

## 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 Class 150
	20K			JIS B2220 20K flanged	ASME B16.34 Class 300
	Class 150/300/600	ASME B16.34	ASME B16.10	ASME B16.5 flanged	ASME B16.34
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	0.5 MPa 150°C	JIS B2011 KITZ Std.	JIS B0203 threaded JIS B2220 5K 10K flanged	JIS B2011 KITZ Std.
	10K				
	20K	2.0 MPa 180°C			
	Type 200			KITZ Std.	
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 Class 150
	20K			JIS B2220 20K flanged	ASME B16.34 Class 300
	Class 150/300	ASME B16.34		ASME B16.5 flanged	ASME B16.34

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

## Bonnet Gasket Materials

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

Series	Class	Material	Maximum Service Temperature
A, D	10K, 20K, 150, 300	Ceramics PTFE	200°C
		Stainless Foil Inserted Flexible Graphite	400°C
	600	PTFE Spiral Wound	300°C
HA	150	Flexible Graphite Spiral Wound	450°C
		Ceramics PTFE	200°C
		Stainless Foil Inserted Flexible Graphite	400°C
	300	PTFE Spiral Wound	260°C
		Flexible Graphite Spiral Wound	450°C
C	150	Ceramics PTFE	200°C
		Stainless Foil Inserted Flexible Graphite	400°C
		PTFE Spiral Wound	300°C
	300	Non-Asbestos Spiral Wound	450°C
		Flexible Graphite Spiral Wound	450°C
		Stainless Steel (Ring Joint)	500°C
		600, 900, 1500	
B	5K, 10K	Reinforced PTFE	180°C
AJ	10K, 150 20K, 300	Flexible Graphite	400°C

Note: Refer to Page 15 for bonnet gaskets used for KITZ low emission service valves.

## Gland Packing Materials

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

Series	Class	Material	Maximum Service Temperature
A, D	10K, 20K 150, 300, 600	Flexible Graphite + PTFE Braided Packing	300°C
		PTFE Cup & Cone	150°C
		Flexible Graphite	500°C
		Carbon Core + PTFE Braided Packing	260°C
HA	150, 300	Flexible Graphite	500°C
		Carbon Core + PTFE Braided Packing	260°C
C	150, 300	Flexible Graphite + PTFE Braided Packing	300°C
		Flexible Graphite	500°C
		600, 900, 1500	Flexible Graphite
B	5K, 10K, Type200	Plastic Graphite Packing	180°C
AJ	10K, 150 20K, 300	Flexible Graphite + PTFE Braided Packing	300°C

Note: Refer to Page 15 for gland packing sets used for KITZ low emission service valves. \*455°C (850°F) for oxidizing atmosphere.

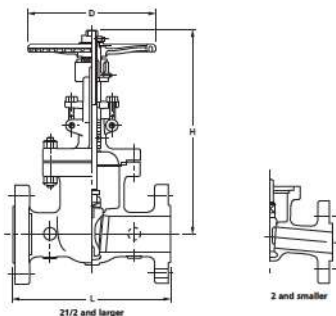
Contact KITZ Corporation or your KITZ distributors for optional requirement of gasket or gland packing materials other than listed above.

## Class 600 GATE VALVE

Pressure-Temperature Rating: ASME B16.34

600UMA

600UMAM



### Materials

Parts	600UMA	600UMAM
Body	CF8	CF8M
Bonnet	CF8	CF8M
Stem	304	316
Disc*	CF8	CF8M
Gland	304	316
Gland flange	CF8	
Gland packing	Refer to Page 10	
Gasket	Refer to Page 10	
Yoke**	CF8	
Yoke sleeve	Ductile Ni-resist	
Handwheel	Ductile iron	
Gland bolt/nut	B8/8	
Gland bolt pin	403	
Bonnet bolt/nut	B8/8	
Grease nipple***	Stainless steel	
Thrust bearing****	Steel	
Bushing***	Carbon	Carbon
Name plate	Aluminum	

\*Body seats and/or disc seats can be optionally hard-faced.  
 \*\*Yoke is separated from bonnet for size 8 and larger.  
 \*\*\*For size 2 and larger \*\*\*\*For size 6 and larger  
 Note: Flexible wedge for all sizes

Items	
Face to face dimensions	ASME B16.10 Class 600
End flange dimensions	ASME B16.5 Class 600
Wall thickness	ASME B16.34 Class 600

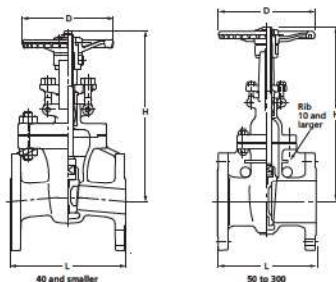
Nominal Size	1/2	3/4	1	1 1/2	2	2 1/2	3	4	6	8	10	12	
	15	20	25	40	50	65	80	100	150	200	250	300	
L	in.	6.50	7.48	8.50	9.49	11.5	13.0	14.0	17.0	22.0	26.0	31.0	33.0
	mm	165	190	216	241	292	330	356	432	559	660	787	838
H (open)	in.	8.27	8.82	9.88	13.1	17.8	19.0	21.5	26.6	35.6	44.4	52.3	59.9
	mm	210	224	251	333	451	482	545	676	904	1128	1329	1521
D	in.	3.94	3.94	5.51	7.09	7.87	8.86	9.84	13.8	17.7	19.7	23.6	26.8
	mm	100	100	140	180	200	225	250	350	450	500	600	680

## 10K GATE VALVE

Pressure-Temperature Rating: JIS B2220

10UMA(T)

10UMAM(T)



### Materials

Parts	10UMA(T)*	10UMAM(T)*
Body	SCS13A	SCS14A
Bonnet	SCS13A	SCS14A
Stem	SUS304	SUS316
Disc	SCS13A	SCS14A
Gland	SUS304	SUS316
Gland flange	SCS13A	
Gland packing	Refer to Page 10	
Gasket	Refer to Page 10	
Yoke sleeve	Ductile Ni-resist	
Yoke**	FCD-5	
Handwheel	FCD400-15	
Gland bolt/nut	SUS304/304	
Bonnet bolt/nut	SUS304/304	
Grease nipple***	SUS303	
Name plate	A1050P	

\* (T) Sufficing stands for the provision of ceramic filled PTFE gaskets  
 \*\*Yoke is separated from bonnet for 250 and larger.  
 \*\*\*For size 250 and larger  
 Note: \* Body seats and/or disc seats can be optionally hard-faced.  
 \* Flexible wedge for all sizes

Items	
Face to face dimensions	ASME B16.10 Class 150
End flange dimensions	JIS B2220 10K
Wall thickness	ASME B16.34 Class 150

Nominal Size	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6	8	10	12	
	15	20	25	32	40	50	65	80	100	125	150	200	250	300	
L	in.	4.25	4.61	5.00	5.51	6.50	7.01	7.48	7.99	9.02	10.0	10.5	11.5	13.0	14.0
	mm	108	117	127	140	165	178	190	203	229	254	267	292	330	356
H (open)	in.	7.91	8.31	8.82	9.45	11.2	13.2	14.7	17.5	20.6	23.9	28.0	36.4	44.3	52.6
	mm	201	211	224	240	284	336	374	444	523	606	711	924	1126	1336
D	in.	3.54	3.54	3.94	3.94	5.51	6.30	7.09	7.87	8.86	9.84	11.8	13.8	15.8	
	mm	90	90	100	100	140	160	180	200	225	250	250	300	350	400