



上海乔治费歇尔管路系统有限公司
Georg Fischer Piping Systems Ltd., Shanghai



057型金属蝶阀系列
Metal Butterfly Valve Type 057
DN50/2" - DN300/12"

+GF+

GEORG FISCHER
PIPING SYSTEMS

乔治费歇尔公司的057型蝶阀系列，具有极好的性能价格比。阀壳用球墨铸铁制成，阀板用球墨铸铁尼龙11涂层或316不锈钢制成，具有很好的耐腐蚀性能，蝶阀可用手柄或手轮齿轮箱操作；也可以使用电动或气动执行器机构操作，各种各样的附件可以使我们的057型蝶阀具有多种功能。

The 057 series metal butterfly valves come from Gerog Fischer have high cost performance, the housings are made of ductile iron, the disks are made of the ductile iron coated with Nylon 11 or 316 stainless steel, which have high corrosion resistance. The valves can be manually operated with handle lever or gearbox; they are also available with our pneumatic or electric actuators. The wide range of accessories allow a versatile use of our butterfly valves.

主要技术参数

Main Technical Parameters

公称直径 (mm) Nominal dimension	DN40, DN50-DN300, DN350-DN1000
公称压力 (Mpa) Nominal pressure	PN10, PN16, PN20
壳体试验压力 (Mpa) Shell testing pressure	公称压力 x 1.5 Nominal pressure x 1.5
密封试验压力 (Mpa) Seal testing pressure	公称压力 x 1.1 Nominal pressure x 1.1
外表涂层 Coated	环氧聚酯涂料、尼龙11、烤漆、覆改性环氧树脂 Ethylene polyester painting, Nylon11, Baking varnish, Coated ethoxyline
适用温度 Suitable temperature	-10~150°C
使用介质 Suitable mediums	水、盐、酸、碱、天然气、空气、醇类、油类、食品、蒸汽…… Water, Salts, Acid, Air, Oils, Food, Steam...

可选材料

Optional Materials

主要零部件 Main parts	材料 Material
阀体 Body	球墨铸铁 Ductile iron
	铝合金 Aluminum
	灰铸铁 Cast iron
	铸钢 Cast steel
	不锈钢 Stainless steel
阀板 Disk	不锈钢CF8/ CF8M Stainless steel CF8/ CF8M
	球墨铸铁覆尼龙11 Ductile iron coated nylon-11
	球墨铸铁镀镍磷 Plated ductile iron
	316L
	双向不锈钢 Two-way stainless steel
阀杆 Stem	416/ 316/ 304
	碳钢电镀 Plated carbon steel
密封圈 Seat	三元乙丙橡胶 EPDM
	丁橡胶 NBR
	氟橡胶 Viton
	耐热三元乙丙橡胶 EPDM
	耐磨三元乙丙橡胶 EPDM
	聚四氟乙烯 PTFE

制造标准

Manufacture Standard

设计制造验收 Design, manufacturing & checking	ISO10631-1991
阀门结构长度 Structure length	ISO5752-1988
阀门法兰连接 Flange connection	ISO7005.2
阀门检验 Valve checking	ISO5208-1987
阀门标志 Valve label	ISO5209-1987
驱动装置连接 Connection actuator	ISO5211-1982

057系列阀门特点 057 Series Valve Feature

1. 阀杆轴向定位装置，采用两垫片加一对开环和弹簧卡圈结构方式，不仅可有效防止阀杆无意地被拆卸，同时可承载一定的轴向力，防止轴杆重量传递给蝶板。

The axial-direction pick device of stem is the structure with two gaskets and a pair of lock ring as well as spring clip retainer ring, which can effectively prevent unintentional disassembly and also undertake certain axial force for avoiding the weigh of stem passing to the disk.

2. 阀杆密封圈起双向密封作用，在防止外来物质侵入的同时，防止介质外流。

The sealing ring on the stem can work in two directions, preventing not only the inrush of extraneous material outside but also the effuse of inside material.

3. 轴套不仅起到支撑阀杆的作用，而且可减低启闭扭矩。

The bushing not only supports the stem, but also can reduce the torque.

4. 舌槽式阀座，可确保阀体、阀座、蝶板之间的准确连接，同时可以方便地更换阀座。

Tongue and groove seat make sure the body, seat and disk connected exactly, and the seat can be changed conveniently at the meantime.

5. 采用世界先进的球面密封，密封可靠。由于是球面密封，阀门在启闭时是平滑过渡，所以减少了摩擦，降低了扭矩，可以先用小功率驱动装置，从而降低用户的成本，提高阀座使用寿命(是普通中线蝶阀的4倍)。

Advanced spherical sealing technology ensures the seal much more reliable. Due to such technology, it is smooth transition when the valve starts up so that the friction and torque are both reduced, in this way, low power actuator can be chosen for cost saving, as a consequence the service life of valve seat can be increased 3 to 4 times than common midline butterfly valve.

6. 采用两截式阀杆无销连接，结果简单紧凑，维修拆卸方便(可现场拆装)；蝶板具有自动对中功能(上下、左右)，实现了蝶板与阀座小过盈量配合。

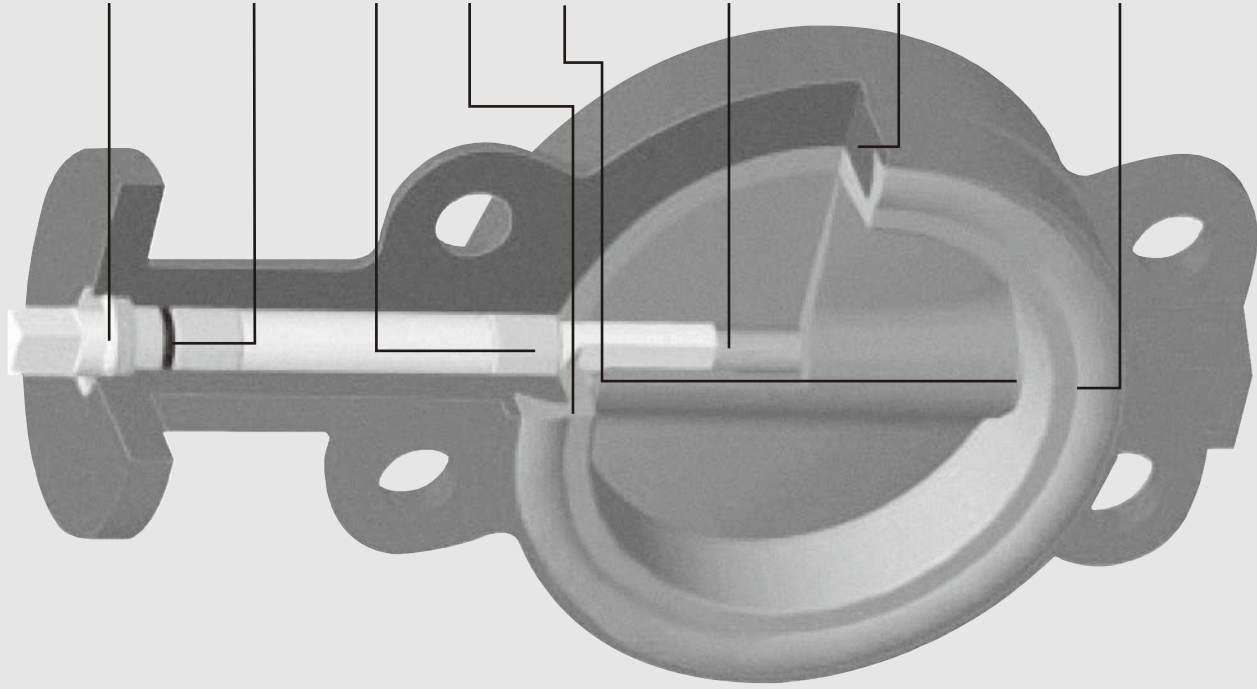
The stem adopt two-piece-design without pins, with simple and compact structure, they can be assembled and disassembled easily in work site; the disk with the function of automatic centering can be matched with the seat perfectly.

7. 由于阀体本身替代普通阀座的靠背，提高了阀门的整体强度，使之能够达到普通中线蝶阀无法实现20kg的公称压力。

On account of the valve body per se replaces the backrest of common valve seat, the bulk strength of valve is enhanced and meanwhile the valve can undertake 20kg nominal pressure which common centerline butterfly valve can't achieve.

8. 阀座法兰密封面采用大宽边，大圆弧的结构，使阀门完全可以适应套合式或焊接式法兰连接要求，适合与任何标准法兰连接。

The flange-sealing surface of the valve seat is the structure of broadside and orthodome, which follows the requirement of thimble or welded connection, and also can be connected with any standard flange.



金属蝶阀 Metal-Butterfly Valves

蝶阀—对夹式，公制和美标 Butterfly Valves Wafer, Metric and inch ANSI



057—手动金属蝶阀(带手柄) Butterfly Valves 057-M (With hand lever)

阀座材料:
Material Housing:

铸铁:
Ductile Iron:

d mm	DN mm	Inch	PN	蝶板材料 Disk material	
				铸铁/ 丽绚涂层 Ductile iron/ Rilsan-coated	316不锈钢 316 Stainless steel
				胶垫: EPDM 代码 Code	胶垫: EPDM 代码 Code
63	50	2	16	300148800	300148810
75	65	2 1/2	16	300148801	300148811
90	80	3	16	300148802	300148812
110	100	4	16	300148803	300148813
140	125	5	16	300148804	300148814
160	150	6	16	300148805	300148815



057—手动金属蝶阀(带齿轮箱操作手轮) Butterfly Valves 057-G (With gear operated handwheel)

阀座材料:
Material Housing:

铸铁:
Ductile Iron:

d mm	DN mm	Inch	PN	蝶板材料 Disk material	
				铸铁/ 丽绚涂层 Ductile iron/ Rilsan-coated	316不锈钢 316 Stainless steel
				胶垫: EPDM 代码 Code	胶垫: EPDM 代码 Code
63	50	2	16	300148820	300148830
75	65	2 1/2	16	300148821	300148831
90	80	3	16	300148822	300148832
110	100	4	16	300148823	300148833
140	125	5	16	300148824	300148834
160	150	6	16	300148825	300148835
225	200	8	16	300148826	300148836
280	250	10	16	300148827	300148837
315	300	12	16	300148828	300148838



057-金属蝶阀-P-FC(故障关)
Butterfly Valves 057-P-FC (Fail safe to close)

阀座材料:
 Material Housing:
 铸铁:
 Ductile Iron:

d mm	DN mm	Inch	PN	蝶板材料 Disk material	
				铸铁/ 丽绚涂层 Ductile iron/ Rilsan-coated	316不锈钢 316 Stainless steel
				胶垫: EPDM 代码 Code	胶垫: EPDM 代码 Code
63	50	2	16	300140920	300140940
75	65	2 1/2	16	300140921	300140941
90	80	3	16	300140922	300140942
110	100	4	16	300140923	300140943
140	125	5	16	300140924	300140944
160	150	6	16	300140925	300140945
225	200	8	16	300140926	300140946



057-金属蝶阀-P-F0(故障开)
Butterfly Valves 057-P-F0 (Fail safe to open)

阀座材料:
 Material Housing:
 铸铁:
 Ductile Iron:

d mm	DN mm	Inch	PN	蝶板材料 Disk material	
				铸铁/ 丽绚涂层 Ductile iron/ Rilsan-coated	316不锈钢 316 Stainless steel
				胶垫: EPDM 代码 Code	胶垫: EPDM 代码 Code
63	50	2	16	300140980	300141000
75	65	2 1/2	16	300140981	300141001
90	80	3	16	300140982	300141002
110	100	4	16	300140983	300141003
140	125	5	16	300140984	300141004
160	150	6	16	300140985	300141005
225	200	8	16	300140986	300141006



057—金属蝶阀—P—DA(双作用) Butterfly Valves 057-P-DA (Double acting)

阀座材料:
Material Housing:
铸铁:
Ductile Iron:

d mm	DN mm	Inch	PN	蝶板材料 Disk material	
				铸铁/ 丽绚涂层 Ductile iron/ Rilsan-coated	316不锈钢 316 Stainless steel
				胶垫: EPDM 代码 Code	胶垫: EPDM 代码 Code
63	50	2	16	300141040	300141060
75	65	2 1/2	16	300141041	300141061
90	80	3	16	300141042	300141062
110	100	4	16	300141043	300141063
140	125	5	16	300141044	300141064
160	150	6	16	300141045	300141065
225	200	8	16	300141046	300141066
280	250	10	16	300141047	300141067
315	300	12	16	300141048	300141068

蝶阀技术数据

Technical Data for the Butterfly Valve

Cv值 Cv Value

DN		阀门开启角度流量Cv值 Cv value in different angle								
mm	inch	10°	20°	30°	40°	50°	60°	70°	80°	90°
50	2	1.28	8.08	19.09	25.06	32.09	45.96	66.57	87.24	95.55
65	2 1/2	1.45	8.73	22.32	39	70	101	160	210	240
80	3	9	24.16	39.87	60.11	101.65	162.36	239.96	325.3	335.75
100	4	7.36	30.49	53.34	78.32	123	202.52	316.05	473.15	653.95
125	5	18.3	38.46	69.99	132.53	217.04	358.29	587.32	870.74	1019.48
150	6	30.29	55.48	109.92	200.18	344.16	552.58	841.91	1386.53	1572.98
200	8	60.82	102.53	246.97	423.11	722.01	1118.1	1734.6	2761.2	3141.96
250	10	98.82	226.18	391.06	688.04	1066.41	1756.83	2766.16	4619.44	6475.77
300	12	4.83	191.31	468.71	826.29	1438.14	2437.11	4219.76	7192.48	8818.85

注: 当阀门用作两位(开, 关)使用时其额定流量系数按90°开启时的Cv值选取, 当阀门用作调节使用时其额定流量系数按70°开启时的Cv值选取, 推荐控制角度为25°-70°, 最佳控制角度为60°-65°。

Note: The flow modulus is the 90° Cv valves when the valve is only used for open-close, and it is 70°, Cv valve when the valve is used for adjustment. The recommended control angle is 25°-70°, the best control angle is 60°-65°.

转换系数

Conversion Factors

	Kv100	Cv
Kv	1	14.28
Cv	0.07	1

金属蝶阀 备件

Metal-Butterfly Valves Spare Parts

裸轴蝶阀，公制和美标
Bare Shaft Valves, Metric and inch ANSI

阀座材料：
Material Housing:

铸铁：
Ductile Iron:



d mm	DN mm	Inch	PN	蝶板材料 Disk material	
				铸铁/ 丽绚涂层 Ductile iron/ Rilsan-coated	316不锈钢 316 Stainless steel
				胶垫: EPDM 代码 Code	胶垫: EPDM 代码 Code
63	50	2	16	300147880	300147810
75	65	2 1/2	16	300147881	300147811
90	80	3	16	300147882	300147812
110	100	4	16	300147883	300147813
140	125	5	16	300147884	300147814
160	150	6	16	300147885	300147815
225	200	8	16	300147886	300147816
280	250	10	16	300147887	300147817
315	300	12	16	300147888	300147818

阀座材料：
Material Housing:

铸铁：
Ductile Iron:

d mm	DN mm	Inch	PN	蝶板材料 Disk material	
				铸铁/ 丽绚涂层 Ductile iron/ Rilsan-coated	316不锈钢 316 Stainless steel
				胶垫: EPDM 代码 Code	胶垫: EPDM 代码 Code
63	50	2	20	300147830	300147840
75	65	2 1/2	20	300147831	300147841
90	80	3	20	300147832	300147842
110	100	4	20	300147833	300147843
140	125	5	20	300147834	300147844
160	150	6	20	300147835	300147845
225	200	8	20	300147836	300147846
280	250	10	20	300147837	300147847
315	300	12	20	300147838	300147848

阀座材料:

Material Housing:

铝合金:

Allumion:

d mm	DN mm	Inch	PN	蝶板材料 Disk material	
				铸铁/ 丽绚涂层 Ductile iron/ Rilsan-coated	316不锈钢 316 Stainless steel
				胶垫: EPDM 代码 Code	胶垫: EPDM 代码 Code
50	40	1 1/2	16	300147850	300147851

蝶阀手柄

Handle Lever Kit for 057-M



d mm	DN mm	Inch	代码 Code
50	40	1 1/2	300147855
63	50	2	300147856
75	65	2 1/2	
90	80	3	
110	100	4	300147857
140	125	5	300147858
160	150	6	

注: 大于DN150, 可提供铸铁材料手柄。

Note: Ductile iron handle are available for over DN150..

蝶阀手轮

Handle Wheel Kit for 057-G



d mm	DN mm	Inch	代码 Code
63	50	2	300148843
75	65	2 1/2	
90	80	3	
110	100	4	300148844
140	125	5	300148845
160	150	6	
225	200	8	300148846
280	250	10	300148847
315	300	12	300148848

金属蝶阀 尺寸

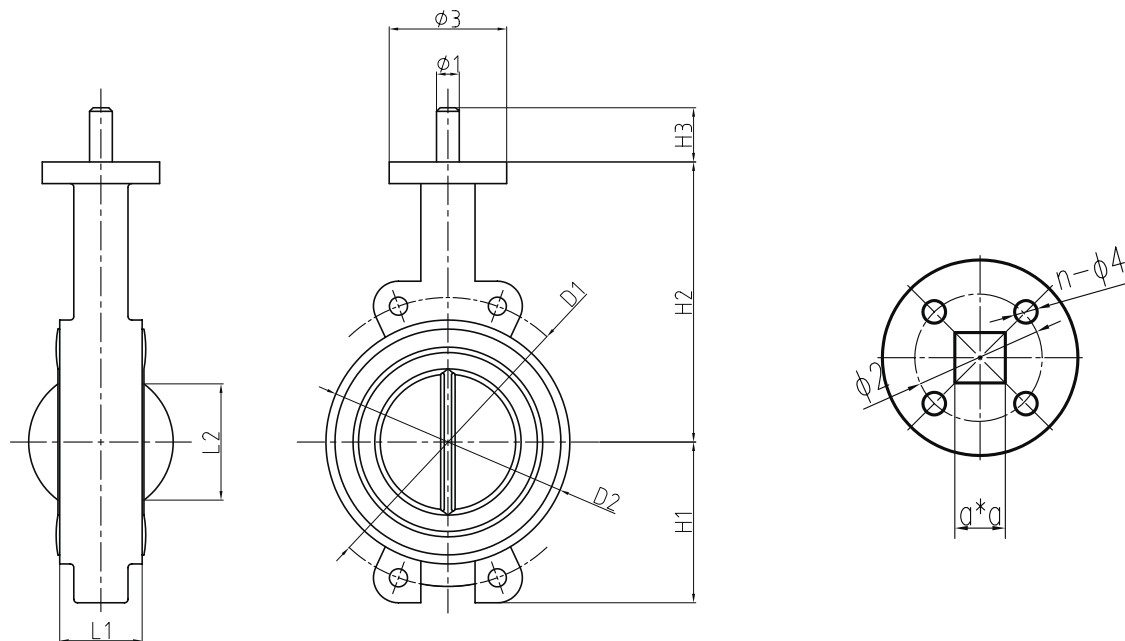
Metal-Butterfly Valves with Dimension

阀体

Valve Body

尺寸

Dimension

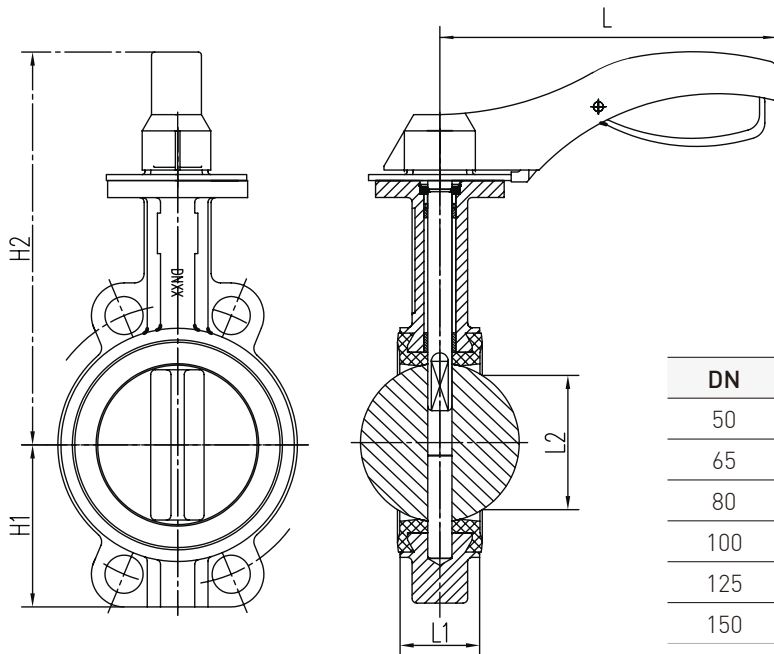


DN mm	inch	H1	H2	H3	D1	D2	$\Phi 1$	$\Phi 3$	n- $\Phi 4$	L1	L2
50	2	70	130	16	125	92	9 x 9	65	4-7	42.6	32
65	2 1/2	76	143	16	145	106	9 x 9	65	4-7	45.6	47
80	3	89	155	16	160	122	9 x 9	65	4-7	45.6	65
100	4	104	170	19	180	150	11 x 11	90	4-10	51.6	91
125	5	120	190	25	210	177	14 x 14	90	4-10	55.6	112
150	6	132	210	25	240	204	14 x 14	90	4-10	59.6	146
200	8	167	243	30	295	260	17 x 17	125	4-12	67.6	194
250	10	202	282	39	350	314	22 x 22	125	4-12	77.6	242
300	12	239	310	39	400	370	22 x 22	150	4-14	79	292

手柄蝶阀
Handle Lever

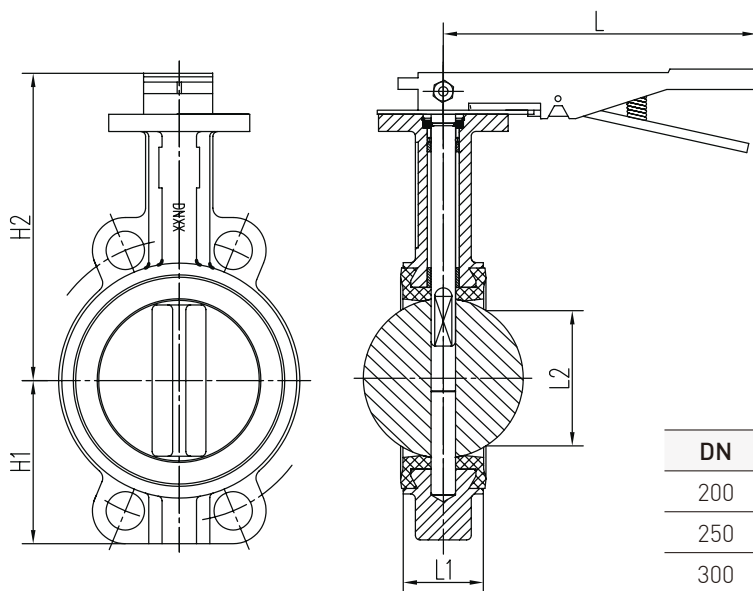
尺寸
Dimension

DN50-DN150



DN	H1	H2	L	L1	L2
50	70	193	170	42.6	32
65	76	205	170	45.6	47
80	89	218	170	45.6	65
100	104	243	200	51.6	91
125	120	263	260	55.6	112
150	132	283	260	56.6	146

DN200-DN300

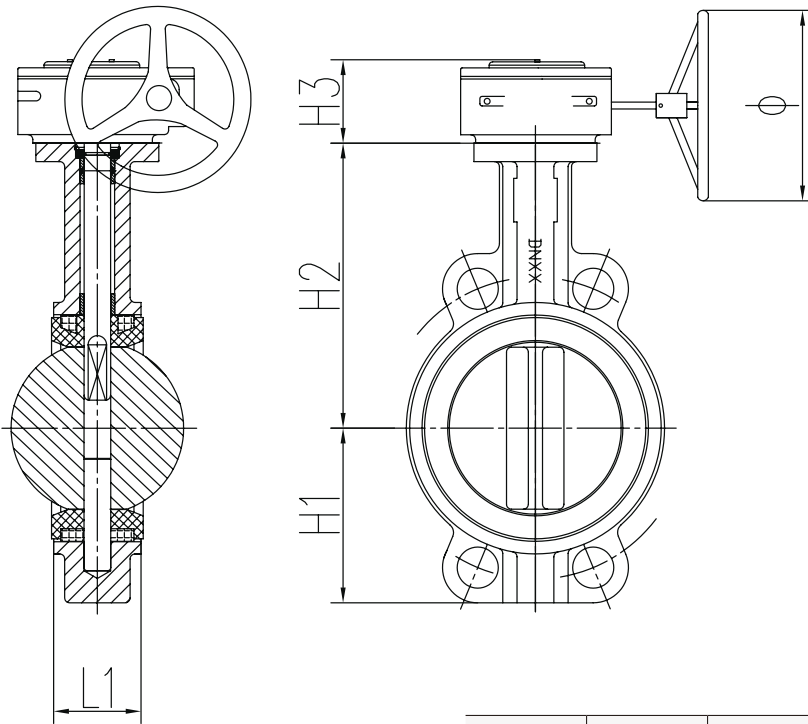


DN	H1	H2	L	L1	L2
200	167	283	360	59.6	194
250	202	322	360	67.6	242
300	239	350	507	77.6	292

手轮蝶阀
Gear Operation

尺寸
Dimension

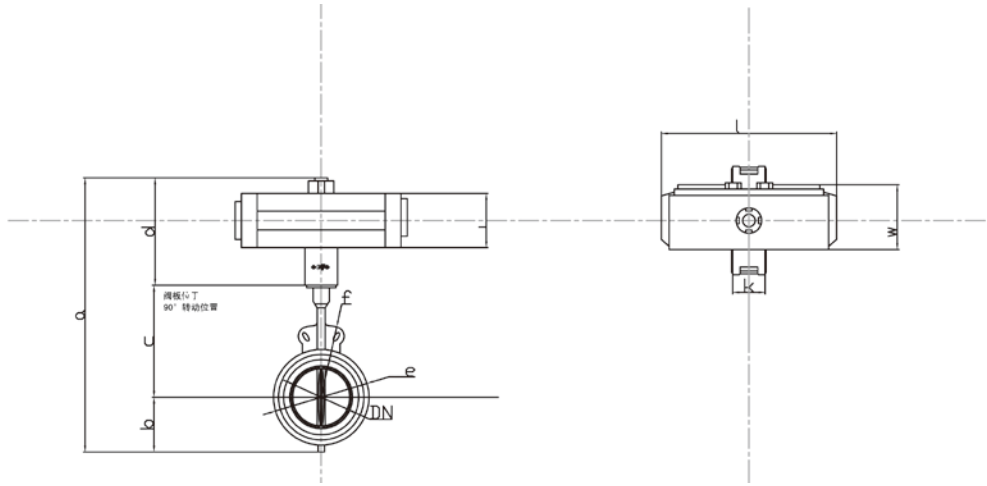
DN50-DN300



DN mm	inch	H1	H2	H3	L1	V
50	2	70	130	68	42.6	150
65	2 1/2	76	143	68	45.6	150
80	3	89	155	68	45.6	150
100	4	104	170	68	51.6	150
125	5	120	190	68	55.6	150
150	6	132	210	68	55.6	150
200	8	167	243	76	59.6	300
250	10	202	282	76	67.6	300
300	12	239	310	80.75	77.6	300

气动蝶阀 Pneumatic Valve

尺寸 Dimension



DN mm	inch	b	c	e	单动式 Single acting (FC/FO)			双动式 Double acting (DA)	
					a	l	w	a	w
50	2	70.0	120.0	92.0	319.5	94.0	95.0	292.0	71.5
65	2 1/2	76.0	133.0	106.0	347.7	90.5	103.0	326.5	83.0
80	3	89.0	145.0	122.0	372.7	98.5	103.0	363.5	95.0
100	4	104.0	160.0	150.0	410.5	111.0	108.5	402.7	103.0
125	5	120.0	180.0	177.0	463.0	122.0	121.5	438.7	103.0
150	6	132.0	200.0	204.0	495.0	122.0	121.5	478.2	108.5
200	8	167.0	233.0	260.0	627.0	184.0	174.0	585.0	142.0
250	10	202.0	272.0	314.0	-	-	-	676.0	152.0
300	12	239.0	298.0	370.0	-	-	-	766.0	174.0

技术数据 Technical Data

控制介质: 中性、无腐蚀性气体
Control medium: (最好的是有轻量油质的压缩空气)
Neutral, non-aggressive gases
(preferably slightly oily compressed air)

控制时间: 0.5-1秒
Control time: 0.5-1s
控制角度: 90° \pm
Control angle: 90° \pm

控制压力 (bar): 单作用 双作用
Control pressure: 最小2.5bar 最小2.5bar
in bar 最大10bar 最大10bar
Single acting Double acting
min. 2.5 bar min. 2.5 bar
max. 10 bar max. 10 bar

容许的工作温度: -10°C 至80°C
Ating temperature: -10°C to 80°C
容许的湿度: 0-98%
Permissible humidity: 0-98%

工作方式: 故障关 (FC)
Mode of operation: 故障开 (FO)
双作用 (DA)
Fail safe close (FC)
Fail safe open (FO)
Double acting (DA)

位置显示器: 视觉直觉
Position indicator: Optical

外壳材料: 铝
(可按要求选用其他
特殊保护面)
Housing material: Aluminum
surfaces hard anodized
(other special protective
available on request)

单作用阀门 Single Acting FC/FO

尺寸 Dimension	气动执行器 Actuator	中间连接件 Intermediate kits			
		适配器 Adaptor		螺栓 Screw bolts *	
DN40	300 141 103	14 x 9	300 147 869	M6 x 20	300 147 865
DN50	300 141 103	14 x 9	300 147 869	M6 x 20	300 147 865
DN65	300 141 104	17 x 9	300 147 870	M6 x 20	300 147 865
DN80	300 141 104	17 x 9	300 147 870	M6 x 20	300 147 865
DN100	300 141 106	22 x 11	300 147 871	M8 x 25	300 141 148
DN125	300 148 841	22 x 14	300 141 143	M8 x 25	300 141 148
DN150	300 148 841	22 x 14	300 141 143	M8 x 25	300 141 148
DN200	300 141 107	27 x 17	300 141 145	M10 x 30	300 147 866

双作用阀门 Double Acting DA

尺寸 Dimension	气动执行器 Actuator	中间连接件 Intermediate kits			
		适配器 Adaptor		螺栓 Screw bolts *	
DN40	300 141 110	11 x 9	300 147 868	M6 x 20	300 147 865
DN50	300 141 110	11 x 9	300 147 868	M6 x 20	300 147 865
DN65	300 141 111	14 x 9	300 147 869	M6 x 20	300 147 865
DN80	300 141 112	14 x 9	300 147 869	M8 x 25	300 141 148
DN100	300 141 113	17 x 11	300 141 141	M8 x 25	300 141 148
DN125	300 141 114	17 x 14	300 141 142	M8 x 25	300 141 148
DN150	300 148 840	22 x 14	300 141 143	M8 x 25	300 14 1148
DN200	300 141 115	22 x 17	300 141 144	M10 x 30	300 147 866
DN250	300 141 116	27 x 22	300 141 146	M10 x 30	300 147 866
DN300	300 141 117	27 x 22	300 141 146	M12 x 40	300 147 867

注: *螺栓代码只表示一个螺栓, 一个阀门需要四个螺栓
Note: * The codes indicate only one bolt, and one valve requires four bolts.