
1967 Merged with Hitachi Metals, Ltd., to change par value of shares and company name.
1970 Hitachi Metals Europe GmbH established in Germany.
1979 Hitachi Metals Singapore Pte. Ltd. established in Singapore.
1991 Recognized as ISO9002 Quality Management System(Kuwana Works).
1999 Recognized as ISO14001 Environment Quality Management System(Kuwana Works).
2003 Revised as ISO9001 Quality Management System(Kuwana Works).
2015 Hitachi Metals Korea Co., Ltd. established.
2023 Company name changed from Hitachi Metals, Ltd. to Proterial, Ltd.
2024 Kuwana Metals, Ltd. established with the transfer of Proterial's piping components business unit to Okaya & Co., Ltd.

Product Warranty

Within eighteen months of completion inspection or within twelve months of the start of usage, whichever is shortest, Kuwana Metals, Ltd. will repair or replace products or the faulty components of products free of charge in the event of failure under normal usage attributable to inadequate design or manufacturing on the part of Kuwana Metals, Ltd. However, repairs or replacements will be charged in any of the following cases. Also note that if a separate agreement is in effect, that agreement shall take precedence.

- (1) When the product has been used in an incorrect manner which deviates from the catalog or instruction manual;
- (2) When the product failure is due to careless handling such as jamming with foreign substances or the sticking of excessive water stains;
- (3) When the product has been disassembled, repaired or altered by a third party other than Kuwana Metals, Ltd.;
- (4) When the product has been subject to causes beyond the control of Kuwana Metals, Ltd. including natural disasters such as wind or flood damage, earthquakes and electrical storms, fire, pollution (special environments), salt damage, war or acts of terror;
- (5) When a failure is due to any other factor not deemed to be the responsibility of Kuwana Metals, Ltd.
Damage caused by use, failure, defect, etc. of the product are excluded from the scope of warranty by Kuwana Metals, Ltd.

- The product specifications, performance values and prices listed in this catalog are based on general conditions of use and are intended as guidelines for selecting models. Please confirm product specifications and conditions including fluids, temperatures and pressures before selecting a product.
- The products listed in this catalog are not designed or manufactured for applications that require a special quality level, such as medical equipment, nuclear generation facilities or airplanes.
- The products listed in this catalog are designed to be used within Japan. When exporting the products, the exporter will need to obtain an export license from the Ministry of Economy, Trade and Industry based on the provisions of the Export Control Order under the Foreign Exchange and Foreign Trade Act.
- Please note that to improve this catalog, the contents may be changed or revised without prior notice. Please be aware that product catalogs published prior to such revisions are not valid.
- The contents of this catalog are copyright of Kuwana Metals, Ltd. Duplication without permission is strictly prohibited. For inquiries, please contact your nearest Kuwana Metals, Ltd. sales office.
- When using a product listed in this catalog, please follow the precautions listed in its instruction manual and use it properly.

Agent

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GOURD BRAND

Stainless Steel Valves

General valves 10K / 20K / 150lb
Ball valves 10K / 20K / 150lb / 300lb

Kuwana Metals, Ltd.

GOURDBRAND

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.

Production Standard

Series			H-series		S-series			
Class			10K	10K(Metal seat)	10K(Soft seat)	20K	150lb	
Specification standard	End-to-end dimensions	Kuwana Metals standard/JIS B 2011		JIS B 2002			ASME B 16.10	
	Wall thickness	Kuwana Metals standard		ASME B 16.34 (1996)				
	Connection	JIS B 0203 Taper pipe threads		JIS B 2220 10K-RF		JIS B 2220 20K-RF	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			Refer to Page 3, Pressure-Temperature Rating					In accordance with ASME B16.34 (1996)*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								
☐ 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								
Test Pressure	Valve body pressure resistance	Water pressure*2	2.10 Mpa			5.10 Mpa	2.93 Mpa	
	Valve seat leakage	Water pressure*2	1.54 Mpa			3.74 Mpa	2.09 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 For details, see “Pressure-temperature ratings ASME B 16.34 (1996).”

*2 Test fluid: There is a case of air.

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	Kuwana Metals standard		JIS B 2002		ASME B 16.10		JIS B 2002	ASME B 16.10		
	Wall Thickness	Kuwana Metals standard		ASME B 16.34(1996)							
	Connection	JIS B 0203		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 to 5.									
Mini ball valve											
Oil is used:		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 ^{*4}	6.3 MPa	8.3 MPa	2.10 MPa	5.10 MPa	2.85 MPa	(General) 6.0MPa	(High temp) 5.88MPa	2.10 MPa	2.85 MPa
	Valve seat leakage	Water pressure ^{*4}	—		1.54 MPa	3.74 MPa	2.09 MPa	(General) 4.4MPa	(High temp) 4.32MPa	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.

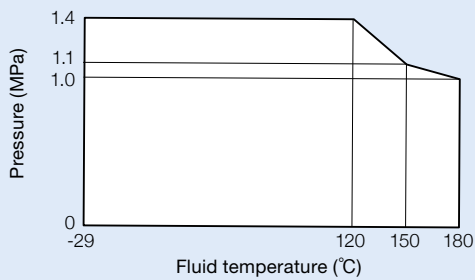
*2 The special PTFE (P seat) consists of multiple PTFE monomers, including a carbon-based reinforcing material, and can be used for fluids at temperatures of up to 300°C.

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

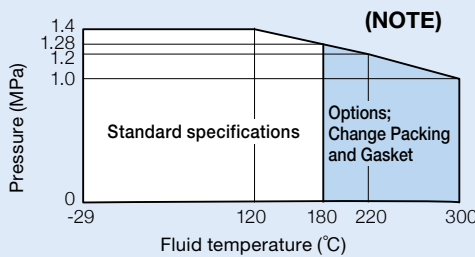
*4 Test fluid: There is a case of air.

Pressure-Temperature Rating

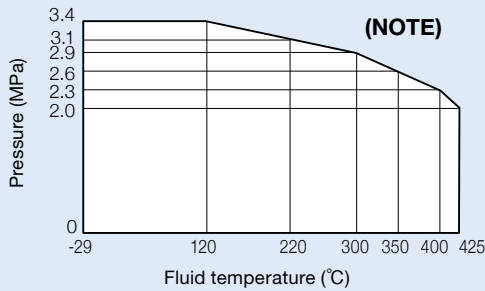
H-series



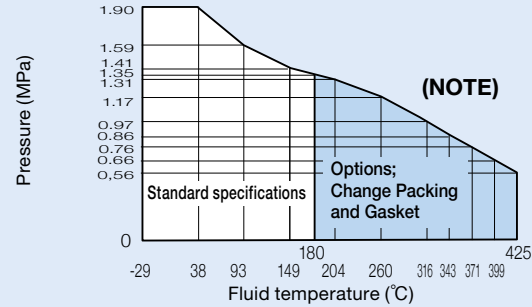
S-series 10K type Metal Seat (SCS13A·SCS14A·SCS16A)



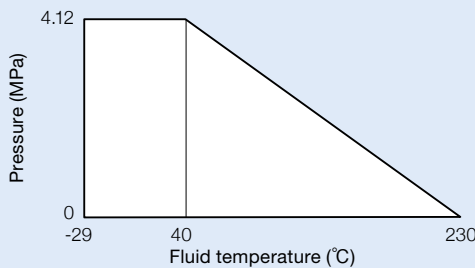
S-series 20K type (SCS13A·SCS14A·SCS16A)



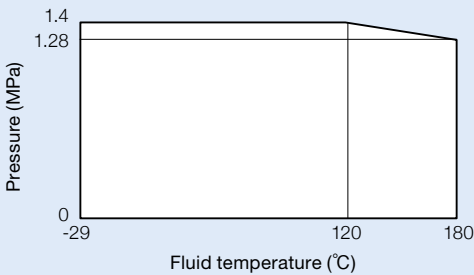
S-series 150lb type (CF8/SCS13A)



Mini Ball Valve 600 Type

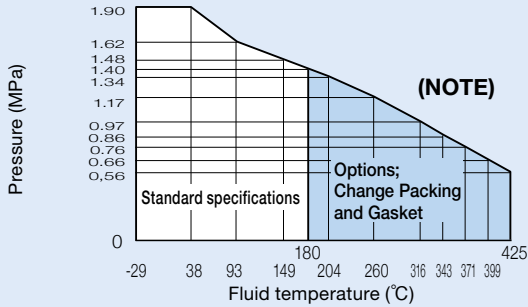


S-series 10K type Soft Seat (SCS13A·SCS14A)

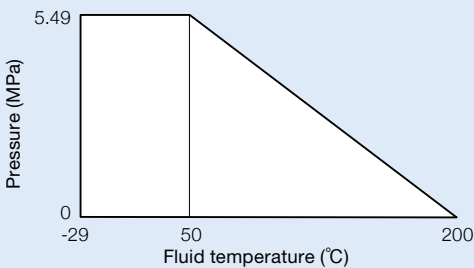


- NOTE;
- A cobalt-base alloy (Co-Cr-W alloy) for the valve seat surface is recommended in case of use in the following conditions.
 - 1. For steam piping with a nominal diameter of 150A (6B) or higher.
 - 2. For steam piping when the pressure is 1.0 Mpa or higher, and the frequency of opening and closing is high.
 - 3. For use with fluids in a dry state.

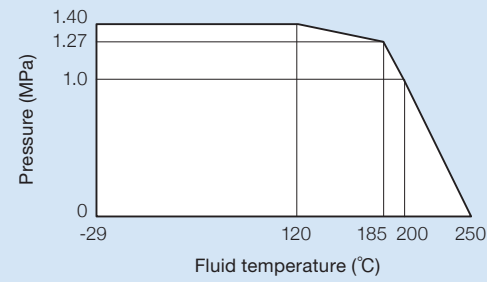
S-series 150lb type (CF8M·CF3M/SCS14A·SCS16A)



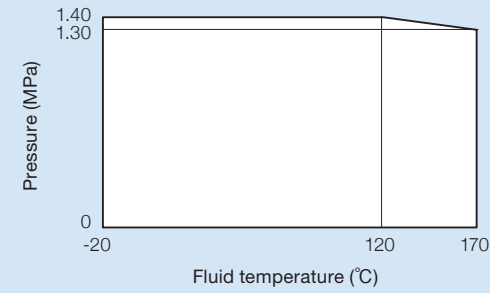
Mini Ball Valve 800 Type



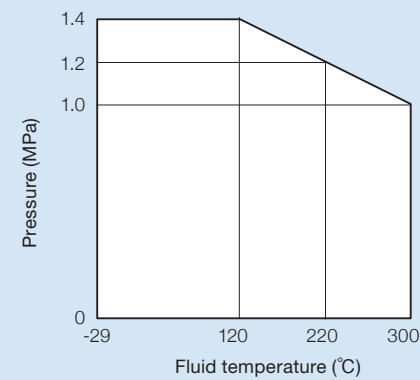
● Two-way ball valves 10K type General-purpose
(SCS13A·SCS14A·SCS16A)



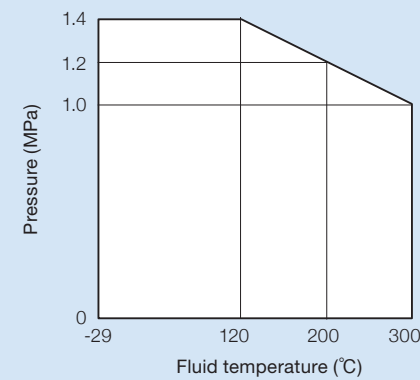
● Two-way ball valves 10K type General-purpose
Nominal 250A·300A(SCS13A·SCS14A)



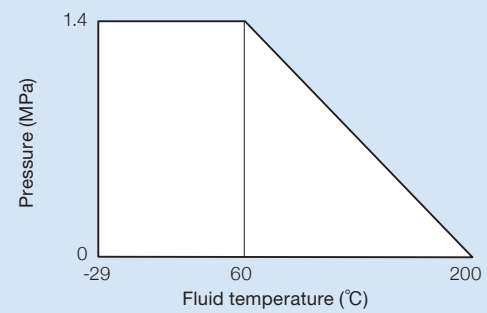
● Two-way ball valves 10K type for high temperature
(SCS13A·SCS14A)



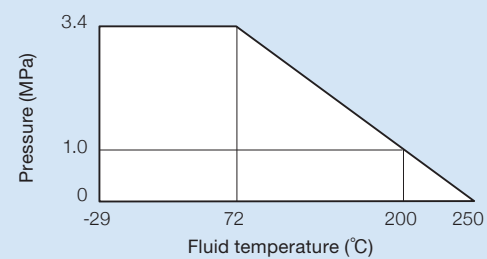
● Two-way ball valves 10K type for high temperature
(SCS16A)



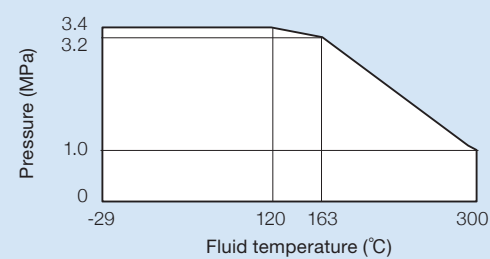
● Three-way ball valves 10K type General-purpose L-port·T-port
(SCS13A·SCS14A·SCS16A)



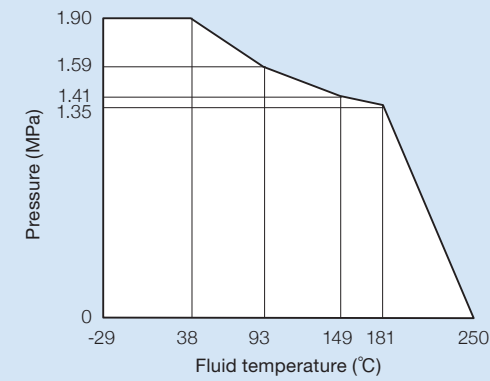
● Two-way ball valves 20K type General-purpose
(SCS13A·SCS14A)



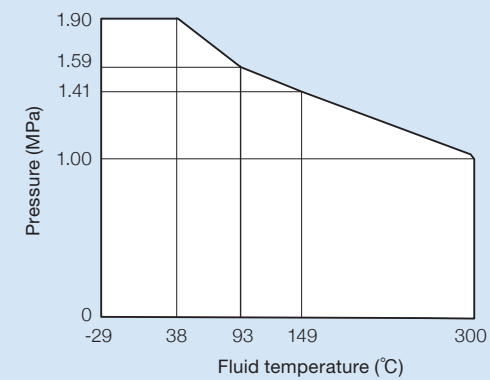
● Two-way ball valves 20K type for high temperature
(SCS13A·SCS14A)



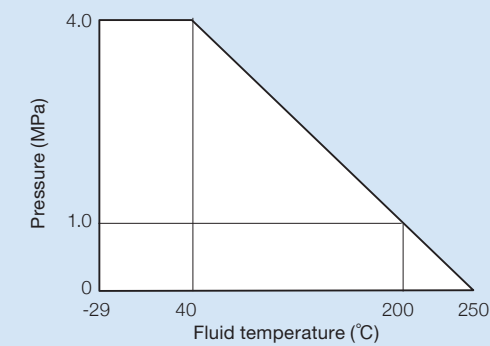
● Two-way ball valves 150lb type General-purpose
(SCS13A)



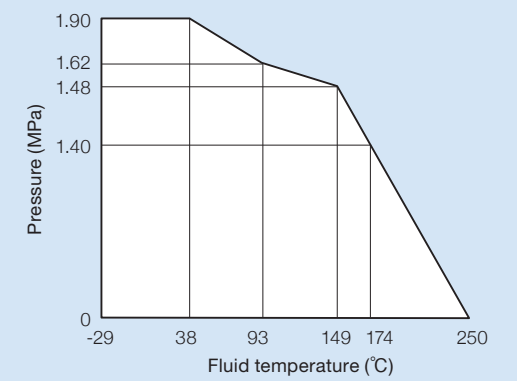
● Two-way ball valves 150lb type for high temperature
(SCS13A)



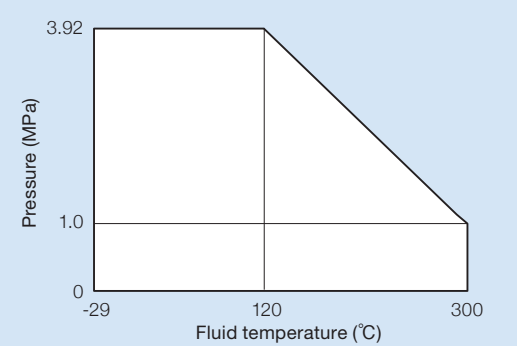
● Two-way ball valves 300lb type General-purpose
(SCS13A)



● Two-way ball valves 150lb type General-purpose
(SCS14A·SCS16A)



● Two-way ball valves 300lb type for high temperature
(SCS13A)



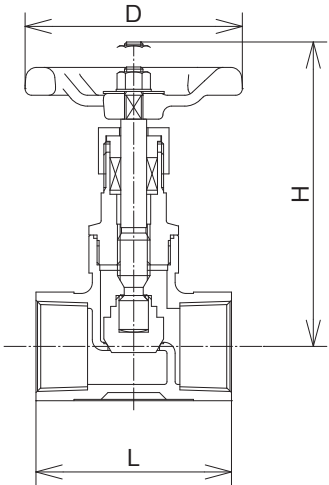
H-series 10K type

Product Code

UESG **Screwed** **Globe valve** Short end-to-end dimension



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



Nominal size (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

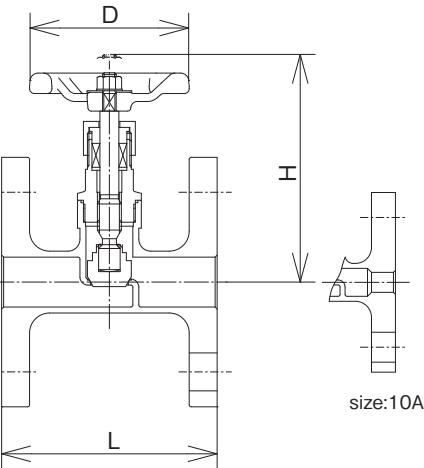
Unit: mm

Product Code

UEFG **Flanged** **Globe valve** Short end-to-end dimension



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



Nominal size (A)	L	D	(Reference) H Fully open
10	73	60	105
15	85	60	105
20	95	60	105
25	108	80	124
32	120	100	135
40	135	100	150
50	155	100	170

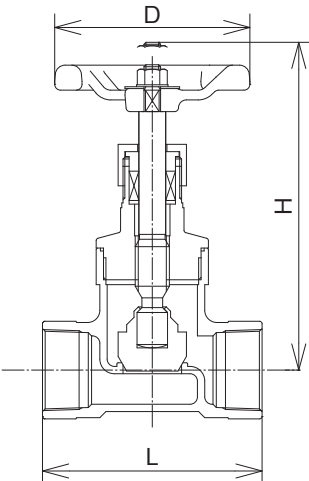
Unit: mm

Product Code

USG/USGM **Screwed** **Globe valve** With JIS-compliant end-to-end dimensions(JIS B 2011)



Product Name	Material		Remarks
	USG	USGM	
Body	SCS13A	SCS14A	
Cover	SCS13A	SCS14A	
Stem	SUS304	SUS316	
Disc	SUS304	SUS316	
Packing	Reinforced PTFE		Conical
Gasket	Reinforced PTFE		
Handle	ADC		3/8B~2B
	FCMB275-5		2 1/2B, 3B



Nominal size (B)	L	D	(Reference) H Fully open
3/8	55	60	105
1/2	65	60	105
3/4	80	80	115
1	90	100	135
1 1/4	105	100	150
1 1/2	120	100	170
2	140	100	190
2 1/2	180	180	235
3	200	180	260

Unit: mm

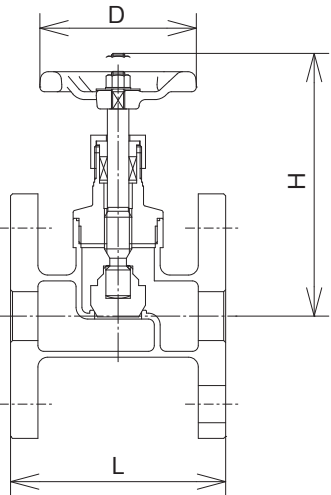
H-series 10K type

Product Code

UFG/UFGM **Flanged** **Globe valve** With JIS-compliant end-to-end dimensions(JIS B 2011)



Product Name	Material		Remarks
	UFG	UFGM	
Body	SCS13A	SCS14A	
Cover	SCS13A	SCS14A	
Stem	SUS304	SUS316	
Disc	SUS304	SUS316	
Packing	Reinforced PTFE		Conical
Gasket	Reinforced PTFE		
Handle	ADC		3/8B~2B
	FCMB275-5		2 1/2B, 3B



Nominal size (A)	L	D	(Reference) H Fully open
10	85*	60	105
15	85	60	105
20	95	80	115
25	110	100	135
32	130	100	150
40	150	100	170
50	180	100	190
65	210	180	235
80	240	180	260

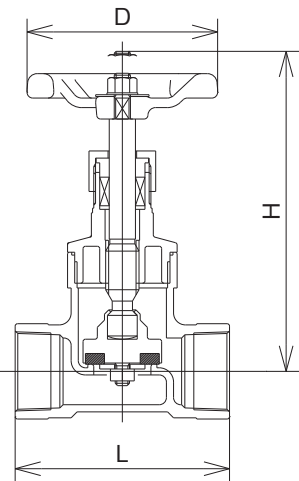
*Our Standards Unit: mm

Product Code

USD/USDM **Screwed** **Globe valve PTFE disc** With JIS-compliant end-to-end dimensions(JIS B 2011)



Product Name	Material		Remarks
	USD	USDM	
Body	SCS13A	SCS14A	
Cover	SCS13A	SCS14A	
Stem	SUS304	SUS316	
Disc	Reinforced PTFE		
Disc	SUS304	SUS316	
Packing	Reinforced PTFE		Conical
Gasket	Reinforced PTFE		
Handle	ADC		



Nominal size (B)	L	D	(Reference) H Fully open
3/8	55	60	105
1/2	65	60	105
3/4	80	80	115
1	90	100	135
1 1/4	105	100	150
1 1/2	120	100	170
2	140	100	190

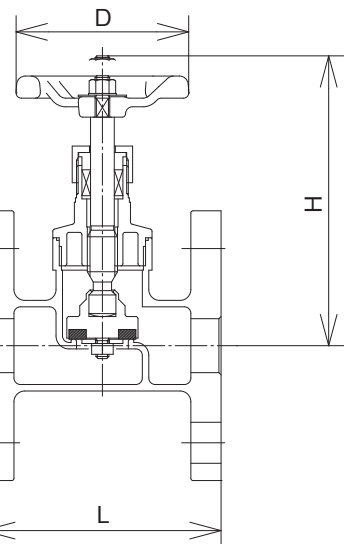
Unit: mm

Product Code

UFD/UFD **Flanged** **Globe valve PTFE disc** With JIS-compliant end-to-end dimensions(JIS B 2011)



Product Name	Material		Remarks
	UFD	UFD	
Body	SCS13A	SCS14A	
Cover	SCS13A	SCS14A	
Stem	SUS304	SUS316	
Disc	Reinforced PTFE		
Disc	SUS304	SUS316	
Packing	Reinforced PTFE		Conical
Gasket	Reinforced PTFE		
Handle	ADC		10A~50A
	FCMB275-5		65A, 80A



Nominal size (A)	L	D	(Reference) H Fully open
10	85*	60	105
15	85	60	105
20	95	80	115
25	110	100	135
32	130	100	150
40	150	100	170
50	180	100	190
65	210	180	235
80	240	180	260

*Our Standards Unit: mm

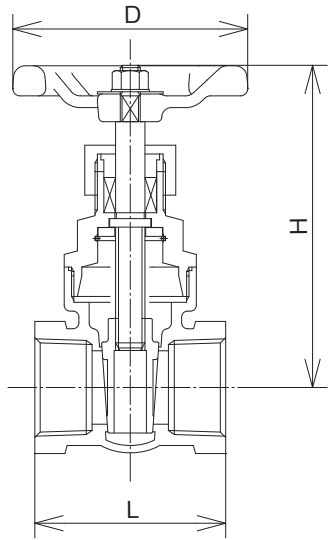
H-series 10K type

Product Code

USS/USSM

Screwed

Gate valve



Product Name	Material		Remarks
	USS	USSM	
Body	SCS13A	SCS14A	
Cover	SCS13A	SCS14A	
Stem	SUS304	SUS316	
Disc	SCS13A	SCS14A	
Packing	Reinforced PTFE		Conical
Gasket	Reinforced PTFE		
Handle	ADC		1/2B~2B
	FCMB275-5		2 1/2B, 3B

Nominal size (B)	L	D	(Reference) H Fully open
1/2	54	60	95
3/4	58	60	100
1	65	80	110
1 1/4	74	80	125
1 1/2	78	100	145
2	87	100	165
2 1/2	115	140	215
3	130	180	245

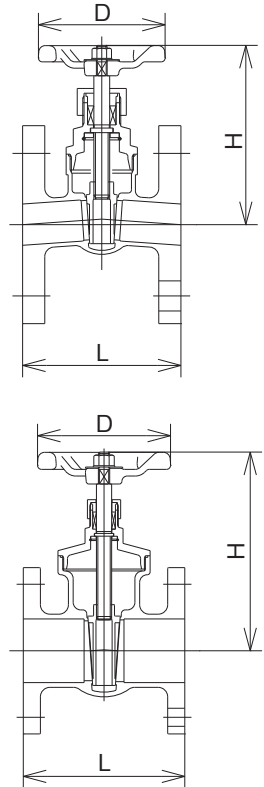
Unit: mm

Product Code

UFS/UFSM

Flanged

Gate valve



Product Name	Material		Remarks
	UFS	UFSM	
Body	SCS13A	SCS14A	
Cover	SCS13A	SCS14A	
Stem	SUS304	SUS316	
Disc	SCS13A	SCS14A	
Packing	Reinforced PTFE		Conical
Gasket	Reinforced PTFE		
Handle	ADC		10A~50A
	FCMB275-5		65A, 80A

Nominal size (A)	L	D	(Reference) H Fully open
15	85	60	98
20	95	60	103
25	100	80	113
32	110	80	129
40	125	100	150
50	140	100	170
65	170	140	215
80	190	180	245

Unit: mm

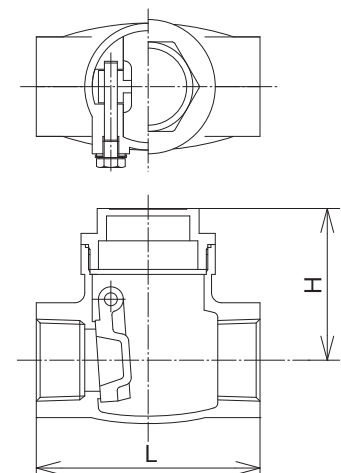
H-series 10K type

Product Code

USCS/USCSM

Screwed

Swing check valve With JIS-compliant end-to-end dimensions(JIS B 2011)



Product Name	Material		Remarks
	USCS	USCSM	
Body	SCS13A	SCS14A	
Cover	SCS13A	SCS14A	
Disc	SCS13A	SCS14A	
Hinge Pin	SUS316		
Gasket	Reinforced PTFE		

Nominal size (B)	L	H
1/2	65	50
3/4	80	55
1	90	60
1 1/4	105	70
1 1/2	120	75
2	140	80
2 1/2	180	95
3	200	105

Unit: mm

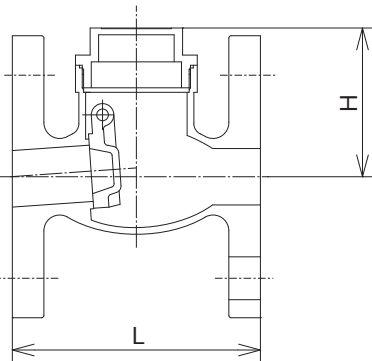
* 2 1/2, 3B: Compliant with the end-to-end dimensions of screwed globe valves required by JIS B 2011

Product Code

UFCS/UFCSM

Flanged

Swing check valve With JIS-compliant end-to-end dimensions(JIS B 2011)



Product Name	Material		Remarks
	UFCS	UFCSM	
Body	SCS13A	SCS14A	
Cover	SCS13A	SCS14A	
Disc	SCS13A	SCS14A	
Hinge Pin	SUS316		
Gasket	Reinforced PTFE		

Nominal size (A)	L	H
15	85	52
20	95	57
25	110	62
32	130	70
40	150	75
50	180	80
65	210	95
80	240	105

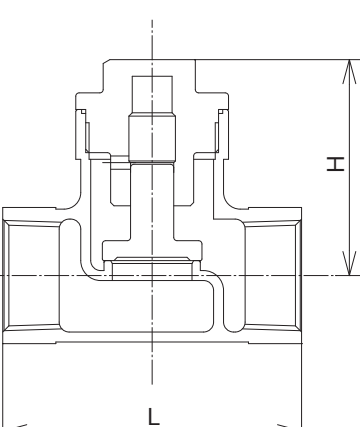
Unit: mm

Product Code

USC/USCM

Screwed

Lift check valve With JIS-compliant end-to-end dimensions(JIS B 2011)



Product Name	Material		Remarks
	USC	USCM	
Body	SCS13A	SCS14A	
Cover	SCS13A	SCS14A	
Disc	SUS304	SUS316	
Gasket	Reinforced PTFE		

Nominal size (B)	L	H
3/8	55	50
1/2	65	50
3/4	80	55
1	90	65
1 1/4	105	75
1 1/2	120	80
2	140	90

Unit: mm

H-series 10K type

Product Code

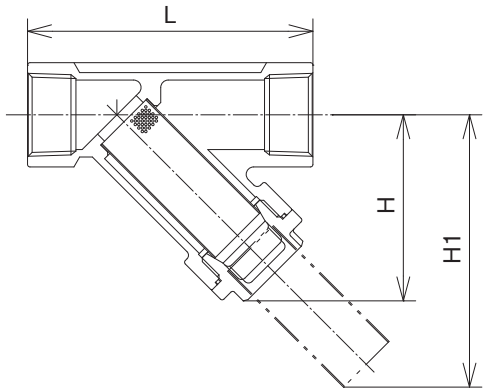
UST

Screwed

Strainer



Product Name	Material	Remarks
Body	SCS13A	
Cover	SCS13A	
Screen	SUS304	
Gasket	Reinforced PTFE	



Nominal size (B)	L	(Reference) H	(Reference) H1
1/4	65	45	60
3/8	70	45	60
1/2	85	55	78
3/4	100	70	96
1	115	80	110
1 1/4	135	85	125
1 1/2	150	100	141
2	180	115	176
2 1/2	220	140	213
3	250	155	239

Unit: mm

Product Code

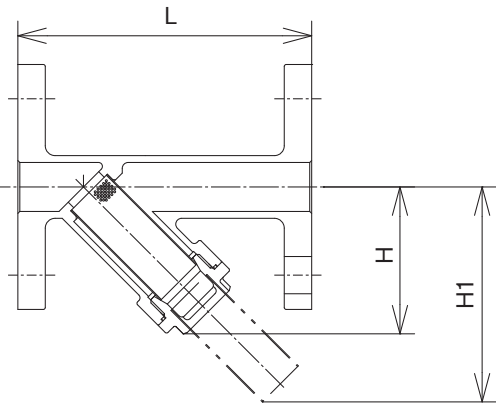
UFT

Flanged

Strainer



Product Name	Material	Remarks
Body	SCS13A	
Cover	SCS13A	
Screen	SUS304	
Gasket	Reinforced PTFE	



Nominal size (A)	L	(Reference) H	(Reference) H1
10	110	45	60
15	120	55	78
20	130	70	96
25	150	80	110
32	170	85	125
40	190	100	141
50	220	115	176

Unit: mm

S-series 10K Type

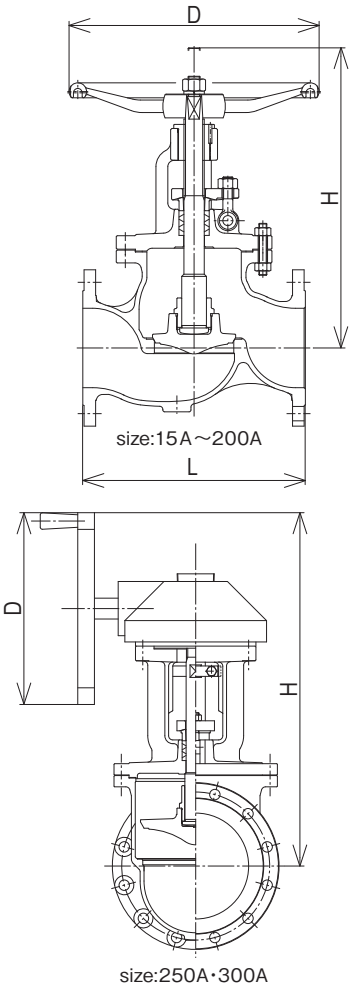
Product Code

U10FG/U10FGM/U10FGO	Flanged	Globe valve
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Product Name	Material			Remarks
	U10FG	U10FGM*	U10FGO*	
Body	SCS13A	SCS14A	SCS16A	
Cover	SCS13A	SCS14A	SCS16A	
Stem	ASTM A276-304	ASTM A276-316	ASTM A276-316L	
Disc	ASTM A276-304	ASTM A276-316	ASTM A276-316L	80A or lower
	ASTM A351-CF8	ASTM A351-CF8M	ASTM A351-CF3M	100A or higher
Packing	Reinforced PTFE			Conical
Gasket	Reinforced PTFE			
Handle	ASTM A47			100A or lower
	ASTM A536			125A~200A

※Contact us for details about product lineup

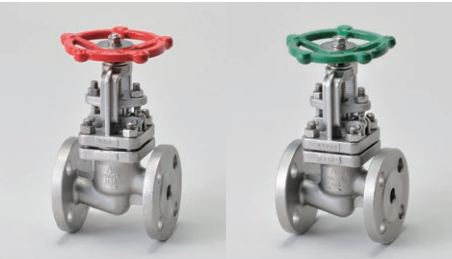


Nominal size (A)	L	D	(Reference) H Fully open
15	108	100	171
20	117	100	174
25	127	100	197
32	140	150	227
40	165	150	231
50	203	150	243
65	216	200	292
80	241	250	338
100	292	300	388
125	356	400	478
150	406	400	491
200	495	450	634
250*	622	460	847.5
300*	698	460	907.5

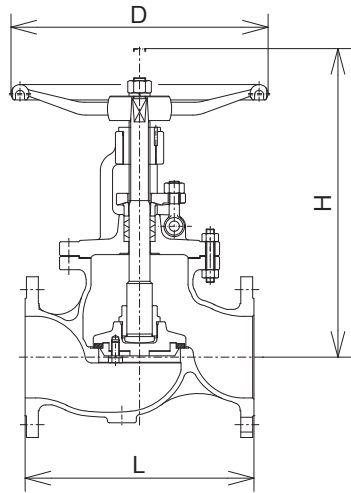
*With gear box Unit: mm

Product Code

U10FD/U10FDM	Flanged	Globe valve with disc
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Product Name	Material		Remarks
	U10FD	U10FDM	
Body	SCS13A	SCS14A	
Cover	SCS13A	SCS14A	
Stem	ASTM A276-304	ASTM A276-316	
Disc	ASTM A276-304	ASTM A276-316	80A or lower
	ASTM A351-CF8	ASTM A351-CF8M	100A or higher
Disc	Reinforced PTFE		
Packing	Reinforced PTFE		Conical
Gasket	Reinforced PTFE		
Handle	ASTM A47		100A or lower
	ASTM A536		125A or higher



Nominal size (A)	L	D	(Reference) H Fully open
15	108	100	171
20	117	100	174
25	127	100	197
32	140	150	227
40	165	150	231
50	203	150	243
65	216	200	292
80	241	250	338
100	292	300	388
125	356	400	478
150	406	400	491
200	495	450	634

Unit: mm

S-series 10K Type

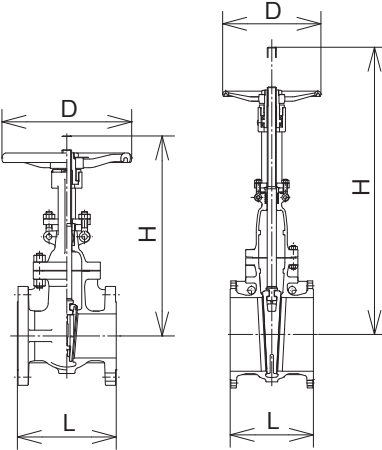
Product Code

U10FS/U10FSM/U10FSO	Flanged	Gate valve
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Product Name	Material			Remarks
	U10FS	U10FSM	U10FSO*	
Body	SCS13A	SCS14A	SCS16A	Co-Cr-W alloy 300A or larger
Cover	SCS13A	SCS14A	SCS16A	
Stem	ASTM A276-304	ASTM A276-316	ASTM A276-316L	
Disc	ASTM A351-CF8	ASTM A351-CF8M	ASTM A351-CF3M	
Packing	Reinforced PTFE			Conical
Gasket	Reinforced PTFE			
Handle	ASTM A47			250A or lower
	ASTM A536			300A or higher

※Contact us for details about product lineup



Nominal size (A)	L	D	(Reference) H Fully open
15	108	100	206
20	117	100	220
25	127	150	260
32	140	150	308
40	165	150	308
50	178	150	337
65	190	200	403
80	203	200	453
100	229	300	544
125	254	300	650
150	267	300	740
200	292	350	944
250	330	350	1145
300	356	400	1332
350	381	450	1482
400	406	600	1689

Unit: mm

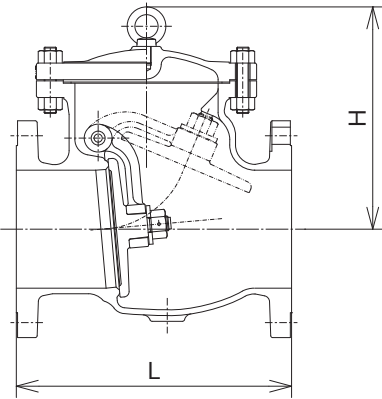
Product Code

U10FCS/U10FCSM/U10FCSO	Flanged	Swing check valve
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Product Name	Material			Remarks
	U10FCS	U10FCSM	U10FCSO*	
Body	SCS13A	SCS14A	SCS16A	
Cover	SCS13A	SCS14A	SCS16A	
Disc	ASTM A351-CF8	ASTM A351-CF8M	ASTM A351-CF3M	
Hinge Pin	ASTM A276-304	ASTM A276-316	ASTM A276-316L	
Gasket	Reinforced PTFE			
Plug	ASTM A276-304	ASTM A276-316	ASTM A276-316L	

※Contact us for details about product lineup



Nominal size (A)	L	(Reference) H
40	165	122
50	203	142
65	216	148
80	241	161
100	292	187
125	330	261
150	356	287
200	495	316
250	622	393
300	698	428

Unit: mm

S-series 10K Type

Product Code

U10FC/U10FCM/U10FCO

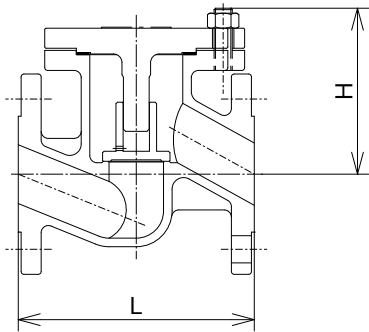
Flanged

Lift check valve



Product Name	Material			Remarks
	U10FC	U10FCM	U10FCO [※]	
Body	SCS13A	SCS14A	SCS16A	
Cover	SCS13A	SCS14A	SCS16A	
Disc	ASTM A276-304	ASTM A276-316	ASTM A276-316L	
Gasket	Reinforced PTFE			

※Contact us for details about product lineup



Nominal size (A)	L	(Reference) H
15	108	71
20	117	74
25	127	78
32	140	99
40	165	103

Unit: mm

Product Code

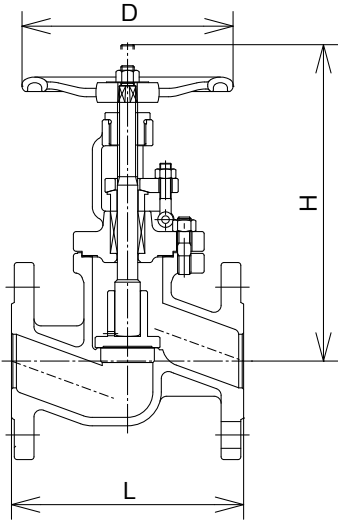
U10FGC/U10FGCM

Flanged

Screwed stop check valve



Product Name	Material		Remarks
	U10FGC	U10FGCM	
Body	SCS13A	SCS14A	
Cover	SCS13A	SCS14A	
Stem	ASTM A276-304	ASTM A276-316	
Disc	ASTM A276-304	ASTM A276-316	
Packing	Reinforced PTFE		
Gasket	Reinforced PTFE		
Handle	ASTM A47		



Nominal size (A)	L	D	(Reference) H Fully open
15	108	100	170
20	117	100	173
25	127	100	193
32	140	150	220
40	165	150	225
50	203	150	243

Unit: mm

Product Code

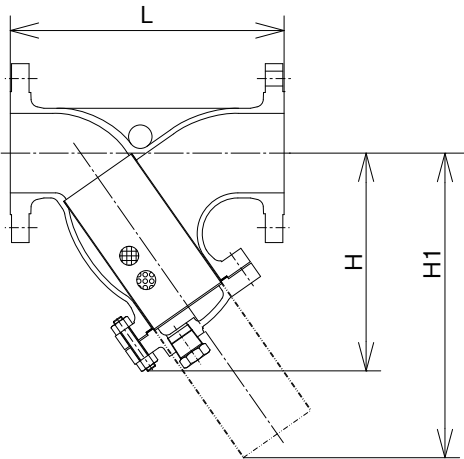
U10FT

Flanged

Strainer



Product Name	Material	Remarks
Body	SCS13A	
Cover	SCS13A	
Screen	SUS304	40 mesh
Gasket	Reinforced PTFE	
Plug	ASTM A276-304	



Nominal size (A)	L	(Reference) H	(Reference) H1
65	290	190	269
80	310	231	309
100	350	279	390
125	400	310	460
150	480	370	525
200	600	441	635
250	730	510	757
300	850	565	841

Unit: mm

S-series 20K Type

Product Code

U20FG/U20FGM/U20FGO

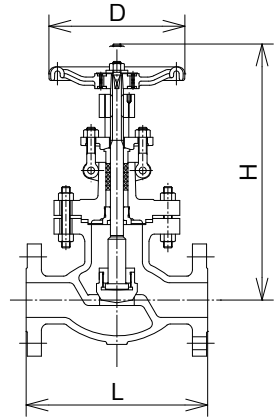
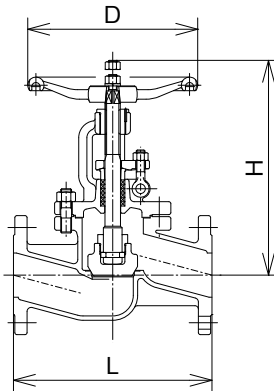
Flanged

Globe Valve



Product Name	Material			Remarks
	U20FG	U20FGM	U20FGO [※]	
Body	SCS13A	SCS14A	SCS16A	
Cover	SCS13A	SCS14A	SCS16A	
Stem	ASTM A276-304	ASTM A276-316	ASTM A276-316L	
Disc	ASTM A276-304	ASTM A276-316	ASTM A276-316L	80A or lower
	ASTM A351-CF8	ASTM A351-CF8M	ASTM A351-CF3M	100A or higher
Packing	Expanded graphite			
Gasket	Expanded graphite sheat			
Handle	ASTM A47			80A or lower
	ASTM A536			100A or higher

※Contact us for details about product lineup



Nominal size (A)	L	D	(Reference) H Fully open
15	152	100	185
20	178	100	187
25	203	150	230
40	229	200	275
50	267	200	278
65	292	250	316
80	318	300	361
100	356	400	435
125	400	450	554
150	444	450	567
200	559	560	694

Unit: mm

Product Code

U20FS/U20FSM/U20FSO

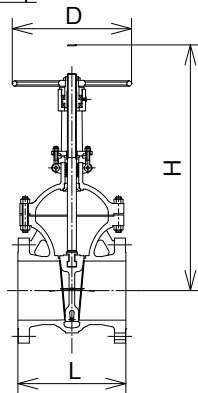
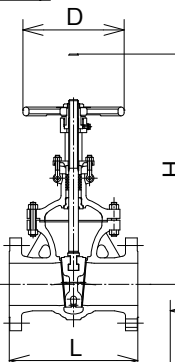
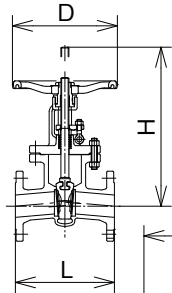
Flanged

Gate valve



Product Name	Material			Remarks
	U20FS	U20FSM [※]	U20FSO [※]	
Body	SCS13A	SCS14A	SCS16A	
Cover	SCS13A	SCS14A	SCS16A	
Stem	A276-304	A276-316	A276-316L	
Disc	A351-CF8	A351-CF8M	A351-CF3M	
Packing	Expanded graphite			
Gasket	Expanded graphite sheat			
Handle	ASTM A47			150A or lower
	ASTM A536			200A or higher

※Contact us for details about product lineup



Nominal size (A)	L	D	(Reference) H Fully open
15	140	100	201
20	152	100	225
25	165	150	268
40	190	200	324
50	216	200	360
65	241	200	407
80	283	300	455
100	305	300	548
125	381	350	677
150	403	350	779
200	419	400	969
250	457	450	1181
300	502	450	1381

Unit: mm

S-series 20K Type

S-series 20K Type

Product Code

U20FCS/U20FCSM/U20FCSO

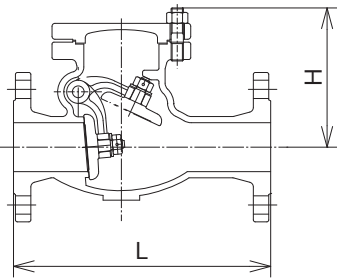
Flanged

Swing check valve



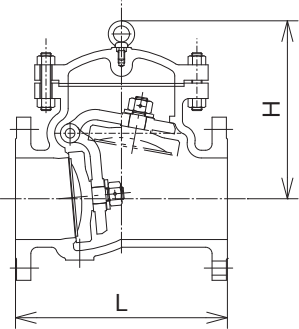
Product Name	Material			Remarks
	U20FCS	U20FCSM*	U20FCSO*	
Body	SCS13A	SCS14A	SCS16A	
Cover	SCS13A	SCS14A	SCS16A	
Disc	ASTM A351-CF8	ASTM A351-CF8M	ASTM A351-CF3M	
Hinge Pin	ASTM A276-304	ASTM A276-316	ASTM A276-316L	
Gasket	Expanded graphite sheat			
Plug	ASTM A276-304	ASTM A276-316	ASTM A276-316L	

※Contact us for details about product lineup



Nominal size (A)	L	(Reference) H Fully open
40	241	124.5
50	267	145
65	292	157
80	318	169
100	356	197
125	400	290
150	444	300
200	533	355

Unit: mm



Product Code

U20FC/U20FCM/U20FCO

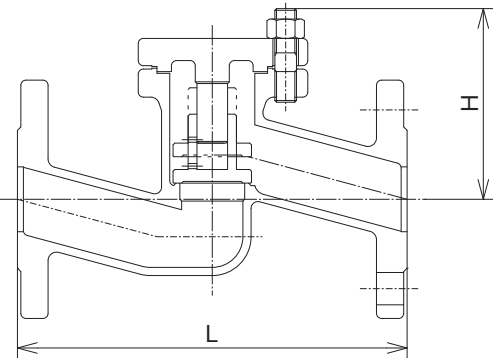
Flanged

Lift check valve



Product Name	Material			Remarks
	U20FC	U20FCM	U20FCO*	
Body	SCS13A	SCS14A	SCS16A	
Cover	SCS13A	SCS14A	SCS16A	
Disc	ASTM A276-304	ASTM A276-316	ASTM A276-316L	
Gasket	Expanded graphite sheat			

※Contact us for details about product lineup



Nominal size (A)	L	(Reference) H Fully open
15	152	76
20	178	78
25	203	92
40	229	112

Unit: mm

S-series 150lb Type

Product Code

U150FG/U150FGM/U150FGO

Flanged

Globe Valve



Product Name	Material			Remarks
	U150FG	U150FGM*	U150FGO*	
Body	SCS13A	SCS14A	SCS16A	
Cover	SCS13A	SCS14A	SCS16A	
Stem	ASTM A276-304	ASTM A276-316	ASTM A276-316L	
Disc	ASTM A276-304	ASTM A276-316	ASTM A276-316L	3B or lower
	ASTM A351-CF8	ASTM A351-CF8M	ASTM A351-CF3M	4B or higher
Packing	Reinforced PTFE			Conical
Gasket	Reinforced PTFE			
Handle	ASTM A47			4B or lower
	ASTM A536			5B or higher

※Contact us for details about product lineup

Product Code

U150FS/U150FSM/U150FSO

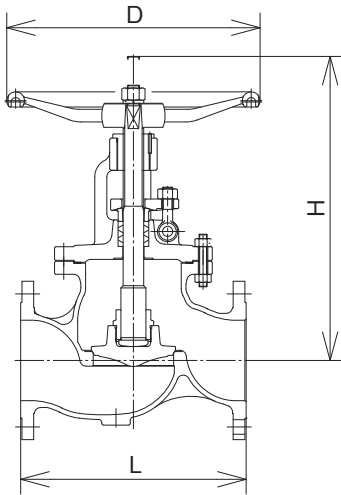
Flanged

Gate valve



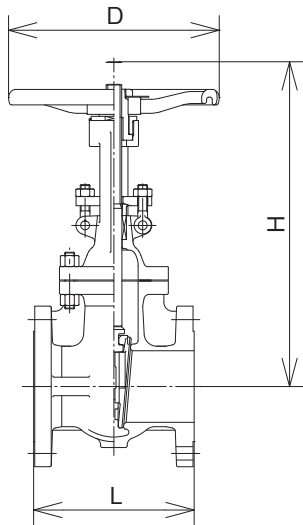
Product Name	Material			Remarks
	U150FS	U150FSM*	U150FSO*	
Body	SCS13A	SCS14A	SCS16A	Co-Cr-W alloy 12B or larger
Cover	SCS13A	SCS14A	SCS16A	
Stem	ASTM A276-304	ASTM A276-316	ASTM A276-316L	
Disc	ASTM A351-CF8	ASTM A351-CF8M	ASTM A351-CF3M	
Packing	Reinforced PTFE			Conical
Gasket	Reinforced PTFE			
Handle	ASTM A47			10B or lower
	ASTM A536			12B

※Contact us for details about product lineup



Nominal size (B)	L	D	(Reference) H Fully open
1/2	108	100	171
3/4	117	100	174
1	127	100	197
1 1/2	165	150	231
2	203	150	243
2 1/2	216	200	292
3	241	250	338
4	292	300	388
5	356	400	478
6	406	400	491
8	495	450	634

Unit: mm



Nominal size (B)	L	D	(Reference) H Fully open
1/2	108	100	196
3/4	117	100	220
1	127	150	260
1 1/2	165	150	308
2	178	150	337
2 1/2	190	200	403
3	203	200	453
4	229	300	544
5	254	300	650
6	267	300	740
8	292	350	944
10	330	350	1145
12	356	400	1332

Unit: mm

S-series 150lb type

Product Code

U150FCS/U150FCSM/U150FCSO

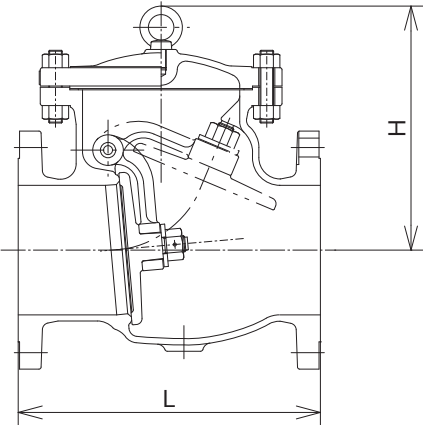
Flanged

Swing check valve



Product Name	Material			Remarks
	U150FCS	U150FCSM*	U150FCSO*	
Body	SCS13A	SCS14A	SCS16A	
Cover	SCS13A	SCS14A	SCS16A	
Disc	ASTM A351-CF8	ASTM A351-CF8M	ASTM A351-CF3M	
Hinge Pin	ASTM A276-304	ASTM A276-316	ASTM A276-316L	
Gasket	Reinforced PTFE			
Plug	ASTM A276-304	ASTM A276-316	ASTM A276-316L	

※Contact us for details about product lineup



Nominal size (B)	L	(Reference) H
1½	165	122
2	203	142
2½	216	148
3	241	161
4	292	187
5	330	261
6	356	287
8	495	316
10	622	393
12	698	428

Unit: mm

Product Code

U150FC/U150FCM/U150FCO

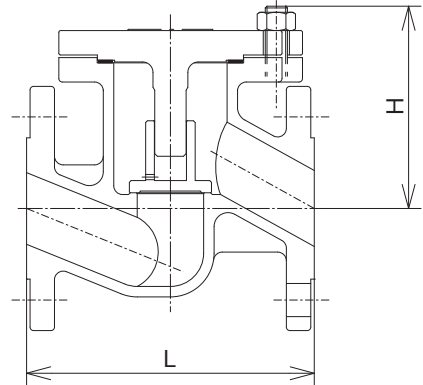
Flanged

Lift check valve



Product Name	Material			Remarks
	U150FC	U150FCM*	U150FCO*	
Body	SCS13A	SCS14A	SCS16A	
Cover	SCS13A	SCS14A	SCS16A	
Disc	ASTM A276-304	ASTM A276-316	ASTM A276-316L	
Gasket	Reinforced PTFE			

※Contact us for details about product lineup



Nominal size (B)	L	(Reference) H
½	108	71
¾	117	74
1	127	78
1½	165	103

Unit: mm

Mini ball type

Product Code

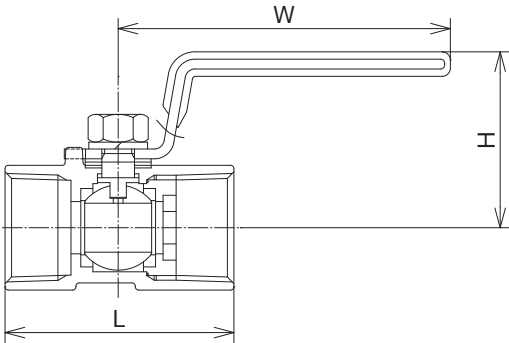
UB2

600 model screwed

Mini ball valve 2-stage reduced bore



Product Name	Material	Remarks
Body	SCS13A	
Ball	AISI316	1B or lower
	ASTM A351-CF8M	1 1/4B or higher
Stem	SUS316	3/4B or lower
	SUS304	1B or higher
Seat ring	Reinforced PTFE	
Packing	Reinforced PTFE	
Handle	SUS304	PVC coating



Nominal size (B)	L	W	(Reference) H
1/4	40.5	58	29
3/8	46	70	30
1/2	56.5	85	40
3/4	63	85	43
1	70	100	52
1 1/4	81	100	55
1 1/2	88	125	65
2	107	125	70

Unit: mm

Product Code

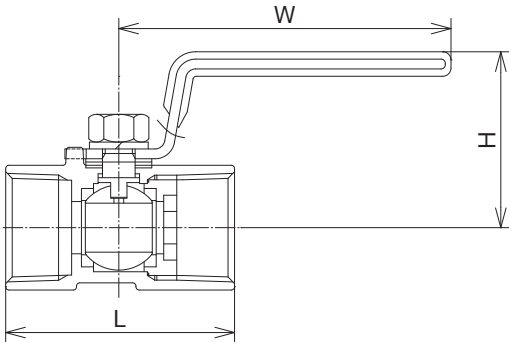
UB2N

600 model screwed

Mini ball valve 2-stage reduced bore



Product Name	Material	Remarks
Body	SCS14A	
Ball	AISI316	1B or lower
	ASTM A351-CF8M	1 1/4B or higher
Stem	SUS316	
Seat ring	Reinforced PTFE	
Packing	Reinforced PTFE	
Handle	SUS304	PVC coating



Nominal size (B)	L	W	(Reference) H
1/4	40.5	58	29
3/8	46	70	30
1/2	56.5	85	40
3/4	63	85	43
1	70	100	52
1 1/4	81	100	55
1 1/2	88	125	65
2	107	125	70

Unit: mm

Product Code

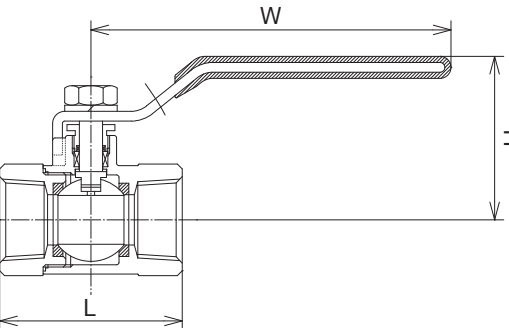
UB1N

800 model screwed

Mini ball valve 1-stage reduced bore



Product Name	Material	Remarks
Body	SCS14A	
Ball	AISI316	1/2B or lower
	ASTM A351-CF8M	3/4B or higher
Stem	SUS316	
Seat ring	Reinforced PTFE	
Packing	PTFE	
Handle	SUS304	PVC coating



Nominal size (B)	L	W	(Reference) H
1/4	59	103	52
3/8	59	103	52
1/2	59	103	52
3/4	66.5	103	56
1	77	109	66
1 1/4	92	145	80
1 1/2	101	145	84
2	122	180	96

Unit: mm

Mini ball valve

Product Code

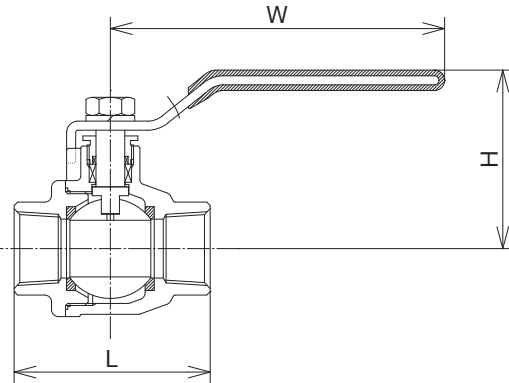
UB0N

800 model screwed

Mini ball valve Full bore



Product Name	Material	Remarks
Body	SCS14A	
Ball	AISI316	3/8B or lower
	ASTM A351-CF8M	1/2B or higher
Stem	SUS316	
Seat ring	Reinforced PTFE	
Packing	PTFE	
Handle	SUS304	PVC coating



Nominal size (B)	L	W	(Reference) H
1/4	55	103	52
3/8	55	103	52
1/2	68	103	56
3/4	74	109	66
1	86	145	80
1 1/4	100	145	84
1 1/2	109	180	96
2	130	180	102

Unit: mm

Product Code

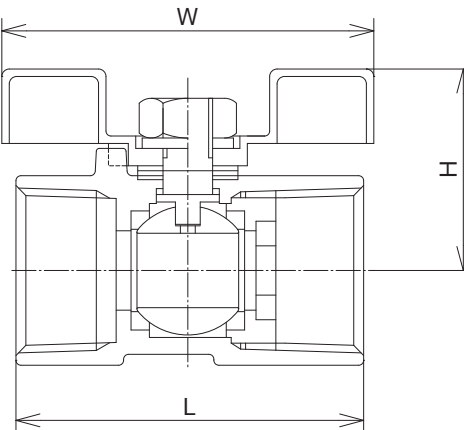
UBT2

600 model screwed

Mini ball valve



Product Name	Material	Remarks
Body	SCS13A	
Ball	AISI316	
Stem	SUS316	Diameter: 3/4B or lower
	SUS304	Bore diameter : 1B
Seat ring	Reinforced PTFE	
Packing	Reinforced PTFE	
Handle	ADC12	



Nominal size (B)	L	W	(Reference) H
1/4	40.5	45	26
3/8	46	45	28
1/2	56.5	50	33
3/4	63	50	36
1	70	70	41

Unit: mm

Product Code

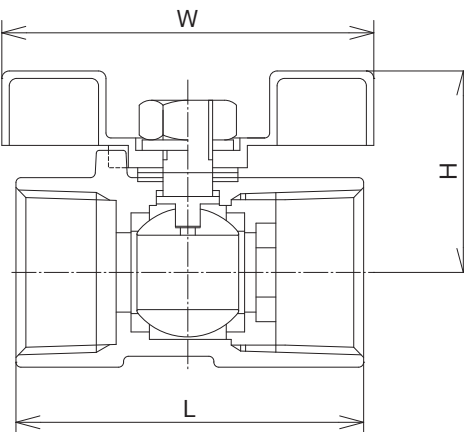
UBT2N

600 model screwed

Mini ball valve



Product Name	Material	Remarks
Body	SCS14A	
Ball	AISI316	
Stem	SUS316	
Seat ring	Reinforced PTFE	
Packing	Reinforced PTFE	
Handle	ADC12	



Nominal size (B)	L	W	(Reference) H
1/4	40.5	45	26
3/8	46	45	28
1/2	56.5	50	33
3/4	63	50	36
1	70	70	41

Unit: mm

Ball Valves 10K type

Product Code

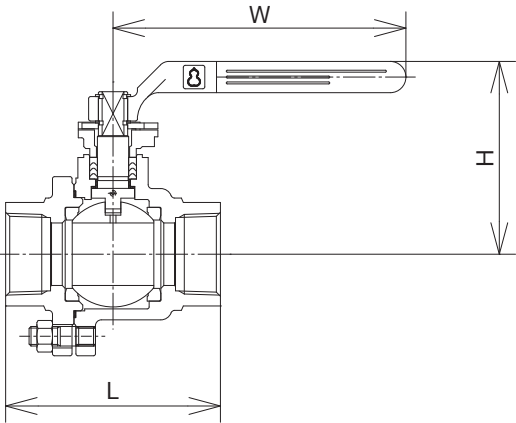
BU10S1B

10K screwed type

Ball valves General-purpose



Product Name	Material	Remarks
Body	SCS13A	
Ball	ASTM A182-F304	
Stem	SUS304	
Seat ring	Special PTFE	FT Seat
Packing	PTFE	
Handle	FCMB340-10	



Nominal size (B)	L	W	(Reference) H
3/8	62	120	72
1/2	65	120	74
3/4	80	120	77
1	90	150	92
1 1/4	110	150	98
1 1/2	120	220	110
2	140	220	118

Unit: mm

Product Code

BU10F1B/BU10F1BM/BU10F1B0

Flanged

Ball valves General-purpose



Product Name	Material			Remarks
	BU10F1B	BU10F1BM	BU10F1B0※	
Body	SCS13A	SCS14A	SCS16A	
Ball	ASTM A182-F304	ASTM A182-F316	ASTM A182-F316L	100A or lower
	SCS13A	SCS14A	SCS16A	125A or higher
Stem	SUS304	ASTM A182-316L	ASTM A182-316L	100A or lower
		SUS316	ASTM A276-316L	125A or higher
Seat ring	Special PTFE			FT Seat
Packing	PTFE			
Handle	FCMB340-10			100A or lower
	SCS13A+SGP			125A or higher

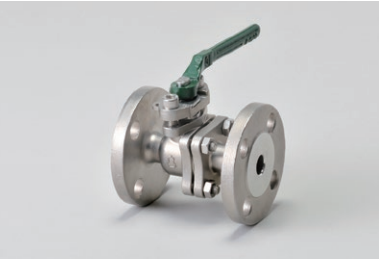
※Contact us for details about the product size.

Product Code

BU10F1P/BU10F1PM/BU10F1P0

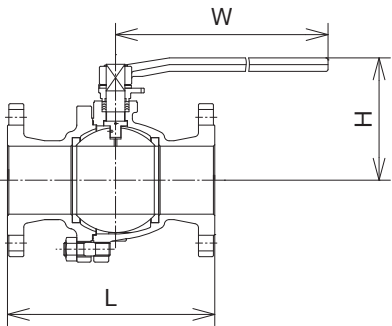
Flanged

Ball valves For high temperatures



Product Name	Material			Remarks
	BU10F1P	BU10F1PM	BU10F1P0※	
Body	SCS13A	SCS14A	SCS16A	
Ball	ASTM A182-F304	ASTM A182-F316	ASTM A182-F316L	100A or lower
	SCS13A	SCS14A	SCS16A	125A or higher
Stem	SUS304	ASTM A182-316L	ASTM A182-316L	100A or lower
		SUS316	ASTM A276-316L	125A or higher
Seat ring	Special PTFE			P seat
Packing	Expanded graphite			
Handle	FCMB340-10			100A or lower
	SCS13A+SGP			125A or higher

※Contact us for details about the product size.



Nominal size (A)	L	W	(Reference) H
15	108	120	74
20	117	120	77
25	127	150	92
32	140	150	98
40	165	220	110
50	178	220	118
65	190	220	132
80	203	400	171
100	229	400	186
125	356	750	283
150	394	1000	303
200	457	1000	379

Unit: mm

Ball Valves Three-Way Ball Valves 10K type

Product Code

BU10F1B/BU10F1BM

Flanged

Ball valves General-purpose Trunnion type



Product Name	Material		Remarks
	BU10F1B	BU10F1BM	
1-stage body	SCS13A	SCS14A	
2-stage body	SCS13A	SCS14A	
Ball	SCS13A	SCS14A	
Upper stem	SUS304	SUS316	
Lower stem	SUS304	SUS316	
Seat ring	PTFE		
Seat retainer	SCS13A	SCS14A	
Seat retainer O-ring*	FKM		
Backup ring	SUS316L		
Gland packing	PTFE conical packing		
Gasket	Reinforced PTFE		

* Special customization is available for the conditions of use.

Product Code

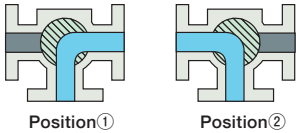
BU10F0TL2/BU10F0TL4

Flanged

Three-way ball valves General-purpose L-port (2/4 seats)

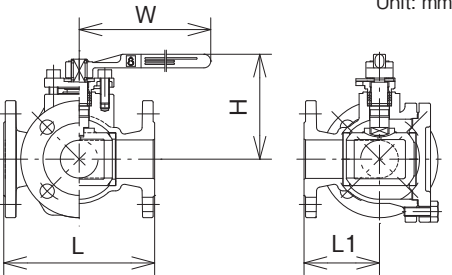


Three way ball valves stop position



Nominal size (A)	L	W	L1	(Reference) H
20	140	120	70	85
25	160	150	80	102
40	180	220	90	129
50	200	220	100	140
65	240	220	120	149
80	260	400	130	196
100	330	400	165	210

Unit: mm



Product Code

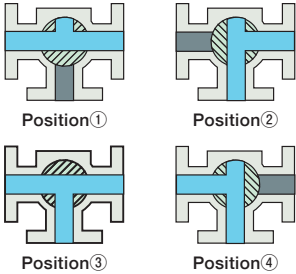
BU10F0TT4

Flanged

Three-way ball valves General-purpose T-Port (4 seats)

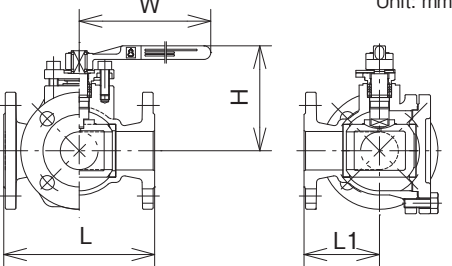


Three way ball valves stop position



Nominal size (A)	L	W	L1	(Reference) H
20	140	120	70	85
25	160	150	80	102
40	180	220	90	129
50	200	220	100	140
65	240	220	120	149
80	260	400	130	196
100	330	400	165	210

Unit: mm



Position of Standard Product is ①↔②. The position can be confirmed by the groove on the valve stem. For 180 degree operation, Use after removing the stopper.

Product Name	Material	Remarks
Body	SCS13A	
Ball	SUS304 or SCS13A	
Stem	SUS304	
Seat ring	Special PTFE	FT Seat
Packing	PTFE	
Handle	FCMB340-10	

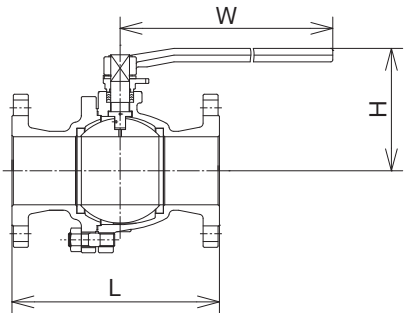
Ball Valves 20K Type

Product Code

BU20F1B/BU20F1BM

Flanged

Ball valves General-purpose



Nominal size (A)	L	W	(Reference) H
15	140	120	79
20	152	120	82
25	165	150	94
32	178	150	100
40	190	220	112
50	216	220	120
65	241	220	134
80	283	400	170
100	305	750	230
150	403	1000	302
200	502	1450	380

Unit: mm

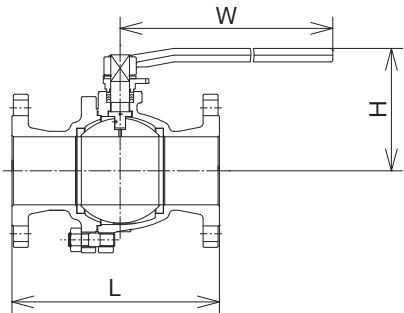
Product Name	Material		Remarks
	BU20F1B	BU20F1BM	
Body	SCS13A	SCS14A	
Ball	ASTM A182-F304	ASTM A182-F316	100A or lower
	SCS13A	SCS14A	150A or higher
Stem	SUS304	ASTM A182-316L	100A or lower
		SUS316	150A or higher
Seat ring	Special PTFE		FT Seat
Packing	PTFE		
Handle	FCMB340-10		80A or lower
	SCS13A+SGP		100A or higher

Product Code

BU20F1P/BU20F1PM

Flanged

Ball valves For high temperatures



Nominal size (A)	L	W	(Reference) H
15	140	120	79
20	152	120	82
25	165	150	94
32	178	150	100
40	190	220	112
50	216	220	120
65	241	220	134
80	283	400	170
100	305	750	230
150	403	1000	302
200	502	1450	380

Unit: mm

Product Name	Material		Remarks
	BU20F1P	BU20F1PM	
Body	SCS13A	SCS14A	
Ball	ASTM A182-F304	ASTM A182-F316	100A or lower
	SCS13A	SCS14A	150A or higher
Stem	SUS304	ASTM A182-316L	100A or lower
		SUS316	150A or higher
Seat ring	Special PTFE		P Seat
Packing	Expanded graphite		
Handle	FCMB340-10		80A or lower
	SCS13A+SGP		100A or higher

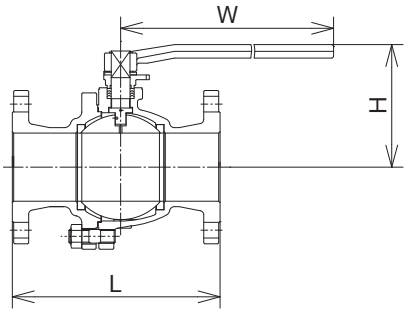
Ball Valves 150lb Type

Product Code

BU150F1B/BU150F1BM/BU150F1BO

Flanged

Ball valves General-purpose



Nominal size (B)	L	W	(Reference) H
1/2	108	120	79
3/4	117	120	82
1	127	150	94
1 1/2	165	220	112
2	178	220	120
2 1/2	190	220	134
3	203	400	170
4	229	400	186
5	356	750	282
6	394	1000	302
8	457	1000	380

Unit: mm

Product Name	Material			Remarks
	BU150F1B	BU150F1BM	BU150F1BO	
Body	SCS13A	SCS14A	SCS16A	
Ball	ASTM A182-F304	ASTM A182-F316	ASTM A182-F316L	4B or lower
	SCS13A	SCS14A	SCS16A	5B or higher
Stem	SUS304	ASTM A182-316L	ASTM A182-316L	4B or lower
		SUS316	ASTM A276-316L	5B or higher
Seat ring	Special PTFE			FT Seat
Packing	PTFE			
Handle	FCMB340-10			4B or lower
	SCS13A+SGP			5B or higher

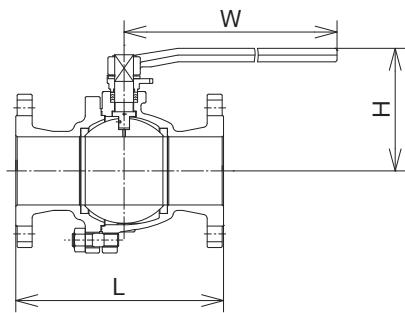
※Contact us for details about the product size.

Product Code

BU150F1P

Flanged

Ball valves For high temperature



Nominal size (B)	L	W	(Reference) H
1/2	108	120	79
3/4	117	120	82
1	127	150	94
1 1/2	165	220	112
2	178	220	120
2 1/2	190	220	134
3	203	400	170
4	229	400	186
6	394	1000	302
8	457	1000	380

Unit: mm

Product Name	Material	Remarks
Body	SCS13A	
Ball	ASTM A182-F304	4B or lower
	SCS13A	6B or higher
Stem	SUS304	
Seat ring	Special PTFE	P Seat
Packing	Expanded graphite	
Handle	FCMB340-10	4B or lower
	SCS13A+SGP	6B or higher

Ball Valve 300lb Type

Product Code

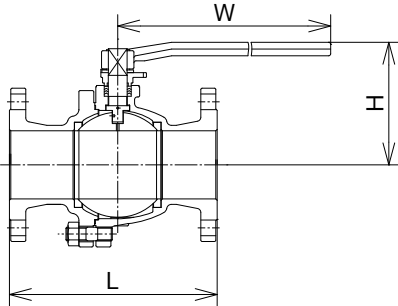
BU300F1B

Flanged

Ball valves General-purpose



Product Name	Material	Remarks
Body	SCS13A	
Ball	ASTM A182-F304	4B or lower
	SCS13A	6B or higher
Stem	SUS304	
Seat ring	Special PTFE	FT Seat
Packing	PTFE	
Handle	FCMB340-10	3B or lower
	SCS13A+SGA	4B or higher



Nominal size (B)	L	W	(Reference) H
1/2	140	120	79
3/4	152	120	82
1	165	150	94
1 1/2	190	220	112
2	216	220	120
2 1/2	241	220	134
3	283	400	170
4	305	750	230
6	403	1000	302
8	502	1450	380

Unit: mm

Product Code

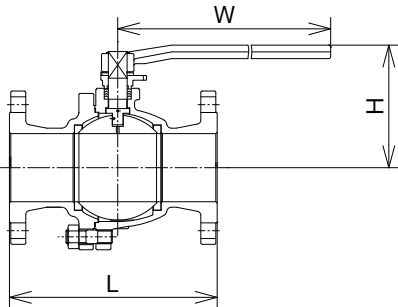
BU300F1P

Flanged

Ball valves For high temperatures



Product Name	Material	Remarks
Body	SCS13A	
Ball	ASTM A182-F304	4B or lower
	SCS13A	6B or higher
Stem	SUS304	
Seat ring	Special PTFE	P Seat
Packing	Expanded graphite	
Handle	FCMB340-10	3B or lower
	SCS13A+SGP	4B or higher



Nominal size (B)	L	W	(Reference) H
1/2	140	120	79
3/4	152	120	82
1	165	150	94
1 1/2	190	220	112
2	216	220	120
2 1/2	241	220	134
3	283	400	170
4	305	750	230
6	403	1000	302
8	502	1450	380

Unit: mm

Product Codes of General Valves

Example: H-series

Standard type

Globe valve with stainless steel 10K disc

Symbol	Body material
U	Stainless steel

Symbol	Shape of connection
No symbol	H series 10K
10	S series 10K
20	S series 20K
150	S series 150lb

Symbol	Shape of connection
F	Flanged
S	Screwed

Symbol	Type
S	Gate valve
G	Globe valve
D	Globe valve with disc
CS	Swing check valve
C	Lift check valve
T	Strainer

Symbol	Body material
No symbol	SCS13A
M	SCS14A

Production size

※The H-series valves with the “E” symbol are those with Kuwana Metals’ standard specifications. “E” stands for Economical. Example: UESG

Ball Valve Product Codes

Standard type

Symbol	Type
BU	Ball valve (stainless steel)

Symbol	Nominal pressure
10	10K
20	20K
150	150lb
300	300lb

Symbol	Shape of connection
F	Flanged
S	Screwed

Symbol	Bore diameter
0	Full-bore, no fire-safe
1	Full-bore, fire-safe

Symbol	Valves Type
B	General-purpose
P	For high temperatures
TL2	Three-way ball valves L-port, 2seats
TL4	Three-way ball valves L-port, 4seats
TT4	Three-way ball valves T-port, 4seats

Symbol	Body material
No symbol	SCS13A
M	SCS14A
O	SCS16A

Production size

Standard type

Symbol	Type
UB	Stainless steel mini ball valve Lever handle
UBT	Stainless steel mini ball valve T-handle

Symbol	Bore diameter	
0	Full bore	
1	Reduced bore	1-stage
2		2-stage

Symbol	Body material
No symbol	SCS13A
N	SCS14A

Production size