

高性能金属密封蝶阀系列  
High performance full metal seal butterfly valve series

**吉富隆智能装备制造集团有限公司**  
GIFLON INTELLIGENT EQUIPMENT MANUFACTURING GROUP CO.,LTD.

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## 企业简介



吉富隆智能装备制造集团有限公司始建于2010年，是一家集自主研发、高端制造、营销服务为一体的现代化集团公司。集团总部坐落于首都北京经济技术开发区，交通十分便利。集团在北京、河北、江苏等地设有生产基地。注册资金10560万元。

公司有产品设计开发中心，现有中高级工程技术人员20余人，使用CAD、CAM辅助开发设计制造系统，采用Pro/E、SolidWorks等软件进行产品建模、有限元分析，以保证产品的设计开发。公司经过多年的创新和发展，已成为国内外具有很强的设计开发和科研与生产相结合规模的智能装备制造企业。

公司拥有先进的数控加工中心、数控机床及金加工和切削加工设备；全自动埋弧焊机、气体保护焊机焊接设备及热处理设备；具备较强检测能力和先进检测设备，有光谱分析仪、硬度计、超声波测厚仪、超声波探伤仪等理化、无损检测设备，拥有先进的阀门综合性能测试、阀门扭矩、寿命试验装置等阀门压力、性能试验装置。

公司致力于智能装备、节能环保等领域，为智能工业系统、智慧热网、智慧水务提供节能方案设计、节能产品制造、工程节能改造、技术维护等服务。同时与哈尔滨工业大学紧密合作，为用户提供智能热网管理中心平台、热网监控、热源控制系、换热站无人值守控制等系统，针对集中供热领域全面提供从热源、热网、热力站到热用户的整体节能解决方案。

公司专业生产大口径和高压等级的油气长输管线球阀(分体式 and 全焊接)和供热专用大口径全焊接球阀、轨道球阀、高性能金属密封蝶阀、旋塞阀以及平板闸阀等产品。可按GB、JB、ASME、ANSI、API、DIN、BS等标准生产，广泛应用在石油、天然气长输管线、化工、电厂、区域供热、水处理等诸多领域，产品以卓越的品质和优质服务赢得了国内外客户的信任，产品行销全国，并远销墨西哥、意大利、美国、智利、委内瑞拉、西班牙等国家和地区。

为了更好的适应市场经济，充分发挥企业优势，公司不断引进外来技术、吸纳先进的管理经验，引进培养高端人才，以一流的产品质量和周到的服务来回馈客户。作为高端阀门装备的制造厂家，为市场提供优质的智能装备产品是我们的责任，也是我们的生存发展之道。

诚信天下，合作共赢！欢迎新老客户莅临我公司参观、指导。

## Company's profile



GIFLON INTELLIGENT EQUIPMENT MANUFACTURING GROUP CO., LTD. was founded in 2010. It is a modern group company integrating with own R&D, high-class manufacturing, and marketing services. Its headquarter is located in the Beijing Economic and Technological Development Zone within convenience transportation. The group has production bases in Beijing, Hebei, Jiangsu and etc, within RMB 105.6 million registered capital.

The company has more than 20 senior engineers and technicians , using CAD and CAM to develop design and manufacturing systems and applying software such as Pro/E and SolidWorks for products modeling and finite element analysis to guaranty the products design and development. After years of innovation and development, the company has become an intelligent equipment manufacturing enterprise with strong design, development, research and production in both China and abroad.

The company has advanced NCPC, CNC machine tools, metal processing , lathe and milling equipment; automatic submerged arc, gas shield and other welding equipment ; heat treatment equipment; and strong test capability and advanced mechanical and chemical testers, NDT test instruments such as spectrum analyzers, hardness testers, Ultrasonic thickness gauge, ultrasonic flaw detector etc and advanced comprehensive valve performance testers, torque, and life span testers.

The company is dedicated on intelligent equipment, energy conservation and environmental protection, and provides services such as energy-saving solution design, energy-saving products manufacturing, projects energy-saving renew, and technical maintenance for intelligent industrial systems, intelligent heating networks, and intelligent water networks. Meanwhile, we have closed cooperation with Harbin Institute of Technology to provide intelligent heating network management center platform, heating network monitoring, heat source control system, heat exchange station unattended control and etc. For collective heat supply, we provide integrated solution for energy saving from the heat source, heat network, distribution station, until the end users.

We are professional on the manufacturing of large-diameter and high-pressure ball valves(split body and fully welded) for long-distance oil and gas pipeline and heating network pipeline, orbital ball valves, high-performance metal sealing butterfly valves, plug valves, flat gate valves and other products . Valve products can be produced in accordance with standards as ASME, ANSI, API, GB, DIN, BS and are widely used in petroleum and natural gas pipelines, oil refinery , chemical industry, power plants, heating network, water treatment and many other fields. Our products have won the trust from domestic and foreign customers through excellent quality and service, and have been exported to Mexico, Italy, the USA, Chile, Venezuela, Spain and other countries.

In order to better adapt to the market economy and completely utilize the advantages of our company, We continuously introduce foreign technology, absorb advanced management experience, high class human resource , and present high quality products and thoughtful service to our customers . As a manufacturer and innovator of high-class equipment, it is our responsibility to provide high-quality intelligent equipment products to the market; creating value for our customers is our way to survival and development.

We warmly welcome every new and old customer visits and instructs our company and look forward to build a win-win cooperation with you.

蝶阀型号编制方法 Method to code the model of butterfly valve



① 操作形式 Driven method

M	E	P	S
手动(蜗轮蜗杆) Manual, (worm gear and worm)	电动Electric	气动 Pneumatic	液动Hydraulic

② 蝶板材料 Disc material

A	B	C	D	E
WCB	CF8	CF3	CF8M	CF3M

③ 密封圈 Sealing ring

A	B	C	D
F304+HF	F316+HF	F304+H60	F316+H60

④ 压力等级 Pressure rating

国标压力等级 GB standard pressure rating	16、25、40、63、100、160、320
美标压力等级 American standard pressure rating	150、300、600、900、1500、2500

⑤ 端面连接形式 End face connection form

W	F	C	L
焊接式 Welding	法兰式 Flanged	对夹式 Wafer	凸耳式Lug

⑥ 阀体材质 Body material

F	C	S	A	T
锻钢 Forged steel	铸钢 Cast steel	不锈钢 Stainless steel	合金钢 Alloy steel	钛合金 Titanium alloy

⑦ 蝶阀公称压力值 PN value of butterfly valve

用MPa的10倍值表示 Expressed with 10 times of MPa value

用磅级表示 on pressure class

⑧ 蝶阀公称通径DN of butterfly valve

DN(mm)	inch	DN(mm)	inch	DN(mm)	inch	DN(mm)	inch
80	3	350	14	900	36	2200	88
100	4	400	16	1000	40	2400	96
125	5	450	18	1200	48	2600	104
150	6	500	20	1400	56	2800	112
200	8	600	24	1600	64	3000	120
250	10	700	28	1800	72	3200	128
300	12	800	32	2000	80	3400	136

执行标准 Execution standard

设计与制造:

JB/T8527、ANSI B16.34、API609等标准;

连接法兰:

GB/T9113.1、ASME B16.47、ANSI B16.5等标准;

结构长度:

GB/T12221、ANSI B16.10、API609等标准;

检验与试验:

GB/T13927、ISO5208、API598等标准

《如需其他标准可另技术确认》

Design and manufacturing:

JB/T8527、ANSI B16.34、API609 and etc;

Connecting flange:

GB/T9113.1、ASME B16.47、ANSI B16.5 and etc;

Structure length:

GB/T12221、ANSI B16.10、API609 and etc;

Inspection and test:

GB/T13927、ISO5208、API598 and etc;

《other standards need to confirm with us》

适用范围 Scope of application

公称通径:

DN50~DN3600 2"~144"

(不同阀门类型尺寸范围有所不同, 详情请电询)

公称压力:

PN2.5~PN260 Class150~Class1500

(不同阀门类型压力范围有所不同, 详情请电询)

温度范围:

-196℃~850℃

连接方式:

法兰式、对焊式、对夹式、凸耳式等

主体材料:

锻钢、碳钢、铬钼钢、奥氏体不锈钢、双相不锈钢、钛合金、哈氏合金、蒙乃尔合金等。

Nominal size:

DN50~DN3600 2"~144"

(Different valve types size range is different, the details please call us)

Nominal pressure:

PN2.5 ~ PN260 Class150 ~ Class1500

(Different valve types pressure range is different, the details please call us)

Temperature range:

-196℃ ~ 850℃

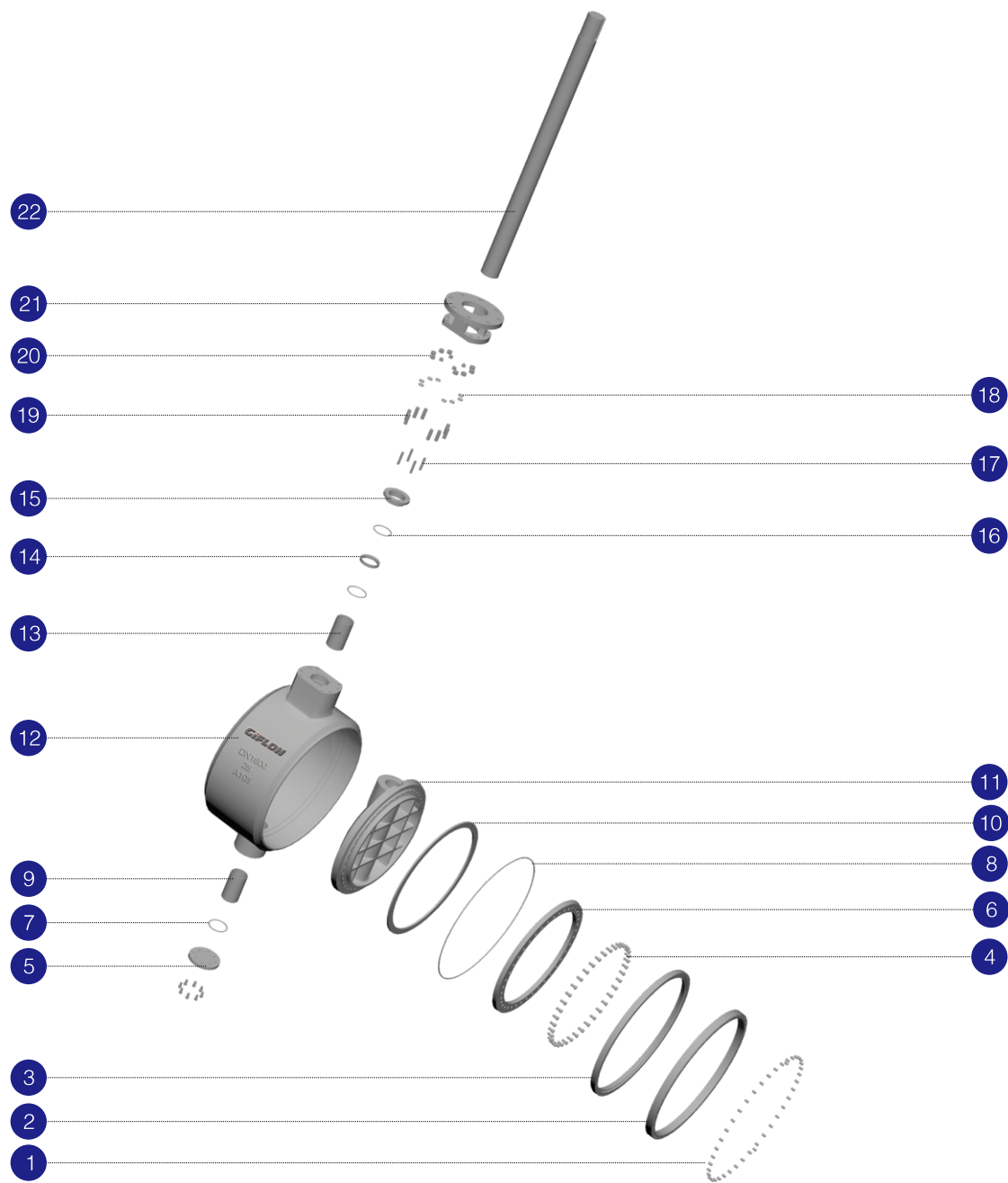
Connection:

flange, butt welding type, wafer, lug type, etc

Main material:

Forged steel, carbon steel, chrome molybdenum steel, austenitic stainless steel, duplex stainless steel, Titanium alloy, hartz alloy, monel alloy, etc

主要零件分解图 Main parts diagram



主要零件材质表 Main parts material table

序号 ITEM	零件名称 Component	碳素钢阀门零件材料 Carbon Steel		不锈钢阀门零件材料 Stainless Steel	
		国标GB	美标API	国标GB	美标API
1	内六角螺钉 Hexagon screw	ASTM A193 B7	ASTM A193 B7	06Cr19Ni10	ASTM A193 B8
2	三开环 Triple open loop	ASTM A105	ASTM A105	06Cr19Ni10	ASTM A182 F304
3	阀座 Seat	ASTM A182 F304+STL	ASTM A182 F304+STL	ASTM A182 F304+STL	ASTM A182 F304+STL
4	内六角螺钉 Hexagon screw	ASTM A193 B7	ASTM A193 B7	06Cr19Ni10	ASTM A193 B8
5	底盖 Bottom cover	ASTM A105	ASTM A105	06Cr19Ni10	ASTM A182 F304
6	压板圈 Pressure plate ring	06Cr19Ni10	ASTM A182 F304	06Cr19Ni10	ASTM A182 F304
7	对开环 Connector ring	06Cr19Ni10	ASTM A182 F304	06Cr19Ni10	ASTM A182 F304
8	金属密封圈 Metal sealing ring	ASTM A182 F304+STL	ASTM A182 F304+STL	ASTM A182 F304+STL	ASTM A182 F304+STL
9	轴套 Shaft sleeve	304+Nitride	ASTM A276 304+Nitride	304+Nitride	ASTM A276 304+Nitride
10	石墨复合垫片 Graphite composite gasket	304+Graphite	ASTM A276 304+Graphite	304+Graphite	ASTM A276 304+Graphite
11	蝶板 Disc	WCB/CF8	ASTM A216 WCB/ASTM A351 CF8	CF8	ASTM A351 CF8
12	阀体 Body	ASTM A105	ASTM A105	ASTM A182 F304	ASTM A182 F304
13	轴套 Shaft sleeve	304+Nitride	ASTM A276 304+Nitride	304+Nitride	ASTM A276 304+Nitride
14	填料压套 Packing bushing	304	ASTM A276 304	304	ASTM A276 304
15	填料压板 Packing Gland	Q235B	A570 Gr.D	304	ASTM A276 304
16	填料垫 Packing gasket	304+Graphite	ASTM A276 304+Graphite	304+Graphite	ASTM A276 304+Graphite
17	螺栓 Stud bolt	ASTM A193 B7	ASTM A193 B7	06Cr19Ni10	ASTM A193 B8
18	垫圈 Spring gasket	65Mn	ASTM A29 1566	GB93	ANSI B18.21.1
19	螺栓 Stud bolt	ASTM A193 B7	ASTM A193 B7	06Cr19Ni10	ASTM A193 B8
20	螺母 Nut	ASTM A194 2H	ASTM A194 2H	06Cr19Ni10	ASTM A194 B8
21	支架 Yoke	WCB	ASTM A216 WCB	WCB	ASTM A216 WCB
22	阀杆 Shaft	20Cr13/17-4PH	20Cr13/17-4PH	20Cr13/17-4PH	20Cr13/17-4PH

◆不同材质阀门各零件材质不同，详情请电询 Different material valve parts material is different, the details please call us

### 设计优势 Design Advantage

活动阀座密封面与蝶板密封圈均采用堆焊钴基硬质合金工艺，完全把密封圈母材与硬质合金彻底融合在一起，堆焊钴基硬质合金加工成型后密封面的洛氏硬度HRC $\geq 50$ ，具备长时间频繁开启阀门密封面不脱落；提高密封面的抗氧化、耐磨性、耐冲刷及耐腐蚀能力，颗粒介质等苛刻工况条件下安全运行；大大减小了密封圈与密封面的摩擦系数，减小密封面摩擦，提高密封圈使用寿命，亦延长了阀门的使用寿命。

Applying bead welding the cobalt based hard alloy on the mobile sealing face of the seat and disc, completely compound the hard alloy and base material together, the hardness of the sealing face HRC $\geq 50$  after the bead welding of cobalt based hard alloy, and will not peel off after long time and high frequency open/close; enhancing the anti-oxidization, wearing, eroding, corrosion features of the sealing face, safe operation under harsh condition, significantly reduce the friction factor of the sealing ring and face, prolong the life span of the sealing ring and valve.

阀杆采用合金钢材料，调质处理，耐腐蚀，保证在使用中无微量变形。  
The material of the stem is alloy steel, with tempered treatment, anti-corrosion, ensure no micro torsion during the use.

在原来三偏心蝶阀密封基础上增加了一个角度偏心，降低阀座与密封圈之间的摩擦力，延长阀门使用寿命。  
Adding an angle eccentric on the seal of the old triple eccentric butterfly valve, reducing the friction between the seat and sealing ring, extent the life span of the valve.

特制金属自润滑轴承在阀门频繁开关中，无卡涩，始终保持操作低扭矩。  
Special self lubrication metal bearing can keep low operation torque, no stuck during the open/close frequently.

活动阀座在介质正反向推动下，实现自动补偿压差零泄漏。  
Mobile seat can realize 0 leakage due to the automatic pressure difference compensation under the push of the medium from both side.

蝶板采用整体流线型结构，流阻系数小，奥氏体材质可以避免管道中酸碱性介质的腐蚀。  
The disc applies integrated streamline structure, low flow resistance factor, the Austenitic material can avoid the corrosion from the acidic or alkalinity mediums in the pipeline.

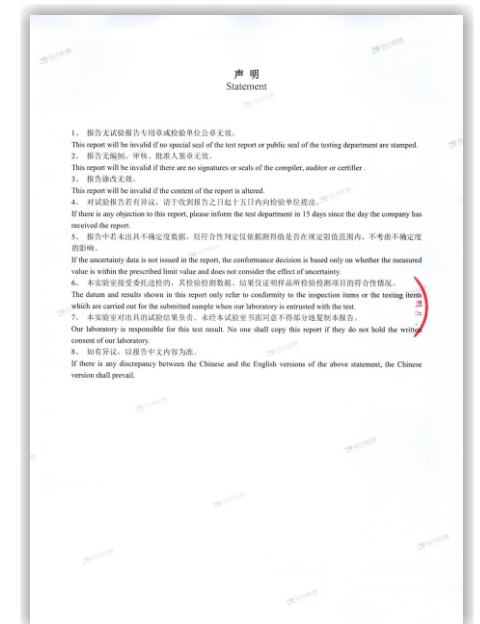
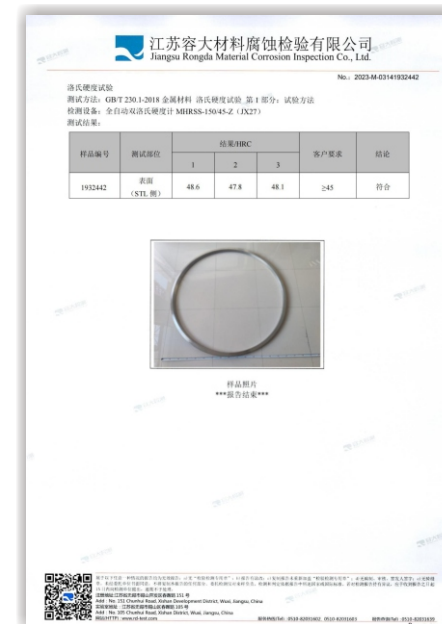
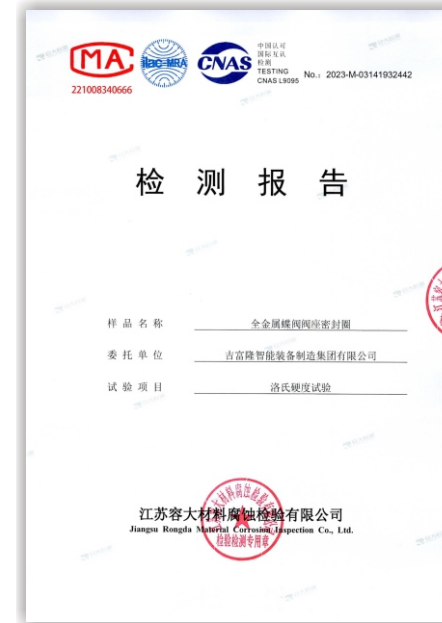
全金属密封结构比普通多层次密封结构，阀门使用寿命提高5-8倍。  
The full metal seal structure can make the life span of the valve 5-8 times longer than ordinary multi-layers seal structure.

阀门整体无橡胶类密封件设计，实现使用温度无差别。  
No rubber sealing parts design of the valve can realize no different on temperature.

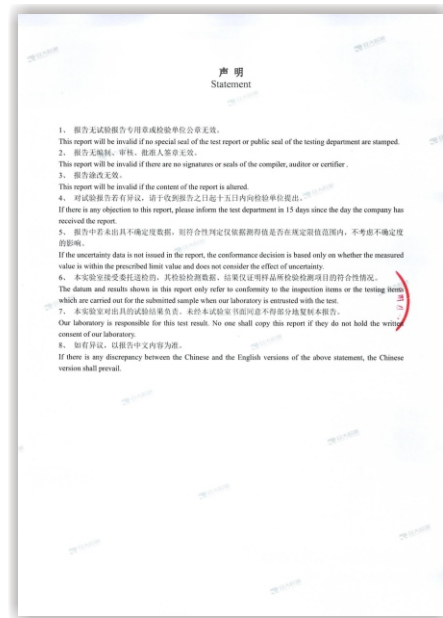
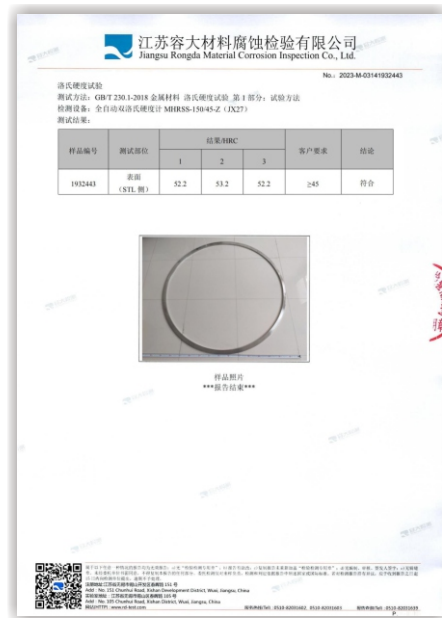
前置式阀座安装设计，可以在线维修并且操作方便简单。  
The design of Front-set seat installation, can make the online maintenance much easier.



### 检测报告 Examining report



检测报告 Inspection report

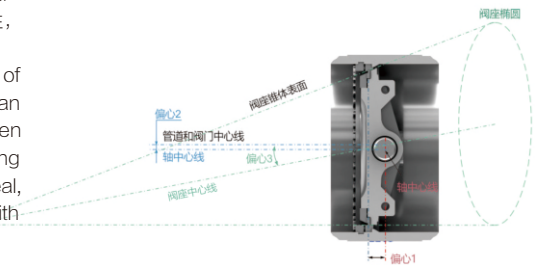


设计理念 Design idea

工作原理 working principle

三偏心全金属硬密封蝶阀具有双向密封气泡级零泄漏性能，这种几何形状保证蝶板密封圈只是处在100%关闭位置时才与阀座完全接触，开启过程中不会产生摩擦或磨损，密封时会产生一种关闭扭矩，使蝶板密封圈具有足够的刚性，确保与阀座紧密结合。

Triple eccentric full metal hard seal butterfly valves have the feature of bi-directional seal and bubble class 0 leakage, this kind of shape can ensure the sealing ring of the disc touch the seat completely only when the disc is at 100% closed position, there is no friction and wearing during the open, and a kind of closing torque can be generated during the seal, the sealing ring of the disc has enough rigidity, ensure the tightness with the seat.



几何形状 Geometric shape

偏心1: 阀轴位于阀座后面，使得密封能够完全环绕接触整个阀座。  
偏心2: 阀轴中心线偏离管道和阀门中心线，这就避免阀门开启和关闭的干涉。  
偏心3: 阀座维体轴偏离阀轴中心线，这样可以在关闭和开启过程中消除摩擦作用，并且实现环绕整个阀座的均匀一致的压缩密封效果。

Eccentric 1: The stem is located behind the seat, make the seal can surround the entire seat completely.

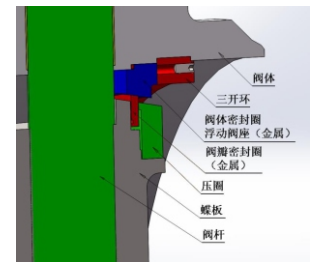
Eccentric 2: The centric line of the stem is deviated the centric line of the pipe and valve, can avoid the interference during the open/close.

Eccentric 3: The centric line of the seat is deviated from the centric line of the stem, can reduce the friction during the open/close, and realize an uniform compacted seal effect around the entire seat.

结构设计 Structure Design

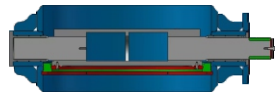
三偏心全金属硬密封蝶阀，提供灵活方便的阀门密封副结构设计，密封环和阀座均采用独立活动的可拆卸设计，易于安装更换与维护。当密封环或阀座受损时，不需报废整台阀门，只需更换密封环或阀座即可，降低保养成本，同时减少了维修工时和检修强度。蝶阀全金属密封圈采用全金属不锈钢锻造密封环及阀座构造，并且密封面表面喷焊司太立合金或碳化钨。其优点是抗冲刷、耐磨损、耐腐蚀、耐高温高压，使用寿命长。在供热管网上的设计使用寿命超过30年以上，达到与管道同寿命水平。能够承受850°C的高温，或更恶劣的工况环境，能够适用更宽广的工况条件。三偏心全金属硬密封蝶阀独树一帜的密封圈结构可实现蝶阀的双向密封，正向与反向承压时均不发生内漏。

The triple eccentric fully metal hard seal butterfly valve, can provide flexible convenience sub-seal structure design, both sealing ring and seat adopt dismantling design, easy to install and maintain, when the seal ring and seat is damaged, there is no necessary to abandon whole set of the valve, just need to replace sealing ring and seat, the maintenance cost, time and work can be reduced. The full metal sealing ring adopt the forged full metal stainless steel and seat structure, and spray welding stellite or tungsten carbide on the surface of it, the advantage of it is resistant to eroding, wearing, corrosion, high temperature and pressure, long life span. The design life span can be more than 30 years on the heat supply pipelines, and as long as the pipeline, can bear 85°C high temperature, or even more harsh condition, can adapt more wide operational conditions. The unique sealing ring structure of the triple eccentric fully metal hard seal butterfly valve can realize the bi-directions seal on the valve, the inner leakage will not happen during the bi-directions pressure bear.

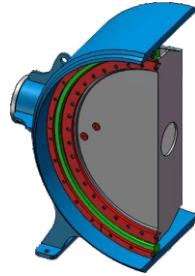


(可更换的全金属密封副结构)

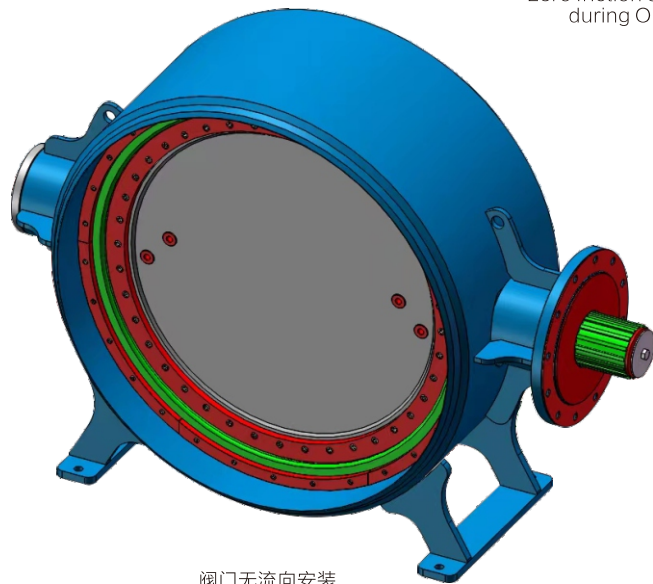
**结构分析 Structural analysis**



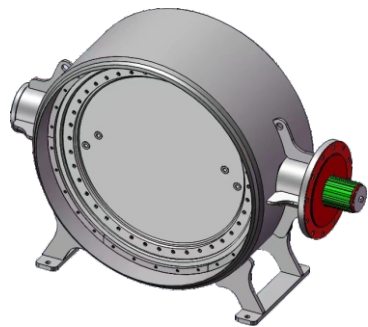
活动阀座自动补偿  
Automatic compensation of mobile seat



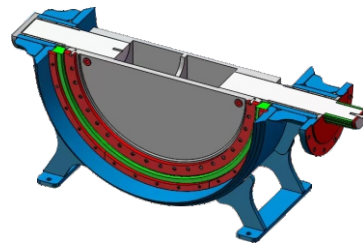
密封面开关零摩擦  
zero friction on sealing face during Open/Close



阀门无流向安装  
Valve installation without flow direction



阀体整体锻造  
integrated forged body



可换式阀座、密封圈  
Renewable seat, sealing ring

**应用领域 Application area**

石化厂  
盐水、二氧化碳蒸汽  
丙烯厂  
蒸汽系统  
丙烯气  
火焰入口和隔离  
乙烯厂  
PSA和分析筛  
乙烯裂化装置  
焦化厂  
PETROCHEMICAL PLANTS  
Brine.CO2 vapor  
Propylene Plants  
Steam service  
Propane Gas  
Flare Inlet and Isolation  
Ethylene Plants  
PSA&Molecular Sieves  
Ethylene Crackers  
Coke Plants

石油炼制  
储油库隔离  
供气阀  
脱硫系统和废气处理器  
火炬气, 酸气隔离  
热裂气  
催化裂化器装置  
PETROLEUM REFINING  
Oil Storage Isolation  
Steam Supply Valves  
Desulphurization Systems and Tail Gas Treaters  
Flare Gas/Sour Gas Isolation  
Hot Cracking Gas  
Catalytic Cracker Units

核电厂  
容器隔离盐水系统  
堆心喷淋系统  
泵隔离海水淡化系统  
NUCLEAR POWER PLANTS  
Container Isolation  
Saltwater Service  
Core Spray Systems  
Pump Isolation  
Seawater Desalination System

火力发电  
泵隔离  
冷凝器冷却  
泵和蒸汽抽取隔离  
热交换器, 冷凝器冷却隔离  
POWER PLANTS  
Pump Isolation  
Condenser COOLING  
Pump and Steam Extraction Isolation  
Heat Exchanger, Condenser Cooling Isolator

纸浆和造纸  
蒸汽隔离, 锅炉水  
绿, 红和黑液  
石灰和泥浆  
PULP AND PAPER  
Steam Isolation, Boiler Water  
Green, Red and Black  
Liquid Lime and Slurries

集中供热  
热电站  
换热站  
区域锅炉房  
热水管网  
蒸汽管网  
CENTRAL HEATING  
Thermal Power Plant  
Heat Exchange Station  
Regional Boiler Rooms  
Hot Water Pipe Network  
Steam Pipe Network

低温  
所有液态气体  
液化和天然气系统  
油田回收系统  
气化和储存设备  
液化天然气运输系统  
CRYOGENICS  
All Liquid Gases  
Liquid and Natural Gas Service  
Oil Field Recovery System  
Gasification Plants and Storage  
LNG Transportation Service



主要产品展示 Main product display



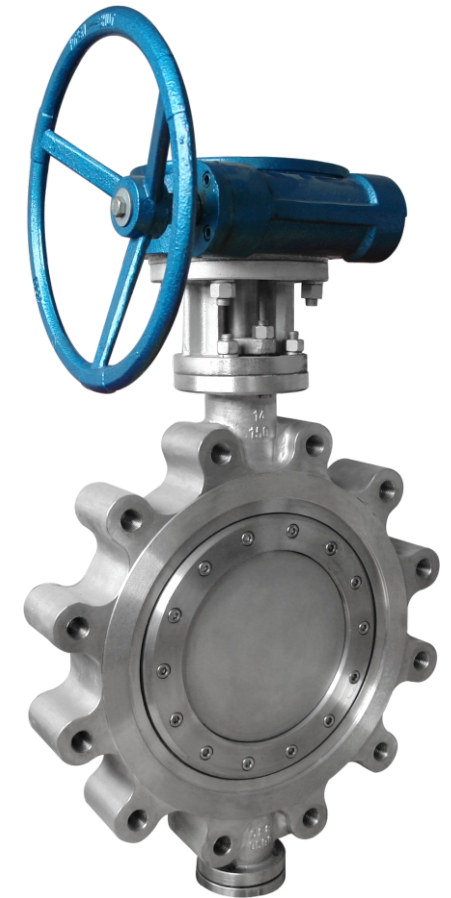
对焊式  
Butt weld type



法兰式  
Flanged type



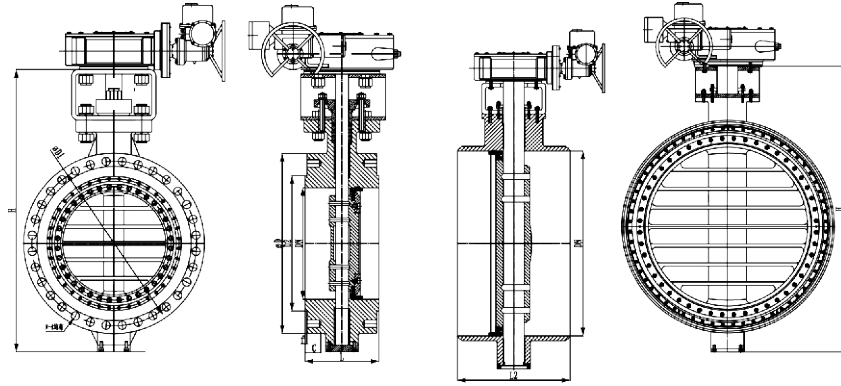
对夹式  
Wafer type



凸耳式  
Lug type

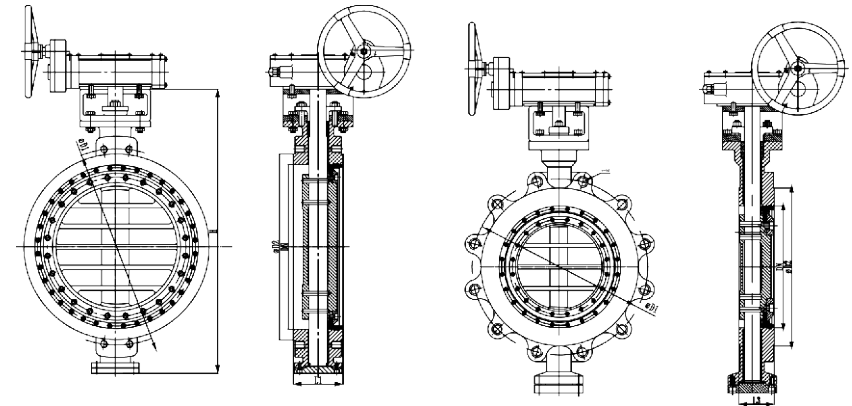


主要连接尺寸 Main connecting dimensions



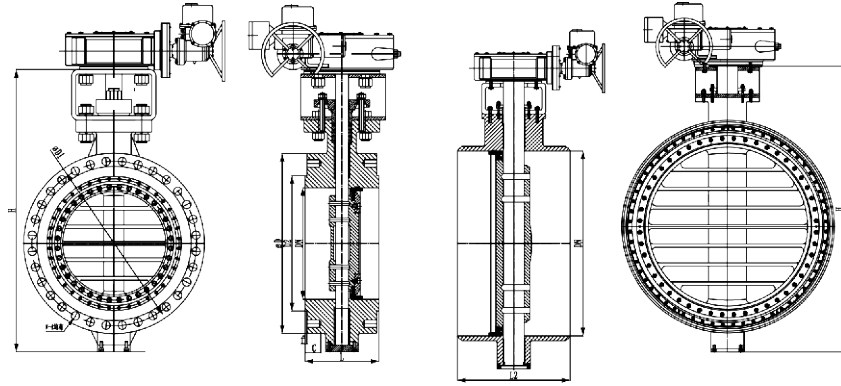
公称通径 DN (mm)	PN 6										近似重量 Weight(appro)			
	L	L1	L2	L3	D	D1	D2	C	H	n-d	Kg (L)	Kg (L1)	Kg (L2)	Kg (L3)
80	114	49	180	49	190	150	124	18	310	4-18	20	11	17	13
100	127	56	190	56	210	170	144	18	325	4-18	23	13	19	16
125	140	64	200	64	240	200	174	18	360	8-18	28	16	25	20
150	140	70	210	70	265	225	199	20	395	8-18	33	21	28	24
200	152	71	230	71	320	280	254	22	480	8-18	48	28	49	36
250	165	76	250	76	375	335	309	24	550	12-18	54	45	95	52
300	178	83	270	83	440	395	363	24	610	12-22	80	61	130	79
350	190	92	290	92	490	445	413	24	710	12-22	103	82	160	107
400	216	102	310	102	540	495	463	24	755	16-22	145	122	216	150
450	222	114	330	114	595	550	518	24	835	16-22	193	150	248	183
500	229	127	350	127	645	600	568	26	900	20-22	258	205	380	254
600	267	154	390	154	755	705	667	30	1060	20-26	302	300	495	398
700	292	165	430	165	860	810	772	26	1170	24-26	385	465	595	576
800	318	190	470	190	975	920	878	26	1320	24-30	525	570	740	690
900	330	203	510	203	1075	1020	978	26	1440	24-30	723	760	1230	870
1000	410	216	550	216	1175	1120	1078	26	1640	28-30	990	975	1450	1180
1200	470	254	630	254	1405	1340	1295	28	1720	32-33	1455	1250	2180	1490
1400	530	390	710	390	1630	1560	1510	32	2055	36-36	1860	1780	2980	2050
1600	600	440	790	440	1830	1760	1710	34	2185	40-36	2180	1990		
1800	670	490	870	490	2045	1970	1918	36	2390	44-39	3950			
2000	760	540	950	540	2265	2180	2125	38	2620	48-42				
2200	800	590	1000	590	2475	2390	2335	42	2980	52-42				
2400	850	650	1100	650	2685	2600	2545	44	3150	56-42				
2600	900	700	1200	700	2905	2810	2750	46	3320	60-48				
2800	950	760	1300	760	3115	3020	2960	48	3550	64-48				
3000	1000	810	1400	810	3315	3220	3160	50	3770	68-48				

主要连接尺寸 Main connecting dimensions



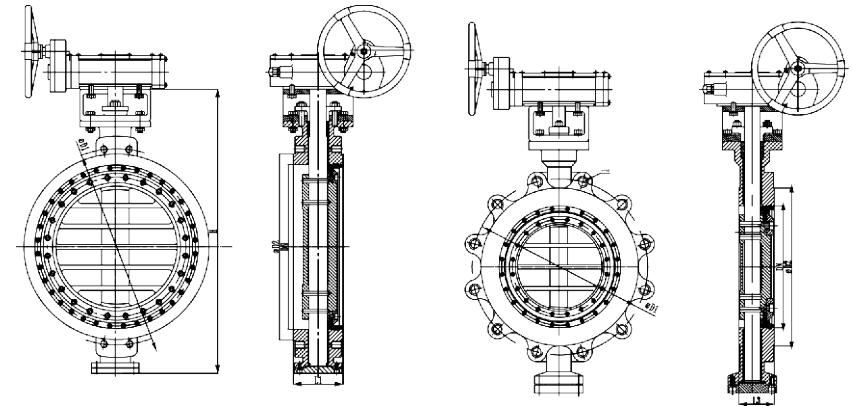
公称通径 DN (mm)	PN 10										近似重量 Weight(appro)			
	L	L1	L2	L3	D	D1	D2	C	H	n-d	Kg (L)	Kg (L1)	Kg (L2)	Kg (L3)
80	114	49	180	49	200	160	132	20	310	8-18	22	11	17	13
100	127	56	190	56	220	180	156	22	325	8-18	24	13	19	19
125	140	64	200	64	250	210	184	22	360	8-18	30	16	25	23
150	140	70	210	70	285	240	211	24	395	8-22	38	21	28	29
200	152	71	230	71	340	295	266	24	480	8-22	56	28	49	51
250	165	76	250	76	395	350	319	26	550	12-22	70	45	95	69
300	178	83	270	83	445	400	370	26	610	12-22	92	61	130	109
350	190	92	290	92	505	460	429	26	710	16-22	115	82	178	143
400	216	102	310	102	565	515	480	26	755	16-26	169	122	238	195
450	222	114	330	114	615	565	530	28	835	20-26	220	150	275	265
500	229	127	350	127	670	620	582	28	900	20-26	265	205	423	335
600	267	154	390	154	780	725	682	34	1060	20-30	399	300	550	460
700	292	165	430	165	895	840	794	34	1170	24-30	489	465	665	740
800	318	190	470	190	1015	950	901	36	1320	24-33	652	570	815	920
900	330	203	510	203	1115	1050	1001	38	1440	28-33	880	760	1360	1180
1000	410	216	550	216	1230	1160	1112	38	1640	28-36	1215	975	1610	1320
1200	470	254	630	254	1455	1380	1328	44	1720	32-39	1790	1250	2415	1680
1400	530	390	710	390	1675	1590	1530	48	2010	36-42	2480	1780	3320	2160
1600	600	440	790	440	1915	1820	1750	52	2255	40-48	3220	2640		
1800	670	490	870	490	2115	2020	1950	56	2480	44-48	4350			
2000	760	540	950	540	2325	2230	2150	60	2660	48-48	5600			

主要连接尺寸 Main connecting dimensions



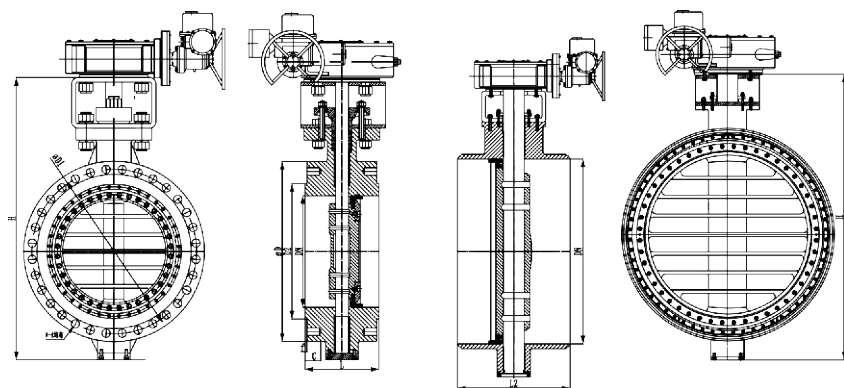
公称通径 DN (mm)	PN 16										近似重量 Weight(appro)			
	L	L1	L2	L3	D	D1	D2	C	H	n-d	Kg (L)	Kg (L1)	Kg (L2)	Kg (L3)
80	114	49	180	49	200	160	132	20	310	8-18	22	11	17	13
100	127	56	190	56	220	180	156	22	325	8-18	24	13	19	19
125	140	64	200	64	250	210	184	22	360	8-18	30	16	25	23
150	140	70	210	70	285	240	211	24	395	8-22	38	21	28	29
200	152	71	230	71	340	295	266	24	480	12-22	56	40	49	51
250	165	76	250	76	405	355	319	26	550	12-26	80	50	95	69
300	178	83	270	83	460	410	370	28	610	12-26	108	75	130	109
350	190	92	290	92	520	470	429	30	710	16-26	140	102	178	143
400	216	102	310	102	580	525	480	32	755	16-30	206	145	238	195
450	222	114	330	114	640	585	548	40	835	20-30	262	190	275	265
500	229	127	350	127	715	650	609	44	900	20-33	318	255	423	335
600	267	154	390	154	840	770	720	54	1060	20-36	470	360	550	460
700	292	165	430	165	910	840	794	40	1170	24-36	553	470	665	740
800	318	190	470	190	1025	950	901	42	1320	24-39	688	655	815	920
900	330	203	510	203	1125	1050	1001	44	1440	28-39	999	897	1360	1180
1000	410	216	550	216	1255	1170	1112	46	1640	28-42	1435	1132	1610	1320
1200	470	254	630	254	1485	1390	1328	52	1850	32-48	2200	1400	2415	1680
1400	530	390	710	390	1685	1590	1530	58	2040	36-48	3200	1900	3320	2160
1600	600	440	790	440	1930	1820	1750	64	2280	40-55	6000	2900		
1800	670	490	870	490	2130	2020	1950	68	2495	44-55	6900	4000		
2000	760	540	950	540	2345	2230	2150	70	2685	48-60	9100	5300		

主要连接尺寸 Main connecting dimensions



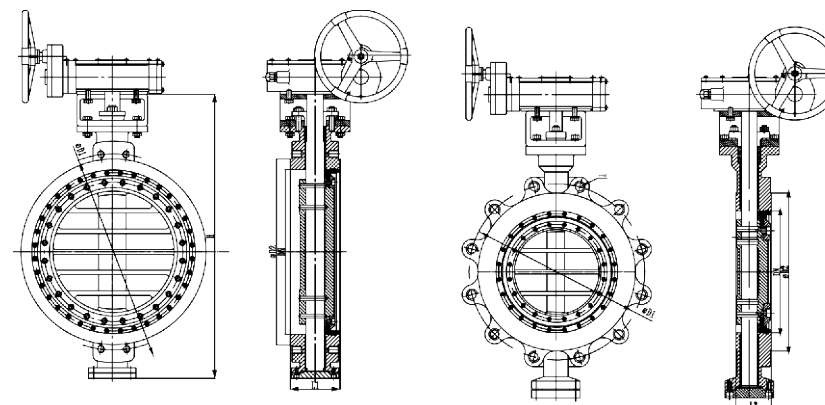
公称通径 DN (mm)	PN 25										近似重量 Weight(appro)			
	L	L1	L2	L3	D	D1	D2	C	H	n-d	Kg (L)	Kg (L1)	Kg (L2)	Kg (L3)
80	114	49	180	49	200	160	132	24	310	8-18	23	11	17	13
100	127	56	190	56	235	190	156	24	325	8-22	25	13	19	19
125	140	64	200	64	270	220	184	26	360	8-26	34	16	25	23
150	140	70	210	70	300	250	211	28	395	8-26	42	21	28	29
200	152	71	230	71	360	310	274	30	480	12-26	58	40	49	51
250	165	76	250	76	425	370	330	32	550	12-30	90	50	95	69
300	178	83	270	83	485	430	389	34	610	16-30	120	75	130	109
350	190	92	290	92	555	490	448	38	710	16-33	170	102	178	143
400	216	102	310	102	620	550	503	40	755	16-36	235	145	238	195
450	222	114	330	114	670	600	548	46	835	20-36	285	190	275	265
500	229	127	350	127	730	660	609	48	900	20-36	385	255	423	335
600	267	154	390	154	845	770	720	58	1060	20-39	580	360	550	460
700	292	165	430	165	960	875	820	50	1170	24-42	705	470	665	740
800	318	190	470	190	1085	990	928	54	1320	24-48	970	655	815	920
900	330	203	510	203	1185	1090	1028	58	1440	28-48	1225	897	1360	1180
1000	410	216	550	216	1320	1210	1140	62	1640	28-55	1680	1132	1610	1320
1200	470	254	630	254	1530	1420	1350	70	1850	32-55	2450	1580	2415	1680
1400	530	390	710	390	1755	1640	1560	76	2040	36-60	3600	2100	3320	2160

主要连接尺寸 Main connecting dimensions



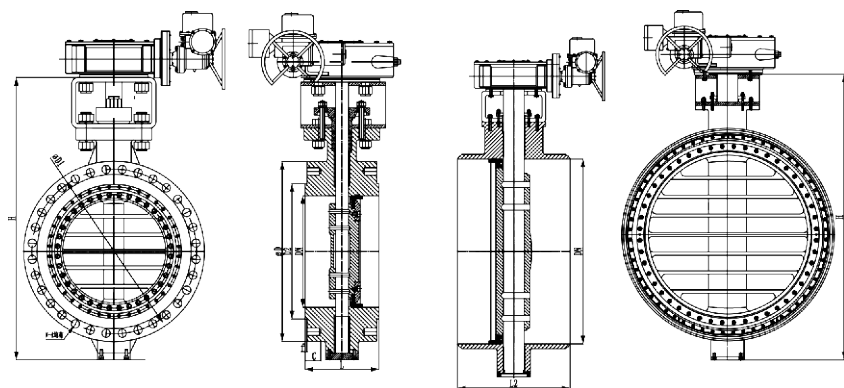
公称通径 DN (mm)	PN 40									
	L	L1	L2	L3	D	D1	D2	C	H	n-d
80	114	49	180	49	200	160	132	24	310	8-18
100	127	56	190	56	235	190	156	24	325	8-22
125	140	64	200	64	270	220	184	26	360	8-26
150	140	70	210	70	300	250	211	28	395	8-26
200	230	71	230	71	375	320	284	34	515	12-30
250	250	76	250	76	450	385	345	38	675	12-33
300	270	83	270	83	515	450	409	42	805	16-33
350	290	92	290	92	580	510	465	46	850	16-36
400	310	102	310	102	660	585	535	50	895	16-39
450	330	152	330	152	685	610	560	57	960	20-39
500	350	159	350	159	755	670	615	57	1030	20-42
600	390	181	390	181	890	795	735	72	1180	20-48

主要连接尺寸 Main connecting dimensions



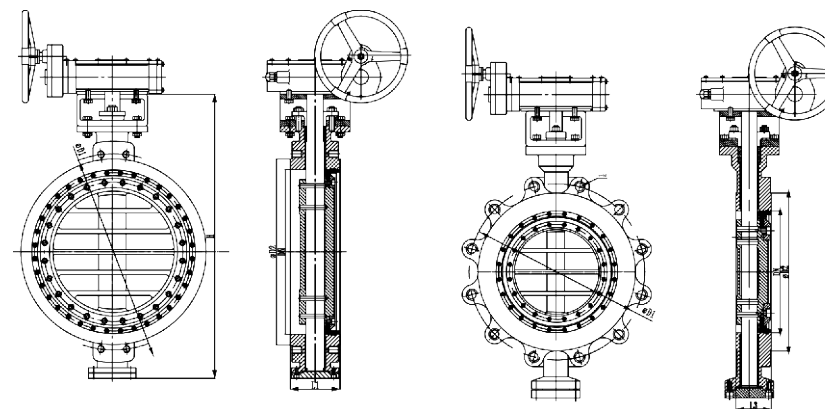
公称通径 DN (mm)	PN 63									
	L	L1	L2	L3	D	D1	D2	C	H	n-d
80	180	64	180	64	215	170	132	28	310	8-22
100	190	64	190	64	250	200	156	30	325	8-26
125	200	70	200	70	295	240	184	34	360	8-30
150	210	76	210	76	345	280	211	36	430	8-33
200	230	89	230	89	415	345	284	42	535	12-36
250	250	114	250	114	470	400	345	46	695	12-36
300	270	114	270	114	530	460	409	52	805	16-36
350	290	127	290	127	600	525	465	56	880	16-39
400	310	140	310	140	670	585	535	60	930	16-42
450	330	160	330	160	715	630	560	64	990	20-42
500	350	170	350	170	800	705	615	68	1050	20-48
600	390	200	390	200	930	820	735	76	1230	20-56

主要连接尺寸 Main connecting dimensions



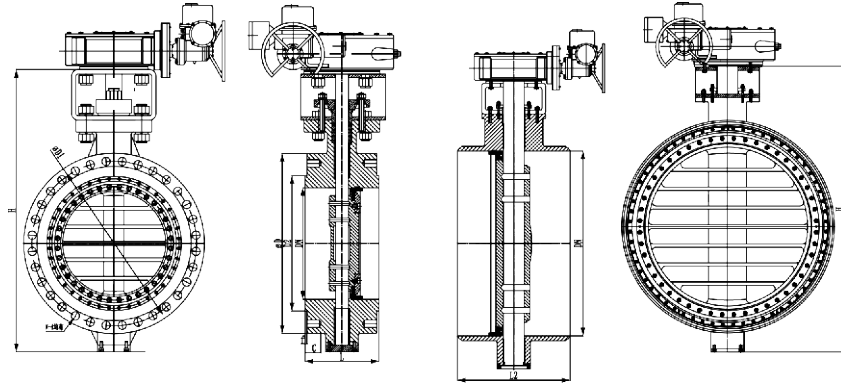
公称通径 DN (mm)	PN 100									
	L	L1	L2	L3	D	D1	D2	C	H	n-d
150	210	76	210	76	355	290	211	44	425	12-33
200	230	89	230	89	430	360	284	52	640	12-36
250	250	114	250	114	505	430	345	60	745	12-39
300	270	114	270	114	585	500	409	68	820	16-42
350	290	127	290	127	655	560	465	74	935	16-48
400	310	140	310	140	715	620	535	82	975	16-48
450	330	160	330	160	770	675	560	89	1110	20-48
500	350	170	350	170	870	760	615	94	1215	20-56
600	390	200	390	200	990	875	735	102	1300	20-62

主要连接尺寸 Main connecting dimensions



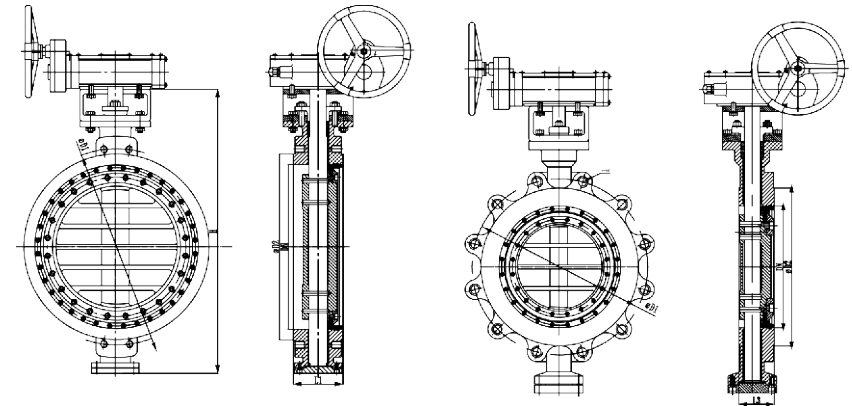
公称通径DN		150Lb									
in	mm	L	L1	L2	L3	D	D1	D2	C	H	n-d
3	80	114	48	180	48	190	152.4	127	24.3	310	4-19
4	100	127	54	190	54	230	190.5	157	24.3	325	8-19
5	125	140	56	200	56	255	215.9	186	24.3	360	8-22
6	150	140	57	210	57	280	241.3	216	25.9	395	8-22
8	200	152	64	230	64	345	298.5	270	29	480	8-22
10	250	165	71	250	71	405	362.0	324	30.6	550	12-26
12	300	178	81	270	81	485	431.8	381	32.2	610	12-26
14	350	190	92	290	92	535	476.3	413	35.4	710	12-29
16	400	216	102	310	102	595	539.8	470	37	755	16-29
18	450	222	114	330	114	635	577.9	533	40.1	835	16-32
20	500	229	127	350	127	700	635.0	584	43.3	900	20-32
24	600	267	154	390	154	815	749.3	692	48.1	1060	20-35
28	700	292	165	430	165	925	863.6	800	71.9	1170	28-35
32	800	318	190	470	190	1060	977.9	914	81.4	1320	28-41
36	900	330	203	510	203	1170	1085.8	1022	90.9	1440	32-41
40	1000	410	216	550	216	1290	1200.2	1124	90.9	1640	36-41
48	1200	470	254	630	254	1510	1422.4	1359	108.4	1850	44-41
56	1400	530	390	710	390	1745	1651.0	1575	124.3	2040	48-48

主要连接尺寸 Main connecting dimensions



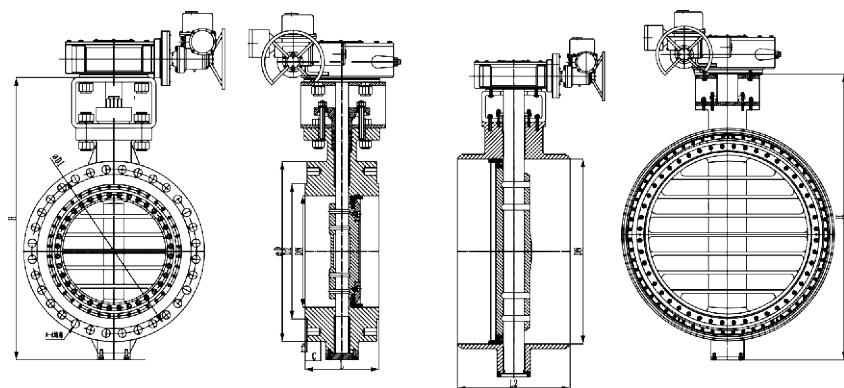
公称通径DN		300Lb									
in	mm	L	L1	L2	L3	D	D1	D2	C	H	n-d
3	80	180	48	180	48	210	168.3	127	29	310	8-22
4	100	190	54	190	54	255	200.0	157	32.2	325	8-22
5	125	200	56	200	56	280	235.0	186	35.4	360	8-22
6	150	210	59	210	59	320	269.9	216	37	430	12-22
8	200	230	73	230	73	380	330.2	270	41.7	535	12-26
10	250	250	83	250	83	445	387.4	324	48.1	695	16-29
12	300	270	92	270	92	520	450.8	381	51.3	805	16-32
14	350	290	117	290	117	585	514.4	413	54.4	880	20-32
16	400	310	133	310	133	650	571.5	470	57.6	930	20-35
18	450	330	149	330	149	710	628.6	533	60.8	990	24-35
20	500	350	159	350	159	775	685.8	584	64	1050	24-35
24	600	390	181	390	181	915	812.8	692	70.3	1230	24-41

主要连接尺寸 Main connecting dimensions



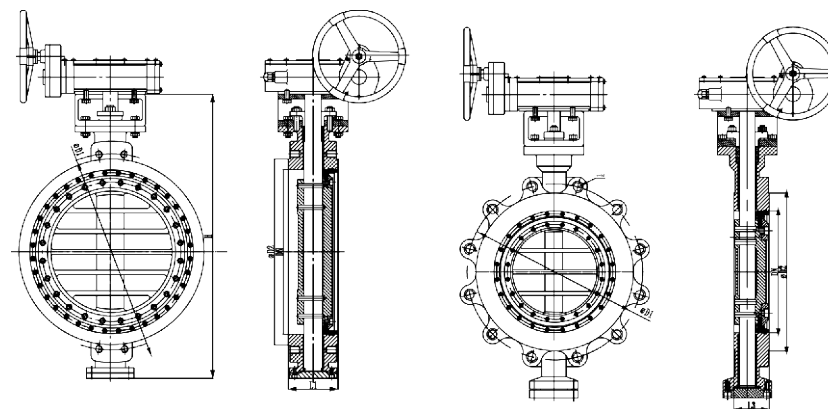
公称通径DN		600Lb									
in	mm	L	L1	L2	L3	D	D1	D2	C	H	n-d
6	150	210	78	210	78	355	292.1	216	54.7	425	12-29
8	200	230	102	230	102	420	349.2	270	62.6	640	12-32
10	250	250	117	250	117	510	431.8	324	70.5	745	16-35
12	300	270	140	270	140	560	489.0	381	73.7	820	20-35
14	350	290	155	290	155	605	527.0	413	76.9	935	20-38
16	400	310	178	310	178	685	603.2	470	83.2	975	20-41
18	450	330	200	330	200	745	654.0	533	89.6	1110	20-45
20	500	350	216	350	216	815	723.9	584	95.9	1215	24-45
24	600	390	232	390	232	940	838.2	692	108.6	1300	24-51

主要连接尺寸 Main connecting dimensions



公称口径DN		900Lb									
in	mm	L	L1	L2	L3	D	D1	D2	C	H	n-d
6	150	225	104	225	104	380	317.5	216	62.6	525	12-32
8	200	275	112	275	112	470	393.7	270	70.5	660	12-38
10	250	325	135	325	135	545	469.9	324	76.9	735	16-39
12	300	375	170	375	170	610	533.4	381	86.4	820	20-39
14	350	425	173	425	173	640	558.8	413	92.8	870	20-41
16	400	475	210	475	210	705	616	470	95.9	965	20-45
18	450	500	228	500	228	785	685.8	533	108.6	1050	20-51
20	500	575	250	575	250	855	749.3	584	115	1175	20-54
24	600	675	275	675	275	1040	901.7	692	146.7	1330	20-67

主要连接尺寸 Main connecting dimensions



公称口径DN		1500Lb									
in	mm	L	L1	L2	L3	D	D1	D2	C	H	n-d
6	150	350	160	350	160	395	317.5	216	89.6	550	12-38
8	200	400	180	400	180	485	393.7	270	99.1	690	12-45
10	250	450	200	450	200	585	482.6	324	115	780	12-51
12	300	500	230	500	230	675	571.5	381	130.9	905	16-54
14	350	550	250	550	250	750	635	413	140.4	990	16-60
16	400	600	265	600	265	825	704.8	470	153.1	1085	16-67
18	450	650	300	650	300	915	774.7	533	169	1180	16-73
20	500	700	340	700	340	985	831.8	584	184.8	1290	16-80
24	600	800	400	800	400	1170	990.6	692	210.2	1450	16-92

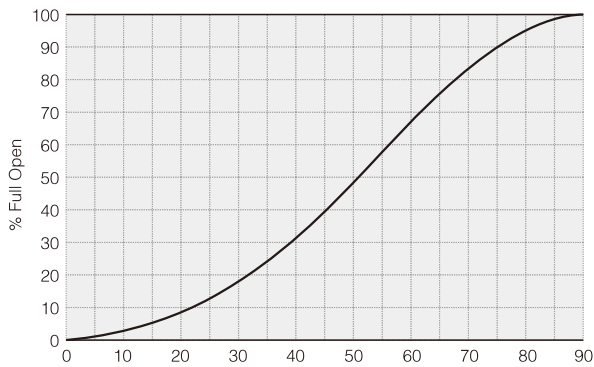
Cv值 value

Size		5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°
mm	in																		
80	3	1	6	14	23	31	39	47	54	62	71	82	96	112	128	143	156	163	163
100	4	2	12	26	42	57	72	85	98	113	130	150	176	205	234	262	285	299	302
150	6	16	31	45	59	76	101	134	178	233	297	369	448	531	616	698	758	796	796
200	8	30	57	82	108	140	185	246	327	427	544	676	821	974	1130	1280	1390	1460	1460
250	10	52	99	142	187	242	320	426	566	739	942	1170	1420	1690	1960	2220	2410	2530	2530
300	12	78	147	212	279	362	478	636	846	1100	1410	1750	2120	2520	2920	3310	3600	3780	3780
350	14	106	201	289	380	493	651	866	1150	1500	1920	2380	2890	3430	3980	4510	4890	5140	5140
400	16	165	313	451	594	769	1020	1350	1800	2350	2990	3720	4510	5350	6210	7040	7640	8020	8020
450	18	217	413	594	782	1010	1340	1780	2370	3090	3940	4890	5940	7050	8180	9270	10100	10600	10600
500	20	268	509	733	965	1250	1650	2200	2920	3820	4860	6040	7340	8710	10100	11400	12400	13000	13000
600	24	386	734	1060	1390	1800	2380	3170	4210	5500	7000	8700	10600	12500	14500	16500	17900	18800	18800
700	28	559	1060	1530	2010	2610	3450	4590	6100	7960	10100	12600	15300	18200	21000	23900	25900	27200	27200
750	30	630	1200	1720	2270	2940	3880	5160	6870	8960	11400	14200	17200	20400	23700	26900	29200	30700	30700
800	32	719	1370	1970	2590	3360	4440	5900	7840	10200	13000	16200	19700	23300	27100	30700	33300	35000	35000
900	36	884	1680	2420	3180	4210	5450	7250	9630	12600	16000	19900	24200	28700	33300	37700	40900	43000	43000
1000	40	1170	2220	3190	4210	5450	7210	9580	12700	16600	21200	26300	31900	37900	44000	49800	54100	56900	56900
1050	42	1230	2340	3370	4440	5760	7610	10100	13400	17600	22400	27800	33700	40000	46500	52600	57100	60000	60000
1200	48	1640	3120	4490	5920	7670	10100	13500	17900	23400	29800	37000	45000	53400	61900	70100	76100	80000	80000

150Lb

Size		5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°
mm	in																		
80	3	1	6	14	23	31	39	47	54	62	71	82	96	112	128	143	156	163	165
100	4	2	12	26	42	57	72	85	98	113	130	150	176	205	234	262	285	299	302
150	6	6	25	41	54	69	91	121	162	212	268	334	407	482	559	634	689	725	725
200	8	11	45	74	98	126	166	222	298	389	492	613	746	884	1030	1160	1260	1330	1330
250	10	19	82	135	178	229	301	402	540	705	891	1110	1350	1600	1860	2110	2290	2410	2410
300	12	29	122	202	266	342	450	601	807	1050	1330	1660	2020	2400	2780	3150	3420	3600	3600
350	14	39	167	274	363	466	613	818	1100	1430	1810	2260	2750	3260	3780	4290	4660	4900	4900
400	16	58	248	408	539	692	910	1220	1630	2130	2690	3360	4090	4840	5610	6370	6920	7280	7280
450	18	77	326	537	710	911	1200	1600	2150	2810	3550	4420	5380	6380	7400	8390	9110	9590	9590
500	20	95	403	663	876	1130	1480	1980	2650	3460	4380	5460	6640	7880	9130	10400	11300	11800	11800
600	24	136	580	955	1260	1620	2130	2850	3820	4990	6310	7860	9570	11300	13100	14900	16200	17100	17100
700	28	199	844	1390	1840	2360	3100	4150	5560	7260	9190	11400	13900	16500	19100	21700	23600	24800	24800
750	30	232	986	1620	2150	2750	3620	4840	6490	8480	10700	13400	16300	19300	22400	25400	27500	29000	29000
800	32	261	1110	1830	2420	3100	4080	5450	7310	9550	12100	15000	18300	21700	25200	28600	31000	32600	32600
900	36	332	1410	2320	3070	3940	5190	6930	9300	12100	15400	19100	23300	27600	32000	36300	39400	41500	41500
1000	40	399	1700	2790	3690	4740	6230	8330	11200	14600	18400	23000	28000	33200	38400	43600	47400	49900	49900
1050	42	457	1940	3200	4230	5430	7140	9540	12800	16700	21100	26300	32000	38000	44000	50000	54200	57100	57100
1200	48	480	2040	3360	4440	5700	7500	10000	13400	17500	22200	27700	33700	39900	46300	52500	57000	60000	60000

300Lb

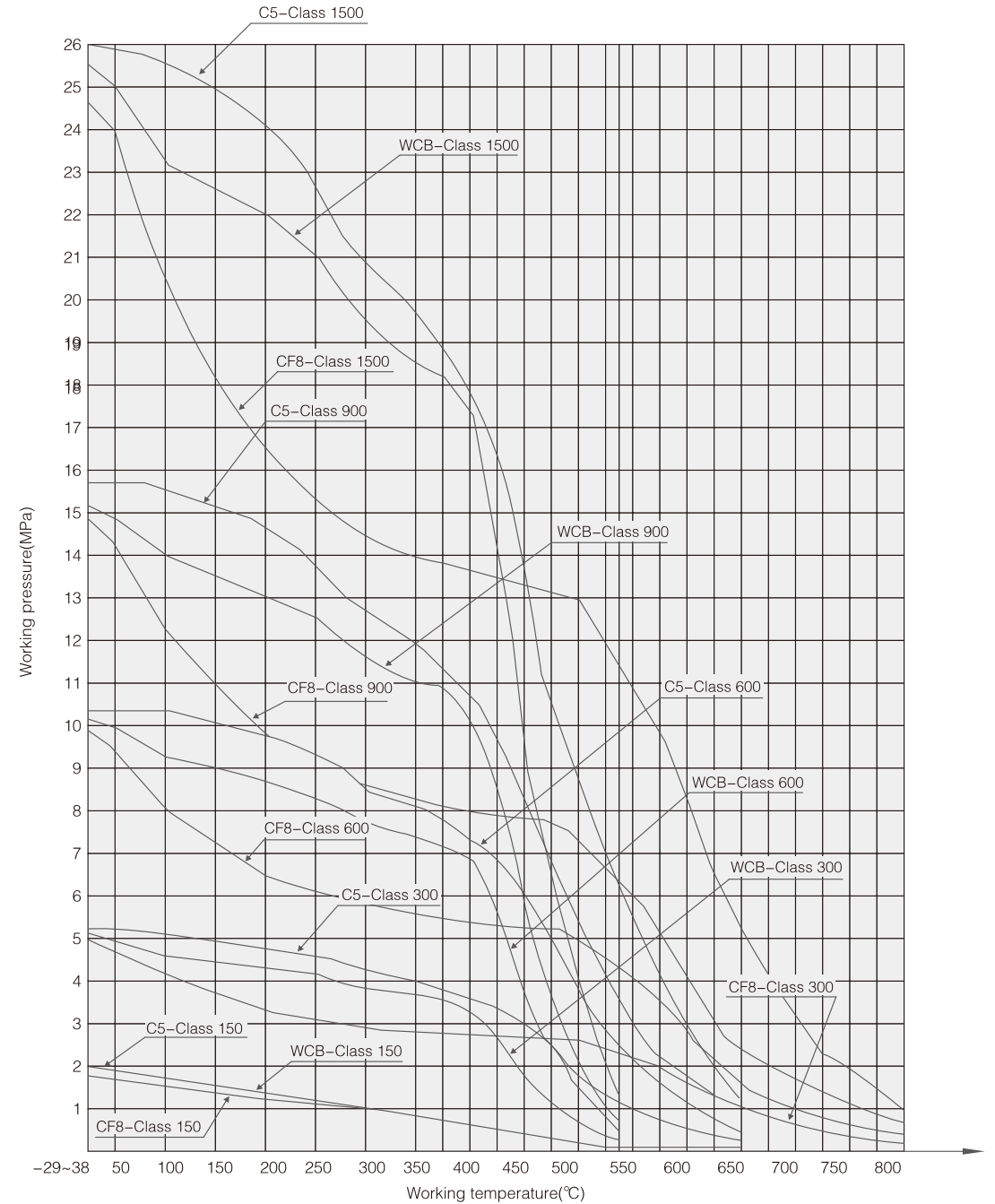


Typical Flow Characteristics

For control applications a wide variety of actuators and accessories can be provided. At moderate pressure drop conditions, turndown approaching 100 to 1 can be achieved because of the action of the disc opening. The disc lifts off the seat very quickly and an equal precentage control curve if produced between 15° to 75°

Materials ASTM A216-WCB.A217-C5 A351-CF8

Pressure-temperature Ratings to ASME B16.34



### 材质表 Materials list

Astm standard	Chemical compositions [%]										Mechanicak proper ties				Hardness Brinell max
	C max	Mn max	P max	S max	Si max	Cr	Mo	Ni	Cu max	V	Tensile [MPa]min	Yield [MPa]min	Elongation [%]min	Reduction [%]min	
A216 WCB	0.30	1.00	0.040	0.045	0.60	≤0.50	≤0.25	≤0.50	0.30	0.03	485	250	22	35	
A216 WCC	0.25	1.20	0.040	0.045	0.60	≤0.50	≤0.25	≤0.50	0.30	0.03	485	275	22	35	
A352 LC3	0.15	0.50-0.80	0.040	0.045	0.60			3.00-4.00			485-655	275	24	35	
A217 WC6	0.05-0.20	0.50-0.80	0.040	0.045	0.60	1.00-1.50	0.45-0.65	0.50	0.50		485-655	275	20	35	
A217 WC9	0.05-0.18	0.40-0.70	0.040	0.045	0.60	2.00-2.75	0.90-1.20	0.50	0.50		485-655	275	20	35	
A217 C5	0.20	0.40-0.70	0.040	0.045	0.75	4.00-6.50	0.45-0.65	0.50	0.50		620-795	415	18	35	
A351 CF3	0.03	1.50	0.040	0.040	2.00	17.0-21.0	≤0.50	8.0-12.0			485	205	35		
A351 CF3M	0.03	1.50	0.040	0.040	1.50	17.0-21.0	2.0-3.0	9.0-13.0			485	205	30		
A351 CF8	0.08	1.50	0.040	0.040	2.00	18.0-21.0	≤0.50	8.0-11.0			485	205	35		
A351 CF8M	0.08	1.50	0.040	0.040	1.50	18.0-21.0	2.0-3.0	9.0-12.0			485	205	30		
A351 CF8C	0.08	1.50	0.040	0.040	2.00	18.0-21.0	≤0.50	9.0-12.0			485	205	30		
A351 CN7M	0.07	1.50	0.040	0.040	1.50	19.0-22.0	2.0-3.0	27.5-30.5			450	170	35		
A105	0.35	0.60-1.05	0.035	0.040	0.10-0.35	≤0.30	≤0.12	≤0.40	0.40	0.08	485	250	22	30	187
A182 F6A	0.15	1.00	0.040	0.030	1.00	11.5-13.5		≤0.50			485	275	18	35	143-207
A182 F304	0.08	2.00	0.045	0.030	1.00	18.0-20.0		8.0-11.0			515	205	30	50	
A182 F304L	0.03	2.00	0.045	0.030	1.00	18.0-20.0		8.0-13.0			485	170	30	50	
A182 F316	0.08	2.00	0.045	0.030	1.00	16.0-18.0	2.0-3.0	10.0-14.0			515	205	30	50	
A182 F316L	0.03	2.00	0.045	0.030	1.00	16.0-18.0	2.0-3.0	10.0-15.0			485	170	30	50	
A182 F321	0.08	2.00	0.045	0.030	1.00	17.0-19.0		9.0-12.0			515	205	30	50	
A182 F11	0.10-0.20	0.30-0.80	0.040	0.040	0.50-1.00	1.0-1.5	0.44-0.65				515	310	20	30	156-207
A182 F22	0.05-0.15	0.30-0.60	0.040	0.040	0.50	2.0-2.5	0.87-1.13				515	310	20	30	156-207
A182 F5	0.15	0.30-0.60	0.030	0.030	0.50	4.0-6.0	0.44-0.65	≤0.50			485	275	20	35	143-217
A350 LF2	0.30	0.60-1.35	0.035	0.040	0.15-0.30	≤0.30	≤0.12	≤0.40	0.40	0.08	485-655	250	22	30	
A276 410	0.08-0.15	1.00	0.040	0.030	1.00	11.5-13.5					480	275	16	45	
A276 420	0.15	1.00	0.040	0.030	1.00	12.0-14.0									255
A276 321	0.08	2.00	0.045	0.030	1.00	17.0-19.0		9.0-12.0			515	205	30	40	
A320 L7	0.38-0.48	0.75-1.00	0.035	0.040	0.15-0.35	0.80-1.10	0.15-0.25				860	725	16	50	321
A320 L7M	0.38-0.48	0.75-1.00	0.035	0.040	0.15-0.35	0.80-1.10	0.15-0.25				690	550	18	50	235
A193 B7	0.37-0.49	0.65-1.10	0.035	0.040	0.15-0.35	0.75-1.20	0.15-0.25				860	720	16	50	321
A193 B7M	0.37-0.49	0.65-1.10	0.035	0.040	0.15-0.35	0.75-1.20	0.15-0.25				690	550	18	50	235
A193 B16	0.36-0.47	0.45-0.70	0.035	0.040	0.15-0.35	0.80-1.15	0.50-0.65			0.25-0.35	860	725	18	50	321
A193 B8	0.08	2.00	0.045	0.030	1.00	18.0-20.0		8.0-11.0			515	205	30	50	223
A193 B8M	0.08	2.00	0.045	0.030	1.00	16.0-18.0	2.00-3.00	10.0-14.0			515	205	30	50	223
A194 2H	≥0.40	1.00	0.040	0.050	0.40										
A194 7	0.37-0.49	0.65-1.10	0.035	0.040	0.15-0.35	0.75-1.20	0.15-0.25								248-327
A194 8	0.08	2.00	0.045	0.030	1.00	18.0-20.0		8.0-11.0							126-300
A194 8M	0.08	2.00	0.045	0.030	1.00	16.0-18.0	2.00-3.00	10.0-14.0							126-300

### 阀门故障分析 Analysis on valve failure

对于用户来说, 实际使用工况与阀门规定的适用范围一致, 以及操作正确与认真维护保养时, 直接关系到阀门故障的避免与使用寿命的延长。The actual working condition of the valve is matched with the tolerance range, correct operation, and careful maintenance are directly related to avoid the failure and extent the life span for the users.

常见的事故详见下表:  
See the table below for the common failures:

故障Failure	分析产生原因Cause analysis	消除故障方法Method of settlement
填料处的外漏 leaking outward at the packing	<ol style="list-style-type: none"> <li>1、填料超期使用、已老化。 The packing is in exceeded use and gets aged.</li> <li>2、操作时用力过大。 Excessive force is used in operation.</li> <li>3、活节螺栓没有拧紧。 The eyelet bolt is not tightened.</li> </ol>	<ol style="list-style-type: none"> <li>1、应及时更换老化、损坏的填料并逐圈安放接头呈30°-50°。 Replace the aged and injured packing in time, place the connectors turn by turn and let them 30°-50° presented.</li> <li>2、应以正常力均匀操作、不许加套管或用其它办法。 Use normal even operation and do not use bushing or any other ways.</li> <li>3、均匀拧紧压住填料用螺栓。 Evenly tighten the bolts used to tightly press the packing.</li> </ol>
密封面泄漏 leaking at the sealing surface	<ol style="list-style-type: none"> <li>1、阀门安装方向和介质流向不符。 The valve installation direction does not conform to the medium flowing direction.</li> <li>2、关闭不到位。 Closing is not in place.</li> <li>3、久闭的阀门在密封面上积垢。 The sealing surface of a long time closed valve gets scaled.</li> <li>4、密封面上损伤严重。 The sealing surface gets seriously injured.</li> </ol>	<ol style="list-style-type: none"> <li>1、注意安装检查。 Pay attention to the installation checkup.</li> <li>2、关严到位。 Make closing in place.</li> <li>3、将阀门开一条缝, 让高速流体冲掉密封上脏物。 Let the valve in crack to have the dirty on the seal flushed out by the high speed fluid.</li> <li>4、重新研磨, 加厚调节垫片补偿。 Regrind and thicken the adjusting gasket compensation.</li> </ol>
法兰连接处泄漏 leaking at the flange connection	<ol style="list-style-type: none"> <li>1、螺栓拧紧力不均。 The bolts are unevenly tightened.</li> <li>2、垫片老化损伤。 The gasket gets aged and injured.</li> <li>3、垫片选用材质与工况介质要求不符。 The gasket material does not conform to the required working condition medium.</li> </ol>	<ol style="list-style-type: none"> <li>1、重新均匀拧紧螺栓。Evenly tighten the bolts again.</li> <li>2、及时更换。Replace it in time.</li> <li>3、按工况要求正确选用垫片材料和形式, 必须时请与厂家联系请求帮助选材选型, 订货时要详细说明要求。 Use correct gasket material and type in accordance with the working condition requirement and, when necessary, ask the manufacturer for help and note the detailed requirement at order.</li> </ol>
手柄、手轮的损坏 damage of handle and handwheel	<ol style="list-style-type: none"> <li>1、使用不正确。 Incorrect use.</li> <li>2、紧固件松脱。 The fastener gets loosened.</li> <li>3、手柄、手轮与阀杆连接损伤。 Damaged connection between the handle, handwheel and stem.</li> </ol>	<ol style="list-style-type: none"> <li>1、禁止使用管子钳、长杠杆、撞击工具等。 Never use grip wrench, long lever, impacting tools.</li> <li>2、随时修配。 Repair and fit it in time.</li> <li>3、随时修复。 Repair it in time.</li> </ol>
蜗轮、蜗杆传动卡咬 seizure between worm and gear	<ol style="list-style-type: none"> <li>1、不清洁嵌入脏物, 影响润滑。 Dirt gets inlaid to affect the lubrication.</li> <li>2、操作不善。 Improper operation.</li> </ol>	<ol style="list-style-type: none"> <li>1、请保持清洁, 定期加油。 Keep it clean and oil it in a fixed period of time.</li> <li>2、若操作是发现卡咬, 阻力很大时, 不能继续操作, 否则损坏加剧。 In case of seizure and a heavy resistance during operation, do not go on operation, or damage would get increased.</li> </ol>
电动安装故障 Electric installation failure	<ol style="list-style-type: none"> <li>1、润滑不良, Bad lubrication。 阀门内有异物卡住造成转矩过大损坏。 Foreign matters are available inside of the valve to make the torque exceeded and injured.</li> <li>2、电动故障。Electric failure.</li> </ol>	<ol style="list-style-type: none"> <li>1、应加油, 保持清洁, 使油管良好, 填料压紧应适度, 应及时排除阀内异物。 Do oiling and keep clean to make the oil tube in good condition, let the packing properly pressed and the foreign matters inside of the valve out in time.</li> <li>2、电机工作时间不超过15分钟, 电源应正常, 应避免电机受潮。 Do not let the motor working for over 15min and getting wetted, the power supply shall be kept normal.</li> </ol>