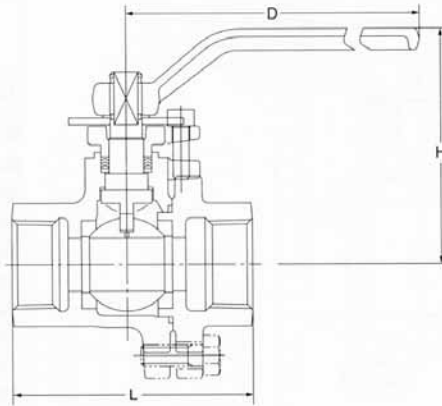


## 20K Ball Valve Reduced Bore

20ST  
20STL (Gas service)



E-E dimension : KITZ Std.  
End threads : JIS B 0203

### Dimensions

Size	mm		mm					
	mm	inch	15	20	25	32	40	50
L	75	3	80	90	105	115	130	
H	106	4 1/8	106	107	129	133	114	
D	130	5 1/8	130	130	160	160	230	

### Maximum Service Pressure

Code	Temperature	Pressure
20ST	110°C W.O.G.	2.75MPa(28kgf/cm <sup>2</sup> )
	140°C W.O.G.	1.96MPa(20kgf/cm <sup>2</sup> )
20STL	80°C gas.	2.4MPa(24.5kgf/cm <sup>2</sup> )

●Use for lubricating or hydraulic oil is acceptable.

### Test Pressure

Body	20ST	4.12MPa (4.4kgf/cm <sup>2</sup> ) [hydrostatic]
	20SLT	3.60MPa (36.8kgf/cm <sup>2</sup> ) [hydrostatic]
Seat	20ST	0.59MPa (6kgf/cm <sup>2</sup> ) [air]
	20SLT	2.50MPa (25.5kgf/cm <sup>2</sup> ) [air]

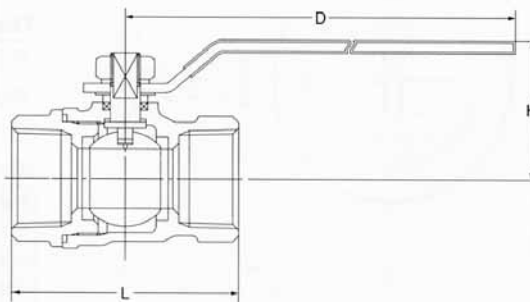
### Materials

Parts	JIS material
Body	FCD-S
Body cap	FCD-S
Stem	SUS 403
Ball	SUS 304 / SCS 13A
Gland	FCD 400
Gland packing	PTFE
Gasket	PTFE
Ball seat	HYPATITE PTFE
O ring*	NBR
Gland bolt	SCM 435
Cap bolt	S45C
Handle	FCD 400
Name plate*	SUS 304

\* for 20STL only

## Class 400 Ball Valve Reduced Bore

ST (Gas Service)



E-E dimension : KITZ Std.  
End threads : JIS B 0203

### Dimensions

Size	mm		mm							
	mm	inch	8	10	15	20	25	32	40	50
L	46	1 7/8	51	57	65	76	86	95	115	
H	38	1 1/2	38	42	49	52	57	63	68	
D	80	3 1/8	80	100	130	130	130	130	150	

W.O.G. at Room temp .....2.75MPa(28kgf/cm<sup>2</sup>)  
Saturated steam .....0.98MPa(10kgf/cm<sup>2</sup>)

●Use for lubricating or hydraulic oil is acceptable.

### Test Pressure

Body	4.12MPa (42kgf/cm <sup>2</sup> ) [hydrostatic]
Seat	0.59MPa (6kgf/cm <sup>2</sup> ) [air]

### Materials

Parts	JIS material
Body	FCD-S* <sup>1</sup>
Cap	FCD-S* <sup>1</sup>
Ball	C3771BE* <sup>2</sup>
Stem	K-Metal* <sup>5</sup>
Gland packing	PTFE
Ball seat	Reinforced PTFE
Gland	C3604BD* <sup>1</sup>
Gasket	PTFE
Handle nut	SS 400* <sup>3</sup>
Handle	SUS 430* <sup>4</sup>

\*<sup>1</sup> Zinc electroplated

\*<sup>2</sup> Ni + Cr electroplated

\*<sup>3</sup> Zinc dicromate electroplated

\*<sup>4</sup> Plastic covering

\*<sup>5</sup> K-Metal is special brass developed for anti-dezincification

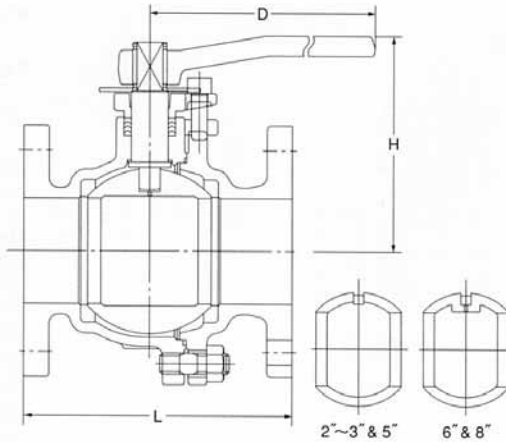
# 10K Ball Valve Full Bore

**10STBF**  
**10STLBF (Gas service)**  
 FF-flanged



**Test Pressure**

Code	10STBF	10STLBF
Body	2.06MPa (21kgf/cm <sup>2</sup> ) [hydrostatic]	2.06MPa (21kgf/cm <sup>2</sup> ) [hydrostatic]
Seat	0.59MPa (6kgf/cm <sup>2</sup> ) [air]	1.28MPa (13kgf/cm <sup>2</sup> ) [air]



F-F dimension : ASME B16.10  
 End flanges : JIS B 2239 10K

**Maximum Service Pressure**

Code	Valve size	Temperature	Pressure
10STBF	All size	120°C W.O.G.	1.37MPa (14kgf/cm <sup>2</sup> )
	4" and smaller	160°C W.O.G.	0.98MPa (10kgf/cm <sup>2</sup> )
	5" to 8"	140°C W.O.G.	0.98MPa (10kgf/cm <sup>2</sup> )
10STLBF	All size	80°C gas	1.18MPa (12kgf/cm <sup>2</sup> )

● Use for lubricating or hydraulic oil is acceptable.

**Materials**

Parts	JIS material
Body	FCD-S
Body cap	FCD-S
Stem	SUS 403
Ball	SUS 304 / SCS 13A / SUS 304TP
Gland	FCD 400
Gland packing	PTFE
Handle	FCD 400
Gasket	PTFE
Packing washer	SUS 304 (1/2"~1 1/4")
Ball seat	HYPATITE PTFE*1
Cap bolt / nut	SS 400*2
Gland bolt	SCM 435
O ring*3	NBR
Stopper	SUS 430
Name plate*3	SUS 304

\*1 PTFE or C/F PTFE is optionally available.

\*2 Different bolt / nut material is required for service exceeding temperature range of 0~225°C.  
 Contact KITZ Corporation for technical advice.

\*3 for 10STLB only  
 Contact KITZ Corporation for use of valve actuators.

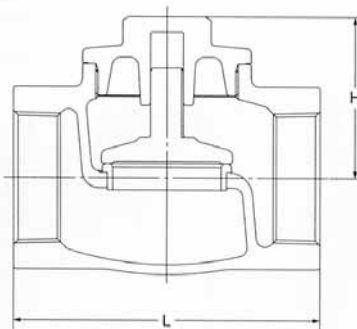
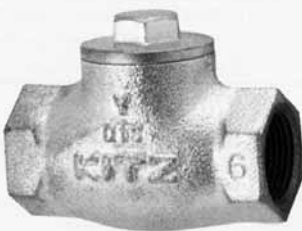
**Dimensions**

Size	mm												
	mm	15	20	25	32	40	50	65	80	100	125	150	200
	inch	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6	8
L		108	117	127	140	165	178	190	203	229	356	394	457
H		106	109	130	135	115	120	153	162	199	219	293	352
D		130	130	160	160	230	230	400	400	460	460	1000	1500

NOTE : For flange dimensions refer to Page 40. ※RF-flanged ends shall be optionally available.

# JIS 10K Lift Check Valve

**10SF**  
 S.C.



E-E dimension : JIS B 2051  
 End threads : JIS B 0203

120°C Static water..... 1.37MPa(14kgf/cm<sup>2</sup>)  
 220°C Steam, air, gas, oil..... 0.98MPa(10kgf/cm<sup>2</sup>)

● Use for lubricating or hydraulic oil is acceptable. Contact KITZ Corporation for technical advice, if valves are used as heat transfer media.

**Test Pressure**

Body	2.06MPa (21kgf/cm <sup>2</sup> ) [hydrostatic]
Seat	1.51~0.50MPa (15.4~5.1kgf/cm <sup>2</sup> ) [hydrostatic] 0.59MPa (6kgf/cm <sup>2</sup> ) [air]

**Materials**

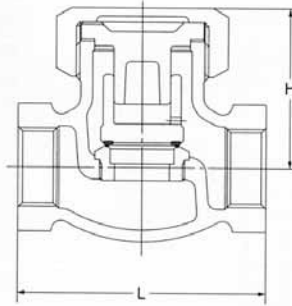
Parts	JIS material
Body	FCD-S
Cap	SUS 403
Disc	SUS 403
Body seat ring	SUS 403

**Dimensions**

Size	mm						
	mm	15	20	25	32	40	50
	inch	1/2	3/4	1	1 1/4	1 1/2	2
L		65	80	90	105	120	140
H		39	42	48	56	65	73

## 20K Lift Check Valve

20SN  
U.B.



E-E dimension : KITZ Std.  
End threads : JIS B 0203

120°C Static water..... 2.75MPa(28kgf/cm<sup>2</sup>)  
220°C Steam, air, gas, oil..... 2.45MPa(25kgf/cm<sup>2</sup>)  
300°C Steam, air, gas, oil..... 2.26MPa(23kgf/cm<sup>2</sup>)  
350°C Steam, air, gas, oil..... 1.96MPa(20kgf/cm<sup>2</sup>)

●Use for lubricating or hydraulic oil is acceptable.

### Test Pressure

Body	4.12MPa (42kgf/cm <sup>2</sup> ) [hydrostatic]
Seat	3.02~1.01MPa (30.8~10.3kgf/cm <sup>2</sup> ) [hydrostatic]
	0.59MPa (6kgf/cm <sup>2</sup> ) [air]

### Materials

Parts	JIS material
Body	FCD-S
Bonnet	SCS 1
Disc	SCS 13A+HF*
Bonnet ring	FCD-S
Gasket	Asbestos
Body seat ring	SCS 13A+HF*

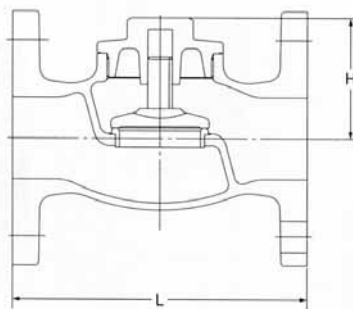
\* Hard-faced with Co-Cr-W alloy  
Asbestos-free gaskets are optional.

### Dimensions

Size	mm						
	mm	15	20	25	32	40	50
	inch	½	¾	1	1¼	1½	2
L		78	91	105	122	135	160
H		56	60	68	80	85	99

## 10K Lift Check Valve

10SFBF  
S.C.  
FF-flanged



F-F dimension : JIS B 2011  
End flanges : JIS B 2239 10K

120°C Static water..... 1.37MPa(14kgf/cm<sup>2</sup>)  
220°C Steam, air, gas, oil..... 0.98MPa(10kgf/cm<sup>2</sup>)

●Use for lubricating or hydraulic oil is acceptable. Contact KITZ Corporation for technical advice, if valves are used as heat transfer media.

### Test Pressure

Body	2.06MPa (21kgf/cm <sup>2</sup> ) [hydrostatic]
Seat	1.51~0.50MPa (15.4~5.1kgf/cm <sup>2</sup> ) [hydrostatic]
	0.59MPa (6kgf/cm <sup>2</sup> ) [air]

### Materials

Parts	JIS material
Body	FCD-S
Cap	SUS 403
Disc	SUS 403
Body seat ring	SUS 403

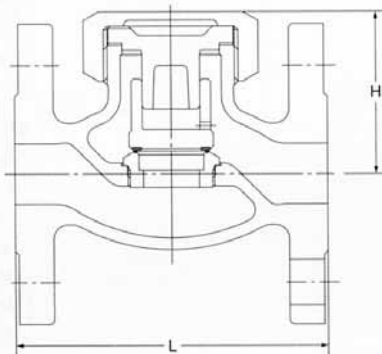
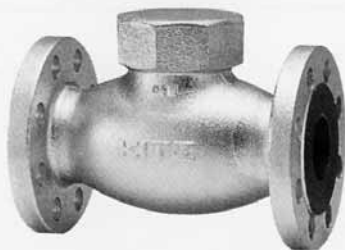
### Dimensions

Size	mm						
	mm	15	20	25	32	40	50
	inch	½	¾	1	1¼	1½	2
L		85	95	110	130	150	180
H		39	42	48	56	65	73

NOTE : For flange dimensions refer to Page 40. ※RF-flanged ends shall be optionally available.

# 20K Lift Check Valve

**20SNB**  
U.B.  
RF-flanged



F-F dimension : JIS B 2002 JV 4-4  
End flanges : JIS B 2239 20K

120°C Static water..... 2.75MPa(28kgf/cm<sup>2</sup>)  
220°C Steam, air, gas, oil..... 2.45MPa(25kgf/cm<sup>2</sup>)  
300°C Steam, air, gas, oil..... 2.26MPa(23kgf/cm<sup>2</sup>)  
350°C Steam, air, gas, oil..... 1.96MPa(20kgf/cm<sup>2</sup>)

●Use for lubricating or hydraulic oil is acceptable.

### Test Pressure

Body	4.12MPa (42kgf/cm <sup>2</sup> ) [hydrostatic]
Seat	3.02~1.01MPa (30.8~10.3kgf/cm <sup>2</sup> ) [hydrostatic] 0.59MPa (6kgf/cm <sup>2</sup> ) [air]

### Materials

Parts	JIS material
Body	FCD-S
Bonnet	SCS 1
Disc	SCS 13A+HF*
Bonnet ring	FCD-S
Gasket	Asbestos
Body seat ring	SCS 13A+HF*

\* Hard-faced with Co-Cr-W alloy  
Asbestos-free gaskets are optional.

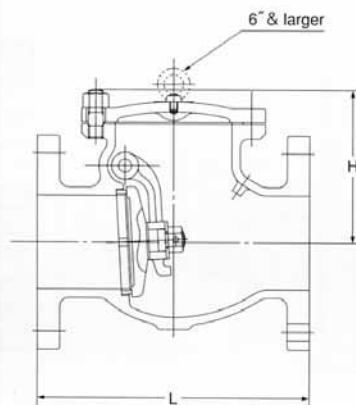
### Dimensions

Size	mm					
	15	20	25	32	40	50
	1/2	3/4	1	1 1/4	1 1/2	2
L	110	120	130	160	180	230
H	56	60	68	80	85	99

NOTE : For flange dimensions refer to Page 40.

# 10K Swing Check Valve

**10SRBF**  
B.C.  
FF-flanged



F-F dimension : JIS B 2002  
End flanges : JIS B 2239 10K

120°C Static water..... 1.37MPa(14kgf/cm<sup>2</sup>)  
220°C Steam, air, gas, oil..... 1.18MPa(12kgf/cm<sup>2</sup>)  
300°C Steam, air, gas, oil..... 0.98MPa(10kgf/cm<sup>2</sup>)

●Use for lubricating or hydraulic oil is acceptable. Contact KITZ Corporation for technical advice, if valves are used as heat transfer media.

●Bolting materials will be changed for servicing high temperature exceeding 225°C. Contact KITZ Corporation for detailed information.

●A gasket will be used for sealing the plug for application to high temperature exceeding 260°C. Specify your service temperature in advance. Ensure replacement of plug gaskets on your valve maintenance.

### Test Pressure

Body	2.06MPa (21kgf/cm <sup>2</sup> ) [hydrostatic]
Seat	1.51~0.50MPa (15.4~5.1kgf/cm <sup>2</sup> ) [hydrostatic] 0.59MPa (6kgf/cm <sup>2</sup> ) [air]

### Materials

Parts	JIS material
Body	FCD-S
Cover	FCD-S
Disc	SUS 403 (8"~12" : SCPH2+13Cr)
Disc nut	SS 400 (5"~12" : SUS 304)
Body seat ring	SCS 1 (5"~12" : SUS 403)
Arm	SCS 13A (5"~12" : SFVC2A or SCHK2)
Hinge pin	SUS 403
Split pin	SUS 304
Plug	SS 400
Washer	SS 400
Gasket	Asbestos
Cover bolt / nut	SS 400

Asbestos-free gaskets are optional.

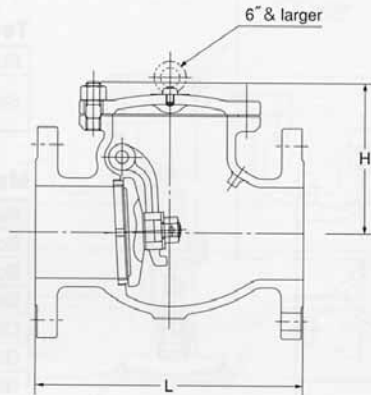
### Dimensions

Size	mm										
	40	50	65	80	100	125	150	200	250	300	
	1 1/2	2	2 1/2	3	4	5	6	8	10	12	
L	165	203	216	241	292	330	356	495	622	698	
H	115	120	130	145	160	195	215	255	310	350	

NOTE : For flange dimensions refer to Page 40. ※RF-flanged ends shall be optionally available.

# Class 150 Swing Check Valve

**150SRB**  
B.C.  
RF-flanged



F-F dimension : ASME B16.10  
End flanges : ASME B16.5

–5°C~+38°C W.O.G. .... 1.73MPa(17.6kgf/cm<sup>2</sup>)  
149°C W.O.G. .... 1.48MPa(15.1kgf/cm<sup>2</sup>)  
260°C W.O.G. .... 1.18MPa(12.0kgf/cm<sup>2</sup>)  
343°C W.O.G. .... 0.86MPa (8.8kgf/cm<sup>2</sup>)

- Use for lubricating or hydraulic oil is acceptable.
- Bolting materials will be changed for servicing high temperature exceeding 225°C. Contact KITZ Corporation for detailed information.
- A gasket will be used for sealing the plug for application to high temperature exceeding 260°C. Specify your service temperature in advance. Ensure replacement of plug gaskets on your valve maintenance.

### Test Pressure

Body	2.75MPa (28kgf/cm <sup>2</sup> ) [hydrostatic]
Seat	1.96MPa (20kgf/cm <sup>2</sup> ) [hydrostatic]
	0.59MPa (6kgf/cm <sup>2</sup> ) [air]

### Materials

Parts	JIS material
Body	FCD-S
Cover	FCD-S
Disc	SUS 403 (8"~12": SCPH2+13Cr)
Disc nut	SS 400 (5"~12": SUS 304)
Split pin	SUS 304
Hinge pin	SUS 403
Plug	SS 400
Gasket	Asbestos
Body seat ring	SUS 403 (1½"~4": SCS 1)
Arm	SCS 13A (5"~12": SFVC2A)
Cover bolt / nut	SS 400

Asbestos-free gaskets are optional.

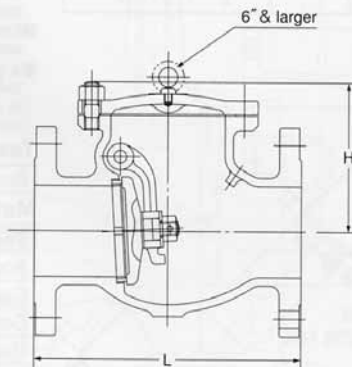
### Dimensions

Size	mm										
	mm	40	50	65	80	100	125	150	200	250	300
	inch	1½	2	2½	3	4	5	6	8	10	12
L		165	203	216	241	292	330	356	495	622	698
H		115	120	130	145	165	200	220	260	320	360

NOTE : For flange dimensions refer to Page 41

# 16K Swing Check Valve

**16SRB**  
B.C.  
RF-flanged



F-F dimension : JIS B 2002  
End flanges : JIS B 2239 16K

120°C Static water..... 2.16MPa(22kgf/cm<sup>2</sup>)  
220°C Steam, air, gas, oil..... 1.96MPa(20kgf/cm<sup>2</sup>)  
300°C Steam, air, gas, oil..... 1.77MPa(18kgf/cm<sup>2</sup>)  
350°C Steam, air, gas, oil..... 1.57MPa(16kgf/cm<sup>2</sup>)

- Use for lubricating or hydraulic oil is acceptable. Contact KITZ Corporation for technical advice, if valves are used as heat transfer media.
- A gasket will be used for sealing the plug for application to high temperature exceeding 260°C. Specify your service temperature in advance. Ensure replacement of plug gaskets on your valve maintenance.

### Test Pressure

Body	3.24MPa (33kgf/cm <sup>2</sup> ) [hydrostatic]
Seat	2.38~0.79MPa (24.2~8.1kgf/cm <sup>2</sup> ) [hydrostatic]
	0.59MPa (6kgf/cm <sup>2</sup> ) [air]

### Materials

Parts	JIS material
Body	FCD-S
Cover	FCD-S
Disc	SUS 403 (8"~12": SCPH2+13Cr)
Body seat ring	SUS 403 (2"~4": SCS1)
Arm	SCS13A (5"~12": SFVC2A or SCPH 2)
Split pin	SUS 304
Hinge pin	SUS 403
Plug	SS 400
Washer	SS 400
Gasket	Asbestos
Cover bolt / nut	S45C

Asbestos-free gaskets are optional.

### Dimensions

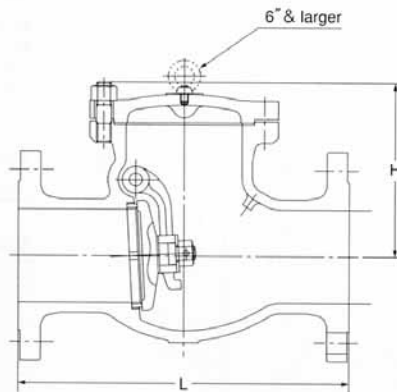
Size	mm									
	mm	50	65	80	100	125	150	200	250	300
	inch	2	2½	3	4	5	6	8	10	12
L		203	216	241	292	330	356	495	622	698
H		120	135	145	165	200	220	265	320	360

NOTE : For flange dimensions refer to Page 40.

# 20K Swing Check Valve

## 20SOB

B.C.  
RF-flanged



F-F dimension : JIS B 2002  
End flanges : JIS B 2239 20K

120°C Static water..... 2.75MPa(28kgf/cm<sup>2</sup>)  
220°C Steam, air, gas, oil..... 2.45MPa(25kgf/cm<sup>2</sup>)  
300°C Steam, air, gas, oil..... 2.26MPa(23kgf/cm<sup>2</sup>)  
350°C Steam, air, gas, oil..... 1.96MPa(20kgf/cm<sup>2</sup>)

### Test Pressure

Body	4.12MPa (42kgf/cm <sup>2</sup> ) [hydrostatic]
Seat	3.02~1.01MPa (30.8~10.3kgf/cm <sup>2</sup> ) [hydrostatic]
	0.59MPa (6kgf/cm <sup>2</sup> ) [air]

### Materials

Parts	JIS material
Body	FCD-S
Cover	FCD-S
Disc	SUS 403 (8"~12" : SCPH2+13Cr)
Disc nut	SS 400 (5"~12" : SUS304)
Body seat ring	SUS 403 (2"~4" : SCS1)
Arm	SCS13A (5"~12" : SFVC2A or SCPH2)
Hinge pin	SUS 403
Split pin	SUS 304
Plug	SS 400
Washer	SS 400
Gasket	Asbestos
Cover bolt / nut	S45C

Asbestos-free gaskets are optional.

### Dimensions

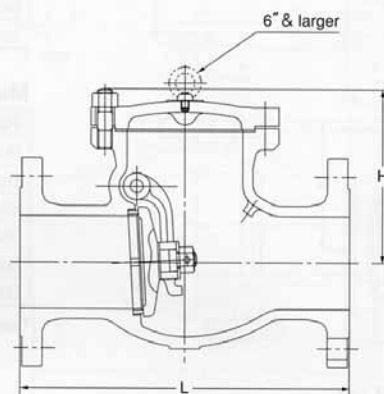
Size	mm	50	65	80	100	125	150	200	250	300
	inch	2	2½	3	4	5	6	8	10	12
L		267	292	318	356	400	444	533	622	711
H		135	145	160	185	220	240	275	335	370

NOTE : For flange dimensions refer to Page 40.

# Class 300 Swing Check Valve

## 300SOB

B.C.  
RF-flanged



F-F dimension : ASME B16.10  
End flanges : ASME B16.5

-5°C~+38°C W.O.G. .... 2.94MPa(30.0kgf/cm<sup>2</sup>)  
149°C W.O.G. .... 2.60MPa(26.5kgf/cm<sup>2</sup>)  
260°C W.O.G. .... 2.28MPa(23.2kgf/cm<sup>2</sup>)  
350°C W.O.G. .... 2.04MPa(20.8kgf/cm<sup>2</sup>)

- Use for lubricating or hydraulic oil is acceptable.
- A gasket will be used for sealing the plug for application to high temperature exceeding 260°C. Specify your service temperature in advance. Ensure replacement of plug gaskets on your valve maintenance.

### Test Pressure

Body	4.41MPa (45kgf/cm <sup>2</sup> ) [hydrostatic]
Seat	3.24MPa (33kgf/cm <sup>2</sup> ) [hydrostatic]
	0.59MPa (6kgf/cm <sup>2</sup> ) [air]

### Materials

Parts	JIS material
Body	FCD-S
Cover	FCD-S
Disc	SUS 403 (8"~12" SCPH2+13Cr)
Disc nut	SS 400 (5"~12" SUS 304)
Split pin	SUS 304
Hinge pin	SUS 403
Plug	SS 400
Gasket	Asbestos
Body seat ring	SUS 403 (2"~4" SCS 1)
Arm	SCS13A (5"~12" SFVC2A)
Cove bolt / nut	S45C

Asbestos-free gaskets are optional.

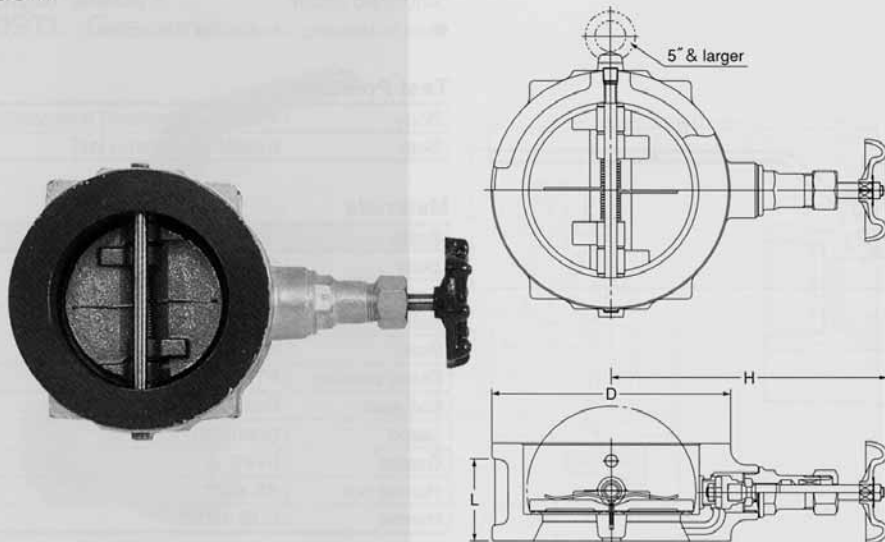
### Dimensions

Size	mm	50	65	80	100	125	150	200	250	300
	inch	2	2½	3	4	5	6	8	10	12
L		267	292	318	356	400	444	533	622	711
H		135	145	160	185	220	240	275	335	370

NOTE : For flange dimensions refer to Page 41.

# 20K Wafer Check Valve

20SW



F-F dimension : KITZ Std.

80°C Static water ..... 2.75MPa(28kgf/cm<sup>2</sup>)  
 80°C W.O.G. .... 1.96MPa(20kgf/cm<sup>2</sup>)

- Use for lubricating or hydraulic oil is acceptable.
- Employment of copper gasket prohibits use of this valve for ammonia or amine chemicals.

### Test Pressure

Body	4.12MPa(42kgf/cm <sup>2</sup> ) [hydrostatic]
Seat	3.02~0.50MPa (30.8~0.5kgf/cm <sup>2</sup> ) [hydrostatic] 0.59MPa(6kgf/cm <sup>2</sup> ) [air]

### Materials

Parts	JIS material
Body	FCD-S+NBR
Bonnet	FCD-S
Stem	SUS 403
Disc	CAC 406
Plug	SWCH 10R
Spring	SUS 304
Gland	SUS 403
Gland packing	Non asbestos
Gasket	C1100P
Handwheel	FCD 450

### Dimensions

Size	mm	50	65	80	100	120	150	200	250	300
	inch	2	2½	3	4	5	6	8	10	12
L		54	60	67	67	83	95	127	140	181
H (open)		153	173	179	192	205	246	271	297	323
D		101	121	137	162	200	235	280	353	403

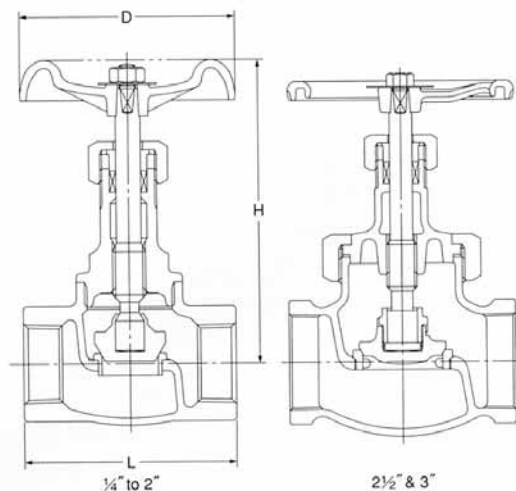
# JIS 10K Globe Valve

10SJ

S.B.I.S. or U.B.I.S.



S.B.I.S. for 2" & smaller  
 U.B.I.S. for 2½" & 3"



E-E dimension : JIS B 2051\*  
 End threads : JIS B 0203  
 \*KITZ Std. for ¼", ⅜", 2½" & 3"

120°C Static water..... 1.37MPa(14kgf/cm<sup>2</sup>)  
 220°C Steam, air, gas, oil..... 0.98MPa(10kgf/cm<sup>2</sup>)

- Use for lubricating or hydraulic oil is acceptable. Contact KITZ Corporation for technical advice, if valves are used as heat transfer media.

### Test Pressure

Body	2.06MPa (21kgf/cm <sup>2</sup> ) [hydrostatic]
Seat	1.51MPa (15.4kgf/cm <sup>2</sup> ) [hydrostatic] 0.59MPa (6kgf/cm <sup>2</sup> ) [air]

### Materials

Parts	JIS material
Body	FCD-S
Bonnet	FCD-S
Stem	SUS 420J2
Disc	SUS 403
Body seat ring	SUS 403
Gland	SUS 403 (½" & ¾": SUS 420J2)
Gland packing	Non asbestos
Packing nut	FCD 400
Handwheel	FCD 450 (2½" & 3": FCD 400)
Wheel nut	SS 400
Gasket*	Asbestos
Bonnet ring*	FCD-S
Name plate	A1050P

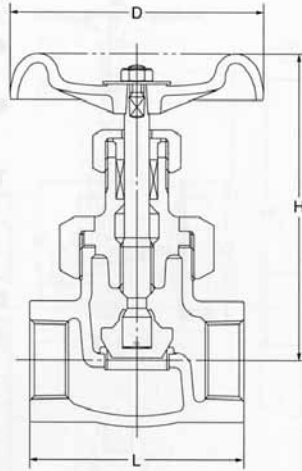
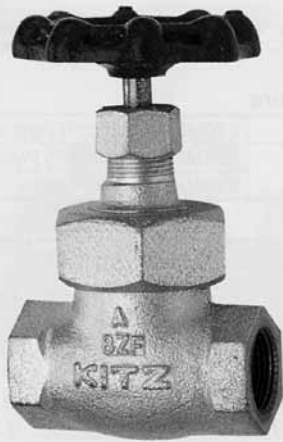
\* Only for 2½" & 3"  
 Asbestos-free gaskets are optional.

### Dimensions

Size	mm	8	10	15	20	25	32	40	50	65	80
	inch	¼	⅜	½	¾	1	1¼	1½	2	2½	3
L		50	55	65	80	90	105	120	140	180	200
H (open)		108	108	122	125	146	160	180	198	250	280
D		60	60	70	80	90	100	115	135	180	225

# 10K Globe Valve

10SP  
U.B.I.S.



E-E dimension : JV 4-4\*  
End threads : JIS B 0203  
\*KITZ Std. for 3/8"

**Dimensions**

Size	mm		10	15	20	25	32	40	50
	inch		3/8	1/2	3/4	1	1 1/4	1 1/2	2
L			64	70	80	90	110	125	140
H (open)			107	125	125	145	162	180	198
D			60	80	80	100	115	115	135

120°C Static water..... 1.37MPa(14kgf/cm<sup>2</sup>)  
220°C Steam, air, gas, oil..... 1.18MPa(12kgf/cm<sup>2</sup>)  
300°C Steam, air, gas, oil..... 0.98MPa(10kgf/cm<sup>2</sup>)

- Use for lubricating or hydraulic oil is acceptable. Contact KITZ Corporation for technical advice, if valves are used as heat transfer media.
- Employment of copper gasket prohibits use of this valve for ammonia or amine chemicals.

**Test Pressure**

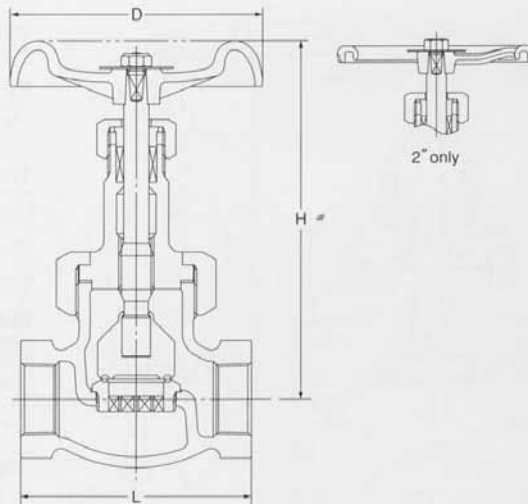
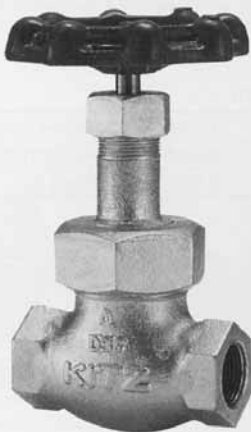
Body	2.06MPa (21kgf/cm <sup>2</sup> ) [hydrostatic]
Seat	1.51MPa (15.4kgf/cm <sup>2</sup> ) [hydrostatic]
	0.59MPa (6kgf/cm <sup>2</sup> ) [air]

**Materials**

Parts	JIS material
Body	FCD-S
Bonnet	FCD-S
Stem	SUS 420J2
Disc	SUS 403
Body seat ring	SUS 403
Gland	SUS 403 (1/2" & 3/4": SUS 420J2)
Gland packing	Non asbestos
Packing nut	FCD 400
Handwheel	FCD 450
Wheel nut	SS 400
Bonnet ring	FCD-S
Gasket	C1100P-0
Name plate	A1050P

# 20K Globe Valve

20SY  
U.B.I.S.



E-E dimension : KITZ Std.  
End threads : JIS B 0203

**Dimensions**

Size	mm		10	15	20	25	32	40	50
	inch		3/8	1/2	3/4	1	1 1/4	1 1/2	2
L			75	78	91	105	122	135	160
H (open)			136	138	157	178	202	210	239
D			70	80	100	115	135	135	180

120°C Static water..... 2.75MPa(28kgf/cm<sup>2</sup>)  
220°C Steam, air, gas, oil..... 2.45MPa(25kgf/cm<sup>2</sup>)  
300°C Steam, air, gas, oil..... 2.26MPa(23kgf/cm<sup>2</sup>)  
350°C Steam, air, gas, oil..... 1.96MPa(20kgf/cm<sup>2</sup>)

- Use for lubricating or hydraulic oil is acceptable. Contact KITZ Corporation for technical advice, if valves are used as heat transfer media.
- Employment of copper gasket prohibits use of this valve for ammonia or amine chemicals.

**Test Pressure**

Body	4.12MPa (42kgf/cm <sup>2</sup> ) [hydrostatic]
Seat	3.02MPa (30.8kgf/cm <sup>2</sup> ) [hydrostatic]
	0.59MPa (6kgf/cm <sup>2</sup> ) [air]

**Materials**

Parts	JIS material
Body	FCD-S
Bonnet	FCD-S
Stem	SUS 420J2
Disc	SUS 403 + HF*
Body seat ring	SCS13A + HF*
Gland	SUS 403 (3/8" & 1/2": SUS 420J2)
Gland packing	Non asbestos
Packing nut	FCD 400
Handwheel	FCD 450 (2": FCD 400)
Wheel nut	SS 400
Bonnet ring	FCD-S
Gasket	C1100P-0
Name plate	A1050P

\* Hard-faced with Co-Cr-W alloy

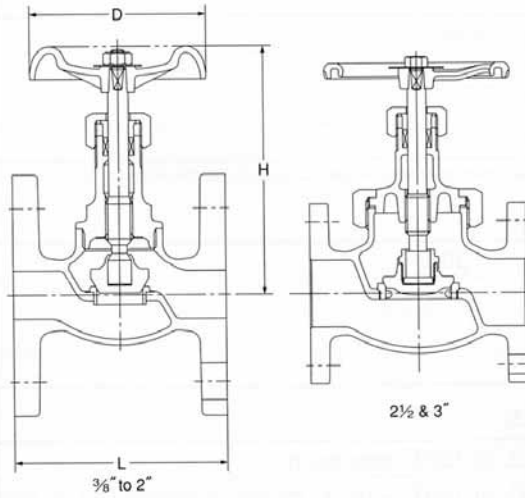
# 10K Globe Valve

## 10SJBF

S.B.I.S. or U.B.I.S.  
FF-flanged



S.B.I.S. for 2" & smaller  
U.B.I.S. for 2½" & 3"



F-F dimension : JIS B 2011\*  
End flanges : JIS B 2239 10K  
\*KITZ Std. for ¾"

120°C Static water..... 1.37MPa(14kgf/cm<sup>2</sup>)  
220°C Steam, air, gas, oil..... 0.98MPa(10kgf/cm<sup>2</sup>)

●Use for lubricating or hydraulic oil is acceptable. Contact KITZ Corporation for technical advice, if valves are used as heat transfer media.

### Test Pressure

Body	2.06MPa (21kgf/cm <sup>2</sup> ) [hydrostatic]
Seat	1.51MPa (15.4kgf/cm <sup>2</sup> ) [hydrostatic] 0.59MPa (6kgf/cm <sup>2</sup> ) [air]

### Materials

Parts	JIS material
Body	FCD-S
Bonnet	FCD-S
Stem	SUS 420J2
Disc	SUS 403
Body seat ring	SUS 403
Gland	SUS 403 (½" & ¾": SUS 420J2)
Gland packing	Non asbestos
Packing nut	FCD 400
Handwheel	FCD 450 (2½" & 3": FCD 400)
Wheel nut	SS 400
Gasket*	Asbestos
Bonnet ring*	FCD-S
Name plate	A1050P

\* Only for 2½" & 3"  
Asbestos-free gaskets are optional.

### Dimensions

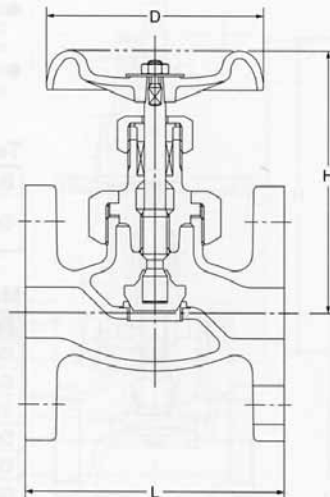
Size	mm									
	mm	10	15	20	25	32	40	50	65	80
L	inch	¾	½	¾	1	1¼	1½	2	2½	3
H (open)		85	85	95	110	130	150	180	210	240
H		108	122	125	146	160	180	198	250	280
D		60	70	80	90	100	115	135	180	225

NOTE : For flange dimensions refer to Page 40. ※RF-flanged ends shall be optionally available.

# 10K Globe Valve

## 10SPBF

U.B.I.S.  
FF-flanged



F-F dimension : JIS B 2002\*  
End flanges : JIS B 2239 10K  
\*KITZ Std. for ¾"

120°C Static water..... 1.37MPa(14kgf/cm<sup>2</sup>)  
220°C Steam, air, gas, oil..... 1.18MPa(12kgf/cm<sup>2</sup>)  
300°C Steam, air, gas, oil..... 0.98MPa(10kgf/cm<sup>2</sup>)

●Use for lubricating or hydraulic oil is acceptable. Contact KITZ Corporation for technical advice, if valves are used as heat transfer media.

●Employment of copper gasket prohibits use of this valve for ammonia or amine chemicals.

### Test Pressure

Body	2.06MPa (21kgf/cm <sup>2</sup> ) [hydrostatic]
Seat	1.51MPa (15.4kgf/cm <sup>2</sup> ) [hydrostatic] 0.59MPa (6kgf/cm <sup>2</sup> ) [air]

### Materials

Parts	JIS material
Body	FCD-S
Bonnet	FCD-S
Stem	SUS 420J2
Disc	SUS 403
Body seat ring	SUS 403
Gland	SUS 403 (½" & ¾": SUS 420J2)
Gland packing	Non asbestos
Handwheel	FCD 450
Wheel nut	SS 400
Bonnet ring	FCD-S
Gasket	C1100P-0
Name plate	A1050P

### Dimensions

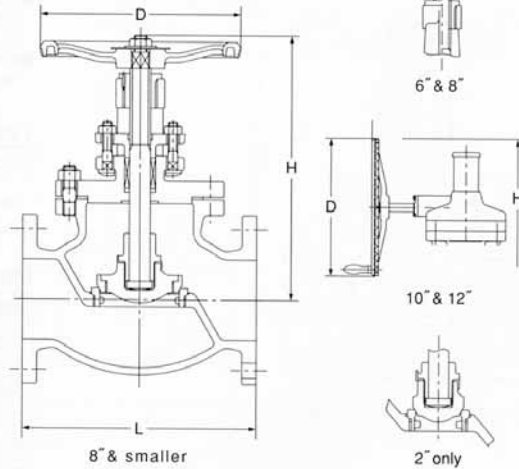
Size	mm							
	mm	10	15	20	25	32	40	50
L	inch	¾	½	¾	1	1¼	1½	2
L		108	108	117	127	140	165	203
H (open)		107	125	125	145	162	180	198
D		60	80	80	100	115	115	135

NOTE : For flange dimensions refer to Page 40. ※RF-flanged ends shall be optionally available.

# 10K Globe Valve

## 10SPBOF

B.B.O.S.Y.  
FF-flanged



F-F dimension : JIS B 2002  
End flanges : JIS B 2239 10K

120°C Static water..... 1.37MPa(14kgf/cm<sup>2</sup>)  
220°C Steam, air, gas, oil..... 1.18MPa(12kgf/cm<sup>2</sup>)  
300°C Steam, air, gas, oil..... 0.98MPa(10kgf/cm<sup>2</sup>)

●Use for lubricating or hydraulic oil is acceptable. Contact KITZ Corporation for technical advice, if valves are used as heat transfer media.

●Bolting materials will be changed for servicing high temperature exceeding 225°C. Contact KITZ Corporation for detailed information.

### Test Pressure

Body	2.06MPa (21kgf/cm <sup>2</sup> ) [hydrostatic]
Seat	1.51MPa (15.4kgf/cm <sup>2</sup> ) [hydrostatic]
	0.59MPa (6kgf/cm <sup>2</sup> ) [air]

### Materials

Parts	JIS material
Body	FCD-S
Bonnet	FCD-S
Stem	SUS 403
Disc	FCD-S (2": SUS 403)
Disc seat ring	SUS 403 (½"~4": SCS 1)
Body seat ring	SUS 403 (½"~4": SCS 1)
Lock nut	FCD-S
Gland	FCD-S
Gland packing	Non asbestos
Handwheel	FCD 400
Wheel nut	SS 400
Packing washer	SUS 403
Bonnet bolt /nut	SS 400
Gland bolt /nut	SS 400
Gasket	Asbestos
Name plate	A1050P
Yoke bush	C6782BD

Asbestos-free gaskets are optional.

### Dimensions

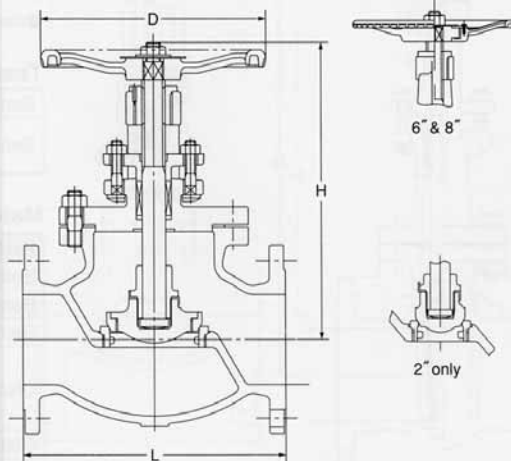
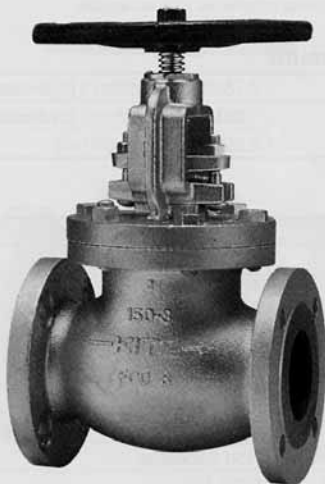
Size	mm	50	65	80	100	125	150	200	250	300	mm
	inch	2	2½	3	4	5	6	8	10	12	
L		203	216	241	292	356	406	495	622	698	
H (open)		302	313	356	377	460	524	585	880	943	
D		200	225	250	250	300	350	400	360	360	

NOTE : For flange dimensions refer to Page 40. ※RF-flanged ends shall be optionally available.

# Class 150 Globe Valve

## 150SPBO

B.B.O.S.Y.  
RF-flanged



F-F dimension : ASME B16.10  
End flanges : ASME B16.5

-5°C~+38°C W.O.G. .... 1.73MPa(17.6kgf/cm<sup>2</sup>)  
149°C W.O.G. .... 1.48MPa(15.1kgf/cm<sup>2</sup>)  
260°C W.O.G. .... 1.18MPa(12.0kgf/cm<sup>2</sup>)  
343°C W.O.G. .... 0.86MPa (8.8kgf/cm<sup>2</sup>)

●Use for lubricating or hydraulic oil is acceptable.

### Test Pressure

Body	2.75MPa (28kgf/cm <sup>2</sup> ) [hydrostatic]
Seat	1.96MPa (20kgf/cm <sup>2</sup> ) [hydrostatic]
	0.59MPa (6kgf/cm <sup>2</sup> ) [air]

### Materials

Parts	JIS material
Body	FCD-S
Bonnet	FCD-S
Stem	SUS 403
Disc	FCD-S (2": SUS 403)
Gland	FCD-S
Gland packing	Non asbestos
Handwheel	FCD 400
Gasket	Asbestos
Body seat ring	SCS 1 (5"~ 8": SUS 403)
Disc seat ring	SCS 1 (5": SUS 403)
Yoke bush	C6782BD

Asbestos-free gaskets are optional.

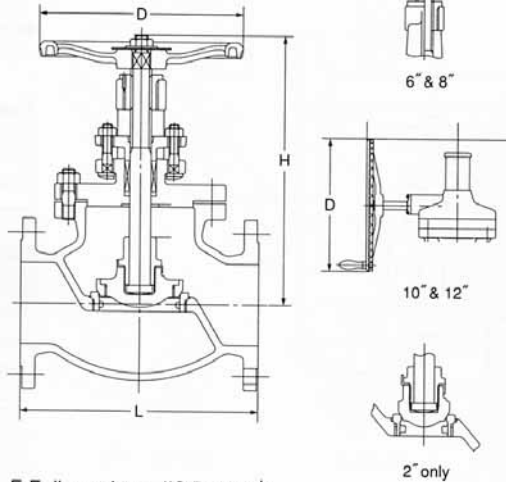
### Dimensions

Size	mm	50	65	80	100	125	150	200	mm
	inch	2	2½	3	4	5	6	8	
L		203	216	241	292	356	406	495	
H (open)		302	313	356	377	460	524	585	
D		200	225	250	250	300	350	400	

NOTE : For flange dimensions refer to Page 41.

# 16K Globe Valve

**16SPBO**  
B.B.O.S.Y.  
RF-flanged



F-F dimension : JIS B 2002\*  
End flanges : JIS B 2239 16K  
\*KITZ Std. for 5" & 6"

120°C Static water..... 2.16MPa(22kgf/cm<sup>2</sup>)  
220°C Steam, air, gas, oil..... 1.96MPa(20kgf/cm<sup>2</sup>)  
300°C Steam, air, gas, oil..... 1.77MPa(18kgf/cm<sup>2</sup>)  
350°C Steam, air, gas, oil..... 1.57MPa(16kgf/cm<sup>2</sup>)

● Use for lubricating or hydraulic oil is acceptable. Contact KITZ Corporation for technical advice, if valves are used as heat transfer media.

### Test Pressure

Body	3.24MPa (33kgf/cm <sup>2</sup> ) [hydrostatic]
Seat	2.38MPa (24.2kgf/cm <sup>2</sup> ) [hydrostatic]
	0.59MPa (6kgf/cm <sup>2</sup> ) [air]

### Materials

Parts	JIS material
Body	FCD-S
Bonnet	FCD-S
Stem	SUS 403
Disc	FCD-S (2" : SUS 403)
Gland	FCD-S
Gland packing	Non asbestos
Handwheel	FCD 400
Gasket	Asbestos
Body seat ring	SCS 1 (5" ~ 12" : SUS 403)
Disc seat ring	SCS 1 (5" ~ 12" : SUS 403)
Yoke bush	C6782BD
Bonnet bolt / nut	S45C
Name plate	A1050P

Asbestos-free gaskets are optional.

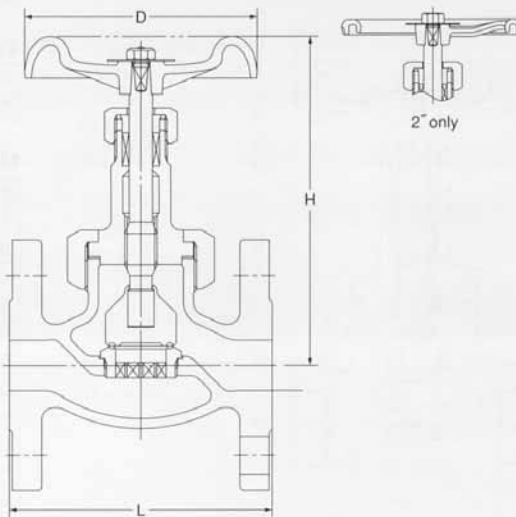
### Dimensions

Size	mm	50	65	80	100	125	150	200	250	300
	inch	2	2½	3	4	5	6	8	10	12
L		203	216	241	292	356	406	495	622	698
H (open)		302	313	356	377	460	524	585	880	943
D		200	225	250	250	300	350	400	360	360

NOTE : For flange dimensions refer to Page 40.

# 20K Globe Valve

**20SYB**  
U.B.I.S.  
RF-flanged



F-F dimension : JIS B 2002 JV 4-4\*  
End flanges : JIS B 2239 20K  
\*KITZ Std. for ¾"

120°C Static water..... 2.75MPa(28kgf/cm<sup>2</sup>)  
220°C Steam, air, gas, oil..... 2.45MPa(25kgf/cm<sup>2</sup>)  
300°C Steam, air, gas, oil..... 2.26MPa(23kgf/cm<sup>2</sup>)  
350°C Steam, air, gas, oil..... 1.96MPa(20kgf/cm<sup>2</sup>)

● Use for lubricating or hydraulic oil is acceptable. Contact KITZ Corporation for technical advice, if valves are used as heat transfer media.

● Employment of copper gasket prohibits use of this valve for ammonia or amine chemicals.

### Test Pressure

Body	4.12MPa (42kgf/cm <sup>2</sup> ) [hydrostatic]
Seat	3.02MPa (30.8kgf/cm <sup>2</sup> ) [hydrostatic]
	0.59MPa (6kgf/cm <sup>2</sup> ) [air]

### Materials

Parts	JIS material
Body	FCD-S
Bonnet	FCD-S
Stem	SUS 420J2
Disc	SUS 403 + HF*
Body seat ring	SCS13A + HF*
Gland	SUS 403 (¾" & ½" : SUS 420J2)
Gland packing	Non asbestos
Packing nut	FCD 400
Handwheel	FCD 450 (2" : FCD 400)
Wheel nut	SS 400
Gasket	C1100P-0
Name plate	A1050P

\* Hard-faced with Co-Cr-W alloy

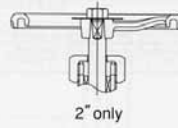
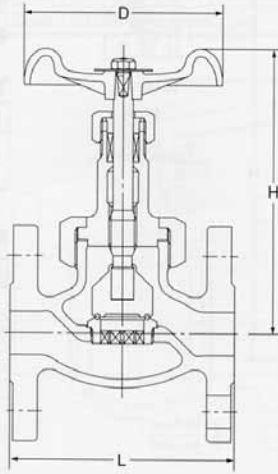
### Dimensions

Size	mm	10	15	20	25	32	40	50
	inch	¾	½	¾	1	1¼	1½	2
L		110	110	120	130	160	180	230
H (open)		136	138	157	178	202	210	239
D		70	80	100	115	135	135	180

NOTE : For flange dimensions refer to Page 40.

# Class 300 Globe Valve

**300SYB**  
U.B.I.S.  
RF-flanged



F-F dimension : JIS B 2002 JV 4-4  
End flanges : ASME B16.5

−5°C ~ +38°C W.O.G. .... 2.94MPa(30.0kgf/cm<sup>2</sup>)  
149°C W.O.G. .... 2.60MPa(26.5kgf/cm<sup>2</sup>)  
260°C W.O.G. .... 2.28MPa(23.2kgf/cm<sup>2</sup>)  
350°C W.O.G. .... 2.04MPa(20.8kgf/cm<sup>2</sup>)

- Use for lubricating or hydraulic oil is acceptable.
- Employment of copper gasket prohibits use of this valve for ammonia or amine chemicals.

### Test Pressure

Body	4.41MPa (45kgf/cm <sup>2</sup> ) [hydrostatic]
Seat	3.24MPa (33kgf/cm <sup>2</sup> ) [hydrostatic] 0.59MPa (6kgf/cm <sup>2</sup> ) [air]

### Materials

Parts	JIS material
Body	FCD-S
Bonnet	FCD-S
Stem	SUS 420J2
Disc	SUS 403+HF*
Gland	SUS 403 (1/2": SUS 420J2)
Gland packing	Non asbestos
Handwheel	FCD 450 (2": FCD 400)
Gasket	C1100P-0
Body seat ring	SCS 13A+HF*

\* Hard-faced with Co-Cr-W alloy

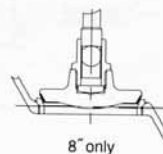
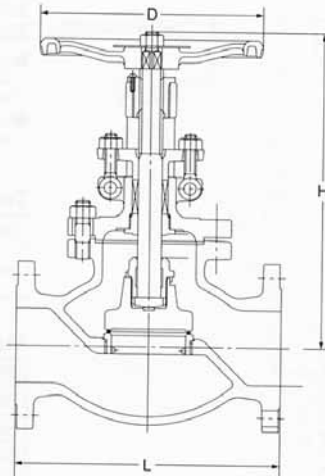
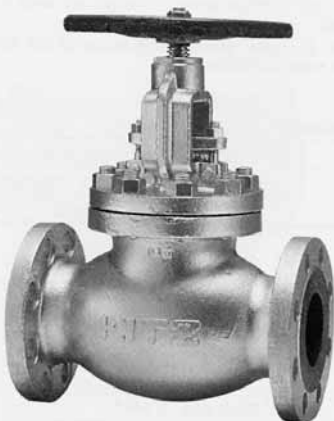
### Dimensions

Size	mm	15	20	25	32	40	50
	inch	1/2	3/4	1	1 1/4	1 1/2	2
L		110	120	130	160	180	230
H (open)		138	157	178	202	210	239
D		80	100	115	135	135	180

NOTE : For flange dimensions refer to Page 41

# 20K Globe Valve

**20SYBO**  
B.B.O.S.Y.  
RF-flanged



F-F dimension : JIS B 2002  
End flanges : JIS B 2239 20K

120°C Static water..... 2.75MPa(28kgf/cm<sup>2</sup>)  
220°C Steam, air, gas, oil..... 2.45MPa(25kgf/cm<sup>2</sup>)  
300°C Steam, air, gas, oil..... 2.26MPa(23kgf/cm<sup>2</sup>)  
350°C Steam, air, gas, oil..... 1.96MPa(20kgf/cm<sup>2</sup>)

- Use for lubricating or hydraulic oil is acceptable. Contact KITZ Corporation for technical advice, if valves are used as heat transfer media.

### Test Pressure

Body	4.12MPa (42kgf/cm <sup>2</sup> ) [hydrostatic]
Seat	3.02MPa (30.8kgf/cm <sup>2</sup> ) [hydrostatic] 0.59MPa (6kgf/cm <sup>2</sup> ) [air]

### Materials

Parts	JIS material
Body	FCD-S
Bonnet	FCD-S
Stem	SUS 403
Disc	SFVC2A+HF*
Lock nut	FCD-S
Body seat ring	SFVC2A+HF*
Gland	FCD-S
Gland packing	Non asbestos
Handwheel	FCD 400
Wheel nut	SS 400
Bonnet bolt /nut	S45C
Gland bolt /nut	SS 400
Yoke bush	C6782BE
Gasket	Asbestos
Name plate	A1050P

\* Hard-faced with Co-Cr-W alloy  
Asbestos-free gaskets are optional.

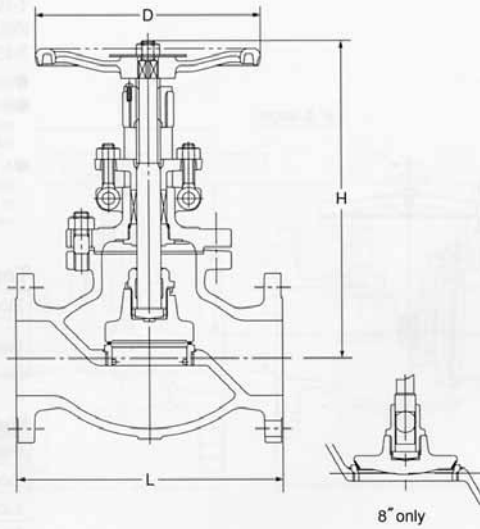
### Dimensions

Size	mm	50	65	80	100	125	150	200
	inch	2	2 1/2	3	4	5	6	8
L		267	292	318	356	400	444	559
H (open)		243	347	382	457	534	593	697
D		225	250	250	300	350	400	560

NOTE : For flange dimensions refer to Page 40.

# Class 300 Globe Valve

**300SYBO**  
B.B.O.S.Y.  
RF-flanged



F-F dimension : ASME B16.10  
End flanges : ASME B16.5

−5°C ~ +38°C W.O.G. .... 2.94MPa(30.0kgf/cm<sup>2</sup>)  
149°C W.O.G. .... 2.60MPa(26.5kgf/cm<sup>2</sup>)  
260°C W.O.G. .... 2.28MPa(23.2kgf/cm<sup>2</sup>)  
350°C W.O.G. .... 2.04MPa(20.8kgf/cm<sup>2</sup>)

● Use for lubricating or hydraulic oil is acceptable.

### Test Pressure

Body	4.41MPa (45kgf/cm <sup>2</sup> ) [hydrostatic]
Seat	3.24MPa (33kgf/cm <sup>2</sup> ) [hydrostatic] 0.59MPa (6kgf/cm <sup>2</sup> ) [air]

### Materials

Parts	JIS material
Body	FCD-S
Bonnet	FCD-S
Stem	SUS 403
Disc	SFVC2A +HF*
Gland	FCD-S
Gland packing	Non asbestos
Handwheel	FCD 400
Gasket	Asbestos
Body seat ring	SFVC2A +HF*
Yoke bush	C6782BE

\* Hard-faced with Co-Cr-W alloy  
Asbestos-free gaskets are optional.

### Dimensions

Size	mm	50	65	80	100	125	150	200
	inch	2	2½	3	4	5	6	8
L		267	292	318	356	400	444	559
H (open)		243	347	382	457	534	593	697
D		225	250	250	300	350	400	560

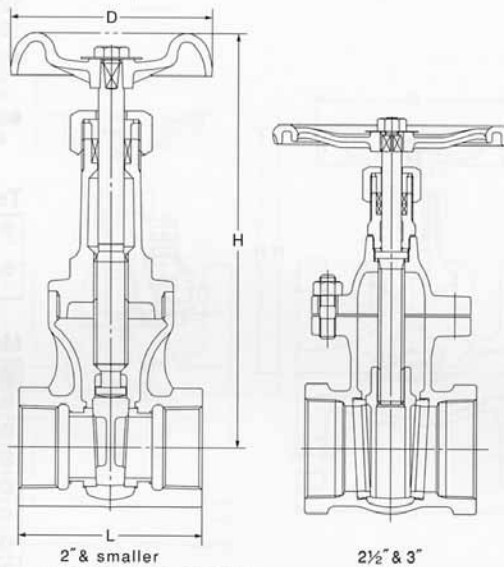
NOTE : For flange dimensions refer to Page 41.

# JIS 10K Gate Valve

**10SM**  
S.B.I.S. or B.B.



S.B.I.S. for 2" & smaller  
B.B. for 2½" & 3"



E-E dimension : JIS B 2051\*  
End threads : JIS B 0203  
\*KITZ Std. for 2½" & 3".

120°C Static water..... 1.37MPa(14kgf/cm<sup>2</sup>)  
220°C Steam, air, gas, oil..... 0.98MPa(10kgf/cm<sup>2</sup>)

● Use for lubricating or hydraulic oil is acceptable. Contact KITZ Corporation for technical advice, if valves are used as heat transfer media.

● Employment of copper disc prohibits use of this valve for ammonia or amine chemicals.

### Test Pressure

Body	2.06MPa (21kgf/cm <sup>2</sup> ) [hydrostatic]
Seat	1.51MPa (15.4kgf/cm <sup>2</sup> ) [hydrostatic] 0.59MPa (6kgf/cm <sup>2</sup> ) [air]

### Materials

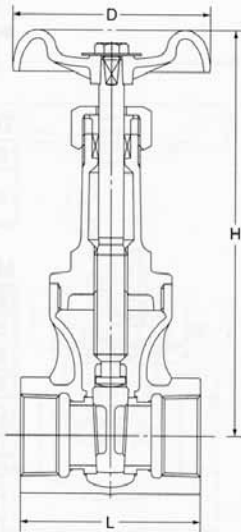
Parts	JIS material
Body	FCD-S
Bonnet	FCD-S
Stem	SUS 403
Disc	CAC 406
Body seat ring	SUS 403(½" & 3" : SCS 1)
Gland	SUS 403
Gland packing	Non asbestos
Packing nut	FCD 400
Handwheel	FCD 450 (2½" & 3" : FCD 400)
Wheel nut	SS 400
Gasket	Non asbestos
Name plate	A1050P

### Dimensions

Size	mm	15	20	25	32	40	50	65	80
	inch	½	¾	1	1¼	1½	2	2½	3
L		60	70	75	85	95	105	130	145
H (open)		150	171	198	233	274	318	253	294
D		60	70	80	90	100	115	180	180

# JIS 10K Gate Valve

**10SMS**  
S.B.I.S.



E-E dimension : JIS B 2051  
End threads : JIS B 0203

120°C Static water..... 1.37MPa(14kgf/cm<sup>2</sup>)  
220°C Steam, air, gas, oil..... 0.98MPa(10kgf/cm<sup>2</sup>)

●Use for lubricating or hydraulic oil is acceptable. Contact KITZ Corporation for technical advice, if valves are used as heat transfer media.

### Test Pressure

Body	2.06MPa (21kgf/cm <sup>2</sup> ) [hydrostatic]
Seat	1.51MPa (15.4kgf/cm <sup>2</sup> ) [hydrostatic] 0.59MPa (6kgf/cm <sup>2</sup> ) [air]

### Materials

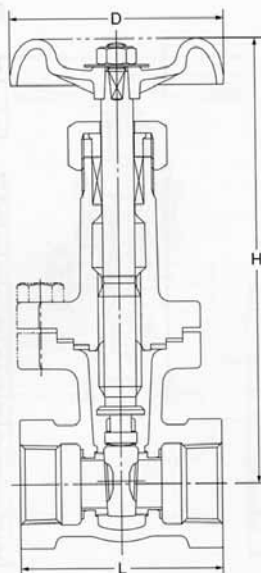
Parts	JIS material
Body	FCD-S
Bonnet	FCD-S
Stem	SUS 403
Disc	SCS 1
Body seat ring	SUS 403
Gland	SUS 403
Gland packing	Non asbestos
Packing nut	FCD 400
Handwheel	FCD 450
Wheel nut	SS 400
Name plate	A1050P

### Dimensions

Size	mm	15	20	25	32	40	50	mm
	inch	½	¾	1	1¼	1½	2	
L		60	70	75	85	95	105	
H (open)		150	171	198	233	274	318	
D		60	70	80	90	100	115	

# 20K Gate Valve

**20SLS**  
B.B.I.S.



E-E dimension : JV 4-4  
End threads : JIS B 0203

120°C Static water..... 2.75MPa(28kgf/cm<sup>2</sup>)  
220°C Steam, air, gas, oil..... 2.45MPa(25kgf/cm<sup>2</sup>)  
300°C Steam, air, gas, oil..... 2.26MPa(23kgf/cm<sup>2</sup>)  
350°C Steam, air, gas, oil..... 1.96MPa(20kgf/cm<sup>2</sup>)

●Use for lubricating or hydraulic oil is acceptable.

### Test Pressure

Body	4.12MPa (42kgf/cm <sup>2</sup> ) [hydrostatic]
Seat	3.02MPa (30.8kgf/cm <sup>2</sup> ) [hydrostatic] 0.59MPa (6kgf/cm <sup>2</sup> ) [air]

### Materials

Parts	JIS material
Body	FCD-S
Bonnet	FCD-S
Stem	SUS 420J2
Disc	SCS 1
Gland	SUS 403
Gland packing	Non asbestos
Handwheel	FCD 450
Gasket	Asbestos
Body seat ring	SUS 403
Name plate	A1050P

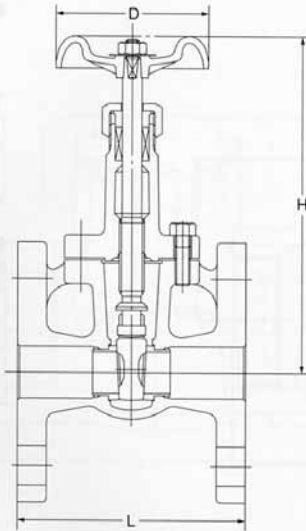
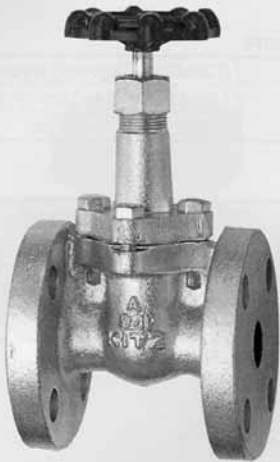
Asbestos-free gaskets are optional.

### Dimensions

Size	mm	15	20	25	32	40	50	mm
	inch	½	¾	1	1¼	1½	2	
L		70	75	85	95	105	115	
H (open)		175	177	214	241	277	301	
D		90	90	100	115	135	135	

# 10K Gate Valve

**10SMBF**  
B.B.I.S.  
FF-flanged



F-F dimension : JV4-4  
End flanges : JIS B 2239 10K

120°C Static water..... 1.37MPa(14kgf/cm<sup>2</sup>)  
220°C Steam, air, gas, oil..... 1.18MPa(12kgf/cm<sup>2</sup>)  
300°C Steam, air, gas, oil..... 0.98MPa(10kgf/cm<sup>2</sup>)

●Use for lubricating or hydraulic oil is acceptable. Contact KITZ Corporation for technical advice, if valves are used as heat transfer media.

### Test Pressure

Body	2.06MPa (21kgf/cm <sup>2</sup> ) [hydrostatic]
Seat	1.51MPa (15.4kgf/cm <sup>2</sup> ) [hydrostatic]
	0.59MPa (6kgf/cm <sup>2</sup> ) [air]

### Materials

Parts	JIS material
Body	FCD-S
Bonnet	FCD-S
Stem	SUS 420J2
Disc	SCS 1
Body seat ring	SUS 403
Gland	SUS 403 (½" & ¾": SUS 420J2)
Gland packing	Non asbestos
Handwheel	FCD 450
Bonnet bolt	S45C
Gasket	Asbestos
Name plate	A1050P

Asbestos-free gaskets are optional.

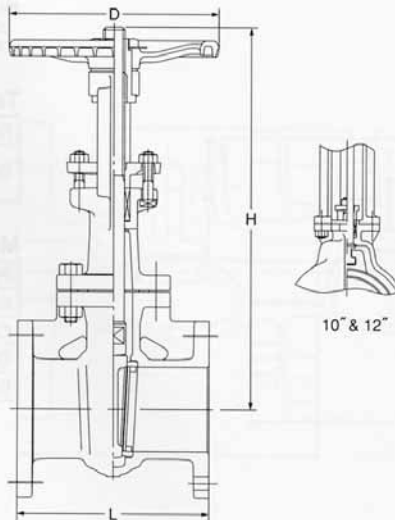
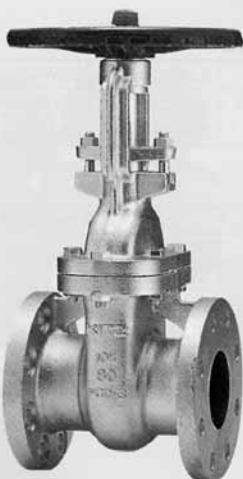
### Dimensions

Size	mm						
	mm inch	15 ½	20 ¾	25 1	32 1¼	40 1½	50 2
L	90	100	110	120	130	140	
H (open)	164	165	188	219	253	285	
D	70	70	80	90	100	115	

NOTE : For flange dimensions refer to Page 40. ※RF-flanged ends shall be optionally available.

# 10K Gate Valve

**10SMBOF**  
B.B.O.S.Y.  
FF-flanged



F-F dimension : JIS B 2002  
End flanges : JIS B 2239 10K

120°C Static water..... 1.37MPa(14kgf/cm<sup>2</sup>)  
220°C Steam, air, gas, oil..... 1.18MPa(12kgf/cm<sup>2</sup>)  
300°C Steam, air, gas, oil..... 0.98MPa(10kgf/cm<sup>2</sup>)

●Use for lubricating or hydraulic oil is acceptable. Contact KITZ Corporation for technical advice, if valves are used as heat transfer media.

●Bolting materials will be changed for servicing high temperature exceeding 225°C. Contact KITZ Corporation for detailed information.

### Test Pressure

Body	2.06MPa (21kgf/cm <sup>2</sup> ) [hydrostatic]
Seat	1.51MPa (15.4kgf/cm <sup>2</sup> ) [hydrostatic]
	0.59MPa (6kgf/cm <sup>2</sup> ) [air]

### Materials

Parts	JIS material
Body	FCD-S
Bonnet	FCD-S
Stem	SUS 403
Disc	SUS 403 (½" ~ 8")
	SFVC2A+13Cr (10") SCPH2+13Cr (12")
Body seat ring	SUS 403 (½" ~ 3": SCS 1)
Gland	FCD-S
Gland packing	Non asbestos
Handwheel	FCD 400
Wheel nut	SS 400
Bonnet bolt /nut	SS 400
Gland bolt /nut	SS 400
Yoke sleeve	C6782BE (8" ~ 12": HBSC2)
Yoke (10" & 12")	FCD-S
Gasket	Asbestos
Name plate	A1050P

Asbestos-free gaskets are optional.

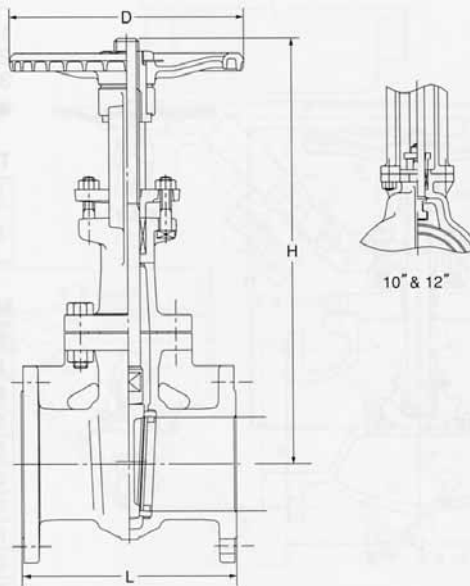
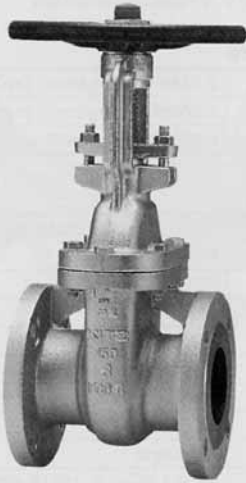
### Dimensions

Size	mm										
	mm inch	40 1½	50 2	65 2½	80 3	100 4	125 5	150 6	200 8	250 10	300 12
L	165	178	190	203	229	254	267	292	330	356	
H (open)	300	352	410	479	566	667	779	993	1181	1404	
D	160	200	200	250	250	300	300	350	400	450	

NOTE : For flange dimensions refer to Page 40. ※RF-flanged ends shall be optionally available.

# Class 150 Gate Valve

**150SMBO**  
B.B.O.S.Y.  
RF-flanged



F-F dimension : ASME B16.10  
End flanges : ASME B16.5

−5°C ~ +38°C W.O.G. .... 1.73MPa(17.6kgf/cm<sup>2</sup>)  
149°C W.O.G. .... 1.48MPa(15.1kgf/cm<sup>2</sup>)  
260°C W.O.G. .... 1.18MPa(12.0kgf/cm<sup>2</sup>)  
343°C W.O.G. .... 0.86MPa (8.8kgf/cm<sup>2</sup>)

● Use for lubricating or hydraulic oil is acceptable.

### Test Pressure

Body	2.75MPa (28kgf/cm <sup>2</sup> ) [hydrostatic]
Seat	1.96MPa (20kgf/cm <sup>2</sup> ) [hydrostatic] 0.59MPa (6kgf/cm <sup>2</sup> ) [air]

### Materials

Parts	JIS material
Body	FCD-S
Bonnet	FCD-S
Stem	SUS 403
Disc	SUS 403 (1½"~8") SFVC2A+13Cr (10") SCPH2+13Cr (12")
Gland	FCD-S
Gland packing	Non asbestos
Handwheel	FCD 400
Gasket	Asbestos
Body seat ring	SUS 403 (1½"~3" : SCS 1)
Yoke sleeve	C6782BE (8"~12" : HBSc2)
Yoke *	FCD-S

\* Only for 10" & 12"  
Asbestos-free gaskets are optional.

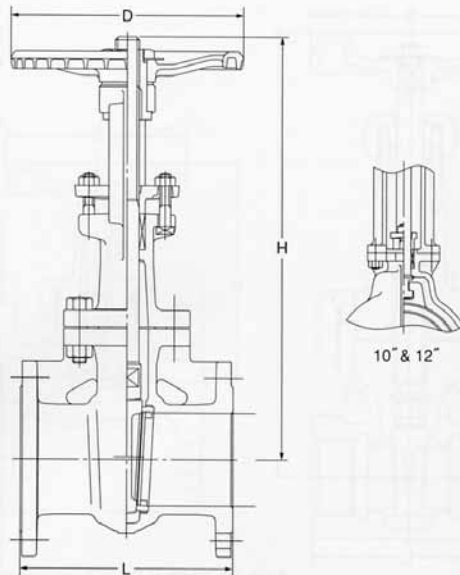
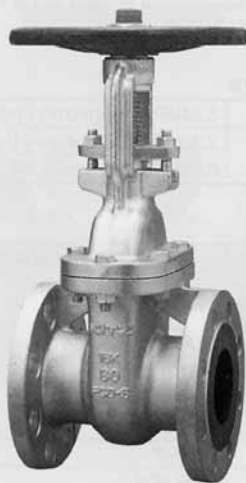
### Dimensions

Size	mm										
	mm	40	50	65	80	100	125	150	200	250	300
	inch	1½	2	2½	3	4	5	6	8	10	12
L		165	178	190	203	229	254	267	292	330	356
H (open)		300	352	408	473	566	667	779	993	1181	1404
D		160	200	200	250	250	300	300	350	400	450

NOTE : For flange dimensions refer to Page 41.

# 16K Gate Valve

**16SMBO**  
B.B.O.S.Y.  
RF-flanged



F-F dimension : JIS B 2002  
End flanges : JIS B 2239 16K

120°C Static water..... 2.16MPa(22kgf/cm<sup>2</sup>)  
220°C Steam, air, gas, oil..... 1.96MPa(20kgf/cm<sup>2</sup>)  
300°C Steam, air, gas, oil..... 1.77MPa(18kgf/cm<sup>2</sup>)  
350°C Steam, air, gas, oil..... 1.57MPa(16kgf/cm<sup>2</sup>)

● Use for lubricating or hydraulic oil is acceptable. Contact KITZ Corporation for technical advice, if valves are used as heat transfer media.

### Test Pressure

Body	3.24MPa (33kgf/cm <sup>2</sup> ) [hydrostatic]
Seat	2.38MPa (24.2kgf/cm <sup>2</sup> ) [hydrostatic] 0.59MPa (6kgf/cm <sup>2</sup> ) [air]

### Materials

Parts	JIS material
Body / Bonnet	FCD-S
Stem	SUS 403
Disc	SUS 403 (1½"~8") SFVC2A+13Cr (10") SCPH2+13Cr (12")
Gland	FCD-S
Gland packing	Non asbestos
Handwheel	FCD 400
Gasket	Asbestos
Body seat ring	SUS 403 (1½"~3" : SCS 1)
Bonnet bolt /nut	S45C
Gland bolt /nut	SS 400
Yoke sleeve	C6782BE (8"~12" : HBSc2)
Yoke	FCD-S
Name plate	A1050P

Asbestos-free gaskets are optional.

### Dimensions

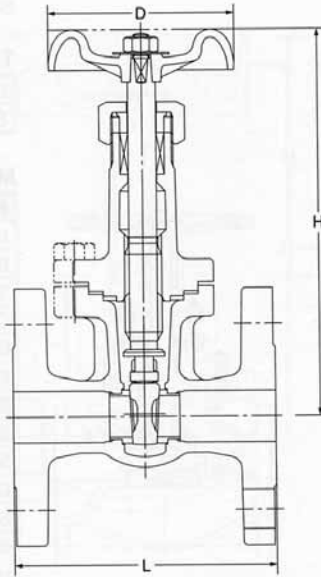
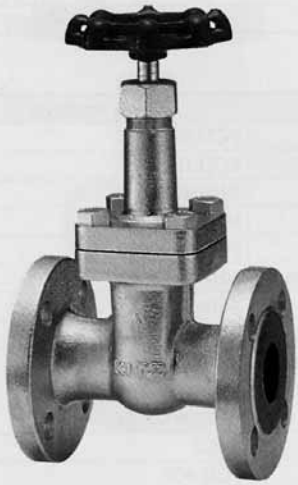
Size	mm										
	mm	40	50	65	80	100	125	150	200	250	300
	inch	1½	2	2½	3	4	5	6	8	10	12
L		165	178	190	203	229	254	267	292	330	356
H (open)		300	352	410	479	566	667	779	993	1181	1404
D		160	200	200	250	250	300	300	350	400	450

NOTE : For flange dimensions refer to Page 40.

# 20K Gate Valve

## 20SLB

B.B.I.S.  
RF-flanged



F-F dimension : JIS B 2002 JV 4-4  
End flanges : JIS B 2239 20K

120°C Static water..... 2.75MPa(28kgf/cm<sup>2</sup>)  
220°C Steam, air, gas, oil..... 2.45MPa(25kgf/cm<sup>2</sup>)  
300°C Steam, air, gas, oil..... 2.26MPa(23kgf/cm<sup>2</sup>)  
350°C Steam, air, gas, oil..... 1.96MPa(20kgf/cm<sup>2</sup>)

●Use for lubricating or hydraulic oil is acceptable.

### Test Pressure

Body	4.12MPa (42kgf/cm <sup>2</sup> ) [hydrostatic]
Seat	3.02MPa (30.8kgf/cm <sup>2</sup> ) [hydrostatic]
	0.59MPa (6kgf/cm <sup>2</sup> ) [air]

### Materials

Parts	JIS material
Body	FCD-S
Bonnet	FCD-S
Stem	SUS 420J2
Disc	SCS 1
Body seat ring	SUS 403
Gland	SUS 403
Gland packing	Non asbestos
Handwheel	FCD 450
Wheel nut	SS 400
Bonnet bolt	S45C
Gasket	Asbestos
Name plate	A1050P

### Dimensions

Size	mm	15	20	25	32	40
	inch	1/2	3/4	1	1 1/4	1 1/2
L		108	117	127	140	165
H (open)		175	177	214	241	277
D		90	90	100	115	135

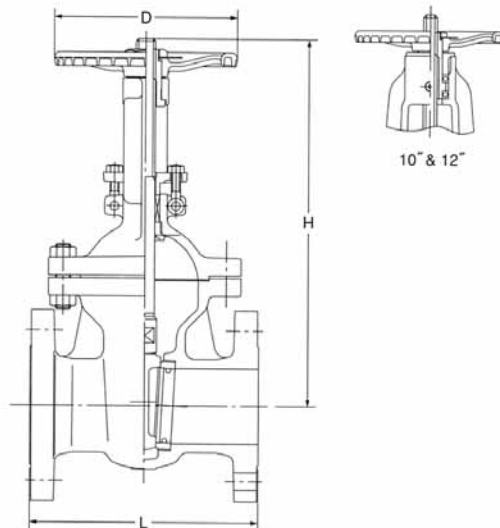
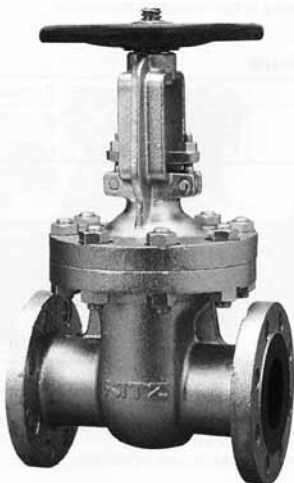
mm Asbestos-free gaskets are optional.

NOTE : For flange dimensions refer to Page 40.

# 20K Gate Valve

## 20SLBO

B.B.O.S.Y.  
RF-flanged



F-F dimension : JIS B 2002  
End flanges : JIS B 2239 20K

120°C Static water..... 2.75MPa(28kgf/cm<sup>2</sup>)  
220°C Steam, air, gas, oil..... 2.45MPa(25kgf/cm<sup>2</sup>)  
300°C Steam, air, gas, oil..... 2.26MPa(23kgf/cm<sup>2</sup>)  
350°C Steam, air, gas, oil..... 1.96MPa(20kgf/cm<sup>2</sup>)

●Use for lubricating or hydraulic oil is acceptable.

### Test Pressure

Body	4.12MPa (42kgf/cm <sup>2</sup> ) [hydrostatic]
Seat	3.02MPa (30.8kgf/cm <sup>2</sup> ) [hydrostatic]
	0.59MPa (6kgf/cm <sup>2</sup> ) [air]

### Materials

Parts	JIS material
Body	FCD-S
Bonnet	FCD-S
Stem	SUS 403
Disc	SUS 403 (8"~12": SCPH2+13Cr)
Body seat ring	SUS 403 (1 1/2": SCS 1)
Gland	FCD-S
Gland packing	Non asbestos
Handwheel	FCD 400
Wheel nut	SS 400
Bonnet bolt/nut	S45C
Gland bolt/nut	SS 400
Yoke sleeve	C6782BE (6"~12": HBSc2)
Gasket	Asbestos
Name plate	A1050P

Asbestos-free gaskets are optional.

### Dimensions

Size	mm	40	50	65	80	100	125	150	200	250	300
	inch	1 1/2	2	2 1/2	3	4	5	6	8	10	12
L		190	216	241	283	305	381	403	419	457	502
H (open)		326	395	450	520	595	725	820	1070	1247	1451
D		160	200	200	250	250	300	350	400	450	500

NOTE : For flange dimensions refer to Page 40.

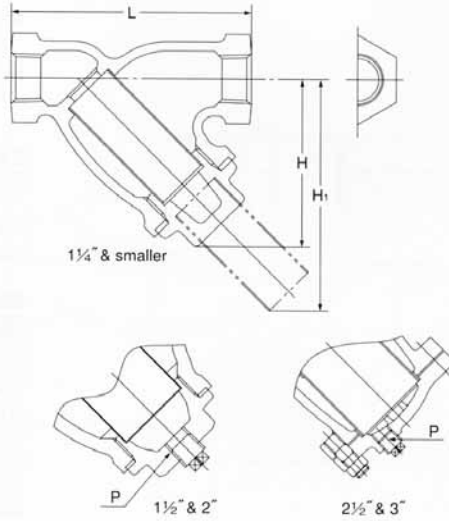
# 10K Strainer for Gas Service

## 10FDY

B.C. or S.C.



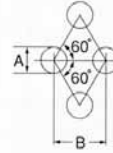
B.C. for 2½" & 3"  
S.C. for 2" & smaller



E-E dimension : KITZ Std.  
End threads : JIS B 0203

120°C Static water..... 1.37MPa(14kgf/cm<sup>2</sup>)  
200°C Steam, air, gas, oil..... 0.98MPa(10kgf/cm<sup>2</sup>)

- Use for lubricating or hydraulic oil is acceptable. Contact KITZ Corporation for technical advice, if valves are used as heat transfer media.
- Employment of copper cap prohibits use of this valve for ammonia or amine chemicals.



### Screen Hole Size

Valve Size	A	B
¼" ~ 2"	1.4	2.4
2½" & 3"	1.5	2.5

### Test Pressure

Body	2.06MPa(21kgf/cm <sup>2</sup> ) [hydrostatic]
------	---

### Materials

Parts	JIS material
Body	FCD-S
Cap (¼" ~ 2")	C3771BE
Cover (2½" & 3")	FCD-S
Gasket	Asbestos
Screen	SUS 304
Plug*	SUS 304 (2": FCMB 270)

\* 1½" & larger  
Asbestos-free gaskets are optional.

### Dimensions

Size	mm										
	mm	8	10	15	20	25	32	40	50	65	80
L	65	70	85	100	115	135	150	180	220	250	
H	46	46	60	65	75	90	100	115	191	215	
P	—	—	—	—	—	—	Rc¾	Rc½	Rc¼	Rc¼	
H1	63	63	85	95	110	130	145	170	271	311	

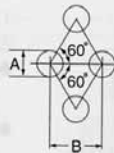
# 10K Strainer for Gas Service

## 10FDYBF

B.C. or S.C.  
FF-flanged

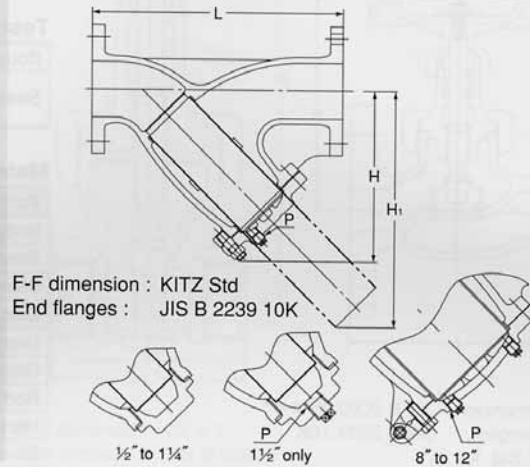


B.C. for 2" & larger  
S.C. for 1½" & smaller



### Screen Hole Size

Valve Size	A	B
½" to 2"	1.4	2.4
2½" to 5"	1.5	2.5
6" & 8"	3	5
10" & 12"	5	7



F-F dimension : KITZ Std  
End flanges : JIS B 2239 10K

120°C Static water..... 1.37MPa(14kgf/cm<sup>2</sup>)  
220°C Steam, air, gas, oil..... 1.18MPa(12kgf/cm<sup>2</sup>)  
300°C Steam, air, gas, oil..... 0.98MPa(10kgf/cm<sup>2</sup>)  
(½" ~ 1½" : 260°C..... 1.07MPa(11kgf/cm<sup>2</sup>))

- Use for lubricating or hydraulic oil is acceptable. Contact KITZ Corporation for technical advice, if valves are used as heat transfer media.
- Employment of copper cap prohibits use of this valve for ammonia or amine chemicals.
- Bolting materials will be changed for servicing high temperature exceeding 225°C. Contact KITZ Corporation for detailed information.
- A gasket will be used for sealing the plug for application to high temperature exceeding 260°C. Specify your service temperature in advance. Ensure replacement of plug gaskets on your valve maintenance.

### Test Pressure

Body	2.06MPa(21kgf/cm <sup>2</sup> ) [hydrostatic]
------	---

### Materials

Parts	JIS material
Body	FCD-S
Cap (½" ~ 1½")	C3771BE
Cover (2" ~ 12")	FCD-S
Gasket	Asbestos
Screen	SUS 304
Cover bolt / nut	SS 400
Plug*	SUS 304

\* 1½" & larger  
Asbestos-free gaskets are optional.

### Dimensions

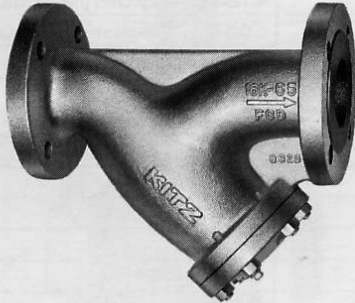
Size	mm															
	mm	15	20	25	32	40	50	65	80	100	125	150	200	250	300	
L	125	140	150	170	190	230	305	360	415	465	515	580	680	800		
H	57	63	77	90	100	138	212	242	284	325	370	462	536	625		
P	—	—	—	—	Rc¾	Rc¼	Rc¼	Rc¼	Rc¾	Rc¾	Rc¾	Rc¾	Rc¾	Rc¾		
H1	82	91	114	134	146	172	290	340	391	450	502	645	757	882		

NOTE : For flange dimensions refer to Page 40. ※RF-flanged ends shall be optionally available.

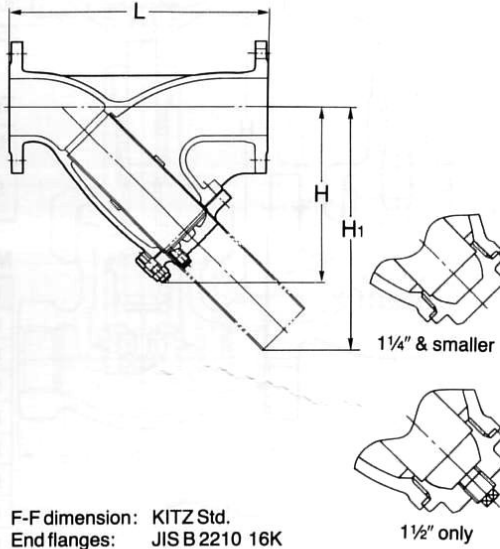
# 16K Y-Pattern Strainer

**Fig. 16FDYB**

B.C. or S.C.  
RF-flanged



B.C. for 2" and larger  
S.C. for 1½" and smaller



120°C Static water ..... 2.16MPa (22kgf/cm<sup>2</sup>)  
220°C Steam, air, gas, oil ..... 1.96MPa (20kgf/cm<sup>2</sup>)  
300°C Steam, air, gas, oil ..... 1.77MPa (18kgf/cm<sup>2</sup>)  
350°C Steam, air, gas, oil ..... 1.57MPa (16kgf/cm<sup>2</sup>)

**Screen Hole Size**

	Valve Size	A	B
	½" to 2"	1.4	2.5
	2½" to 5"	1.5	2.5
	6" to 8"	3	5
	10" to 12"	5	7

**Test Pressure**

Body	3.24MPa (33kgf/cm <sup>2</sup> ) [hydrostatic]
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**Materials**

Parts	JIS material
Body	FCD-S
Cap (½"~1½")	C3771 BE
Cover (2"~12")	FCD-S
Gasket	Asbestos
Screen	SUS 304
Cover bolt	SS 400 (8"-12": SUS 304)
Cover nut	SS 400
Plug*	SUS 304 (8"-12": C3371BD)

\* 1½" & larger  
Asbestos-free gasket are optional.

**Dimensions**

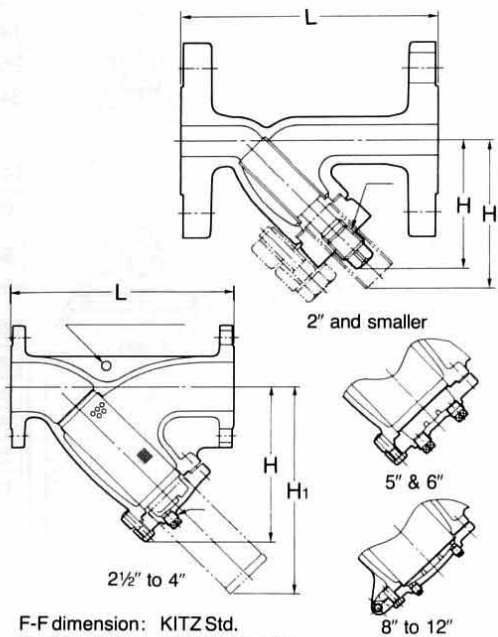
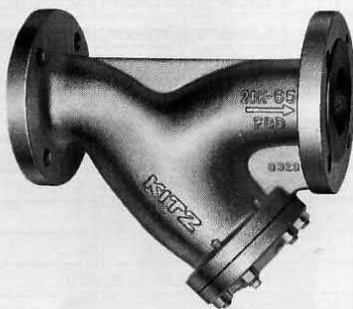
Size	mm	15	20	25	32	40	50	65	80	100	125	150	200	250	300
	inch	½	¾	1	1¼	1½	2	2½	3	4	5	6	8	10	12
L		125	140	150	170	190	250	305	360	415	465	515	580	680	800
H		57	63	77	90	100	168	212	242	284	325	370	462	536	625
P		—	—	—	—	Rc¾	Rc¼	Rc¼	Rc¼	Rc¾	Rc¾	Rc¾	Rc¾	Rc¾	Rc¾
H <sub>1</sub>		82	91	114	134	146	218	285	340	391	450	502	645	757	882

NOTE: For flange dimensions refer to Page 36.

# 20K Strainer for Gas Service

**Fig. 20FDYB**

B.C.  
RF-flanged



120°C Static water ..... 2.75MPa (28kgf/cm<sup>2</sup>)  
220°C Steam, air, gas, oil ..... 2.45MPa (25kgf/cm<sup>2</sup>)  
300°C Steam, air, gas, oil ..... 2.26MPa (23kgf/cm<sup>2</sup>)  
350°C Steam, air, gas, oil ..... 1.96MPa (20kgf/cm<sup>2</sup>)

**Test Pressure**

Body	4.12MPa (42kgf/cm <sup>2</sup> ) [hydrostatic]
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**Materials**

Parts	JIS material
Body	FCD-S
Cover	FCD-S
Gasket	Asbestos
Screen*	SUS 304
Plug	SUS 304
Cover bolt	S45C

\* 40 mesh wire cloth (reinforced with SUS 304 punched plate)  
Asbestos-free gaskets are optional.

**Dimensions**

Size	mm	10	15	20	25	32	40	50	65	80	100	125	150	200	250	300
	inch	¾	½	¾	1	1¼	1½	2	2½	3	4	5	6	8	10	12
L		120	125	140	160	185	200	250	305	360	415	465	515	620	760	870
H		65	65	70	85	124	135	163	222	254	294	335	382	442	548	654
H <sub>1</sub>		74	74	85	105	126	139	172	299	345	398	457	508	570	733	895
P		Rc¼	Rc¼	Rc¾	Rc½	Rc¾	Rc1	Rc1¼	Rc½	Rc½	Rc¾	Rc¾	Rc¾	Rc1	Rc1	Rc1

NOTE: For flange dimensions refer to Page 36.