EICMATION®

规格

设计
FFA/FGA系列低负载蝶阀，采用中线结构的金属断面密封设计。金属密封阀座围绕在阀板周围，这种结构可以实现低阀座的泄露量。该系列蝶阀结构简单，重量轻，制造工艺成熟，维修方便，适用于低压状态流动的流体，压力控制，同时能够适用于高温度的流体。

操作
手柄90°旋转,10°一卡，物理指示器

连接
法兰式, 对夹式：
DN100-DN3000

压力范围
DN50-DN3000:PN6/10
DN25~DN40 (需定制)

温度范围
-29°C - +650°C

泄漏率
≤3% KVs

材料
阀体: A36
304
316

阀板: A36
304
316

阀座: 304
316
金属密封

填料： 柔性石墨

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
DN50-DN3000:PN6/10
DN25~DN40(Need to be customized)

TEMPER ATURE RANGE
-29°C - +650°C

LEAKAGE RATE
≤3% KVs

MATERIALS
Body: A36
304
316

Disc: A36
304
316

Seat: 304
316
Metal

Packing: Graphite

型号:
FFA/FGA

手动低负载蝶阀/ISO5211
平台低负载蝶阀
PN6/10

A36
304
316



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

A36
304
316

以上信息仅供参考，埃克美迅公司保留修改的权利，恕不另行通知

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

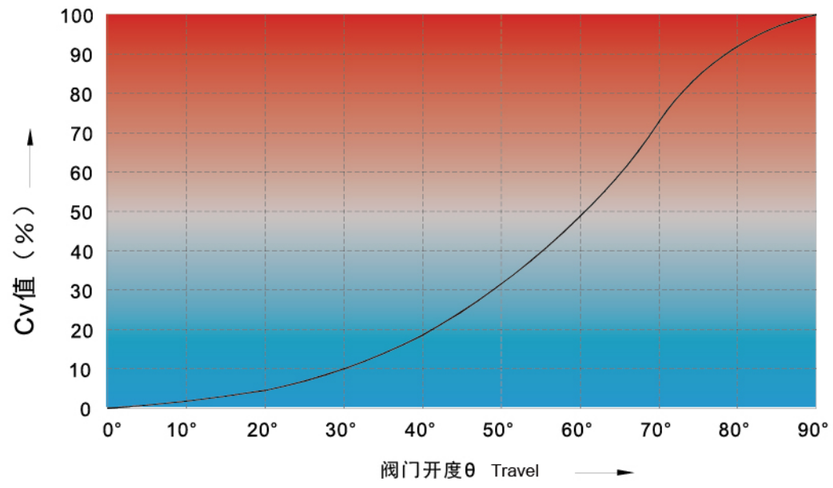
举例说明：比如FFA23D1621
=低负载蝶阀,A36/304,金属密封,PN6,国标法兰,DN100
蝶阀

1.字符 产品	2+3.字符 阀体/ 内件	4.字符 密封	5.字符 压力标准	6.字符 连接	7 + 8.字符 口径
FFA=低负载蝶阀 FGA=ISO5211平台 低负载蝶阀	23=A36/304 24=A36/316 33=304/304 44=316/316	D=金属密封	1=PN6 2=PN10	5=对夹 6=国标法兰 A=美标对夹 M=美标法兰	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"

e.g. FFA/FGA23D1721
= Low load butterfly valve/ISO5211 Low load butterfly valve,A36/304,Metal,PN6,GB Flange,DN100
Butterfly valve

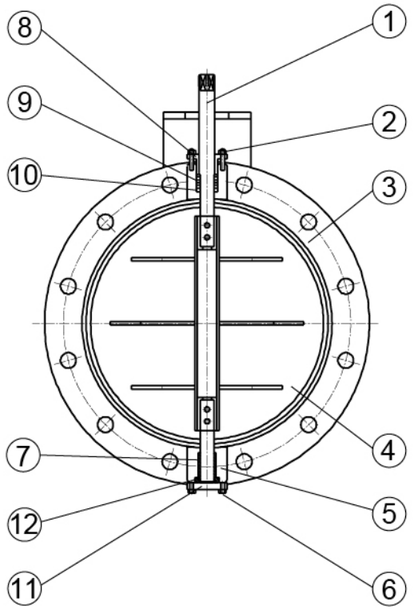
A. Type	B+C. Body/Internal	D. Sealing	E. Pressure	F. Connection	G + H. Size
FFA=Low load butterfly valve FGA=ISO5211 Low load butterfly valve	24=A36/316 33=304/304 44=316/316	D=Metal	1=PN6 2=PN10	5=Wafer 6=GB Flange A=ASME Wafer M=ASME Flange	18=2" 26=12" 34=32" 19=2 1/2" 27=14" 35=34" 20=3" 28=16" 36=36"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

流量特性曲线图 / Chart of Flow Characteristic



Art.FFA/FGA-Series

零件说明/Parts list



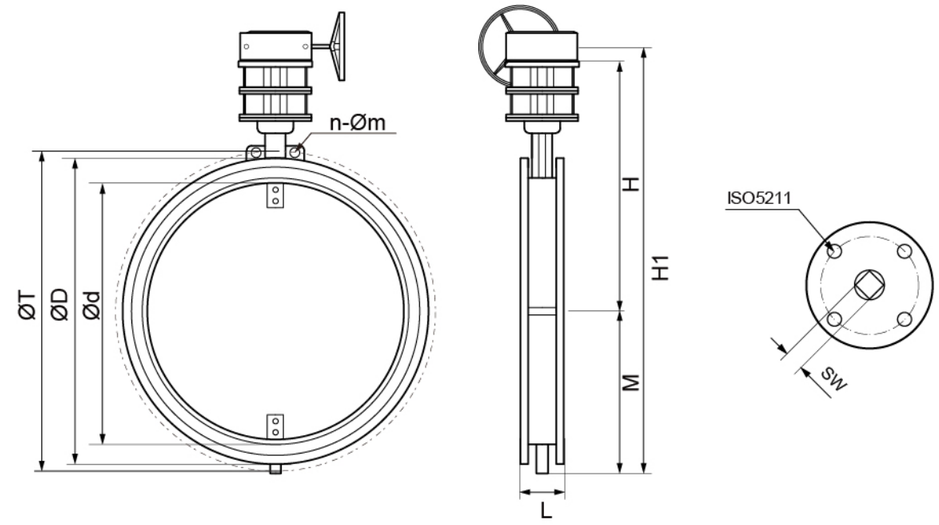
序号	描述	材料
1	阀杆	304
		316
2	螺柱 螺母	304
3	阀体	A36
		304
		316
4	阀板	304
		316
5	填料函	304
6	螺栓 螺母	304
7	轴承部件	316
		轴承钢SUJ2/GCR15
8	填料压盖	CF8
9	填料	柔性石墨
10	衬垫	304
11	底盖	A36
		304
		316
12	垫圈	柔性石墨

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

尺寸/Dimension

EICMATION®

Wafer

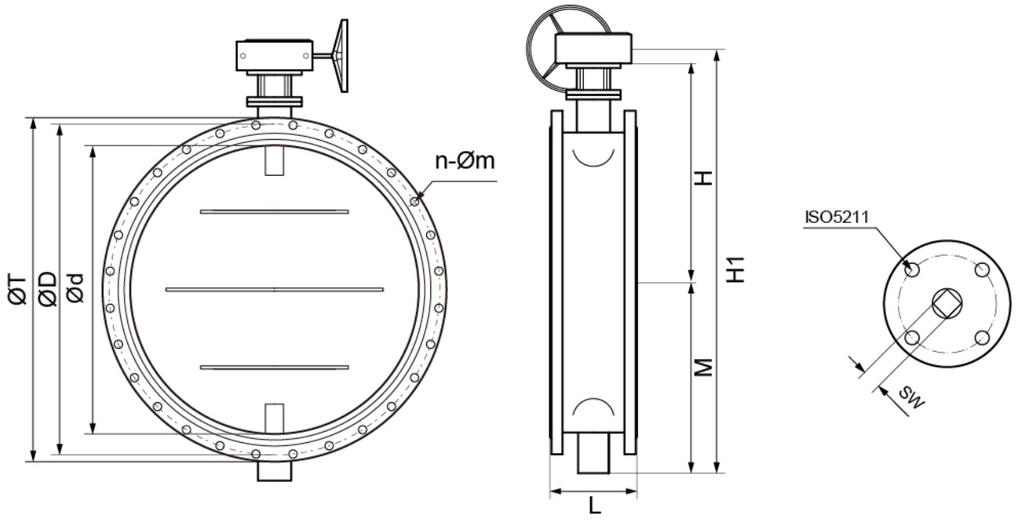


DN	Size	Ød	L	H	H1	M	SW	ISO5211	PN6			PN10		
									ØD	ØT	n-Øm	ØD	ØT	n-Øm
50	2"	50	43	310	402	72	11	F05-F07	110	140	2-Ø14	125	165	2-Ø18
65	2-1/2"	66	46	335	437	82	11	F05-F07	130	160	2-Ø14	145	185	2-Ø18
80	3"	78	49	345	455	90	14	F05-F07	150	190	2-Ø18	160	200	2-Ø18
100	4"	102	56	365	485	100	14	F05-F07	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
大于24"的尺寸请咨询埃克美迅技术部					Size above 24" please contact eicmation technical department.									

Art.FFA/FGA-Series

尺寸/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

大于24"的尺寸请咨询埃克美迅技术部　　Size 24" above please contact eicmation technical department.

规格

设计
FFA/FGA系列低负载蝶阀，采用中线结构的金属断面密封设计。金属密封阀座围绕在阀板周围，这种结构可以实现低阀座的泄露量。该系列蝶阀结构简单，重量轻，制造工艺成熟，维修方便，适用于低压状态流动的流体，压力控制，同时能够适用于高温度的流体。

操作
气动双作用或单作用

连接
法兰式, 对夹式:
DN100-DN3000

压力范围
DN50-DN3000:PN6/10
DN25~DN40（需定制）

温度范围
-29°C - +650°C

泄漏率
≤3% KVs

材料
阀体: A36
304
316

阀板: A36
304
316

阀座: 304
316
金属密封

填料： 柔性石墨

气源介质
过滤后气体(除油、灰和水)

选项
两位三通或两位五通阀，限位开关，定位器，过滤减压器，手动离合器

更多规范请根据蝶阀(FGA)和执行器(PA)数据表

以上信息仅供参考，埃克美迅公司保留修改的权利，恕不另行通知

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
DN50-DN3000:PN6/10
DN25~DN40(Need to be customized)

TEMPER ATURE RANGE
-29°C - +650°C

LEAKAGE RATE
≤3% KVs

MATERIALS
Body: A36
304
316

Disc: A36
304
316

Seat: 304
316
Metal

Packing: Graphite

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

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

型号:
FGA-PA

气动低负载蝶阀
PN6/10

A36
304
316



Type:
FGA-PA

Pneumatic low load butterfly valve
PN6/10

A36
304
316

举例说明： 比如FGA23D1621-PA1114110
=ISO5211平台低负载蝶阀,A36/304,金属密封,PN6,国标法兰,DN100，气动执行器，双作用，阳极氧化铝，Ø63mm,NBR,齿轮，0°-90°

蝶阀

1.字符 产品	2+3.字符 阀体/内件	4.字符 密封	5.字符 压力标准	6.字符 连接	7 + 8.字符 口径
FGA=ISO5211平台 低负载蝶阀	23=A36/304 24=A36/316 33=304/304 44=316/316	D=金属密封	1=PN6 2=PN10	5=对夹 6=国标法兰 A=美标对夹 M=美标法兰	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"

执行器

9.字符 产品	10. 字符 功能	11.字符 材质	12 + 13.字符 规格	14.字符 密封	15.字符 结构	16.字符 行程
PA=气动执行器	1=双作用 2=单作用常闭 3=单作用常开	1=铝合金 2=不锈钢	13=Ø52 22=Ø190 14=Ø63 23=Ø210 15=Ø75 24=Ø240 16=Ø83 25=Ø270 17=Ø92 26=Ø300 18=Ø105 27=Ø350 19=Ø125 28=Ø400 20=Ø140 21=Ø160	1=NBR 2=HNBR 3=FKM	1=齿轮	0=0-90° 1=0-120° 2=0-135° 3=0-150° 4=0-180° 5=0-270°

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	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"

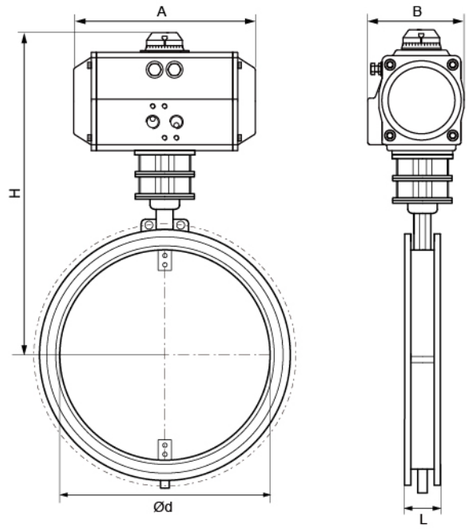
Actuator

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

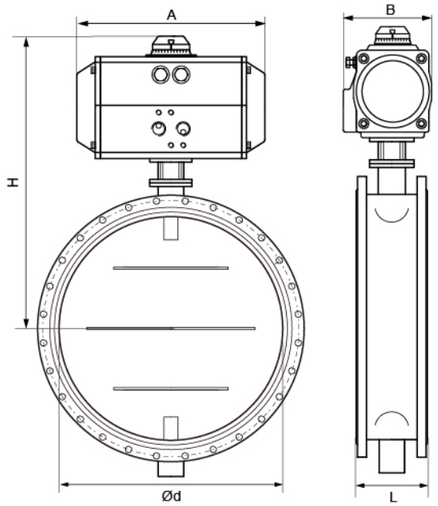
尺寸/Dimension

EICMATION®

PN6/10



Wafer



Flange

SIZE	DN	Ød	Actuator Model	Actuator Size	A	B	Wafer L	Wafer H	Flange L	Flange H
2"	50	50	PA1113110	Ø52	147	72	43	482	-	-
			PA2114110	Ø63	172	83		498		-
21/2"	65	66	PA1113110	Ø52	147	72	46	507	112	444
			PA2114110	Ø63	172	83		523		460
3"	80	78	PA1114110	Ø63	172	83	49	533	114	491
			PA2115110	Ø75	184	95		545		503
4"	100	102	PA1114110	Ø63	172	83	56	553	127	559
			PA2115110	Ø75	184	95		565		571
5"	125	125	PA1115110	Ø75	184	95	64	605	140	586
			PA2116110	Ø83	204	103		614		595
6"	150	156	PA1115110	Ø75	184	95	70	630	140	599
			PA2116110	Ø83	204	103		639		608
8"	200	207	PA1116110	Ø83	204	103	71	694	152	808
			PA2117110	Ø92	262	109		702		816
10"	250	261	PA1117110	Ø92	262	109	76	752	165	846
			PA2118110	Ø105	268	121		768		862
12"	300	311	PA1118110	Ø105	268	121	83	833	180	894
			PA2119110	Ø125	301	143		855		916
14"	350	340	PA1119110	Ø125	301	143	92	915	180	944
			PA2120110	Ø140	394	152		943		972
16"	400	390	PA1120110	Ø140	394	152	102	1013	200	996
			PA2121110	Ø160	458	174		1028		1011
18"	450	441	PA1120110	Ø140	394	152	114	1063	200	1024
			PA2121110	Ø160	458	174		1078		1039
20"	500	492	PA1121110	Ø160	458	174	127	1188	220	1067
			PA2122110	Ø190	528	206		1232		1101
24"	600	594	PA1121110	Ø160	458	174	127	1218	220	1134
			PA2122110	Ø190	528	206		1262		1168

注：阀体详细数据请详见FGA手动低负载蝶阀/ISO5211平台低负载蝶阀
大于24"的尺寸请咨询埃克美迅技术部。
以上为常规工况执行器配置尺寸，
如特殊工况的执行器配置详询埃克美迅技术部。

Note:Details please refer to FGA Low load butterfly valve/ISO5211Low load butterfly valve
Size above 24" please contact eicmation technical department.
Above information is under normal working conditon,
Please consult the technical department in case of special working conditions

Art.FGA-PA-Series

EICMATION®

规格

设计
FFA/FGA系列低负载蝶阀，采用中线结构的金属断面密封设计。金属密封阀座围绕在阀板周围，这种结构可以实现低阀座的泄露量。该系列蝶阀结构简单，重量轻，制造工艺成熟，维修方便，适用于低压状态流动的流体，压力控制，同时能够适用于高温度的流体。

操作
电动含手动操作

连接
法兰式, 对夹式:
DN100-DN3000

压力范围
DN50-DN3000:PN6/10
DN25~DN40（需定制）

温度范围
-29°C - +650°C

泄漏率
≤3% KVs

材料
阀体: A36
304
316

阀板: A36
304
316

阀座: 304
316
金属密封

填料： 柔性石墨

可选电压
24V DC,24V AC,110V AC,220V AC,380V AC

防护
IP 67

标准设备
限位开关,物理指示器,手动控制

选项
电位计调节型4-20mA
Exd IIB T4
更多要求请咨询

更多规范请根据蝶阀(FGA)和执行器(KL)数据表

以上信息仅供参考，埃克美迅公司保留修改的权利，恕不另行通知

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
DN50-DN3000:PN6/10
DN25~DN40(Need to be customized)

TEMPER ATURE RANGE
-29°C - +650°C

LEAKAGE RATE
≤3% KVs

MATERIALS
Body: A36
304
316

Disc: A36
304
316

Seat: 304
316
Metal

Packing: Graphite

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

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

型号:
FGA-KL

电动低负载蝶阀
全通径
PN 6/10

A36
304
316



Type:
FGA-KL

Electric low load butterfly valve.
PN 6/10

A36
304
316

举例说明：比如 FGA23D1621-KL411111
=ISO5211平台低负载蝶阀,A36/304,金属密封,PN6,国标法兰,DN100，电动执行器50Nm,220VAC,防护等级IP67.开关+干接点

蝶阀

1.字符 产品	2+3.字符 阀体/内件	4.字符 密封	5.字符 压力标准	6.字符 连接	7 + 8.字符 口径
FGA=ISO5211平台 低负载蝶阀	23=A36/304 24=A36/316 33=304/304 44=316/316	D=金属密封	1=PN6 2=PN10	5=对夹 6=国标法兰 A=美标对夹 M=美标法兰	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"

执行器

9.字符 产品	10. 字符 电压	11.字符 防护等级	12+13.字符 扭矩（NM）	14.字符 附件	15.字符 备用
KL=基本型角行程 电动执行器	1=24V DC 2=24V AC 3=110V AC 4=220V AC 5=380V AC	1=IP67 2=IP68 3=Exd ⅡBT4 （50-600NM）	11=50 13=100 15=200 17=400 19=600 21=1000 23=2000	1=开关+干接点 2=调节型4~20mA	1=无 2=电位计1K~10K 3=电流位置传感器4~20mA 4=过载保护（200-2000NM） 8=除湿保护

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" 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"

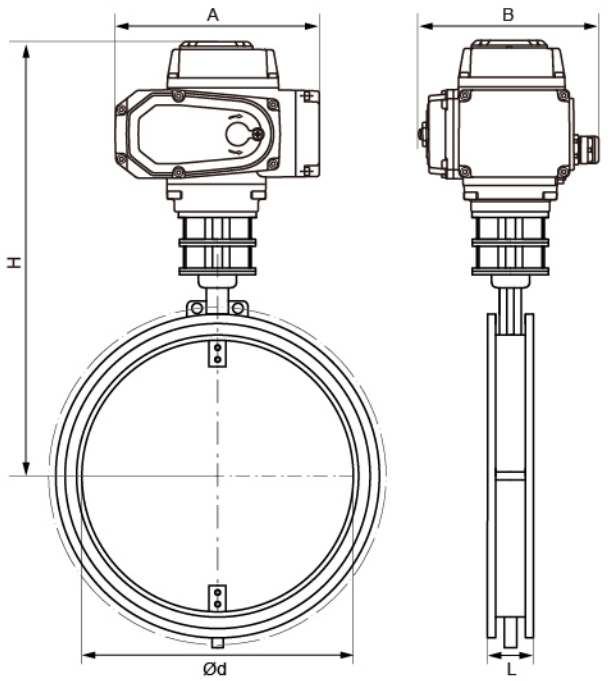
Actuator

I . Type	J. Voltage	K. Explosion proof grade	L+M. Torque(NM)	N. Function	O. Option
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 ⅡBT4 （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=Arefaction protect

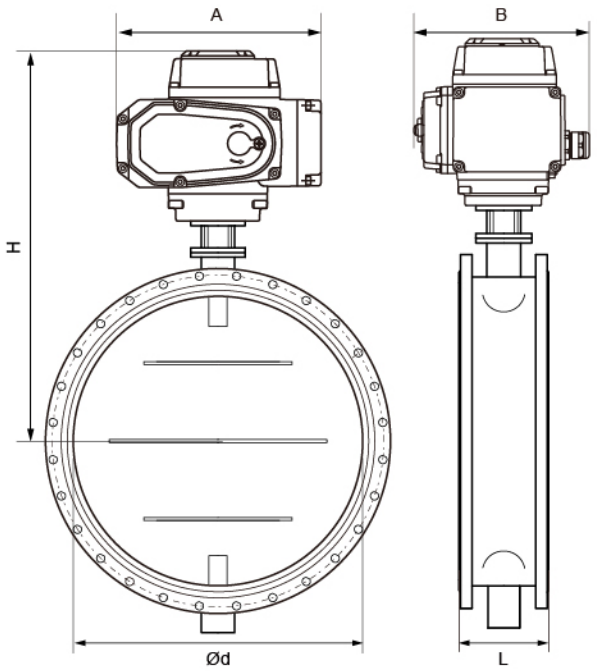
Art.FGA-KL-Series

尺寸/Dimension

PN6/10



Wafer



Flange

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		540		-
21/2"	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

注：阀体详细数据请详见FGA手动低负载蝶阀/ISO5211平台低负载蝶阀
大于24"的尺寸请咨询埃克美迅技术部。
以上为常规工况执行器配置尺寸，
如特殊工况的执行器配置详询埃克美迅技术部。

Note:Details please refer to FGA Low load butterfly valve/ISO5211Low load butterfly valve
Size above 24" please contact eicmation technical department.
Above information is under normal working conditon,
Please consult the technical department in case of special working conditions