



2014 EDITION



法兰中心板式蝶阀

Flanged concentric disc butterfly valve

■控制装置法兰 Driving device flange

可以配用手柄、蜗轮蜗杆传动、电动或气动控制装置。

Can be used in handles, gear operators, electric or pneumatic actuators.

■轴套 Bushing

减小转动力矩，支撑阀杆，并使其与阀体有效分离，减小阀杆的磨损。

Reduce driving torque, support stem, and effectively separate it with valve body, reduce wear of stem.

■阀板轴孔端面 Surface of disc axle hole

经过抛光处理，与阀座精密配合。

Through treatment of polishing, precisely fit with seat.

■高精度阀板外缘 High precision disc external profile

实现气密性试验零泄漏要求。启闭力矩小，延长阀座使用寿命。

Reach the requirement of bubble-tight, small start and stop torque, longer usage life of seat.

■阀杆密封 Stem seal

阀杆密封不易变形，从而避免了通常的阀杆泄漏现象。

Stem is not easy to be distorted, eliminating possible leakage in stem.

■连接键 Strong precision key

精度高，强度大，适用于手柄及其它控制装置的安装。

Give possible attachment for manual lever or actuator.

■高精度锥销 Precision taper pin

牢固连接阀杆与阀板，具有防振脱特点，且易于更换。

Ensure positive vibration proof. Stem to disc connection. Easily field replaceable.

■整体阀杆结构 Integral stem design

精度高，可靠性强，便于控制阀板启闭。

High precision and reliability, convenient for start.

■侧密封 Side seal

无需法兰垫圈。

With no need of flange gasket.

■体衬胶式阀座 Body lined with rubber seat

整体支撑性好，固定稳定，抗拉、防泄漏。

Good integral support, stable and solid, stretch-proof, leakage-proof.

■O形圈 O-ring

辅助防止轴端泄漏。

Prevent leakage axle end.



■适用压力 Applicable Pressure: PN1.0~1.6MPa

■适用规格 Applicable Size: DN50~1400

■适用温度 Applicable Temperature: -10℃~150℃

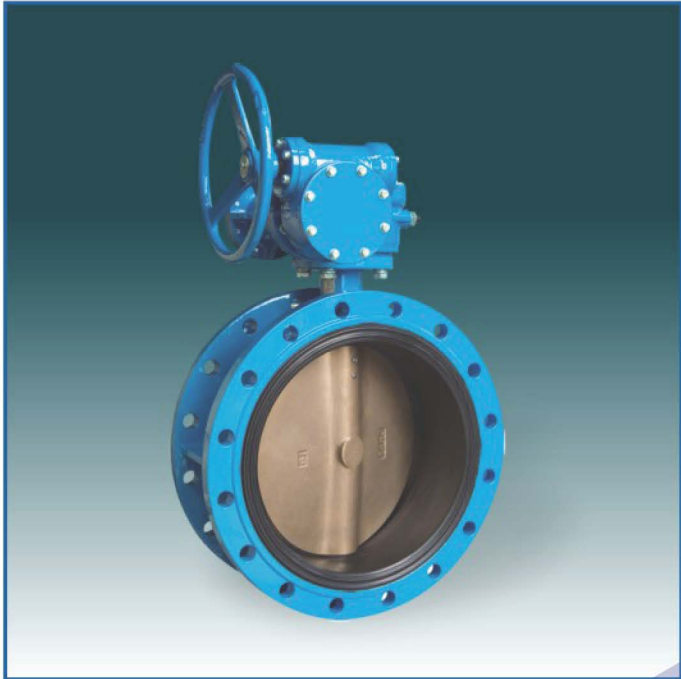
■主体材质 Body material: 铸铁、球墨铸铁

CI, DI,

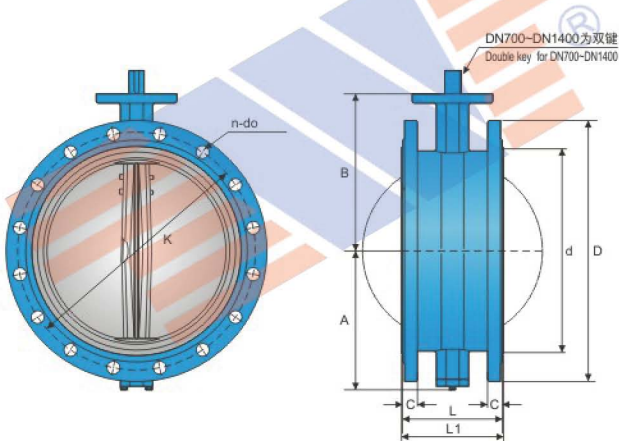
天津塘沽瓦特斯阀门有限公司
TIANJIN TANGGU TWT VALVE CO., LTD.

www.twtvalve.com

法兰中心板式蝶阀 · 技术参数
Flanged concentric disc butterfly valve technical parameters



对夹式蝶阀 · 外形尺寸
Wafer butterfly Valve Dimensions



流量曲线
Curve of Flow Rate

注：流量特性曲线表示阀门开启程度和流量的关系，一般蝶阀适用于流量控制，当阀门开启角度在30°以下时，不推荐用于控制流量。

Note: Performance curve of flow volume means the relationship between open degree of valve and flow volume. Normally butterfly valve suitable to use in control flow. When valve's open degree under 30°, not recommend to use in flow volume control.

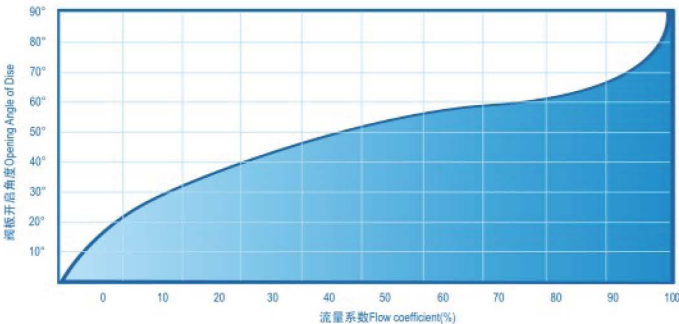
	部件	Component	材质	Material
DN50~350	阀体	Body	铸铁/球墨铸铁/铝青铜/不锈钢/碳钢	CI, DI, Al-bronze, Stainless steel, Carbon steel
	轴套	Bushing	润滑青铜/复合F4	Lubricated bronze, PTFE
	转轴	Shaft	不锈钢	Stainless steel
	阀座	Seat	橡胶	Rubber
	阀板	Disc	球墨铸铁/铝青铜/不锈钢	DI, Al-bronze, Stainless steel
	圆锥销	Taper pin	不锈钢	Stainless steel
	O型圈	O-ring	橡胶	Rubber
	键	Key	45(适用于DN300~350)	45(Only for DN300~350)
DN400~1200	阀体	Body	铸铁/球墨铸铁/铝青铜/不锈钢/碳钢	CI, DI, Al-bronze, Stainless steel, Carbon steel
	螺钉	Hex. bolt	碳钢	Carbon steel
	O型圈	O-ring	橡胶	Rubber
	底端盖	End plate	碳钢/不锈钢	Carbon steel, Stainless Steel
	轴套	Bushing	润滑青铜/复合F4	Lubricated bronze, PTFE
	阀座	Seat	橡胶	Rubber
	转轴	Shaft	不锈钢	Stainless steel
	阀板	Disc	球墨铸铁/铝青铜/不锈钢	DI, Al-bronze, Stainless steel
	圆锥销	Taper pin	不锈钢	Stainless steel
	键	Key	45	45
注：上表中所列材质为常规配置，如有特殊需要，请在合同中注明。 Note: Materials indicated in above table are for common usage, please give clear declaration in your contract if the re is special need.				

性能规范

1. 作为管路中调节或截断介质的设备。
2. 适用于手柄控制装置 (DN50~300)，蜗轮蜗杆、电动及气动控制装置。
3. 设计与制造标准符合 GB/T12238。
4. 压力试验符合 GB/T13927。
5. 结构长度符合 GB/T12221。
6. 侧法兰标准符合 GB/T17241.6。
7. 有关安装信息，请参见“安装与维护使用说明书”。

Technical Data

1. Equipment used in regulating or cutting off medium in pipeline.
2. Suitable for handles (DN50~300), Gear Operators, electric and pneumatic control actuators.
3. Standards of design and manufacture conform to GB/T12238.
4. Pressure test conform to GB/T13927.
5. Structure length meet to GB/T12221.
6. Side flange standard meet to GB/T17241.6.
7. For installation information, please refer to "Operation manual of installation and maintenance".



法兰中心板式蝶阀 · 外型尺寸 PN10 · PN16
Flanged concentric disc butterfly valve Overall Dimension PN10 · PN16

单位 Unit: mm

规格 Size	L	L1	PN10									PN16								
			A	B	C	D	K	d	f	n-Φ	重量 WT (kg)	A	B	C	D	K	d	f	n-Φ	重量 WT (kg)
50	108	111	83	120	19	165	125	99	3	4-Φ19	7.6	83	120	19	165	125	99	3	4-Φ19	7.6
65	112	115	93	130	19	185	145	118	3	4-Φ19	9.7	93	130	19	185	145	118	3	4-Φ19	9.7
80	114	117	100	145	19	200	160	132	3	8-Φ19	10.6	100	145	19	200	160	132	3	8-Φ19	10.6
100	127	130	114	155	19	220	180	156	3	8-Φ19	13.8	114	155	19	220	180	156	3	8-Φ19	13.8
125	140	143	125	170	19	250	210	184	3	8-Φ19	18.2	125	170	19	250	210	184	3	8-Φ19	18.2
150	140	143	143	190	19	285	240	211	3	8-Φ23	21.7	143	190	19	285	240	211	3	8-Φ23	21.7
200	152	155	170	205	20	340	295	266	3	8-Φ23	31.8	170	205	20	340	295	266	3	12-Φ23	34.6
250	165	168	198	235	22	395	350	319	3	12-Φ23	44.7	198	235	22	405	355	319	3	12-Φ28	51.1
300	178	182	223	280	24.5	445	400	370	4	12-Φ23	57.9	223	280	24.5	460	410	370	4	12-Φ28	66.8
350	190	194	270	310	26.5	505	460	429	4	16-Φ23	81.6	312	310	26.5	520	470	429	4	16-Φ28	107
400	216	221	300	340	28	565	515	480	4	16-Φ28	106	330	400	28	580	525	480	4	16-Φ31	139
450	222	227	340	375	30	615	565	530	4	20-Φ28	147	363	422	30	640	585	548	4	20-Φ31	190
500	229	234	355	430	31.5	670	620	582	4	20-Φ28	165	390	480	31.5	715	650	609	4	20-Φ34	232
600	267	272	410	500	36	780	725	682	5	20-Φ31	235	495	562	36	840	770	720	5	20-Φ37	350
700	292	299	478	560	39.5	895	840	794	5	24-Φ31	238	581	624	39.5	910	840	794	5	24-Φ37	442
800	318	325	529	620	43	1015	950	901	5	24-Φ34	475	655	672	43	1025	950	901	5	24-Φ40	590
900	330	337	584	665	46.5	1115	1050	1001	5	28-Φ34	595	743	720	46.5	1125	1050	1001	5	28-Φ40	746
1000	410	417	657	735	50	1230	1160	1112	5	28-Φ37	794	802	800	50	1255	1170	1112	5	28-Φ43	976
1200	470	478	799	917	57	1455	1380	1328	5	32-Φ40	1290	951	941	57	1485	1390	1328	5	32-Φ49	1540
1400	530	538	920	1040	60	1675	1590	1530	5	36-Φ43	2210	1070	1065	60	1685	1590	1530	5	36-Φ49	2585

CV值—流量系数 (US-GPM@1△P) DN50 to DN1000 CV Valve-Flow Rate Coefficient

规格 Size	10°	20°	30°	40°	50°	60°	70°	80°	90°
50	0.1	5	12	24	45	64	90	125	135
65	0.2	8	20	37	65	98	144	204	220
80	0.3	12	22	39	70	116	183	275	302
100	0.5	17	36	78	139	230	364	546	600
125	0.8	29	61	133	237	392	620	930	1022
150	2	45	95	205	366	605	958	1437	1579
200	3	89	188	408	727	1202	1903	2854	3136
250	4	151	320	694	1237	2047	3240	4859	5340
300	5	234	495	1072	1911	3162	5005	7507	8250
350	5	338	715	1549	2761	4568	7230	10844	11917
400	8	464	983	2130	3797	6282	9942	14913	16388
450	11	615	1302	2822	5028	8320	13168	19752	21705
500	14	791	1674	3628	6465	10698	16931	25396	29908
600	22	1222	2587	5605	9989	16528	26157	39236	43116
700	36	1813	3639	6636	10000	14949	22769	34898	49500
800	45	2387	4791	8736	13788	20613	31395	48117	68250
900	60	3021	6063	11055	17449	26086	39731	60895	86375
1000	84	4183	8395	15307	24159	36166	55084	84425	119750
1200	106	5370	10741	19641	30690	46065	70587	107568	153450

 CV=当阀门全开时，阀门两端压差为1磅/英寸²，流体用60°F的清水时，通过阀门的美加仑/分的流量数。

 CV=when valve entirely opened, pressure difference in both sides of valve will be 1 pound/inch², when fluid is 60°F clean water, flow volume of per gallon/min. flowing through valve.

$CV=Q/(G/\Delta P)^{1/2}$ 式中: Q=最大流量 (美加仑/分)
 G=比重 (水=1)
 ΔP =压力降 (磅/英寸²)

$CV=Q/(G/\Delta P)^{1/2}$ Whereas: G=Specific gravity, clean water will be 1.0
 Q=Max. flow rate
 ΔP =Pressure difference, lb/in²

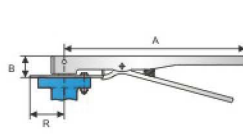
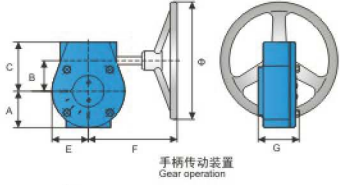
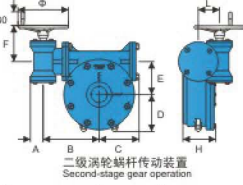
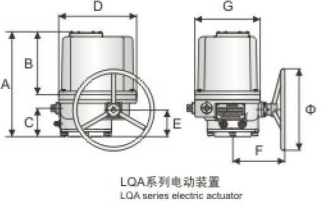
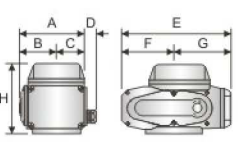
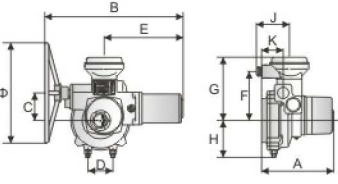
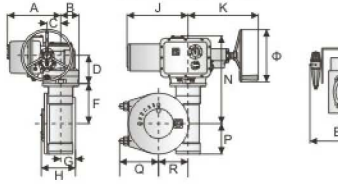
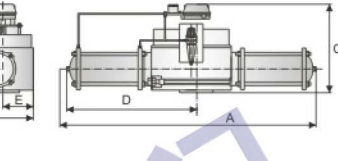
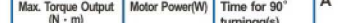
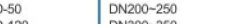
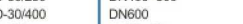
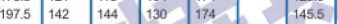
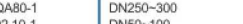
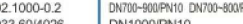
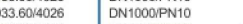
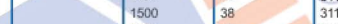
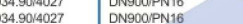
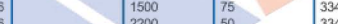
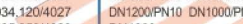
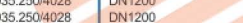
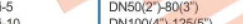
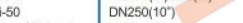
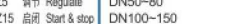
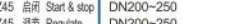
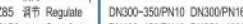
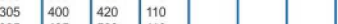
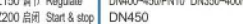
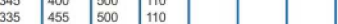
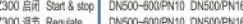
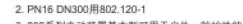
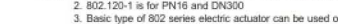
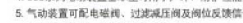
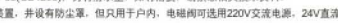
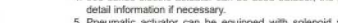
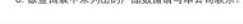
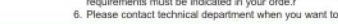
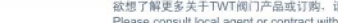
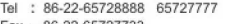
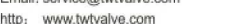
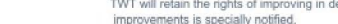
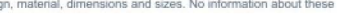
 C=当阀门全开时，阀门两端压差为100KPa(1Kg/cm²)，流体用常温清水时，某给定行程的流量以m³/h计，介质密度取Kg/m³的流量数值(m³)。CV=1.17C

 C=The valve CV is the flow rate(m³/h) of pure water at normal temperature passing through the valve when the valve disc is fully opened and the pressure differential between the two ends of the valve is 100Kpa(1Kg/cm²) CV=1.17C

传动装置 · 外型尺寸

Actuator Technical Parameters

单位 Unit: mm

   		   		   		   		   		   		   		   		   		   		   		   		   		   		   		   		   		   		   		   		   		   		   		   		   		   		   		   		   		   		   		   		   		   		   																																																																										
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