



Specification

DESIGN

FFA/FGA series low load butterfly valve features a metal sectional seal design with a concentric structure. The metal-sealed seat surrounds the valve plate, and this structure can realize low leakage of the seat.

This series of butterfly valve is simple in structure, light in weight, mature in manufacturing technology, convenient in maintenance, suitable for flow and pressure control of low pressure flow, and also applicable to high temperature fluid.

OPERATION

90 ° rotation of the handle, Each 10°lockable, physical indicator

CONNECTION

Flanged type, Wafer type:
DN100 - DN3000

PRESSURE RANGE

DN100 - DN3000:PN6/10

The above information is for reference only and Eicmation reserves the right to alter without prior notice

TEMPERATURE RANGE

-10°C - +650°C

LEAKAGE CLASS

ANSI CLASS III

MATERIALS

Body: A36
304
316

Disc: A36
304
316

Seat: 304
316

Packing: Graphite/PTFE



Type:
FFA/FGA
Manual low load
butterfly valve
PN 6/10

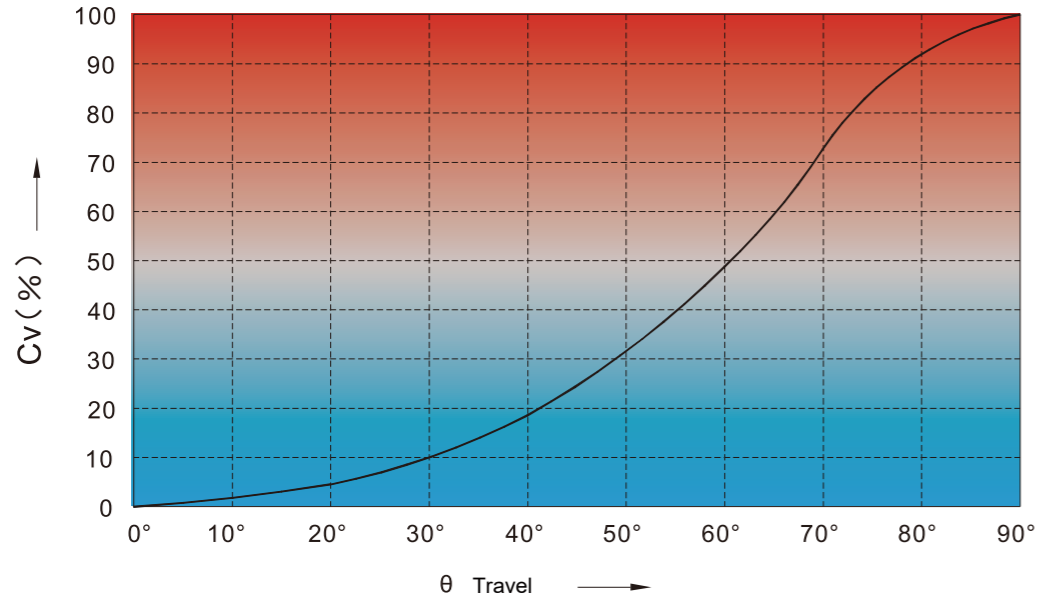
A36
304
316

e.g. FFA/FGA23D1721

= Low load butterfly valve/ISO5211 Low load butterfly valve,A36/304,Metal,PN6,GB Flange,DN100

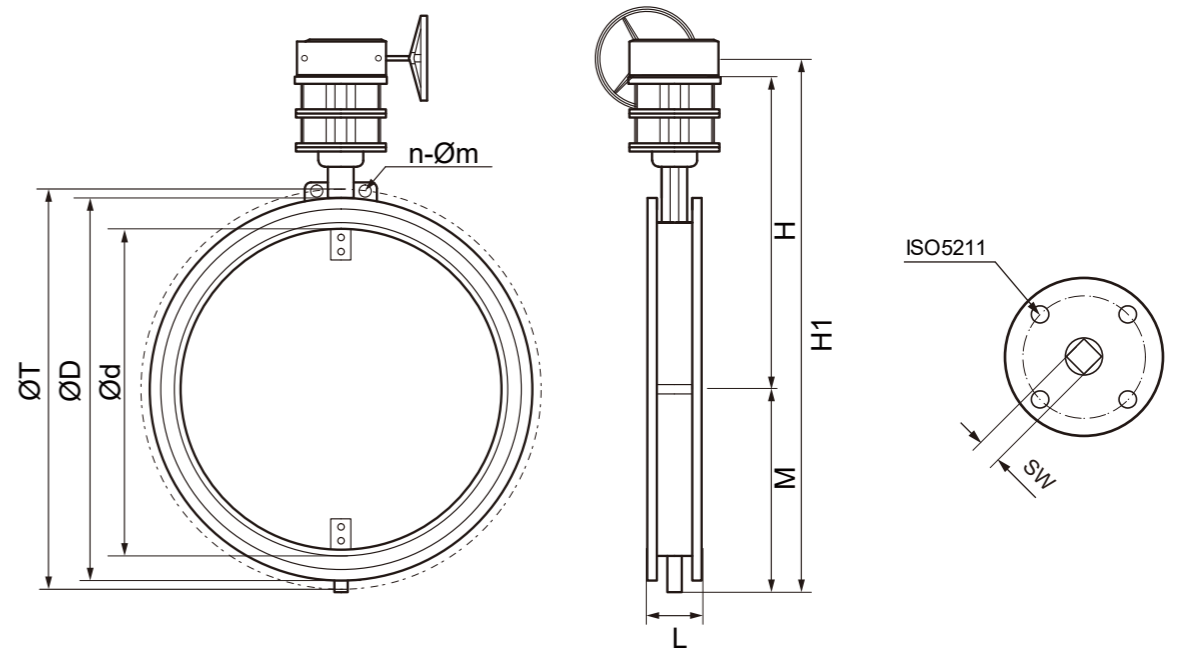
Butterfly valve

A. Type	B+C. Body/Internal	D. Sealing	E. Pressure	F. Connection	G + H. Size		
FFA=Low load butterfly valve	24=A36/316 33=304/304 44=316/316	D=Metal	1=PN6 2=PN10	5=Wafer 6=GB Flange A=ASME Wafer M=ASME Flange	18=2"	26=12"	34=32"
FGA=ISO5211					19=2 1/2"	27=14"	35=34"
Low load butterfly valve					20=3"	28=16"	36=36"
					21=4"	29=18"	29=18"
					22=5"	30=20"	30=20"
					23=6"	31=24"	37=38"
					24=8"	32=28"	38=40"
					25=10"	33=30"	39=44"

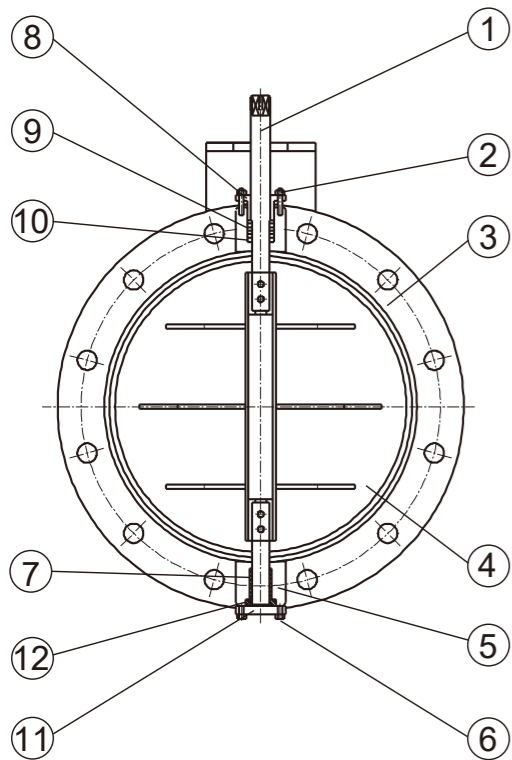


Dimension

Wafer



Parts list



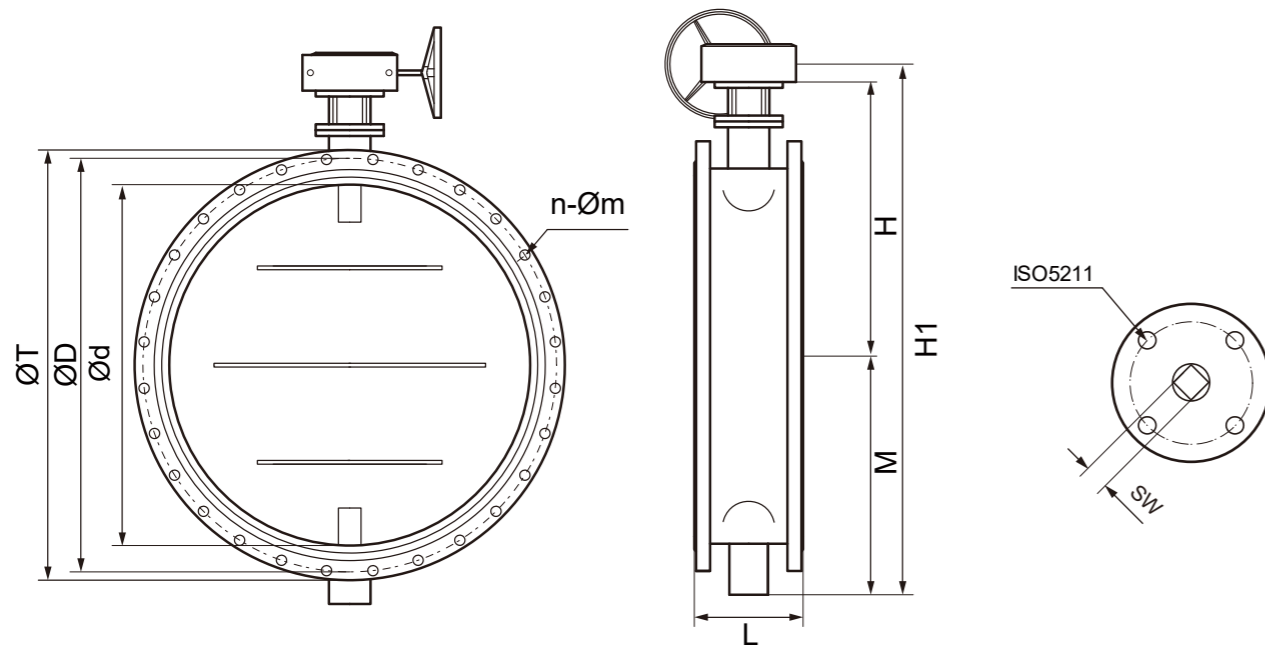
NO.	Description	Material
1	Stem	304
		316
2	Bolt Stud & Nut	304
3	Body	A36
		304
4	Disc	304
		316
5	Stuffing Box	304
6	Bolt & Buts	304
7	Besring Part	316
		Stainless steel SUJ2/GCR15
8	Packing Cap	CF8
9	Packing	Graphite
10	Gasket	304
11	Bottom Cap	A36
		316
12	Gasket	Graphite

DN	Size	Ød	L	H	H1	M	SW	ISO5211	PN6			PN10		
									ØD	ØT	n-Øm	ØD	ØT	n-Øm
50	2"	50	43	310	402	72	11	F05-F07	110	140	2-Ø14	125	165	2-Ø18
65	2-1/2"	66	46	335	437	82	11	F05-F07	130	160	2-Ø14	145	185	2-Ø18
80	3"	78	49	345	455	90	14	F05-F07	150	190	2-Ø18	160	200	2-Ø18
100	4"	102	56	365	485	100	14	F05-F07	170	210	2-Ø18	180	220	2-Ø18
125	5"	125	64	405	540	115	14	F05-F07	200	240	2-Ø18	210	250	2-Ø18
150	6"	156	70	430	580	130	14	F05-F07	225	265	2-Ø18	240	285	2-Ø22
200	8"	207	71	485	677	162	17	F05-F07	280	320	2-Ø18	295	340	2-Ø22
250	10"	261	76	535	755	190	17	F07-F10	335	375	2-Ø18	350	395	2-Ø22
300	12"	311	83	600	850	220	22	F07-F10	395	440	2-Ø22	400	445	2-Ø22
350	14"	340	92	660	940	250	22	F10-F12	445	490	2-Ø22	460	505	2-Ø22
400	16"	390	102	730	1038	278	27	F10-F12	495	540	2-Ø22	515	565	2-Ø26
450	18"	441	114	780	1115	305	27	F10-F12	550	595	2-Ø22	565	615	2-Ø26
500	20"	492	127	890	1285	365	27	F12/F14	600	645	2-Ø22	620	670	2-Ø26
600	24"	594	127	920	1365	415	27	F12/F14	705	755	2-Ø26	725	780	2-Ø30

Size above 24" please contact eicmation technical department.

Dimension

Flange



Size	Ød	L	H	H1	M	SW	ISO5211	PN6			PN10		
								ØD	ØT	n-Øm	ØD	ØT	n-Øm
2-1/2"	66	112	262	362	90	11	F05-F07	130	160	4-Ø14	145	185	4-Ø18
3"	78	114	293	408	105	14	F05-F07	150	190	4-Ø18	160	200	8-Ø18
4"	102	127	361	486	115	14	F05-F07	170	210	4-Ø18	180	220	8-Ø18
5"	125	140	376	516	130	14	F05-F07	200	240	8-Ø18	210	250	8-Ø18
6"	156	140	389	541	142	14	F05-F07	225	265	8-Ø18	240	285	8-Ø22
8"	207	152	589	779	170	17	F05-F07	280	320	8-Ø18	295	340	8-Ø22
10"	261	165	619	836	197	17	F07-F10	335	375	12-Ø18	350	395	12-Ø22
12"	311	180	651	901	230	22	F07-F10	395	440	12-Ø22	400	445	12-Ø22
14"	340	180	679	954	255	22	F10-F12	445	490	12-Ø22	460	505	16-Ø22
16"	390	200	703	1003	280	27	F10-F12	495	540	16-Ø22	515	565	16-Ø26
18"	441	200	731	1058	307	27	F10-F12	550	595	16-Ø22	565	615	20-Ø26
20"	492	220	759	1111	332	27	F12/F14	600	645	20-Ø22	620	670	20-Ø26
24"	594	220	826	1233	387	27	F12/F14	705	755	20-Ø26	725	780	20-Ø30

Size 24" above please contact eicmation technical department.



Specification

DESIGN

FGA series low load butterfly valve features a metal sectional seal design with a concentric structure. The metal-sealed seat surrounds the valve plate, and this structure can realize low leakage of the seat. This series of butterfly valve is simple in structure, light in weight, mature in manufacturing technology, convenient in maintenance, suitable for flow and pressure control of low pressure flow, and also applicable to high temperature fluid.

OPERATION

Pneumatic double-acting or single-acting

CONNECTION

Flanged type, Wafer type:
DN100 - DN3000

PRESSURE RANGE

DN100-DN3000:PN6/10

TEMPERATURE RANGE

-10°C - +650°C

LEAKAGE CLASS

ANSI CLASS III

The above information is for reference only and Eicmation reserves the right to alter without prior notice

MATERIALS

Body: A36
304
316

Disc: A36
304
316

Seat: 304
316

Packing: Graphite/PTFE

EXTERNAL TEMPERATURE RANGE

-20°C - +70°C

PILOT MEDIA

Filtered gases (oil, ash and water removal)

OPTIONS

3/2-ways or 5/2-ways valve, limit switch, positioner, filter reducer, manual clutch

For further specifications please refer to the butterfly valve (FGA) and actuator (PA) data sheet



Type:
FGA-PA

Pneumatic low load
butterfly valve
PN6/10

A36
304
316

Ordering example: e.g. FGA23D1621-PA1114110

=ISO5211 Low load butterfly valve, A36/304, Metal, PN6, GB Flange, DN100, Pneumatic actuator, Double action, Ø63mm, NBR, Gear, 0°-90° Butterfly valve

A. Type	B+C. Body/Internal	D. Sealing	E. Pressure criteria	F. Connection	G + H. Size		
FGA=ISO5211 Low load butterfly valve	23=A36/304 24=A36/316 33=304/304 44=316/316	D=Metal	1=PN6 2=PN10	5=Wafer 6=GB Flange A=ASME Wafer M=ASME Flange	18=2"	26=12"	34=32"
					19=2 1/2"	27=14"	35=34"
					20=3"	28=16"	36=36"
					21=4"	29=18"	29=18"
					22=5"	30=20"	30=20"
					23=6"	31=24"	37=38"
					24=8"	32=28"	38=40"
					25=10"	33=30"	39=44"

Actuator

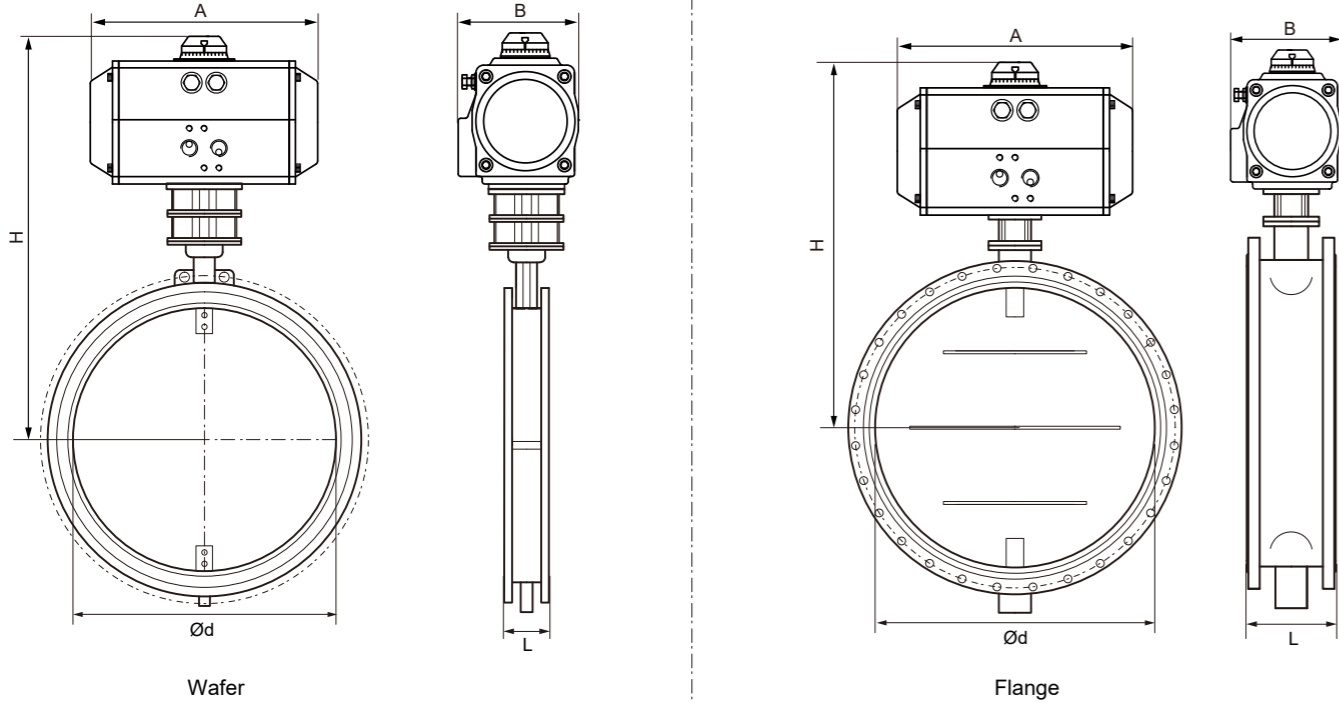
I. Type	J. Function	K. Material	L + M. Size		N. Seal	O. Structure	P. Trip
PA=Pneumatic actuator	1=Double action 2=Single action-close 3=Single action-open	1=Aluminium alloy 2=Stainless steel	13=Ø52	22=Ø190	1=NBR 2=HNBR 3=FKM	1=Gear	0=0-90°
			14=Ø63	23=Ø210			1=0-120°
			15=Ø75	24=Ø240			2=0-135°
			16=Ø83	25=Ø270			3=0-150°
			17=Ø92	26=Ø300			4=0-180°
			18=Ø105	27=Ø350			5=0-270°
			19=Ø125	28=Ø400			
			20=Ø140				
			21=Ø160				

Dimension

PN6/10



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SIZE	DN	Ød	Actuator		A	B	Wafer		Flange	
			Model	Size			L	H	L	H
2"	50	50	PA1113110	Ø52	147	72	43	482	-	-
			PA2114110	Ø63	172	83		498	-	-
2 1/2"	65	66	PA1113110	Ø52	147	72	46	507	112	444
			PA2114110	Ø63	172	83		523	112	460
3"	80	78	PA1114110	Ø63	172	83	49	533	114	491
			PA2115110	Ø75	184	95		545	114	503
4"	100	102	PA1114110	Ø63	172	83	56	553	127	559
			PA2115110	Ø75	184	95		565	127	571
5"	125	125	PA1115110	Ø75	184	95	64	605	140	586
			PA2116110	Ø83	204	103		614	140	595
6"	150	156	PA1115110	Ø75	184	95	70	630	140	599
			PA2116110	Ø83	204	103		639	140	608
8"	200	207	PA1116110	Ø83	204	103	71	694	152	808
			PA2117110	Ø92	262	109		702	152	816
10"	250	261	PA1117110	Ø92	262	109	76	752	165	846
			PA2118110	Ø105	268	121		768	165	862
12"	300	311	PA1118110	Ø105	268	121	83	833	180	894
			PA2119110	Ø125	301	143		855	180	916
14"	350	340	PA1119110	Ø125	301	143	92	915	180	944
			PA2120110	Ø140	394	152		943	180	972
16"	400	390	PA1120110	Ø140	394	152	102	1013	200	996
			PA2121110	Ø160	458	174		1028	200	1011
18"	450	441	PA1120110	Ø140	394	152	114	1063	200	1024
			PA2121110	Ø160	458	174		1078	200	1039
20"	500	492	PA1121110	Ø160	458	174	127	1188	220	1067
			PA2122110	Ø190	528	206		1232	220	1101
24"	600	594	PA1121110	Ø160	458	174	127	1218	220	1134
			PA2122110	Ø190	528	206		1262	220	1168

Note: Details please refer to FGA Low load butterfly valve/ISO5211 Low load butterfly valve
 Size above 24" please contact eicmation technical department.
 Above information is under normal working condition,
 Please consult the technical department in case of special working conditions

Specification

DESIGN

FGA series low load butterfly valve features a metal sectional seal design with a concentric structure. The metal-sealed seat surrounds the valve plate, and this structure can realize low leakage of the seat.
 This series of butterfly valve is simple in structure, light in weight, mature in manufacturing technology, convenient in maintenance, suitable for flow and pressure control of low pressure flow, and also applicable to high temperature fluid.

OPERATION

Electric with handle operation

CONNECTION

Flanged type, Wafer type:
 DN100 - DN3000

PRESSURE RANGE

DN100 up to DN3000: PN 6/10

TEMPERATURE RANGE

-10°C - +650°C

LEAKAGE CLASS

ANSI CLASS III

For further specifications please refer to the butterfly valve (FGA) and actuator (KL) data sheet

The above information is for reference only and Eicmation reserves the right to alter without prior notice

Ordering example:

e.g. FGA23D1621-KL411111
 =ISO5211 Low load butterfly valve, A36/304, Metal, PN6, GB Flange, DN100, Electric actuator 50Nm, 220VAC, Explosion proof grade IP67, On/Off+dry contact

Butterfly valve

A. Type	B+C. Body/Internal	D. Sealing	E. Pressure criteria	F. Connection	G+H. Size		
FGA=Low load butterfly valve	23=A36/304 24=A36/316 33=304/304 44=316/316	D=Metal	1=PN6 2=PN10	5=Wafer 6=GB Flange A=ASME Wafer M=ASME Flange	18=2" 19=2 1/2" 20=3" 21=4" 22=5" 23=6" 24=8" 25=10"	26=12" 27=14" 28=16" 29=18" 30=20" 31=24" 32=28" 33=30"	34=32" 35=34" 36=36" 29=18" 30=20" 37=38" 38=40" 39=44"

Actuator

I. Type	J. Voltage	K. Explosion proof grade	L+M. Torque(NM)	N. Extra	O. Spare
KL=Basic angle stroke Electric actuator	1=24V DC 2=24V AC 3=110V AC 4=220V AC 5=380V AC	1=IP67 2=IP68 3=Exd IIB T4 (50-600NM)	11=50 13=100 15=200 17=400 19=600 21=1000 23=2000	1=On/Off type +dry contact 2=Modulate type 4~20mA	1=No 2=1K~10K potentiometer 3=Current position sensor 4~20mA 4=Overload protection (200-2000NM) 8=Arefraction protect

MATERIALS

Body: A36
304
316

Disc: A36
304
316

Seat: 304
316

Packing: Graphite/PTFE

EXTERNAL TEMPERATURE RANGE

-20°C - +60°C

OPTIONAL VOLTAGE

24V DC, 24V AC, 110V AC, 220V AC, 380V AC

PROTECTION

IP 67

STANDARD EQUIPMENT

additional limit switches, optical position indicator, manual override

OPTIONS

Potentiometer modulate type 4-20mA
 Exd IIB T4
 For more requests please contact us



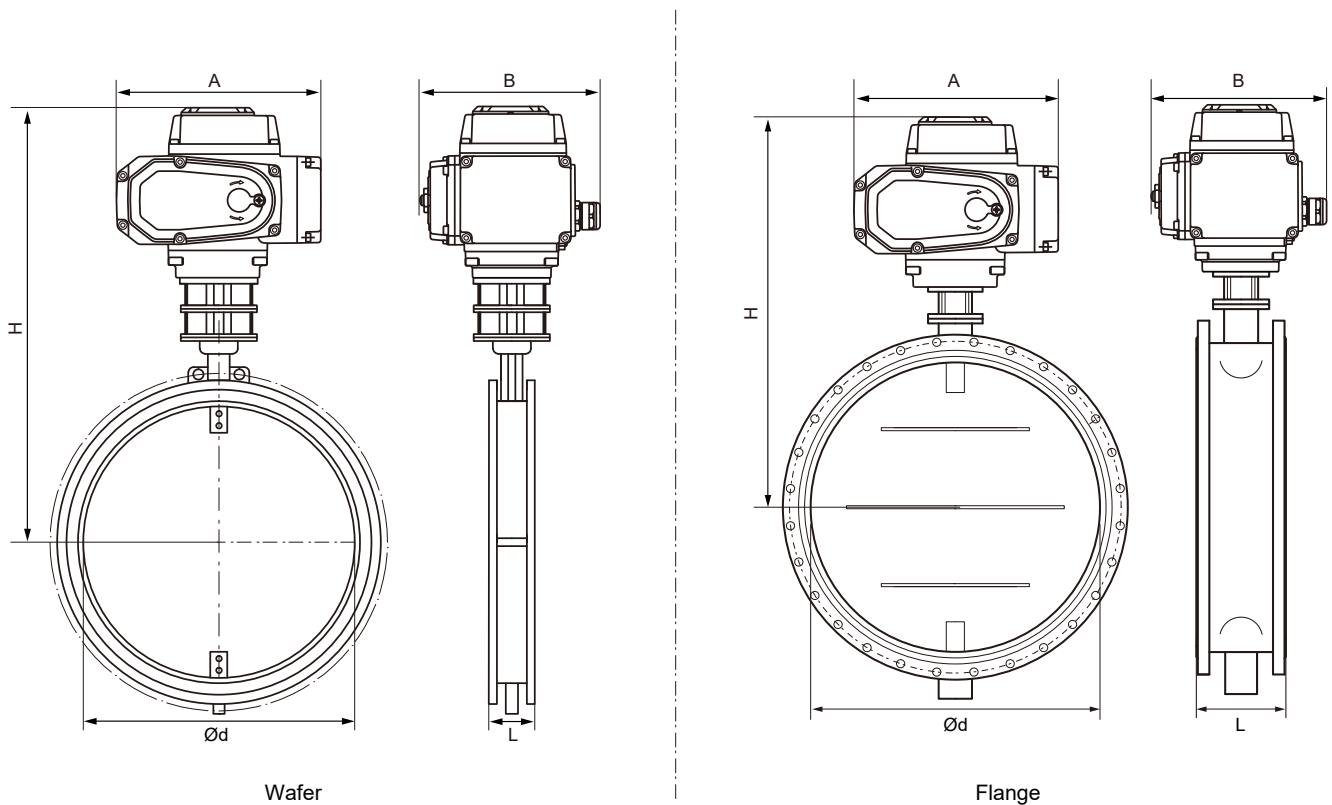
Type:
FGA-KL

Electric low load butterfly valve.
 PN 6/10

A36
304
316

Dimension

PN6/10



SIZE	DN	Ød	Actuator		A	B	Wafer		Flange	
			Model	Torque(NM)			L	H	L	H
2"	50	50	KL111111	50	165.0	140.5	43	527.5	-	-
			KL121111	50	170.5	121		-		
2 1/2"	65	66	KL111111	50	165.0	140.5	46	552.5	112	479.5
			KL121111	50	170.5	121		565		492
3"	80	78	KL111111	50	165.0	140.5	49	562.5	114	510.5
			KL121111	50	170.5	121		575		523
4"	100	102	KL111111	50	165.0	140.5	56	582.5	127	578.5
			KL121111	50	170.5	121		595		591
5"	125	125	KL111111	50	165.0	140.5	64	622.5	140	593.5
			KL121111	50	170.5	121		635		606
6"	150	156	KL111111	50	165.0	140.5	70	647.5	140	606.5
			KL121111	50	170.5	121		660		619
8"	200	207	KL111311	100	211.5	154	71	733.5	152	837.5
			KL121311	100	217.5	139		747		851
10"	250	261	KL111311	100	211.5	154	76	783.5	165	867.5
			KL121311	100	217.5	139		797		881
12"	300	311	KL111511	200	259	186	83	883	180	934
			KL121511	200	217.5	139		862		913
14"	350	340	KL111511	200	259	186	92	943	180	962
			KL121511	200	217.5	139		922		941
16"	400	390	KL111711	400	259	186	102	1013	200	986
			KL121711	400	266.5	170		1023		996
18"	450	441	KL111711	400	259	186	114	1063	200	1014
			KL121711	400	266.5	170		1073		1024
20"	500	492	KL111911	600	259	186	127	1173	220	1042
			KL121911	600	266.5	170		1183		1052
24"	600	594	KL111911	600	259	186	127	1203	220	1109
			KL121911	600	266.5	170		1213		1119

Note: Details please refer to FGA Low load butterfly valve/ISO5211 Low load butterfly valve

Size above 24" please contact eicmation technical department.

Above information is under normal working condition,

Please consult the technical department in case of special working conditions