

KITZ AJ Series JIS 10K Aluminium Butterfly Valves

As the first diecast aluminium butterfly valves designed in conformity with JIS B 2032 and ISO 5752 standards, we are proud to introduce the KITZ AJ Series wafer type rubber lined butterfly valves for a wide range of industrial and commercial applications. Its features include light weight for a considerably reduced piping load, patent applied S-shape cross-section discs, and dual seat supporter rings for rigid valve structure and extended service life.



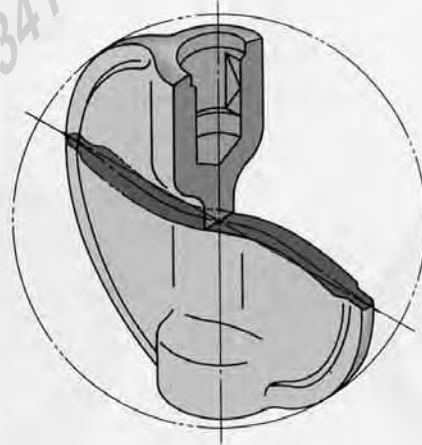
Technical Specifications

Maximum service pressure	0.98MPa (10 kgf/cm ²) [JIS B2032]
Service temperature range (Refer to P-T rating shown on Page 8 for details)	-20°C to +120°C
Continuous service temperature range	0°C to +100°C
Face-to-face dimensions	JIS B 2032 / ISO 5752
Durability test	JIS B 2032
Stem/disc mechanical strength	JIS B 2032
Shell test pressure	1.47MPa (15 kgf/cm ²) [hydrostatic]
Seat test pressures	0.59MPa (6 kgf/cm ²) [pneumatic] 1.08MPa (11 kgf/cm ²) [hydrostatic]
Pressure-temperature rating of EPDM seat	See Page 8
Coupling flanges	JIS 10K

AJ Series Aluminium Butterfly Valves

Design Features

- **Requirements of JIS B 2032** are fully met on pressure-temperature rating, F-F dimensions, durability tests, mechanical strength of stem and disc, and rubber liner P-T rating.
- **Diecast aluminium valve bodies** weigh only one-third of our conventional cast iron butterfly valves.
- **Spherical surface design and S-shape cross-section of valve discs** make full contact between discs and rubber liners for extremely high sealing performance with reduced valve operating torque. Thorough 360° shut-off mechanism also helps extend the service life of rubber liners.
- **Integral actuator mounting pads to ISO standard** are provided for easy, on-the-spot direct mounting of actuators.
- **Newly developed EPDM seats** are designed with unique features such as;
 - Self-reinforcing dual back-ribs to protect liners from deformation for higher sealing function and extended service life.
 - Disc seating contact is designed wide enough to assure the fail-free sealing performance.
 - Dual brass seat supporter rings are built in the rubber seats for functional stability, and extended service life.
 - Easy mounting by means of gasketless flange sealing contact.



KITZ Product Coding

G - **10** **A J** **M** **E**
 | | | | |
 1 2 3 4 5

① Valve operator

G Worm gear
 D Pneumatic actuator
 EB Electric actuator
 None Manual lever

② **Nominal pressure:** 0.98MPa (10 kgf/cm²)

③ **Valve type:** JIS aluminium butterfly valve

④ **Disc material:** JIS SCS 14A

⑤ **Seat material:** EPDM

AJ Series Aluminium Butterfly Valves

Design Features



Materials

Parts	JIS material
Body	ADC 12
Stem	SUS 403
Disc	SCS 14A
Seat	EPDM
O-ring	EPDM
Thrust washer	Brass plate
Bearing	Polyacetal
Bottom stem	SUS 403
Gland plate	SPCC
Seat supporter rings	Brass



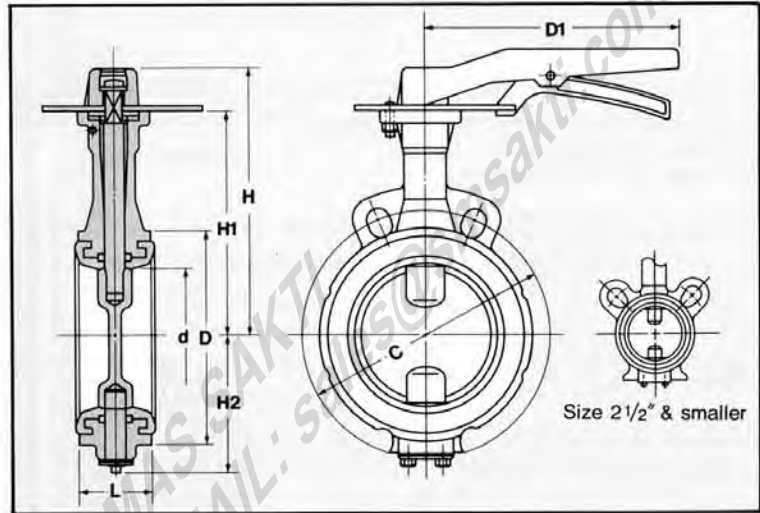
KITZ Butterfly Valves

AJ Series Aluminium Butterfly Valves

10AJME: Lever Operated

Dimensions

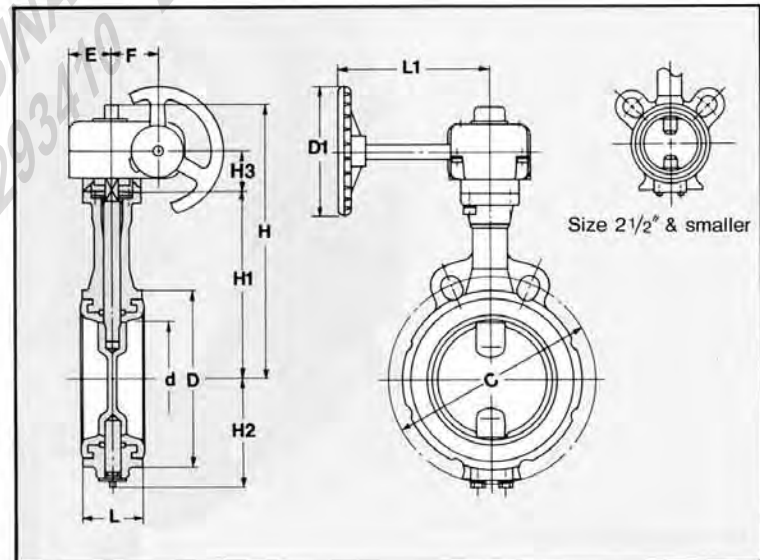
Size	mm							
	mm inch	40 1½	50 2	65 2½	80 3	100 4	125 5	150 6
d	40	50	65	80	100	125	150	150
H	175	180	187	195	205	238	252	252
H ₁	130	135	143	150	160	185	198	198
H ₂	51	65	72	84	95	116	130	130
L	33	43	46	46	52	56	56	56
D	78	92	115	131	151	186	211	211
C	105	120	140	150	175	210	240	240
D ₁	180	180	180	180	180	230	230	230



G-10AJME: Gear Operated

Dimensions

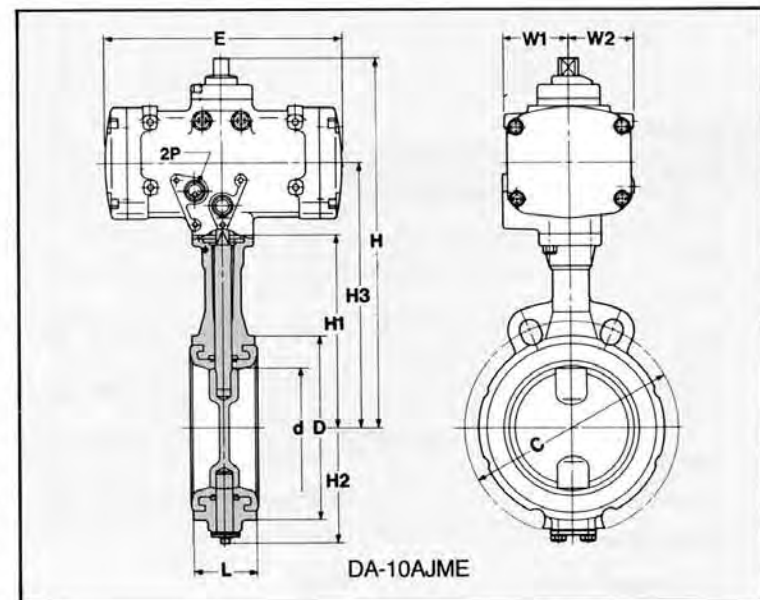
Size	mm								
	mm inch	40 1½	50 2	65 2½	80 3	100 4	125 5	150 6	200 8
d	40	50	65	80	100	125	150	196	196
H	202.5	207.5	215.5	222.5	232.5	257.5	270.5	318.5	318.5
H ₁	130	135	143	150	160	185	198	230	230
H ₂	51	65	72	84	95	116	130	162	162
H ₃	33.8	33.8	33.8	33.8	33.8	33.8	33.8	44	44
L	33	43	46	46	52	56	56	60	60
D	78	92	115	131	151	186	211	268	268
C	105	120	140	150	175	210	240	290	290
D ₁	110	110	110	110	110	110	110	170	170
L ₁	135	135	135	135	135	135	135	185	185
E	36.4	36.4	36.4	36.4	36.4	36.4	36.4	45.5	45.5
F	40.3	40.3	40.3	40.3	40.3	40.3	40.3	62.9	62.9
Gear type	No. 1	No. 1	No. 1	No. 1	No. 1	No. 1	No. 1	No. 1	No. 2



DA-10AJME/DAS-10AJME: Pneumatically Operated

Dimensions

Size	mm								
	mm inch	40 1½	50 2	60 2½	80 3	100 4	125 5	150 6	200 8
d	40	50	65	80	100	125	150	196	196
H	DA	258.5	263.5	271.5	298.5	308.5	387	400	432
	DAS	278.5	283.5	345	352	379	404	417	501.5
H ₁	130	135	143	150	160	185	198	230	230
H ₂	51	65	72	84	95	116	130	162	162
H ₃	DA	179	184	192	209	219	272	285	317
	DAS	189	194	230	237	264	289	302	356
L	33	43	46	46	52	56	56	60	60
D	78	92	115	131	151	186	211	268	268
C	105	120	140	150	175	210	240	290	290
Actuator	P	Rc¼	Rc¼	Rc¼	Rc¼	Rc¼	Rc¼	Rc¼	Rc¼
	DA	No.	DA-109		DA-211		DA-313		DA-415
		W ₁	45		54		58		65
		W ₂	41		51		58		61
		E	168		195		270.8		356
	DAS	No.	DAS-209	DAS-309	DAS-311	DAS-421		DAS-524	
		W ₁	74	78		81		102	
		W ₂	51	58		61		87	
		E	256	396		470		628	



Note: KITZ Series pneumatic actuators operate DA / DAS-10AJME butterfly valves.

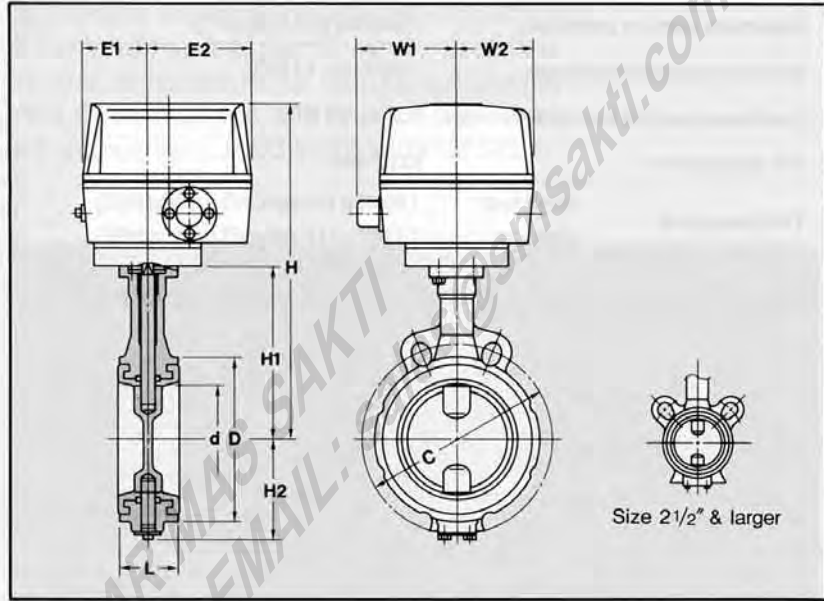
AJ Series Aluminium Butterfly Valves

EL100/200-10AJME: Electrically Operated

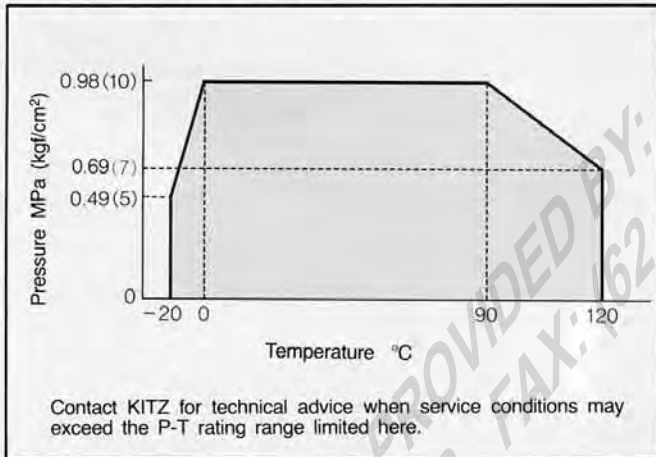
Dimensions

		mm								
Size	mm	40	50	65	80	100	125	150	200	
	inch	1½	2	2½	3	4	5	6	8	
d		40	50	65	80	100	125	150	196	
H		263.5	268.5	276.5	283.5	293.5	363.5	376.5	427.5	
H₁		130	135	143	150	160	185	198	230	
H₂		51	65	72	84	95	116	130	162	
L		33	43	46	46	52	56	56	60	
D		78	92	115	131	151	186	211	268	
C		105	120	140	150	175	210	240	290	
Actuator	E₁					58			65	68
	E₂					96			105	117
	W₁					92			98	115
	W₂					69			72	78
	Type	EL100/200-109			EL100/200-111		EL100/200-2		EL100/200-3	

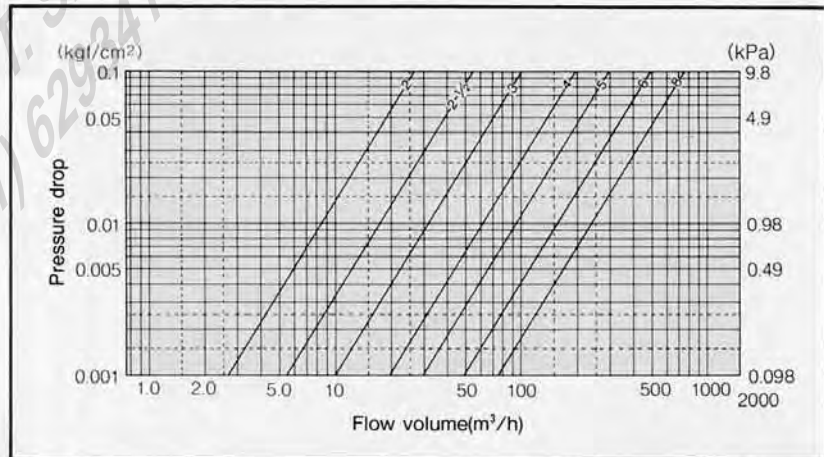
Note: KITZ EL100 (100V) or EL200 (200V) electric actuators operate EL100-10AJME or EL200-10AJME butterfly valves respectively.



EPDM seat P-T rating



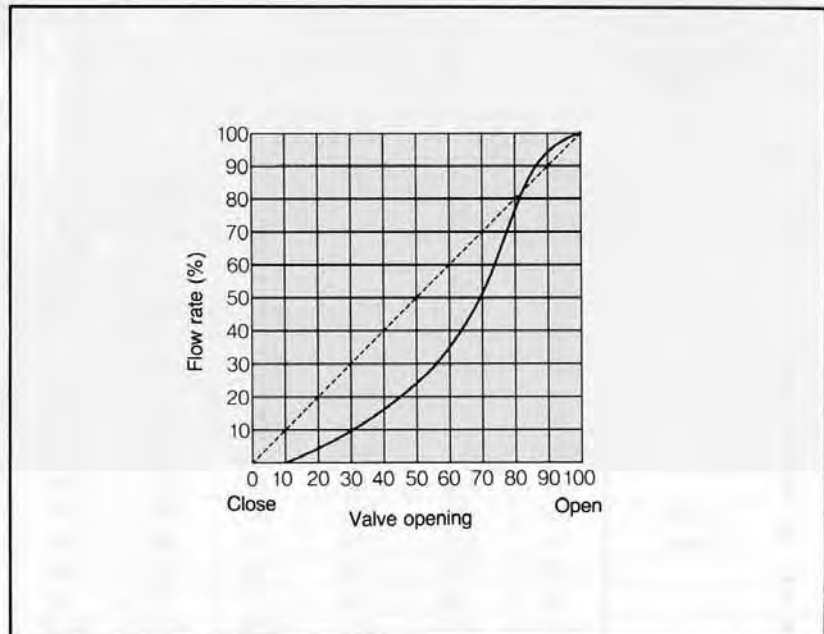
Flow characteristics



Flow coefficient (Cv)

Size		Valve opening			
mm	inch	30°	45°	60°	90°
40	1½	6	12	25	62
50	2	10	20	40	99
65	2½	15	37	80	205
80	3	26	77	132	372
100	4	50	127	260	723
125	5	93	212	419	1100
150	6	128	326	660	1820
200	8	194	501	1050	2780

Flow rate



KITZ ACME 10K Aluminium Butterfly Valves

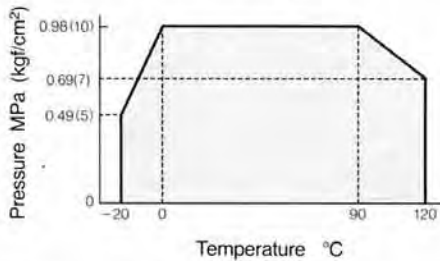
Technical specifications

Maximum service pressure	0.98MPa (10 kgf/cm ²)	
Service temperature range	-20°C to +120°C	
Continuous service temperature range	0°C to +100°C	
F-F dimensions	KITZ Std.	
Test pressure	shell test	1.96MPa (20 kgf/cm ²) [hydrostatic]
	seat test	1.17MPa (12 kgf/cm ²) [hydrostatic]

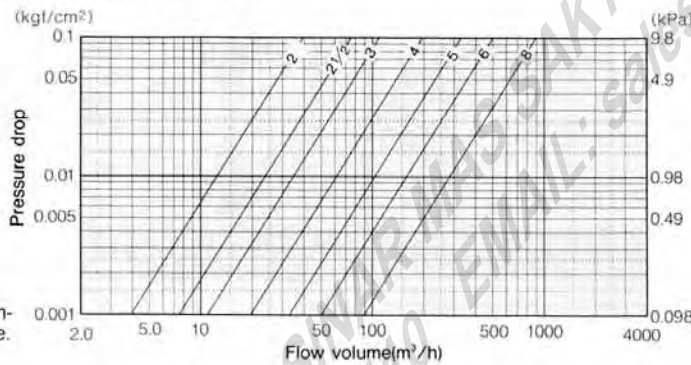
Flow coefficient (Cv)

Size		Valve opening			
mm	inch	30°	45°	60°	90°
50	2	12	34	67	146
65	2½	23	55	112	279
80	3	33	80	162	404
100	4	65	145	295	727
125	5	98	238	485	1210
150	6	152	368	750	1870
200	8	237	527	1120	3300

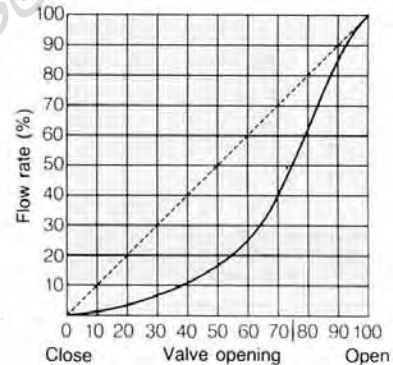
EPDM seat P-T rating



Flow characteristics

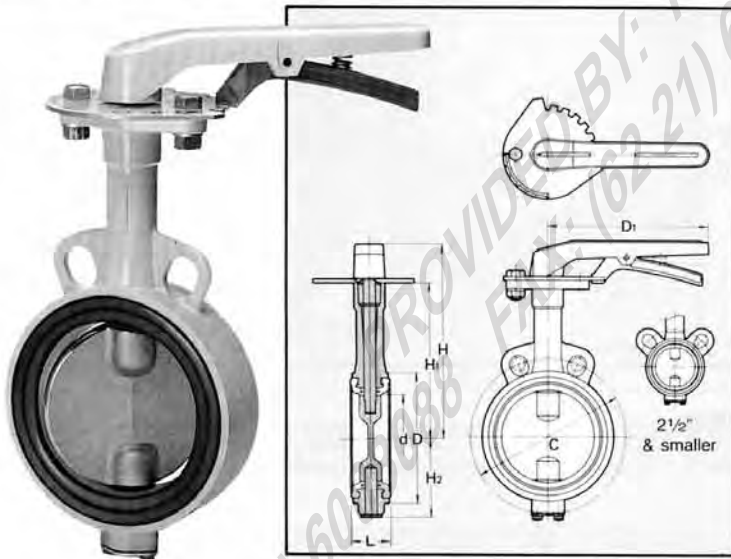


Flow rate

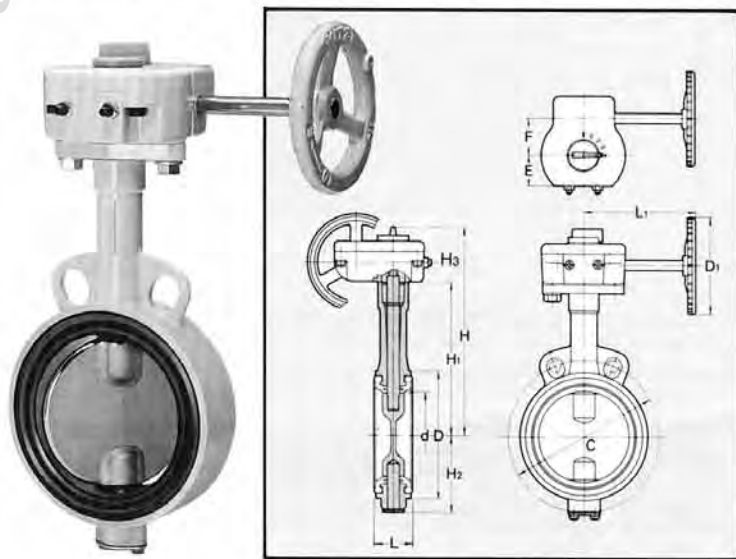


Contact KITZ for technical advice when service conditions may exceed the P-T rating range limited here.

10 ACME: Lever operated



G-10 ACME: Gear operated



Dimensions

Size	mm	50	65	80	100	125	150	200
	inch	2	2½	3	4	5	6	8
d		52	67	80	100	127	152	200
H	Lever	194	202	207	219	250	265	—
	Gear	215	223	228	240	262	277	312
H ₁		150	158	163	175	197	212	240
H ₂		62	72	82	94	116	129	161
H ₃		23	23	23	23	23	23	27
L		35	35	40	40	45	50	60
D		90	115	126	146	181	211	257
C		120	140	150	175	210	240	290
D ₁	Lever	180	180	180	180	230	230	—
	Gear	110	110	110	110	140	140	170
L ₁		135	135	135	135	180	180	185
E		35	35	35	35	35	35	42
F		42.5	42.5	42.5	42.5	42.5	42.5	60.0
Gear type		No.1	No.1	No.1	No.1	No.1	No.1	No.2

Materials

Parts	JIS material
Body	ADC 12
Stem	SUS 403
Disc	SCS 14A
Seat	EPDM
O-ring	EPDM
End plate	SPCC
Index plate*	SPCC
Stop lever*	ADC12

* Provided for lever operation