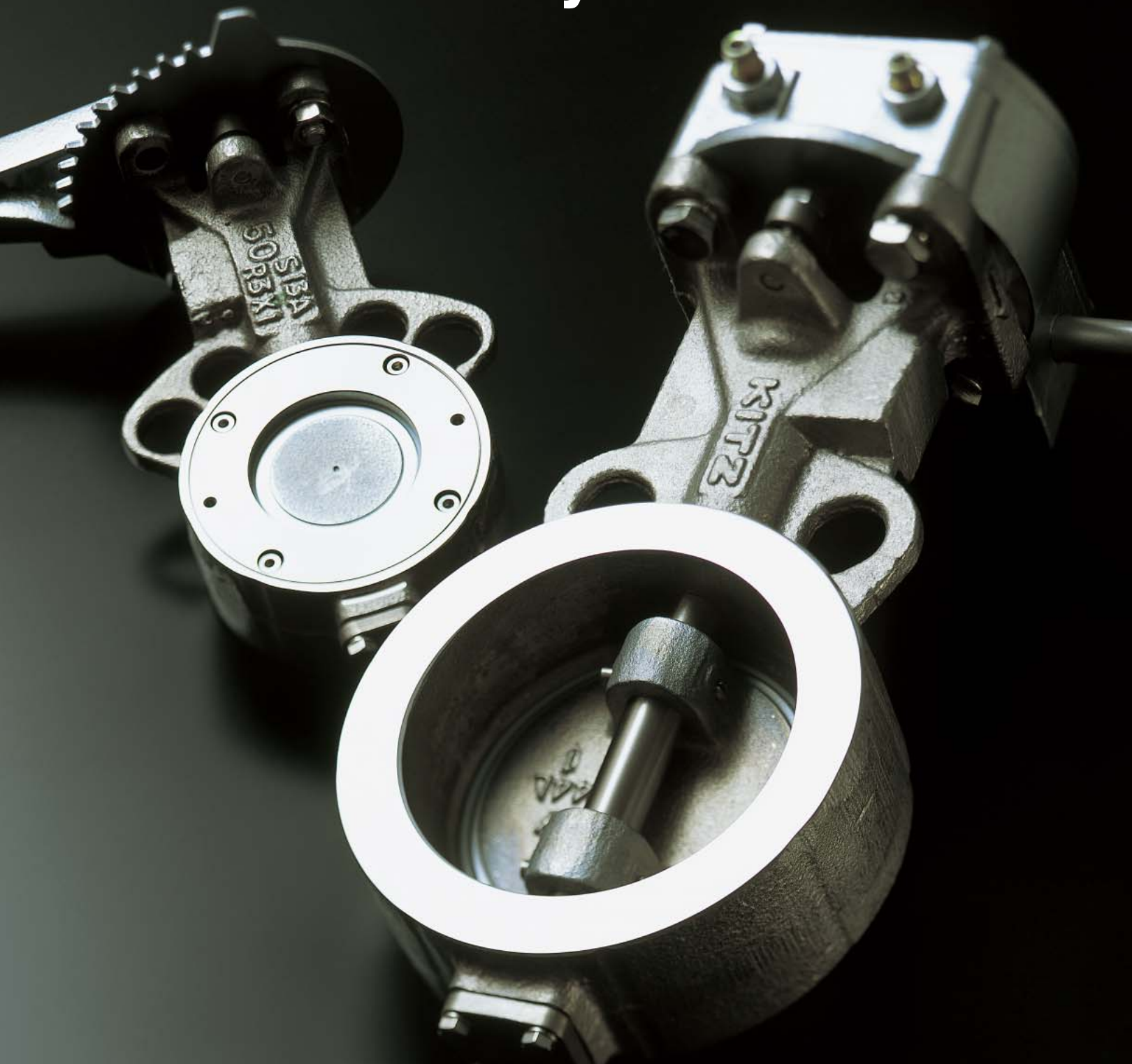
KITZ

Stainless Steel Butterfly Valves

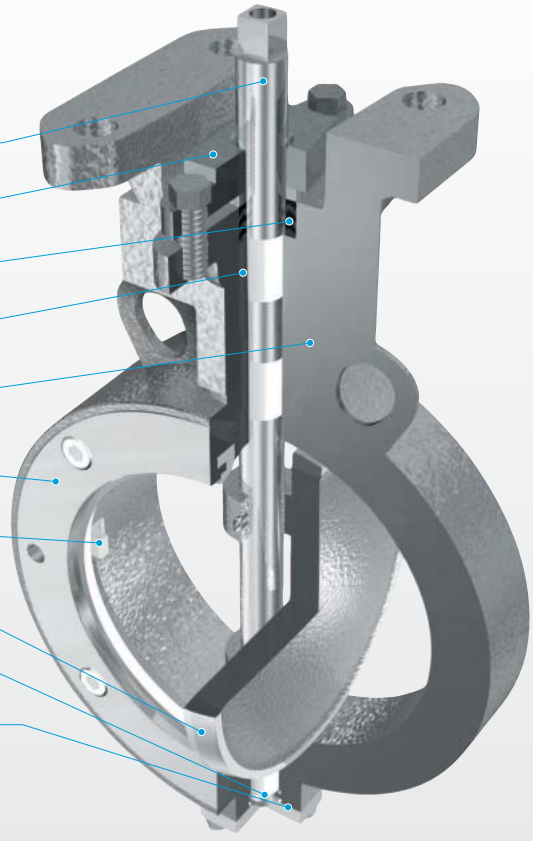


KITZ CORPORATION

KITZ Type UB 10K/16K & Class 150 Stainless Steel Butterfly Valves

Double-eccentric kinematics, and all stainless steel bodies and trims guarantee high performance corrosion resistant service for application of KITZ Type UB butterfly valves to chemical industries.

DESIGN FEATURES

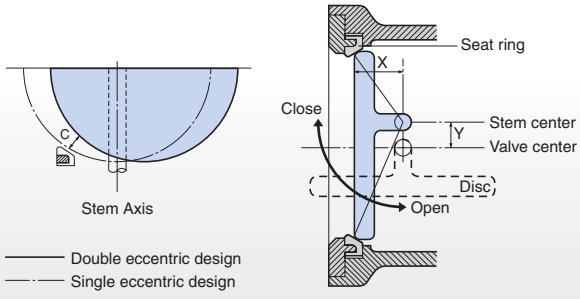


*SCS14A or SUS316 is available as an option

Double-eccentric kinematics

The valves stem is designed eccentric to both the center of the seat ring (by X) and the center of the valve body (by Y), which makes the clearance C between the seat ring and the disc seat surface on its fully open position (Fig.1). Disc seating surface is spherically machined and contacts PTFE seat tightly thorough 360℃ for leak-free service. All these help minimize frictional wear of seat rings and reduce the valve operating torque considerably.

Fig.1



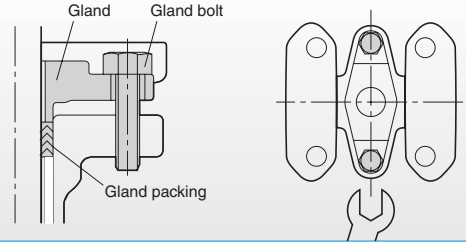
Durable seat rings

Seat rings are made of PTFE with stainless steel supporter. Furthermore, double-eccentric kinematics relieve seat ring from damage or wear which is a rather usual problem of conventional butterfly valves, This makes the service life twice as long as rubber seated butterfly valves.

Retightening of gland packing

There is a room between the gland and the lever or gear to allow retightening of gland boltings without trouble of disassembly of the lever or gear during plant operation. Another feature of KITZ Type UB butterfly valves (Fig.2).

Fig.2

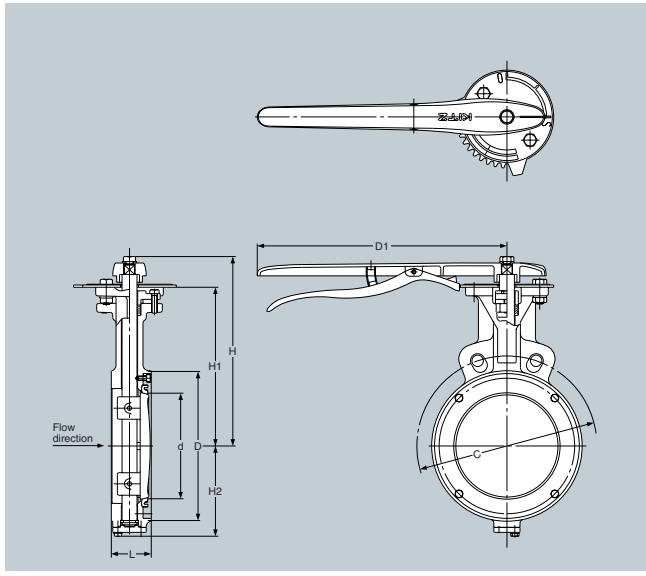


KITZ Butterfly Valves

LEVER OPERATED

10UB*: Class 10K／150UB: Class 150

*KITZ valve codes shall be suffixed with M in case of SCS14A stainless steel body and trim.



Dimensions

unit:mm

Size		d	H	H1	H2	L	D	D1	C	
mm	inch								10K	150
50	2	50	176	138	64	43	90	230	120	120.5
65	2½	65	186	148	74	46	115		140	139.5
80	3	78	208	167	82		126	280	150	152.5
100	4	98	222	181	92	52	146		175	190.5
125	5	123	241	202	115	56	181	350	210	216.0
150	6	148	264	225	126		211		240	241.5

Materials

Parts	ASTM Materials	JIS Materials
Body	A351 GR.CF8*1	SCS13A*1
Stem	SUS304 N2	SUS304 N2
Disc	A351 GR.CF8*1	SCS13A*1
Gland	A351 GR.CF8*1	SCS13A*1
Seat ring	PTFE*2	PTFE*2
Seat retainer	A276 TYPE304	SUS304
Gland packing	PTFE	PTFE
Gasket	PTFE	PTFE

Parts	ASTM Materials	JIS Materials
Set bolt	A193 GR.B8	SUS304
Taper pin	A276 TYPE316	SUS316
Stem bearing	METAL BACKED PTFE	METAL BACKED PTFE
Gland bolts	A193 GR.B8	SUS304
Thrust washer	PTFE	PTFE
End plate	A351 GR.CF8	SCS13A
End plate bolts	A193 GR.B8	SUS304

*1. CF8M(316)/SCS14A(SUS316) is available as an option.
*2. carbon filled PTFE seat rings are optionally available.

⚠ CAUTION

The following gaskets should be used for the installation of the valves into pipelines.

[Type of Gasket]

- Reinforced PTFE gasket (Jacketed gasket, Spiral Wound gasket or Metal gasket cannot be installed.)

[Dimension of Gasket]

- The dimensions of the gasket should comply with ASME B16.21. (Minimum gasket thickness is 3㎜.)

The valves cannot be installed to stub ends.

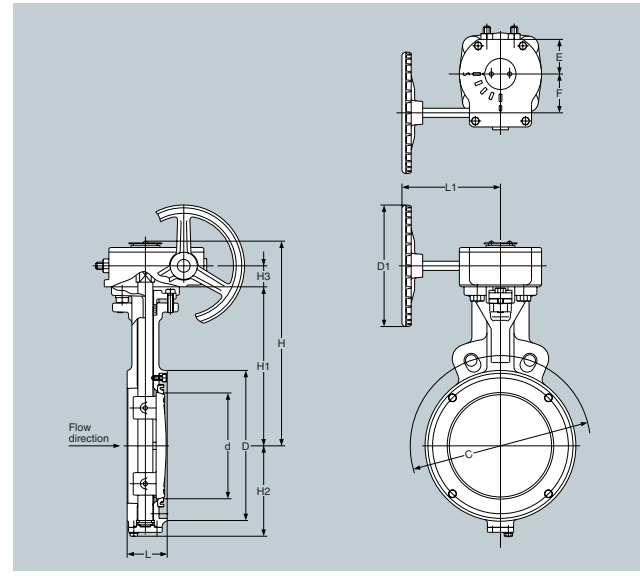
UB is a unidirectional valve. The valve must be installed according to an arrow, provided on the side of the operator mounting flange. The arrow must point from the higher pressure side to the lower pressure side in the valve closed position.

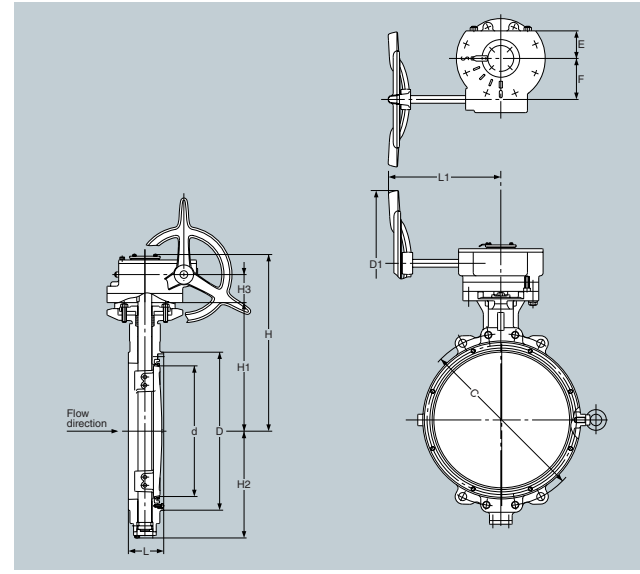
KITZ Butterfly Valves

LONG SPINDLE GEAR OPERATED

GL-10UB*: Class 10K／GL-16UB: Class 16K／GL-150UB: Class 150

*KITZ valve codes shall be suffixed with M in case of SCS14A stainless steel body and trim.





Dimensions

unit:mm

Size		d	H	H1	H2	H3	L	L1	D	D1	E	F	C			Gear type
mm	inch												10K	16K	150	
50	2	50	191	138	64	25	43	150	90	140	35	42	120	120	120.5	No.1
65	2½	65	201	148	74		46		115				140	140	139.5	
80	3	78	225	167	82	28		195	126	170	42	60	150	160	152.5	No.2
100	4	98	239	181	92		52		146				175	185	190.5	
125	5	123	260	202	115		56	204	181	200			210	225	216.0	
150	6	148	283	225	126				211				240	260	241.5	
200	8	197	350	263	164	47	71	280	257	310	54	66	290	305	298.5	No.3
250	10	243	417	315	235	60	76	310	322	360	69	89	355	380	–	No.4
300	12	295	444	342	258		83		367				400	430	–	
350	14	325	476	374	294		92	363	410	500	70	93.5	445	480	–	No.5
400	16	371	572	408	315	95	102	377	470		90	134	510	540	–	No.6
450	18	421	606	442	370		114		530				565	605	–	
500	20	470	622	458	398		127		580				620	660	–	
600	24	569	758	558	475	170	154		688		105	213	730	770	–	No.7

KITZ Butterfly Valves

TECHNICAL SPECIFICATIONS

●Maximum service pressures	10K	1.37MPa
	16K (Size 2" to 12")	1.96MPa
	16K (Size 14" to 24")	1.37MPa
●Service temperature range	PTFE seat	−29℃ to +160℃
	Carbon filled PTFE seat	−29℃ to +200℃
●Wall thickness		ASME B 16.34 Class 150
●Face-to-face dimensions	ISO 5752	
	Short	6" and smaller
	Medium	8" and larger
●Coupling flanges	10K	JIS 10K
	16K	JIS 16K
	Class 150	ASME Class 150

●Flow coefficient (Cv)

Size		Valve opening			
mm	inch	30°	45°	60°	90°
50	2	17	33	54	83
65	2½	36	69	112	175
80	3	52	101	164	255
100	4	94	182	295	460
125	5	147	285	462	722
150	6	240	465	756	1180
200	8	455	883	1440	2240
250	10	743	1450	2350	3660
300	12	1150	2230	3610	5640
350	14	1440	2790	4520	7060
400	16	1910	3700	6010	9390
450	18	2500	4850	7880	12300
500	20	3110	6030	9800	15300
600	24	4650	9030	14700	22900

⚠ CAUTION

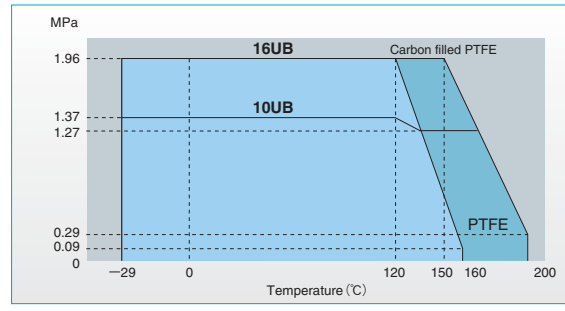
For mounting Valves onto pipes, be sure to use gaskets* specified below:

*Asbestos joint sheet or PTFE sheet

mm

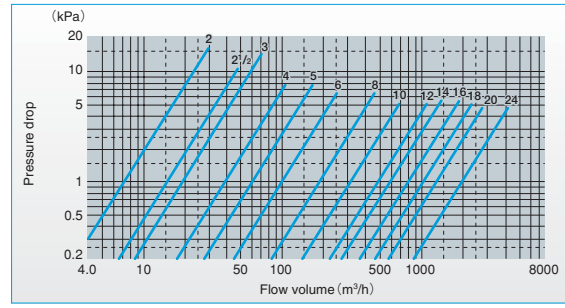
Size	I/D		O/D	Thickness
inch	Min.	Max.	Min.	Min.
2	60	61	90	3
2½	73	77	115	3
3	88	90	126	3
4	108	116	146	3
5	136	143	181	3
6	162	170	211	3
8	213	220	257	3
10	266	275	322	3
12	312	326	367	3
14	342	359	410	3
16	389	410	470	3
18	444	460	530	3
20	493	513	580	3
24	594	615	688	3

●P-T rating of seats

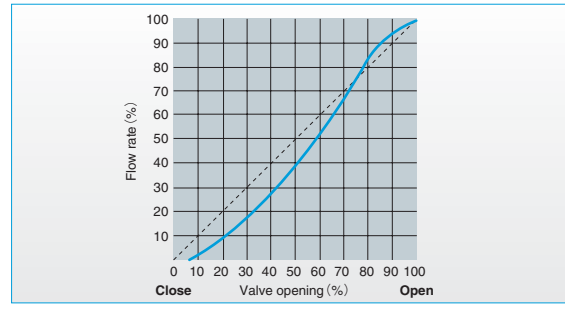


Contact KITZ for technical advice when service conditions may exceed the P-T rating range limited here.

●Flow characteristics (for handling static clean water)



●Flow rate



⚠ CAUTION

Pressure-temperature ratings and other performance data published in this catalog have been developed from our design calculation, in-house testing, field reports provided by our customers and/or published official standards or specifications. They are good only to cover typical applications as a general guideline to users of KITZ products introduced in this catalog.

For any specific application, users are kindly requested to contact KITZ Corporation for technical advice, or to carry out their own study and evaluation for proving suitability of these products to such an application. Failure to follow this request could result in property damage and/or personal injury, for which we shall not be liable.

While this catalog has been compiled with the utmost care, we assume no responsibility for errors, impropriety or inadequacy. Any information provided in this catalog is subject to from-time-to-time change without notice for error rectification, product discontinuation, design modification, new product introduction or any other cause that KITZ Corporation considers necessary. This edition cancels all previous issues.

Read instruction manual carefully before use.

⚠ NOTICE

If any products designated as strategic material in the Foreign Exchange and Foreign Trade Law, Cabinet Order Concerning Control of Export Trade, Cabinet Oeder Concerning Control of Foregn Exchange and other related laws and ordinances ("Foreign Exchange Laws") are exported to any foreign country or countries, an export license issued by the Japanese Government will be required under the Foreign Exchange Laws.

Futher, there may be cases where an export license issued by the government of the United States or other country will be required under the applicable export-related laws and ordinances in such relevant countries.

The contract shall become effective subject to that a relevant export license is obtained from the Japanese Government.

A chrysanthemum-handle is a symbol of KITZ,
the brand of valve reliability

ISO 9001 certified since 1989

KITZ

KITZ CORPORATION

1-10-1, Nakase, Mihama-ku, Chiba 261-8577, Japan
International Sales Dept. Phone : 81-43-299-1730, 1732 and 1733
Fax : 81-43-299-0121

—— Distributed by ——

Printed in Japan