

# STAINLESS STEEL

# Stainless Steel

## General Design Specifications

Series	Normal pressure	Pressure - temperature ratings*	Face to face dimensions	End connection dimensions	Wall Thickness
A	10K	JIS B2220	JIS B2002	JIS B2220 10K flanged	ASME B16.34
	20K			JIS B2220 20K flanged	
	Class 150/300/600	ASME B16.34	ASME B16.10	ASME B16.5 flanged	
HA	Class 150/300	ASME B16.34	ASME B16.10	ASME B16.5 flanged	API 603
C	Class 150/300/600/900/1500	ASME B16.34	ASME B16.10	ASME B16.5 flanged	API 600
B	5K	0.5MPa 150°C	JIS B 2011 KITZ Std.	JIS B0203 threaded	JIS B 2011 KITZ Std.
	10K	1.0MPa 180°C		JIS B2220 5K 10K flanged	
	20K	2.0MPa 180°C			
	Type 200	KITZ Std.		ASME B1.20.1 threaded	
D	Class 150/300/600	ASME B16.34	KITZ Std.	ASME B1.20.1 threaded ASME B16.11 socket welded	ASME B16.34
AJ	10K	JIS B2220	KITZ Std.	JIS B2220 10K flanged	ASME B16.34
	20K			JIS B2220 20K flanged	
	Class 150/300	ASME B16.34		ASME B16.5 flanged	

\*Actual pressure-temperature rating in service depends on the materials of gland packing and gasket chosen for valves.

## Bonnet Gasket Materials

Depending on the class ratings and servicing conditions, the following gasket materials are available\* for the body/bonnet flange gaskets of KITZ stainless and high alloy steel valves. Specify your gasket material in your purchase order.

Series	Series C			Series A·HA·D·AJ		
Gasket material	Class 150	Class 300	Class 600/900/1500	10K, Class 150	20k, Class 300	Class 600
Corrugated metal	●					
Ring joint metal			●			
Spiral wound metal, PTFE filled		●			●	●
Flexible graphite	●			●	●	
Spiral wound metal, flexible graphite filled		●			●	●
Stainless steel inserted flexible graphite	●			●	●	
Ceramic filled PTFE	●			●	●	

Please refer to our website ([www.kitz.co.jp](http://www.kitz.co.jp)) or contact KITZ for details. \*Except Series B valves, which employ only KITZ standard materials.

## Gland Packing Materials



The following packing materials can be chosen for KITZ stainless and high alloy steel valves, depending on the service conditions or market requirements. Specify your packing material in your purchase order.

	Packing material	Service conditions
Asbestos-free	Braided PTFE fiber	260°C (500°F) corrosion resistant
	PTFE cup & cone / PTFE V-ring	150°C (300°F) corrosion resistant
	Carbon fiber	500°C (930°F) high pressure
	Flexible graphite	600°C (1110°F)* corrosion resistant
	Inconel wired flexible graphite	600°C (1110°F)* corrosion resistant

Please refer to our website ([www.kitz.co.jp](http://www.kitz.co.jp)) or contact KITZ for details. \*Except Series B valves, which employ only KITZ standard materials. \*455°C (850°F) for oxidizing atmosphere.

Contact KITZ Corporation or your KITZ distributors for an optional requirement for gasket or gland packing materials other than those listed above.

## Disc Construction

Series	Nominal pressure	Solid wedge 	Flexible wedge 
<b>A</b>	10K, 20K, Class 150, 300, 600	—	All sizes
<b>HA</b>	Class 150, 300	—	All sizes
<b>C</b>	Class 150, 300	4 and smaller	6 and larger
	Class 600, 900, 1500	1 1/2 and smaller	2 and larger
<b>B</b>	5K, 10K, 20K, 200	All sizes	—
<b>D</b>	Class 150, 300, 600	—	All sizes
<b>AJ</b>	10K, 20K, Class 150, 300	—	All sizes

## Pressure-Temperature Ratings for Series B (KITZ Standard)

Temperature	W	G1	G2
	120°C below	150°C below	180°C below
5K	0.7	0.5	—
10K	1.4	1.1	1.0
20K	2.0	1.2	1.0

W: Static water without pressure variation

G1,G2: Steam, air, non-inflammable gas and oil (lubricant and machining oil)

Note: Actual pressure-temperature rating in service depends on the materials of gland packing and gasket chosen for valves.

### Product Coding (Except for Series B)

**AK-150 U M A M 4**

1 2 3 4 5 6 7

#### 1 End connection

**None..** RF-Flanged with smooth finished gasket face

**AK.....** Threaded Ends to ASME B1.20.1 NPT

**AW.....** Socket Welding Ends to ASME B16.11

#### 2 Nominal pressure

Code	Nominal pressure	Code	Nominal pressure
5	JIS 5K	300	ASME 300
10	JIS 10K	600	ASME 600
20	JIS 20K	900	ASME 900
150	ASME Class150	1500	ASME Class1500

#### 3 Product identification

**U...** Identification code for stainless and high alloy steel valves in general.

#### 4 Valve type

**M...** Gate valves  
**P...** Globe valves  
**PD...** Soft Seated Globe valves  
**O...** Swing Check valves  
**N...** Lift Check valves  
**Y...** Y-pattern Strainers

#### 5 Valve design

**Code Series**  
**A.....** Series A  
**HA.....** Series HA  
**C.....** Series C  
**None..** Series D  
**AJ.....** Series A, Jacketed  
**AW.....** Series A, Bellows Seal

#### 6 Shell material

**None..** CF8 (304)  
**M.....** CF8M (316)  
**O.....** CF3M (316L)  
**V.....** CF3 (304L)  
**CB.....** CF8C (321)  
**CG.....** CG8M (317)  
**CK.....** CK20 (310)  
**SD.....** Super Duplex Stainless Steel (SDPV-K1)  
**CN.....** CN7M (Alloy 20)  
**HB.....** N-12MV (Hastelloy B)  
**HC.....** CW-12MW (Hastelloy C)

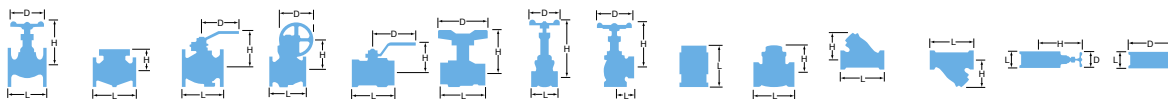
#### 7 Nominal valve size


**JIS flanged..** in mm base  
**Others.....** in inches base






## KITZ Low Emission Valves

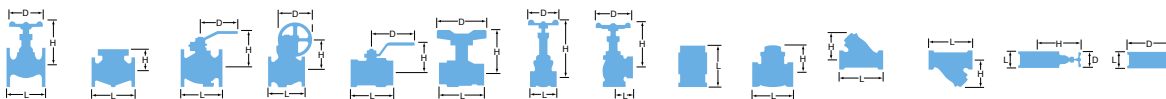
In the United States, the Federal Clean Air Act was amended drastically in 1990 in order to realize the new environmental protection policy of a 95% reduction in fugitive emission or leak levels of toxic gases and chemicals from plant equipment. Promulgated in April 1994, the new law requires all plants handling a toxic gas specified by the Environmental Protection Agency to periodically monitor their plant equipment for the detection of leaks exceeding 500 ppm, and to repair or replace all defective parts immediately. California has exceeded the Federal Law with a state regulation requiring a maximum leak level of 100 ppm for an astonishing 99% reduction in such environmental pollution for the Northern California Region after 1997.

Our low emission valves—the proud fruits of several years of trial and error at our laboratory—are designed, engineered, manufactured, and tested to now meet the 100-ppm maximum emission level. This is the standard specification in North America for KITZ Class 150, 300, and 600 Series A and C stainless and high alloy steel valves. In other markets, all these low emission valves are optionally available. Major design considerations for having upgraded our standard valves to low emission performance are introduced below.



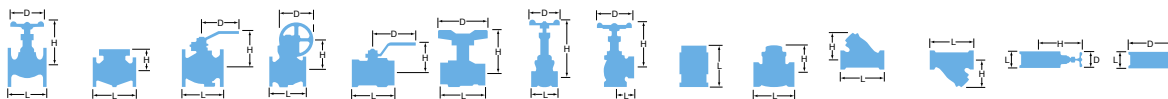
TYPE			B-SERIES GATE			B-SERIES GATE			B-SERIES GATE			B-SERIES GATE			B-SERIES GATE			
Stainless Steel																		
FIG			UE			UEM			UEB			UEBM			UEL			
PRESSURE			10K			10K			10K			10K			10K			
END CONNECTION			BS21 (JIS B0203)			BS21 (JIS B0203)			JIS B2220			JIS B2220			BS21 (JIS B0203)			
DIMENSIONS		inch	mm	L	H	D	L	H	D	L	H	D	L	H	D	L	H	D
	1/2	15	—	—	—	—	—	—	—	85	99	70	—	—	—	54	96	70
	3/4	20	—	—	—	—	—	—	—	95	105	70	—	—	—	58	101	70
	1	25	—	—	—	—	—	—	—	100	116	80	100	116	80	65	112	80
	1 1/4	32	—	—	—	—	—	—	—	110	128	80	110	128	80	74	123	80
	1 1/2	40	—	—	—	—	—	—	—	125	170	100	125	170	100	78	150	100
	2	50	—	—	—	—	—	—	—	140	188	100	140	188	100	87	167	100
	2 1/2	65	115	248	135	115	248	135	170	248	135	170	248	135	—	—	—	—
	3	80	130	275	155	130	275	155	190	275	155	190	275	155	—	—	—	—
4	100	155	315	200	155	315	200	—	—	—	—	—	—	—	—	—	—	
BODY			SCS13A			SCS13A			SCS13A			SCS14A			SCS13A			
BONNET			SCS13A			SCS13A			SCS13A / SUS304			SCS14A / SUS316			SCS13A			
STEM			SUS304			SUS304			SUS304			SUS316			SUS304			
DISC			SCS13A			SCS13A			SCS13A			SCS14A			SCS13A			






TYPE			B-SERIES GATE				B-SERIES GATE				A-SERIES GATE				A-SERIES GATE				A-SERIES GATE			
Stainless Steel																						
FIG			UELM				DKUELM				10UMA / 10UMAT				10UMAM / 10UMAMT				20UMA / 20UMAT			
PRESSURE			10K				PN16				10K				10K				20K			
END CONNECTION			BS21 (JIS B0203)				DIN 259				JIS B2220				JIS B2220				JIS B2220			
DIMENSIONS			inch	mm	L	H	D	L	H	D	L	H	D	L	H	D	L	H	D			
	1/2	15	54	96	70	54	96	70	108	201	90	108	201	90	140	209	100					
	3/4	20	58	101	70	58	101	70	117	211	90	117	211	90	152	220	100					
	1	25	65	112	80	65	112	80	127	224	100	127	224	100	165	239	100					
	1 1/4	32	74	123	80	74	123	80	140	240	100	140	240	100	—	—	—					
	1 1/2	40	78	150	100	78	150	100	165	284	140	165	284	140	190	294	140					
	2	50	87	167	100	87	167	100	178	336	160	178	336	160	216	355	180					
	2 1/2	65	—	—	—	—	—	—	190	374	180	190	374	180	241	404	180					
	3	80	—	—	—	—	—	—	203	444	200	203	444	200	283	472	225					
	4	100	—	—	—	—	—	—	229	523	225	229	523	225	305	560	250					
	5	125	—	—	—	—	—	—	254	606	250	254	606	250	381	626	300					
	6	150	—	—	—	—	—	—	267	711	250	267	711	250	403	753	350					
	8	200	—	—	—	—	—	—	292	924	300	292	924	300	419	968	400					
	10	250	—	—	—	—	—	—	330	1126	350	330	1126	350	457	1177	450					
	12	300	—	—	—	—	—	—	356	1336	400	356	1336	400	502	1378	500					
	14	350	—	—	—	—	—	—	381	1486	450	381	1486	450	562	1590	600					
	16	400	—	—	—	—	—	—	406	1690	600	406	1690	600	638	1810	600					
	18	450	—	—	—	—	—	—	432	1890	600	432	1890	600	714	1980	680					
	20	500	—	—	—	—	—	—	457	2100	680	457	2100	680	791	2190	760					
	24	600	—	—	—	—	—	—	508	2460	760	508	2460	760	943	2580	910					
BODY			SCS14A				A351 Gr.CF8M				SCS13A				SCS14A				SCS13A			
BONNET			SCS14A				A351 Gr.CF8M				SCS13A				SCS14A				SCS13A			
STEM			SUS316				A276 TYPE316				SUS304				SUS316				SUS304			
DISC			SCS14A				A351 Gr.CF8M				SCS13A				SCS14A				SCS13A			
											Fig. 10UMAT : Gland Packing / PTFE				Fig. 10UMAMT : Gland Packing / PTFE				Fig. 20UMAT : Gland Packing / PTFE			








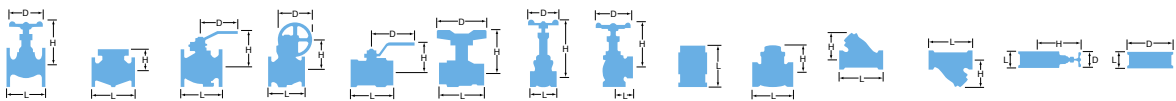
TYPE	A-SERIES GATE					A-SERIES GATE			A-SERIES GATE			A-SERIES GATE			A-SERIES GATE		
Stainless Steel																	
FIG	20UMAM / 20UMAMT					150UMA / 150UMAT			150UMAM / 150UMAMT			300UMA			300UMAM		
PRESSURE	20K					Class 150			Class 150			Class 300			Class 300		
END CONNECTION	JIS B2220					ASME B16.5			ASME B16.5			ASME B16.5			ASME B16.5		
DIMENSIONS	inch	mm	L	H	D	L	H	D	L	H	D	L	H	D	L	H	D
	1/2	15	140	209	100	108	201	90	108	201	90	140	209	100	140	209	100
	3/4	20	152	220	100	117	211	90	117	211	90	152	220	100	152	220	100
	1	25	165	239	100	127	224	100	127	224	100	165	239	100	165	239	100
	1 1/2	40	190	294	140	165	284	140	165	284	140	190	294	140	190	294	140
	2	50	216	355	180	178	336	160	178	336	160	216	355	180	216	355	180
	2 1/2	65	241	404	180	190	374	180	190	374	180	241	404	180	241	404	180
	3	80	283	472	225	203	444	200	203	444	200	283	472	225	283	472	225
	4	100	305	560	250	229	523	225	229	523	225	305	560	250	305	560	250
	5	125	381	626	300	254	606	250	254	606	250	381	626	300	381	626	300
	6	150	403	753	350	267	711	250	267	711	250	403	753	350	403	753	350
	8	200	419	968	400	292	924	300	292	924	300	419	968	400	419	968	400
	10	250	457	1177	450	330	1126	350	330	1126	350	457	1177	450	457	1177	450
	12	300	502	1378	500	356	1336	400	356	1336	400	502	1378	500	502	1378	500
	14	350	762	1590	600	381	1486	450	381	1486	450	762	1590	600	762	1590	600
	16	400	838	1810	600	406	1690	600	406	1690	600	838	1810	600	838	1810	600
	18	450	914	1980	680	432	1890	600	432	1890	600	914	1980	680	914	1980	680
	20	500	991	2190	760	457	2100	680	457	2100	680	991	2190	760	991	2190	760
	24	600	1143	2580	910	508	2460	760	508	2460	760	1143	2580	910	1143	2580	910
BODY	SCS14A					A351 Gr.CF8			A351 Gr.CF8M			A351 Gr.CF8			A351 Gr.CF8M		
BONNET	SCS14A					A351 Gr.CF8			—			A351 Gr.CF8			A351 Gr.CF8M		
COVER	—					—			A351 Gr.CF8M			—			—		
STEM	SUS316					TYPE 304			TYPE 316			A276 TYPE 304			A276 TYPE 316		
DISC	SCS14A					A351 Gr.CF8			A351 Gr.CF8M			A351 Gr.CF8			A351 Gr.CF8M		
	Fig. 20UMAMT : Gland Packing / PTFE					Fig. 150UMAT : Gland Packing / PTFE			Fig. 150UMAMT : Gland Packing / PTFE								






TYPE	A-SERIES GATE					A-SERIES GATE			HA-SERIES GATE			HA-SERIES GATE			HA-SERIES GATE		
Stainless Steel																	
FIG	600UMA					600UMAM			10UMHA/10UMHAT			10UMHAM/10UMHAMT			20UMHA/20UMHAT		
PRESSURE	600LB					600LB			10K			10K			20K		
END CONNECTION	ASME B16.5					ASME B16.5			JIS B2220			JIS B2220			JIS B2220		
DIMENSIONS	inch	mm	L	H	D	L	H	D	L	H	D	L	H	D	L	H	D
	1/2	15	165	210	100	165	210	100	108	216	100	108	216	100	140	207	100
	3/4	20	190	224	100	190	224	100	117	220	100	117	220	100	152	217	100
	1	25	216	251	140	216	251	140	127	231	100	127	231	100	165	270	100
	1 1/2	40	241	333	180	241	333	180	165	277	140	165	277	140	190	325	140
	2	50	292	451	200	292	451	200	178	335	160	178	335	160	216	356	180
	2 1/2	65	330	482	225	330	482	225	190	373	180	190	373	180	241	405	180
	3	80	356	545	250	356	545	250	203	443	200	203	443	200	283	472	225
	4	100	432	676	350	432	676	350	229	522	225	229	522	225	305	560	250
	6	150	559	904	450	559	904	450	267	710	250	267	710	250	403	753	350
	8	200	660	1128	500	660	1128	500	292	924	300	292	924	300	419	968	400
	10	250	787	1329	600	787	1329	600	330	1125	350	330	1125	350	457	1177	450
	12	300	838	1521	680	838	1521	680	356	1328	400	356	1328	400	502	1378	500
	14	350	—	—	—	—	—	—	381	1491	450	381	1491	450	762	1590	600
	16	400	—	—	—	—	—	—	406	1692	600	406	1692	600	838	1750	600
	18	450	—	—	—	—	—	—	432	1889	600	432	1889	600	914	1930	680
	20	500	—	—	—	—	—	—	457	2102	680	457	2102	680	991	2140	760
	24	600	—	—	—	—	—	—	508	2484	760	508	2484	760	1143	2530	910
BODY	A351 Gr.CF8					A351 Gr.CF8			SCS13A			SCS14A			SCS13A		
BONNET	A351 Gr.CF8					A351 Gr.CF8			SCS13A			SCS14A			SCS13A		
STEM	A276 TYPE 304 / A351 Gr.CF8					A276 TYPE 316 / A351 Gr.CF8M			SUS304			SUS316			SUS304		
DISC	A351 Gr.CF8					A351 Gr.CF8			SCS13A			SCS14A			SCS13A		
									10UMHAT : Gland Packing / PTFE			10UMHAMT : Gland Packing / PTFE			20UMHAT : Gland Packing / PTFE		








TYPE			HA-SERIES GATE			HA-SERIES GATE			HA-SERIES GATE			HA-SERIES GATE			HA-SERIES GATE		
Stainless Steel																	
FIG			20UMHAM/20UMHAMT			150UMHA/150UMHAT			150UMHAM/150UMHAMT			300UMHA			300UMHAM		
PRESSURE			20K			Class 150			Class 150			Class 300			Class 300		
END CONNECTION			JIS B2220			ASME B16.5			ASME B16.5			ASME B16.5			ASME B16.5		
DIMENSIONS	inch	mm	L	H	D	L	H	D	L	H	D	L	H	D	L	H	D
	1/2	15	140	207	100	108	216	100	108	216	100	140	207	100	140	207	100
	3/4	20	152	217	100	117	220	100	117	220	100	152	217	100	152	217	100
	1	25	165	270	100	127	231	100	127	231	100	165	270	100	165	270	100
	1 1/2	40	190	325	140	165	277	140	165	277	140	190	325	140	190	325	140
	2	50	216	356	180	178	335	160	178	335	160	216	356	180	216	356	180
	2 1/2	65	241	405	180	190	373	180	190	373	180	241	405	180	241	405	180
	3	80	283	472	225	203	443	200	203	443	200	283	472	225	283	472	225
	4	100	305	560	250	229	522	225	229	522	225	305	560	250	305	560	250
	6	150	403	753	350	267	710	250	267	710	250	403	753	350	403	753	350
	8	200	419	968	400	292	924	300	292	924	300	419	968	400	419	968	400
	10	250	457	1177	450	330	1125	350	330	1125	350	457	1177	450	457	1177	450
	12	300	502	1378	500	356	1328	400	356	1328	400	502	1378	500	502	1378	500
	14	350	762	1590	600	381	1491	450	381	1491	450	762	1590	600	762	1590	600
	16	400	838	1750	600	406	1692	600	406	1692	600	838	1750	600	838	1750	600
	18	450	914	1930	680	432	1889	600	432	1889	600	914	1930	680	914	1930	680
	20	500	991	2140	760	457	2102	680	457	2102	680	991	2140	760	991	2140	760
24	600	1143	2530	910	508	2484	760	508	2484	760	1143	2530	910	1143	2530	910	
BODY			SCS14A			A351 Gr.CF8			A351 Gr.CF8M			A351 Gr.CF8			A351 Gr.CF8M		
BONNET			SCS14A			A351 Gr.CF8			A351 Gr.CF8M			A351 Gr.CF8			A351 Gr.CF8M		
STEM			SUS316			TYPE 304			TYPE 316			TYPE 304			TYPE 316		
DISC			SCS14A			A351 Gr.CF8			A351 Gr.CF8M			A351 Gr.CF8			A351 Gr.CF8M		
			20UMHAMT : Gland Packing / PTFE			150UMHAT : Gland Packing / PTFE			150UMHAMT : Gland Packing / PTFE								

TYPE			AJ-SERIES GATE			AJ-SERIES GATE			AJ-SERIES GATE			AJ-SERIES GATE			B-SERIES GLOBE		
Stainless Steel																	
FIG			10UMAJ			20UMAJ			150UMAJ			300UMAJ			UAB		
PRESSURE			10K			20K			Class 150			Class 300			5K		
END CONNECTION			JIS B2220			JIS B2220			ASME B16.5			ASME B16.5			JIS B2220		
DIMENSIONS	inch	mm	L	H	D	L	H	D	L	H	D	L	H	D	L	H	D
	1/4	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	3/8	10	—	—	—	—	—	—	—	—	—	—	—	—	73	106	70
	1/2	15	169	199	100	173	199	100	165	199	100	178	199	100	85	106	70
	3/4	20	169	213	100	173	213	100	165	213	100	178	213	100	95	108	70
	1	25	177	232	100	181	232	100	177	232	100	190	232	100	108	119	80
	1 1/4	32	—	—	—	—	—	—	—	—	—	—	—	—	120	142	90
	1 1/2	40	188	283	140	192	283	140	187	283	140	203	283	140	135	155	90
	2	50	201	322	160	270	353	180	203	322	160	283	353	180	155	186	115
	2 1/2	65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	3	80	217	447	200	289	470	225	229	447	200	305	470	225	—	—	—
	4	100	260	523	225	386	560	250	267	523	225	403	560	250	—	—	—
	5	125	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	6	150	279	710	250	434	753	350	292	710	250	457	753	350	—	—	—
BODY			SCS13A			SCS13A			A351 Gr.CF8			A351 Gr.CF8			SCS13A		
BONNET			SCS13A			SCS13A			A351 Gr.CF8			A351 Gr.CF8			SCS13A		
STEM			SUS304			SUS304			TYPE 304			TYPE 304			SUS304		
DISC			SCS13A			SCS13A			A351 Gr.CF8			A351 Gr.CF8			SUS304		
			Full Jacketed			Full Jacketed			Full Jacketed			Full Jacketed					



TYPE	B-SERIES GLOBE					B-SERIES GLOBE			B-SERIES GLOBE			B-SERIES GLOBE			B-SERIES GLOBE		
Stainless Steel																	
FIG	UCL					UCB			UD			UDM			UDB		
PRESSURE	10K					10K			10K			10K			10K		
END CONNECTION	BS21 (JIS B0203)					JIS B2220			BS21 (JIS B0203)			BS21 (JIS B0203)			JIS B2220		
DIMENSIONS	inch	mm	L	H	D	L	H	D	L	H	D	L	H	D	L	H	D
	1/4	8	44	68	55	—	—	—	—	—	—	—	—	—	—	—	—
	3/8	10	48	68	55	73	106	70	55	109	60	55	109	60	—	—	—
	1/2	15	52	68	55	85	106	70	65	112	60	65	112	60	85	112	60
	3/4	20	60	93	60	95	108	70	80	113	70	80	113	70	95	113	70
	1	25	72	100	70	108	119	80	90	143	90	90	143	90	110	143	90
	1 1/4	32	80	122	80	120	142	90	105	150	90	105	150	90	130	150	90
	1 1/2	40	90	138	90	135	155	90	120	171	100	120	171	100	150	171	100
	2	50	100	153	100	155	186	115	140	189	115	140	189	115	180	189	115
	2 1/2	65	—	—	—	—	—	—	—	—	—	—	—	—	210	252	180
	3	80	—	—	—	—	—	—	—	—	—	—	—	—	240	277	225
	4	100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
BODY	SCS13A					SCS13A			SCS13A			SCS14A			SCS13A		
BONNET	SCS13A					SUS304			SCS13A			SCS14A			SCS13A		
STEM	SUS304					SUS304			SUS304			SUS316			SUS304		
DISC	SUS304					SUS304			PTFE			PTFE			PTFE		
									Soft-Seated disc			Soft-Seated disc			Soft-Seated disc		

TYPE	B-SERIES GLOBE					B-SERIES GLOBE			B-SERIES GLOBE			B-SERIES GLOBE			B-SERIES GLOBE		
Stainless Steel																	
FIG	UDBM					UJ			UJM			UJB			UJBM		
PRESSURE	10K					10K			10K			10K			10K		
END CONNECTION	JIS B2220					BS21 (JIS B0203)			BS21 (JIS B0203)			JIS B2220			JIS B2220		
DIMENSIONS	inch	mm	L	H	D	L	H	D	L	H	D	L	H	D	L	H	D
	3/8	10	—	—	—	55	109	60	55	109	60	85	109	60	85	109	60
	1/2	15	85	112	60	65	111	60	65	111	60	85	111	60	85	111	60
	3/4	20	95	113	70	80	112	70	80	112	70	95	112	70	95	112	70
	1	25	110	143	90	90	142	90	90	142	90	110	142	90	110	142	90
	1 1/4	32	130	150	90	105	150	90	105	150	90	130	150	90	130	150	90
	1 1/2	40	150	171	100	120	171	100	120	171	100	150	171	100	150	171	100
	2	50	180	189	115	140	189	115	140	189	115	180	189	115	180	189	115
	2 1/2	65	210	252	180	180	253	180	180	253	180	210	253	180	210	253	180
	3	80	240	277	225	200	280	225	200	280	225	240	280	225	240	280	225
BODY	SCS14A					SCS13A			SCS14A			SCS13A			SCS14A		
BONNET	SCS14A					SCS13A			SCS14A			SCS13A			SCS14A		
STEM	SUS316					SUS304			SUS316			SUS304			SUS316		
DISC	PTFE					SUS304 / SCS13A			SUS316 / SCS14A			SUS304 / SCS13A			SUS316 / SCS14A		
	Soft-Seated disc																

Bronze &amp; Brass

Cast Iron

Ductile Iron

Stainless Steel

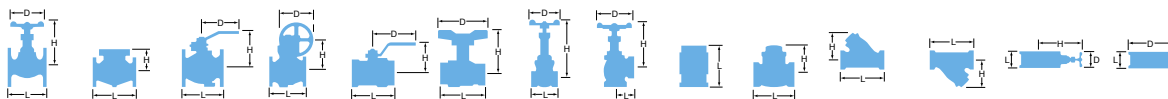
Carbon Steel






Butterfly Valve






Ball Valve

Ball Valve Seat

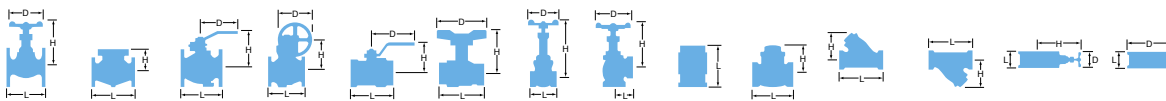
Actuated Valve













TYPE			A-SERIES GLOBE			A-SERIES GLOBE			A-SERIES GLOBE			A-SERIES GLOBE			A-SERIES GLOBE		
Stainless Steel																	
			10UPA / G-10UPA / 10UPAT			10UPAM / G-10UPAM / 10UPAMT			20UPA / G-20UPA / 20UPAT			20UPAM / G-20UPAM / 20UPAMT			150UPA / G-150UPA / 150UPAT		
			10K			10K			20K			20K			Class 150		
			JIS B2220			JIS B2220			JIS B2220			JIS B2220			ASME B16.5		
DIMENSIONS	inch	mm	L	H	D	L	H	D	L	H	D	L	H	D	L	H	D
	3/8	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	1/2	15	108	166	90	108	166	90	152	184	100	152	184	100	108	166	90
	3/4	20	117	168	90	117	168	90	178	182	100	178	182	100	117	168	90
	1	25	127	173	100	127	173	100	203	185	100	203	185	100	127	173	100
	1 1/4	32	140	191	120	140	191	120	—	—	—	—	—	—	—	—	—
	1 1/2	40	165	203	140	165	203	140	229	234	160	229	234	160	165	203	140
	2	50	203	234	160	203	234	160	267	286	180	267	286	180	203	234	160
	2 1/2	65	216	247	180	216	247	180	292	295	200	292	295	200	216	247	180
	3	80	241	292	200	241	292	200	318	341	250	318	341	250	241	292	200
	4	100	292	324	225	292	324	225	356	396	300	356	396	300	292	324	225
	5	125	356	381	250	356	381	250	400	492	350	400	492	350	356	381	250
	6	150	406	452	350	406	452	350	444	563	400	444	563	400	406	452	350
	8	200	495	556	400	495	556	400	559	874	500	—	874	—	495	556	400
10	250	622	923	500	622	923	500	622	1048	600	—	1048	—	622	923	500	
12	300	698	1013	500	698	1013	500	—	—	—	—	—	—	698	1013	500	
BODY			SCS13A			SCS14A			SCS13A			SCS14A			A351 Gr.CF8		
BONNET			SCS13A			SCS14A			SCS13A			SCS14A			A351 Gr.CF8		
STEM			SUS304			SUS316			SUS304			SUS316			A276 TYPE304		
DISC			SCS13A			SUS316 / SCS14A			SUS304 / SCS13A			SUS316			A351 Gr.CF8		
			Fig. 10UPAT : Gland Packing / PTFE SIZE.10 & 12 Gear operation type			Fig. 10UPAMT : Gland Packing / PTFE SIZE.10 & 12 Gear operation type			Fig. 20UPAT : Gland Packing / PTFE SIZE.8 & 10 Gear operation type			Fig. 20UPAMT : Gland Packing / PTFE SIZE.8 & 10 Gear operation type			Fig. 150UPAT : Gland Packing / PTFE SIZE.10 & 12 Gear operation type		

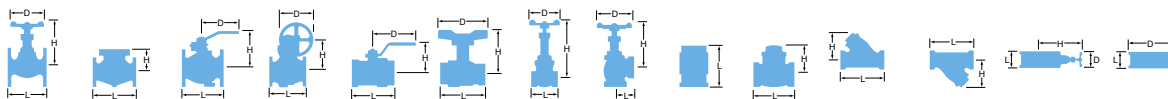
TYPE			A-SERIES GLOBE			A-SERIES GLOBE			A-SERIES GLOBE			A-SERIES GLOBE			A-SERIES GLOBE		
Stainless Steel																	
			150UPAM / G-150UPAMT / 150UPAMT			300UPA / G-300UPA			300UPAM / G-300UPAM			600UPA			600UPAM		
			Class 150			Class 300			Class 300			600LB			600LB		
			ASME B16.5			ASME B16.5			ASME B16.5			ASME B16.5			ASME B16.5		
DIMENSIONS	inch	mm	L	H	D	L	H	D	L	H	D	L	H	D	L	H	D
	3/8	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	1/2	15	108	166	90	152	184	100	152	184	100	165	212	120	165	212	120
	3/4	20	117	168	90	178	182	100	178	182	100	190	209	120	190	209	120
	1	25	127	173	100	203	185	100	203	185	100	216	245	160	216	245	160
	1 1/4	32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	1 1/2	40	165	203	140	229	234	160	229	234	160	241	282	200	241	282	200
	2	50	203	234	160	267	286	180	267	286	180	292	373	225	292	373	225
	2 1/2	65	216	247	180	292	295	200	292	295	200	330	411	250	330	411	250
	3	80	241	292	200	318	341	250	318	341	250	356	491	350	356	491	350
	4	100	292	324	225	356	396	300	356	396	300	432	584	400	432	584	400
	5	125	356	381	250	400	492	350	400	492	350	—	—	—	—	—	—
	6	150	406	452	350	444	563	400	444	563	400	—	—	—	559	742	600
	8	200	495	556	400	559	874	500	559	874	500	—	—	—	—	—	—
10	250	622	923	500	622	1048	600	622	1048	600	—	—	—	—	—	—	
12	300	698	1013	500	—	—	—	—	—	—	—	—	—	—	—	—	
BODY			A351 Gr.CF8M			A351 Gr.CF8			A351 Gr.CF8M			A351 Gr.CF8			A351 Gr.CF8M		
BONNET			A351 Gr.CF8M			A351 Gr.CF8			A351 Gr.CF8M			A351 Gr.CF8			A351 Gr.CF8M		
STEM			A276 TYPE316			A276 TYPE304 / TYPE304			A276 TYPE316 / TYPE316			A276 TYPE304			A276 TYPE316		
DISC			A276 TYPE316			A276 TYPE304 / A351 Gr.CF8			A351 Gr.CF8M			A276 TYPE304			A276 TYPE316		
			Fig. 150UPAMT : Gland Packing / PTFE SIZE.10 & 12 Gear operation type			SIZE.8 & 10 Gear operation type			SIZE.8 & 10 Gear operation type								











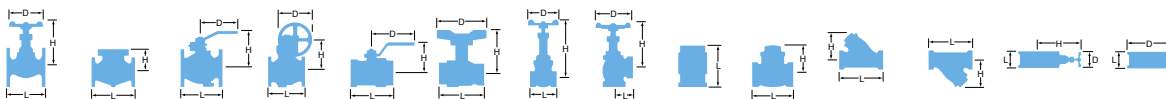
TYPE	AJ-SERIES GLOBE					AJ-SERIES GLOBE			AJ-SERIES GLOBE			AJ-SERIES GLOBE			A-SERIES GLOBE		
Stainless Steel																	
FIG	10UPAJ					20UPAJ			150UPAJ			300UPAJ			10UPAW		
PRESSURE	10K					20K			Class 150			Class 300			10K		
END CONNECTION	JIS B2220					JIS B2220			ASME B16.5			ASME B16.5			JIS B2220		
DIMENSIONS	inch	mm	L	H	D	L	H	D	L	H	D	L	H	D	L	H	D
	1/2	15	156	186	100	160	186	100	152	186	100	165	186	100	108	166	90
	3/4	20	156	186	100	160	186	100	152	186	100	165	186	100	117	166	90
	1	25	190	187	100	194	187	100	190	187	100	203	187	100	127	169	100
	1 1/2	40	214	236	160	218	236	160	213	236	160	229	236	160	165	201	140
	2	50	239	237	160	254	289	180	241	237	160	267	289	180	203	231	160
	2 1/2	65	—	—	—	—	—	—	—	—	—	—	—	—	216	244	180
	3	80	280	293	200	302	343	250	292	293	200	318	343	250	241	283	200
	4	100	349	326	225	339	398	300	356	326	225	356	398	300	292	363	225
	5	125	—	—	—	—	—	—	—	—	—	—	—	—	356	425	250
	6	150	—	—	—	—	—	—	—	—	—	—	—	—	406	482	350
BODY	SCS13A					SCS13A			A351 Gr.CF8			A351 Gr.CF8			SCS13A		
BONNET	SCS13A					SCS13A			A351 Gr.CF8			A351 Gr.CF8			SCS13A		
STEM	SUS304					SUS304			TYPE304			TYPE304			SUS304		
DISC	SCS13A					SUS304			TYPE304			TYPE304			SUS316 / SCS14A		
	Full Jacketed					Full Jacketed			Full Jacketed			Full Jacketed			Bellows seal globe valve		





TYPE	A-SERIES GLOBE					A-SERIES GLOBE			A-SERIES GLOBE			A-SERIES GLOBE			A-SERIES GLOBE		
Stainless Steel																	
FIG	10UPAWM					20UPAW			20UPAWM			150UPAW			150UPAWM		
PRESSURE	10K					20K			20K			Class 150			Class 150		
END CONNECTION	JIS B2220					JIS B2220			JIS B2220			ASME B16.5			ASME B16.5		
DIMENSIONS	inch	mm	L	H	D	L	H	D	L	H	D	L	H	D	L	H	D
	1/2	15	108	166	90	152	184	100	152	184	100	108	166	90	108	166	90
	3/4	20	117	166	90	178	184	100	178	184	100	117	166	90	117	166	90
	1	25	127	169	100	203	185	100	203	185	100	127	169	100	127	169	100
	1 1/2	40	165	201	140	229	234	160	229	234	160	165	201	140	165	201	140
	2	50	203	231	160	267	287	180	267	287	180	203	231	160	203	231	160
	2 1/2	65	216	244	180	292	293	200	292	293	200	216	244	180	216	244	180
	3	80	241	283	200	318	402	250	318	402	250	241	283	200	241	283	200
	4	100	292	363	225	356	453	300	356	453	300	292	363	225	292	363	225
	5	125	356	425	250	400	538	350	400	538	350	356	425	250	356	425	250
	6	150	406	482	350	444	606	400	444	606	400	406	482	350	406	482	350
BODY	SCS14A					SCS13A			SCS14A			A351 Gr.CF8			A351 Gr.CF8M		
BONNET	SCS14A					SCS13A			SCS14A			A351 Gr.CF8			A351 Gr.CF8M		
STEM	SUS304					SUS304			SUS304			TYPE304			A276 TYPE304		
DISC	SUS316 / SCS14A					SUS316 / SCS14A			SUS316 / SCS14A			TYPE316 / A351 Gr.CF8M			A276 TYPE316 / A351 Gr.CF8M		
	Bellows seal globe valve					Bellows seal globe valve			Bellows seal globe valve			Bellows seal globe valve			Bellows seal globe valve		








TYPE			A-SERIES GLOBE			A-SERIES GLOBE			B-SERIES LIFT CHECK			B-SERIES SWING CHECK			B-SERIES SWING CHECK		
Stainless Steel																	
FIG			300UPAW			300UPAWM			UN			UO			UOM		
PRESSURE			Class 300			Class 300			10K			10K			10K		
END CONNECTION			ASME B16.5			ASME B16.5			BS21 (JIS B0203)			JIS B2220			BS21 (JIS B0203)		
DIMENSIONS	inch	mm	L	H	D	L	H	D	L	H	D	L	H	D	L	H	D
	3⁄8	10	—	—	—	—	—	—	55	50	24	—	—	—	—	—	—
	1⁄2	15	152	184	100	152	184	100	65	53	29	65	45	29	65	45	29
	3⁄4	20	178	184	100	178	184	100	80	54	35	80	55	35	80	55	35
	1	25	203	185	100	203	185	100	90	62	43	90	61	44	90	61	44
	1¼	32	—	—	—	229	234	160	105	66	53	105	71	53	105	71	53
	1½	40	229	234	160	267	287	180	120	76	59	120	72	59	120	72	59
	2	50	267	287	180	292	293	200	140	85	74	140	81	73	140	81	73
	2½	65	292	293	200	318	402	250	—	—	—	180	93	89	180	93	89
	3	80	318	402	250	356	453	300	—	—	—	200	104	104	200	104	104
	4	100	356	453	300	400	538	350	—	—	—	—	—	—	—	—	—
	5	125	400	538	350	444	606	400	—	—	—	—	—	—	—	—	—
	6	150	444	606	400	—	—	—	—	—	—	—	—	—	—	—	—
BODY			A351 Gr.CF8			A351 Gr.CF8M			SCS13A			SCS13A			SCS14A		
CAP			A351 Gr.CF8			A351 Gr.CF8M			—			CF8 / TYPE 304			CF8M / TYPE316		
COVER			—			—			CF8 / TYPE 304			—			—		
DISC			TYPE304			A276 TYPE304			—			SCS13A			SCS14A		
HINGE PIN			TYPE316 / A351 Gr.CF8M			A276 TYPE316 / A351 Gr.CF8M			SCS13A / SUS304			SUS304			SUS316		
			Bellows seal globe valve			Bellows seal globe valve											

TYPE		B-SERIES SWING CHECK				B-SERIES SWING CHECK				A-SERIES LIFT CHECK			A-SERIES LIFT CHECK			A-SERIES LIFT CHECK		
Stainless Steel																		
FIG		UOB				UOBM				10UNA / 10UNAT			10UNAM / 10UNAMT			20UNA / 20UNAT		
PRESSURE		10K				10K				10K			10K			20K		
END CONNECTION		JIS B2220				JIS B2220				JIS B2220			JIS B2220			JIS B2220		
DIMENSIONS	inch	mm	L	H	D	L	H	D	L	H	D	L	H	D	L	H	D	
	3/8	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	1/2	15	85	45	95	85	45	95	108	74	95	108	74	95	152	73	95	
	3/4	20	95	55	100	95	55	100	117	76	100	117	76	100	178	73	100	
	1	25	110	61	125	110	61	125	127	76	125	127	76	125	203	73	125	
	1 1/4	32	130	71	135	130	71	135	140	84	135	140	84	135	—	—	—	
	1 1/2	40	150	72	140	150	72	140	165	86	140	165	86	140	229	90	140	
	2	50	180	81	155	180	81	155	—	—	—	—	—	—	—	—	—	
	2 1/2	65	210	93	175	210	93	175	—	—	—	—	—	—	—	—	—	
	3	80	240	104	185	240	104	185	—	—	—	—	—	—	—	—	—	
	4	100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	5	125	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	6	150	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
BODY		SCS13A				SCS14A				SCS13A			SCS14A			SCS13A		
CAP		CF8 / TYPE 304				CF8M / TYPE316				—			SCS14A			SCS13A		
COVER		—				—				SCS13A			—			—		
DISC		SCS13A				SCS14A				SUS304			SUS316			SUS304		
HINGE PIN		SUS304				SUS316				—			—			—		
										Fig. 10UNAT : Gasket / PTFE			Fig. 10UNAMT : Gasket / PTFE			Fig. 20UNAT : Gasket / PTFE		



TYPE	A-SERIES LIFT CHECK					A-SERIES LIFT CHECK			A-SERIES LIFT CHECK			A-SERIES LIFT CHECK			A-SERIES LIFT CHECK		
Stainless Steel																	
FIG	20UNAM / 20UNAMT					150UNA / 150UNAT			150UNAM			300UNA			300UNAM		
PRESSURE	20K					Class 150			Class 150			Class 300			Class 300		
END CONNECTION	JIS B2220					ASME B16.5			ASME B16.5			ASME B16.5			ASME B16.5		
DIMENSIONS	inch	mm	L	H	D	L	H	D	L	H	D	L	H	D	L	H	D
	1/2	15	152	73	95	108	74	89	108	74	89	152	73	95	152	73	95
	3/4	20	178	73	100	117	76	98	117	76	98	178	73	117	178	73	117
	1	25	203	73	125	127	76	108	127	76	108	203	73	124	203	73	124
	1 1/4	32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	1 1/2	40	229	90	140	165	86	127	165	86	127	229	90	156	229	90	156
BODY	SCS14A					A351 Gr.CF8			A351 Gr.CF8M			A351 Gr.CF8			A351 Gr.CF8M		
COVER	SCS14A					A351 Gr.CF8			A351 Gr.CF8M			A351 Gr.CF8			A351 Gr.CF8M		
STEM	—					—			—			—			—		
DISC	SUS316					TYPE304			A276 TYPE316			A276 TYPE304			A276 TYPE316		
	Fig. 20UNAMT : Gasket / PTFE					Fig. 150UNAT : Gasket / PTFE			Fig. 10UOAT : Gasket / PTFE								

TYPE	A-SERIES SWING CHECK					A-SERIES SWING CHECK			A-SERIES SWING CHECK			A-SERIES SWING CHECK			A-SERIES SWING CHECK		
Stainless Steel																	
FIG	10UOA / 10UOAT					10UOAM / 10UOAMT			20UOA / 20UOAT			20UOAM / 20UOAMT			150UOA / 150UOAT		
PRESSURE	10K					10K			20K			20K			Class 150		
END CONNECTION	JIS B2220					JIS B2220			JIS B2220			JIS B2220			ASME B16.5		
DIMENSIONS	inch	mm	L	H	D	L	H	D	L	H	D	L	H	D	L	H	D
	1 1/2	40	165	111	140	165	111	140	241	121	140	241	121	140	165	111	127
	2	50	203	121	155	203	121	155	267	143	155	267	143	155	203	121	152
	2 1/2	65	216	134	175	216	134	175	292	163	175	292	163	175	216	134	178
	3	80	241	148	185	241	148	185	318	178	200	318	178	200	241	148	190
	4	100	292	162	210	292	162	210	356	201	225	356	201	225	292	162	229
	5	125	330	192	250	330	192	250	400	231	270	400	231	270	330	192	254
	6	150	356	217	280	356	217	280	444	259	305	444	259	305	356	217	279
	8	200	495	264	330	495	264	330	533	292	350	533	292	350	495	264	343
	10	250	622	287	400	622	287	400	622	356	430	622	356	430	622	287	406
	12	300	698	315	445	698	315	445	711	373	480	711	373	480	698	315	483
	14	350	787	363	490	787	363	490	—	—	—	—	—	—	787	363	533
	16	400	864	407	560	864	407	560	—	—	—	—	—	—	864	407	597
BODY	SCS13A					SCS14A			SCS13A			SCS14A			SCS13A		
COVER	SCS13A					SCS14A			SCS13A			SCS14A			SCS13A		
STEM	—					—			—			—			—		
DISC	SUS13A					SCS14A			SCS13A			SCS14A			SCS13A		
HINGE PIN	SUS304					SUS316			SUS304			SUS316			SUS304		
	Fig. 10UOAT : Gasket / PTFE					Fig. 10UOAMT : Gasket / PTFE			Fig. 20UOAT : Gasket / PTFE			Fig. 10UOAMT : Gasket / PTFE			Fig. 20UOAT : Gasket / PTFE		

Bronze &amp; Brass

Cast Iron

Ductile Iron

Stainless Steel

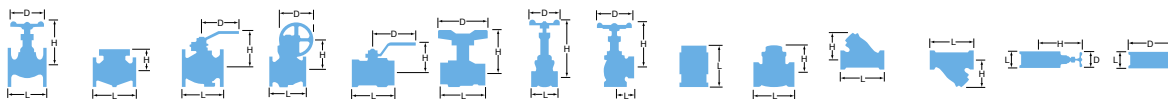
Carbon Steel






Butterfly Valve

Ball Valve

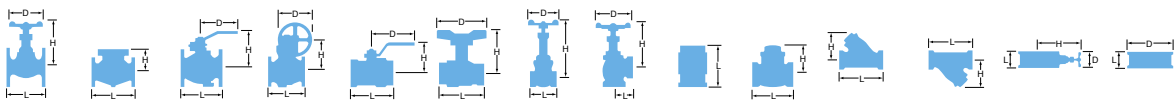
Ball Valve Seat

Actuated Valve



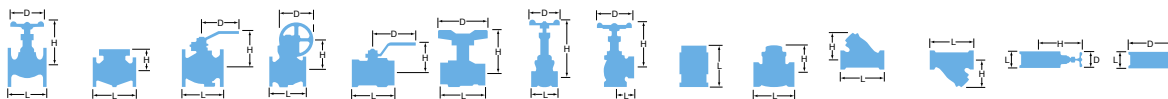
TYPE			A-SERIES SWING CHECK			A-SERIES SWING CHECK			A-SERIES SWING CHECK			A-SERIES SWING CHECK			A-SERIES SWING CHECK		
Stainless Steel																	
FIG			150UOAM / 150UOAMT			300UOA			300UOAM			600UOA			600UOAM		
PRESSURE			Class 150			Class 300			Class 300			600LB			600LB		
END CONNECTION			ASME B16.5			ASME B16.5			ASME B16.5			ASME B16.5			ASME B16.5		
DIMENSIONS	inch	mm	L	H	D	L	H	D	L	H	D	L	H	D	L	H	D
	1/2	15	—	—	—	—	—	—	—	—	—	165	90	95	165	90	95
	3/4	20	—	—	—	—	—	—	—	—	—	190	96	117	190	96	117
	1	25	—	—	—	—	—	—	—	—	—	216	109	124	216	109	124
	1 1/2	32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	1 1/2	40	165	111	127	241	121	156	241	121	156	241	126	156	241	126	156
	2	50	203	121	152	267	143	165	267	143	165	292	189	165	292	189	165
	2 1/2	65	216	134	178	292	163	190	292	163	190	330	213	190	330	213	190
	3	80	241	148	190	318	178	210	318	178	210	356	239	210	356	239	210
	4	100	292	162	229	356	201	254	356	201	254	432	279	273	432	279	273
	5	125	330	192	254	400	231	279	400	231	279	—	—	—	—	—	—
	6	150	356	217	279	444	259	318	444	259	318	559	339	356	559	339	356
	8	200	495	264	343	533	292	381	533	292	381	660	414	419	660	414	419
	10	250	622	287	406	622	356	444	622	356	444	—	430	—	—	430	—
	12	300	698	315	483	711	373	521	711	373	521	838	477	508	838	477	508
	14	350	787	363	533	—	—	—	—	—	—	—	—	—	—	—	—
	16	400	864	407	597	—	—	—	—	—	—	—	—	—	—	—	—
BODY			A351 Gr.CF8M			A351 Gr.CF8			A351 Gr.CF8M			A351 Gr.CF8			A351 Gr.CF8M		
COVER			A351 Gr.CF8M			A351 Gr.CF8			A351 Gr.CF8M			A351 Gr.CF8			A351 Gr.CF8M		
STEM			—			—			—			—			—		
DISC			A351 Gr.CF8M			A351 Gr.CF8			A351 Gr.CF8M			A351 Gr.CF8			A351 Gr.CF8M		
HINGE PIN			TYPE316			A276 TYPE304			A276 TYPE316			TYPE304			TYPE316		
			Fig. 150UOAMT : Gasket / PTFE														

TYPE			WAFFER CHECK				WAFFER CHECK			
Stainless Steel										
FIG			10UW				10UWS			
PRESSURE			10K				10K			
END CONNECTION			Wafer Type				Wafer Type			
DIMENSIONS	inch	mm	L	H	D	L	H	D		
	1½	15	—	—	—	—	—	—		
	¾	20	—	—	—	—	—	—		
	1	25	—	—	—	—	—	—		
	1½	32	—	—	—	—	—	—		
	1½	40	—	—	—	—	—	—		
	2	50	60	147	60	60	147	60		
	2½	65	67	155	60	67	155	60		
	3	80	73	163	60	73	163	60		
	4	100	73	175	60	73	175	60		
	5	125	89	189	70	89	189	70		
	6	150	98	202	70	98	202	70		
	8	200	127	229	70	127	229	70		
10	250	146	280	90	146	280	90			
12	300	181	307	90	181	307	90			
BODY			SCS13A+NBR				SCS13A			
COVER			—				—			
STEM			—				—			
DISC			SCS13A				SCS13A			
HINGE PIN			SUS304				SUS304			



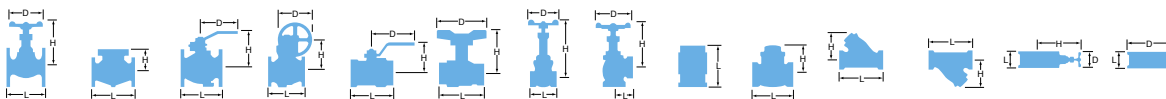
TYPE			AJ-SERIES LIFT CHECK					AJ-SERIES LIFT CHECK					AJ-SERIES LIFT CHECK					AJ-SERIES LIFT CHECK					AJ-SERIES LIFT CHECK									
Stainless Steel																																
			FIG					10UNAJ					10UNAJM					20UNAJ					150UNAJ					300UNAJ				
			PRESSURE					10K					10K					20K					Class 150					Class 300				
			END CONNECTION					JIS B2220					JIS B2220					JIS B2220					ASME B16.5					ASME B16.5				
DIMENSIONS			inch	mm	L	H	D	L	H	D	L	H	D	L	H	D	L	H	D	L	H	D	L	H	D							
			1½	15	156	73	140	156	73	140	160	73	140	152	73	127	165	73	156	165	73	156	203	73	165	229	90	190				
			¾	20	156	73	140	156	73	140	160	73	140	152	73	127	165	73	156	165	73	156	203	73	165	229	90	190				
			1	25	190	73	155	190	73	155	194	73	155	190	73	152	203	73	165	203	73	165	203	73	165	229	90	190				
			1½	40	214	90	175	214	90	175	218	90	175	213	90	178	229	90	190	229	90	190	229	90	190	229	90	190				
BODY			SCS13A					SCS14A					SCS13A					A351 Gr.CF8					A351 Gr.CF8									
BONNET			SCS13A					SCS14A					SCS13A					A351 Gr.CF8					A351 Gr.CF8									
STEM			—					—					—					—					—									
DISC			SUS304					SUS316					SUS304					A276 TYPE316					TYPE304									
			Full Jacketed					Full Jacketed					Full Jacketed					Full Jacketed					Full Jacketed									






TYPE	AJ-SERIES SWING CHECK					AJ-SERIES SWING CHECK					AJ-SERIES SWING CHECK					AJ-SERIES SWING CHECK				
Stainless Steel																				
FIG	10UOAJ					20UOAJ					150UOAJ					300UOAJ				
PRESSURE	10K					20K					Class 150					Class 300				
END CONNECTION	JIS B2220					JIS B2220					ASME B16.5					ASME B16.5				
DIMENSIONS	inch	mm	L	H	D	L	H	D	L	H	D	L	H	D	L	H	D	L	H	D
	1 1/2	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	2	50	239	122	185	254	146	200	241	122	190	267	146	210	267	146	210	267	146	210
	2 1/2	65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	3	80	280	149	210	314	180	225	292	149	229	330	180	254	330	180	254	330	180	254
	4	100	349	171	280	383	200	305	356	171	279	400	200	318	400	200	318	400	200	318
	6	150	393	214	330	421	255	350	406	214	343	444	255	381	444	255	381	444	255	381
	8	200	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
BODY	SCS13A					SCS13A					A351 Gr.CF8					A351 Gr.CF8				
COVER	SCS13A					SCS13A					A351 Gr.CF8					A351 Gr.CF8				
STEM	—					—					—					—				
DISC	SCS13A					SCS13A					A351 Gr.CF8					A351 Gr.CF8				
HINGE PIN	SUS304					SUS304					TYPE304					TYPE304				
	Full Jacketed					Full Jacketed					Full Jacketed					Full Jacketed				












TYPE			BALL CHECK			BALL CHECK			B-SERIES Y TYPE STRAINER			B-SERIES Y TYPE STRAINER			B-SERIES Y TYPE STRAINER		
Stainless Steel																	
FIG			10UFT			10UFTE			UY			UYM			UYB		
PRESSURE			10K			10K			20K			20K			10K		
END CONNECTION			JIS B2220			JIS B2220			BS21 (JIS B0203)			BS21 (JIS B0203)			JIS B2220		
DIMENSIONS	inch	mm	L	H	D	L	H	D	L	H	D	L	H	D	L	H	D
	1/4	8	—	—	—	—	—	—	65	50	21	65	50	21	—	—	—
	3/8	10	—	—	—	—	—	—	70	50	23	70	50	23	110	50	90
	1/2	15	—	—	—	—	—	—	85	60	29	85	60	29	120	58	95
	3/4	20	—	—	—	—	—	—	100	65	35	100	65	35	130	66	100
	1	25	—	—	—	—	—	—	115	77	43	115	77	43	150	78	125
	1 1/4	32	—	—	—	—	—	—	135	90	54	135	90	54	170	93	135
	1 1/2	40	190	87	140	—	—	—	150	100	61	150	100	61	190	104	140
	2	50	200	100.5	155	200	100.5	155	180	115	73	180	115	73	220	122	155
	2 1/2	65	220	123.5	175	220	123.5	175	220	150	90	220	150	90	—	—	—
	3	80	240	150	185	240	150	185	250	193	105	250	193	105	—	—	—
	4	100	290	187	210	290	187	210	—	—	—	—	—	—	—	—	—
	6	150	410	275	280	410	275	280	—	—	—	—	—	—	—	—	—
	8	200	—	—	—	500	366	330	—	—	—	—	—	—	—	—	—
BODY			CF8			CF8			SCS13A			SCS14A			SCS13A		
COVER			CF8			CF8			—			—			—		
CAP			—			—			CF8 / TYPE 304			CF8M / TYPE316			CF8 / TYPE 304		
DISC			NBR			NBR			—			—			—		
SCREEN			—			—			SUS304			SUS316			SUS304		

TYPE			B-SERIES Y TYPE STRAINER			A-SERIES Y TYPE STRAINER			A-SERIES Y TYPE STRAINER			A-SERIES Y TYPE STRAINER		
Stainless Steel														
FIG			UYBM			10UYA			10UYAM			20UYA		
PRESSURE			10K			10K			10K			20K		
END CONNECTION			JIS B2220			JIS B2220			JIS B2220			JIS B2220		
DIMENSIONS	inch	mm	L	H	D	L	H	D	L	H	D	L	H	D
	3/8	10	110	50	90	—	—	—	—	—	—	—	—	—
	1/2	15	120	58	95	—	—	—	—	—	—	160	70	95
	3/4	20	130	66	100	—	—	—	—	—	—	160	80	100
	1	25	150	78	125	—	—	—	—	—	—	190	92	125
	1 1/4	32	170	93	135	—	—	—	—	—	—	—	—	—
	1 1/2	40	190	104	140	—	—	—	—	—	—	240	125	140
	2	50	220	122	155	—	—	—	—	—	—	250	150	155
	2 1/2	65	—	—	—	270	160	175	270	160	175	300	160	175
	3	80	—	—	—	290	197	185	290	197	185	320	197	200
	4	100	—	—	—	350	233	210	350	233	210	380	246	225
	5	125	—	—	—	390	267	250	390	267	250	—	—	—
	6	150	—	—	—	440	320	280	440	320	280	550	342	305
	8	200	—	—	—	540	380	330	540	380	330	600	430	350
	10	250	—	—	—	760	538	440	760	538	440	760	538	430
	12	300	—	—	—	870	635	445	870	635	445	870	635	480
BODY			SCS14A			SCS13A			CF8M			SCS13A		
CAP			CF8M / TYPE316			—			—			—		
COVER			—			SCS13A			CF8M			SCS13A		
DISC			—			—			—			—		
SCREEN			SUS316			SUS304			TYPE316			SUS304		



TYPE	NEEDLE				NEEDLE				NEEDLE				NEEDLE				NEEDLE			
mm., Series																				
FIG	UN3-AP-				UN3-BP-				UN3-CP-				UN3-DP-				UN3-EP-			
PRESSURE	30K				30K				30K				30K				30K			
END CONNECTION	BS21 (JIS B0203)				BS21 (JIS B0203)				COUPLE LOK				COUPLE LOK				JIS B0203 / COUPLE LOK			
DIMENSIONS	mm	L	H	D	L	H	D	L	H	D	L	H	D	L	H	D	L	H	D	D
	6	40	59	40	15	59	40	60.8	59	40	30.4	59	40	55.4	59	40	55.4	59	40	40
	8	40	59	40	15	59	40	60.8	59	40	30.4	59	40	55.4	59	40	55.4	59	40	40
	10	45	64	40	18	64	40	62.4	64	40	—	—	—	56.2	64	40	56.2	64	40	40
	10	—	—	—	—	—	—	—	—	—	—	—	—	56.2	64	40	56.2	64	40	40
	12	55	79	50	—	—	—	70.2	64	40	—	—	—	60.1	64	40	60.1	64	40	40
	12	—	—	—	—	—	—	—	—	—	—	—	—	60.1	64	40	60.1	64	40	40
BODY	SUS 316				SUS 316				SUS 316				SUS 316				SUS 316			
STEM	SUS630				SUS630				SUS630				SUS630				SUS630			
FIG	Rc1/8": UN3-AP-1 Rc1/4": UN3-AP-2 Rc3/8": UN3-AP-3 Rc1/2": UN3-AP-4				Rc1/8": UN3-BP-1 Rc1/4": UN3-BP-2 Rc3/8": UN3-BP-3				6mm: UN3-CP-6 8mm: UN3-CP-8 10mm: UN3-CP-10 12mm: UN3-CP-12				6mm: UN3-DP-6 8mm: UN3-DP-8				6mm x R1/4": UN3-EP-6-2 8mm x R1/4": UN3-EP-8-2 10mm x R1/4": UN3-EP-10-2 10mm x R3/8": UN3-EP-10-3 12mm x R1/4": UN3-EP-12-2 12mm x R3/8": UN3-EP-12-3			

TYPE	NEEDLE				NEEDLE				NEEDLE				NEEDLE			
mm., Series																
FIG	UN3-FP-				UN26-AP-				UN26-CP-				UN26-SP-			
PRESSURE	30K				260K				260K				260K			
END CONNECTION	JIS B0203 / COUPLE LOK				BS21 (JIS B0203)				COUPLE LOK				JIS B2316			
DIMENSIONS	mm	L	H	D	L	H	D	L	H	D	L	H	D	L	H	D
	6	30.4	59	40	48	69	40	64.8	69	40	60	69	40	60	69	40
	8	30.4	59	40	48	69	40	64.8	69	40	60	69	40	60	69	40
	10	31.2	64	40	55	82	70	68.4	83	50	65	82	70	65	82	70
	12	35.1	64	40	—	—	—	74.7	83	50	—	—	—	—	—	—
	15	—	—	—	60	87	70	—	—	—	75	87	70	—	—	—
	20	—	—	—	70	104	85	—	—	—	85	104	85	—	—	—
	25	—	—	—	85	122	85	—	—	—	100	122	85	—	—	—
BODY	SUS 316				SUS 316				SUS 316				SUS 316			
STEM	SUS630				SUS630				SUS630				SUS630			
FIG	6mm x R1/4": UN3-FP-6-2 8mm x R1/4": UN3-FP-8-2 10mm x R1/4": UN3-FP-10-2 10mm x R3/8": UN3-FP-10-3 12mm x R1/4": UN3-FP-12-2 12mm x R3/8": UN3-FP-12-3				Rc1/8": UN26-AP-1 Rc1/4": UN26-AP-2 Rc3/8": UN26-AP-3 Rc1/2": UN26-AP-4 Rc3/4": UN26-AP-5 Rc1": UN26-AP-6				6mm: UN26-CP-6 8mm: UN26-CP-8 10mm: UN26-CP-10 12mm: UN26-CP-12				1/8": UN26-SP-1 1/4": UN26-SP-2 3/8": UN26-SP-3 1/2": UN26-SP-4 3/4": UN26-SP-5 1": UN26-SP-6			

TYPE	NEEDLE				NEEDLE				NEEDLE				NEEDLE				NEEDLE			
Inch Series																				
FIG	UN3-CP-				UN3-DP-				UN3-EP-				UN3-FP-				UN26-CP-			
PRESSURE	30K				30K				30K				30K				260K			
END CONNECTION	COUPLE LOK				COUPLE LOK				JIS B0203 / COUPLE LOK				JIS B0203 / COUPLE LOK				COUPLE LOK			
DIMENSIONS	inch	L	H	D	L	H	D	L	H	D	L	H	D	L	H	D	L	H	D	D
	1/8	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	1/4	8	60.8	59	40	30.4	59	40	55.4	59	40	30.4	59	40	64.8	69	40	64.8	69	40
	3/8	10	62.4	64	40	—	—	—	56.2	64	40	31.2	64	40	68.4	83	50	68.4	83	50
	3/8	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	1/2	15	70.2	64	40	—	—	—	—	—	—	—	—	—	74.7	83	50	74.7	83	50
BODY	SUS 316				SUS 316				SUS 316				SUS 316				SUS 316			
STEM	SUS630				SUS630				SUS630				SUS630				SUS630			
FIG	1/4": UN3-CP-02 3/8": UN3-CP-03 1/2": UN3-CP-04				1/4": UN3-DP-02				1/4": UN3-EP-02 3/8": UN3-EP-03 1/2": UN3-EP-04				1/4": UN3-FP-02 3/8": UN3-FP-03 1/2": UN3-FP-04				1/4": UN26-CP-02 3/8": UN26-CP-03 1/2": UN26-CP-04			

Bronze &amp; Brass

Cast Iron

Ductile Iron

Stainless Steel

Carbon Steel

Butterfly Valve

Ball Valve

Ball Valve Seat

Actuated Valve

