G500 五偏心旋转阀
G500 Penta-eccentric rotary valve

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

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，采用相关三维等专业技术软件进行产品建模、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、气体保护焊机等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力等级的油气长输管线球阀(分体式和全焊接)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。

吉富隆集团 GIFLON
G500 五偏心旋转阀
G500 Penta-eccentric rotary valve

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 became an intelligent equipment manufacturingenterprise 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.

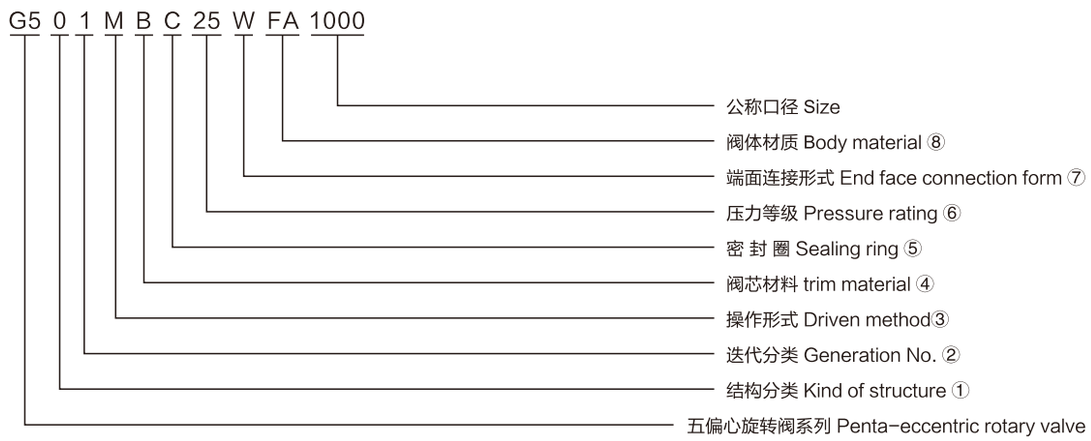
The company is dedicated on intelligent equipment, energy conservation and environmental protection, and provides services such as energy-saving solution design, energy-saving products manufacturing, projects energy-saving renew, and technical maintenance for intelligent industrial systems, intelligent heating networks, and intelligent water networks. Meanwhile, we have closed cooperation withHarbin 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 companyand look forward to build a win-win cooperation with you.

型号编制说明 Way of coding



① 结构分类 Kind of structure

0-免维护系列 Maintenance free series	1-在线维护系列 Online maintenance series

② 产品迭代 Generation No.

1-第一代 First generation	2-第二代 Second generation	··· ···

③ 操作形式 Driven method

M-手动(蜗轮蜗杆) Manual, (worm gear and worm)	E-电动 Electric	P-气动 Pneumatic	S-液动 Hydraulic	Q-气液联动 hydro-pneumatic aligned

④ 阀芯材料 Trim material

A-WCB	B-CF8	C-CF3	D-CF8M	E-CF3M

⑤ 密封圈 Sealing ring

A-F304+HF	B-F316+HF	C-F304+STL	D-F316+STL

⑥ 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

⑦ 端面连接形式 End face connection form

W-焊接式 Welding	F-法兰式 Flanged	C-法兰+焊接 Flange+Welding

⑧ 阀体材质 Body material

F-锻钢 Forged stee (FA-A105、FL-LF2)	G-合金钢 Alloy steel	S-不锈钢 Stainless steel

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执行标准 Execution standard

设计与制造：
GB/T 37827、API 6D、API 608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：
GB/T 37827、API 6D、API 608 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：
DN150–DN1600 6"–64"
（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:
DN150–DN1600 6"–64"
(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, etc
Main material:
Forged steel, carbon steel, chrome molybdenum steel, austenitic stainless steel, duplex stainless steel, Titanium alloy, hartz alloy, monel alloy, etc

技术说明 Features and specifications

五偏心旋转阀是吉富隆集团最新研发的高性能阀门产品，本产品吸取三偏心蝶阀和偏心半球阀的偏心结构优点，同时结合全焊接球阀的密封、外观结构特点，通过独特五偏心结构完美融合为一体的全新阀门产品。

Penta-eccentric rotary valve is a latest high performance valve product developed by Giflon group, this product is combined the advantage of the eccentric structure of triple eccentric butterfly valves and eccentric half spheric ball valves and the features of the appearance and seal of the fully welded ball valves, through an unique perfect penta-eccentric structure to develop a new type of valve product.

五偏心旋转阀的结构特点 The structure features of penta-eccentric rotary valve:

一、设计标准 Design standard

ASTM《美国材料标准》
DIN EN《欧洲材料标准》
API 598《美国阀门检验与测试》
ASME B16. 34美国《法兰、螺纹和焊接连接的阀门》
EN 12266-1欧洲《工业阀门检测标准》
GB/T 12224《钢制阀门 一般要求》
GB/T 12228《通用阀门 碳素钢锻件技术条件》
GB/T 12229《通用阀门 碳素钢铸件技术条件》
GB/T 12230《通用阀门 不锈钢铸件技术条件》
GB/T 13927-2008《工业阀门 压力试验》
NB/T 47008《承压设备用碳素钢和合金钢锻件》
NB/T 47010《承压设备用不锈钢和耐热钢锻件》
ASTM《American material stands》
DIN EN《 European material stands》
API 598《American valves inspection and testing》
ASME B16.34 American《Valves with flanges,thread,and welded ends》
EN 12266-1 European《Industrial valves test standard》
GB/T 12224《General requirements on steel valves》
GB/T 12228《Technical requirements on forged carbon steel parts for general valves》
GB/T 12229《Technical requirements on cast carbon steel parts for general valves》
GB/T 12230《Technical requirements on cast stainless steel parts for general valves》
GB/T 12230GB/T 13927-2008《Pressure tests for industrial valves》
NB/T 47008《Forged carbon steel and alloy steel parts for pressured equipment》
NB/T 47010《Forged alloy steel parts and refractory steel for pressured equipment》

二、结构特点 Structural features

1）阀体：阀体采用偏心设计，整体锻造球形结构，抗轴向力，强度高，刚度好，重量轻，可有效降低自身重量，减少变形，对于压力管道阀门来说，此点尤为重要。

1）Body: The body is adapted with eccentric structure, integrated forged spheric structure, anti-axial force, high strength, good rigidity, light weight, can reduce weight, deformation which are very essential for the valves on pressured pipeline.

2）阀芯：阀芯采用独特的五偏心结构设计，整体铸造结构，具有非常好的刚性，双向承压时，阀芯能够保持稳定的密封性能；直通式全流道设计（全通径）大大提高流量系数，流阻小。

2）Trim: The trim is adapted with unique penta-eccentric structure, integrated forged structure, with very good rigidity, can keep stability of sealing feature when bear bi-directional pressure, the straight through full bore design can significantly increase the flow factor, and reduce the flow resistance.

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3）阀座/密封圈：阀座及密封圈表面均采用钴基合金堆焊设计，堆焊钴基硬质合金后密封面的洛氏硬度HRC≥ 40以上，具备长时间频繁开启，密封面材料不脱落，抗氧化、耐冲刷、耐腐蚀等特性。

3）Seat/Sealing ring: the surface of Seat and Sealing ring are adapted with bead welding with cobalt alloy, after bead welding with cobalt alloy, the surface hardness of the sealing face can be above HRC 40, the sealing face won't be peeled off, after long time open and close, and with good anti- oxidation, erosion, corrosion features.

4）辅材及密封件：内置密封件均采用304+石墨复合材料，无橡胶类软密封材料，可耐高温，能确保阀门长期稳定运行，保持零泄漏。

4）Auxiliaries and sealing parts: the build in sealing parts are adapted with 304+ graphite composited materials, without soft sealing materials as rubber, can resist to high temperature, to ensure the zero leakage after long time using.

5）有限元分析：通过对阀体、阀芯、阀座、密封圈和阀杆经过三维有限元分析，根据模拟结果，获取最佳的结构设计。

5）Finite analysis: through the result on the 3D finite analysis on body, trim, seat, sealing ring and stem to acquire the best structural design.

三、设计理念 Concepts on design

五偏心旋转阀是结合球阀和蝶阀的基础上进行优势整合的全新阀门产品，独特的五偏心结构设计，真正实现全金属双向硬密封功能，具备密封摩擦系数小，开关不卡涩，耐高温及低温等工况。

The penta-eccentric rotary valve is a new valve product combined the advantages of ball valves and butterfly valves, within unique penta-eccentric structural design, to realize full metal bi-directional sealing function, with low sealing friction factor, smooth opening and closing, resists on high and low temperature.

四、性能优势 Advanced features

五偏心旋转阀在设计的同时，创新的工艺可实现阀门终身免维护，可以调节流量，可以在线维修更换阀座和密封圈，节约后续运行成本。

The design of penta-eccentric rotary valve, the innovated crafts can realize maintenance free during the life span of the valve, control the flow rate, online replacement on seat and sealing rings, to reduce the cost during operation.

五、产品优点 Advantages of the product

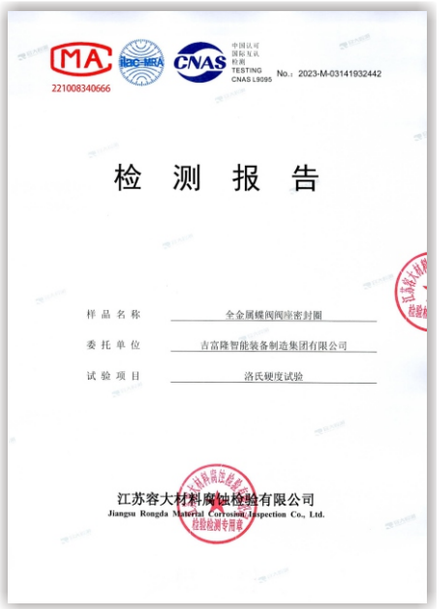
★ 全金属硬密封长寿命设计，适用高温、低温工况；
Full metal hard seal, long life span design, applicable on high and low temperature conditions
★ 全通径大流量设计，流阻小；
Full bore large flow rate design, low flow resistance
★ 真正与管道同寿命（限在供热管网、循环水等水管网工况条件下）。
Truly same life span with the pipeline(for heat supply pipelines, water circulation pipeline and another water pipelines)

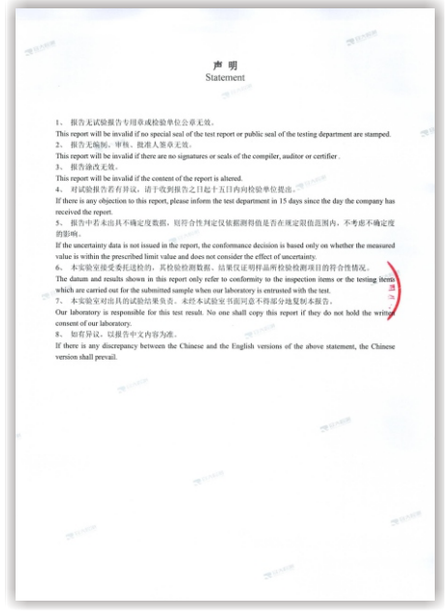
六、应用范围 Applicable fields

五偏心旋转阀可广泛应用于蒸汽、高温水长输供热管网，电厂、化工、水务、污水处理等工业管网，亦可在煤化工、多晶硅等严苛工况下使用。

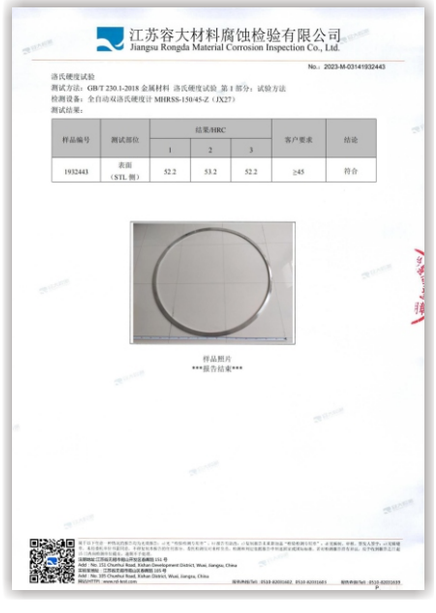
The penta-eccentric rotary valves can be widely applied on steam, high temperature water long distance heat supply pipelines, power plants, chemical plants, water supply, sewage treatment pipelines, and also for harsh conditions as coal chemical plants, ploy-crystalline silicon plants.

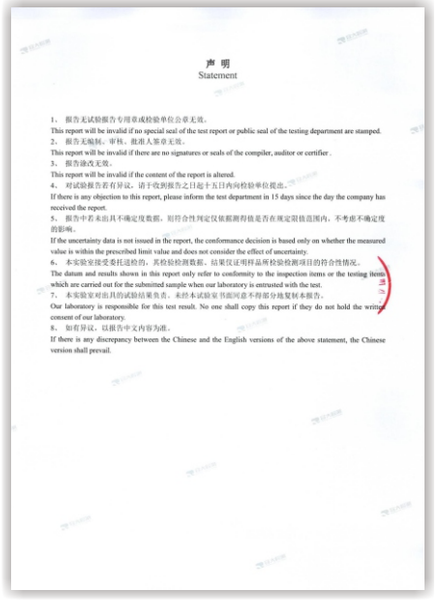
检测报告 Inspection report





检测报告 Inspection report





主要产品展示 Main product display

对焊式
Butt weld type

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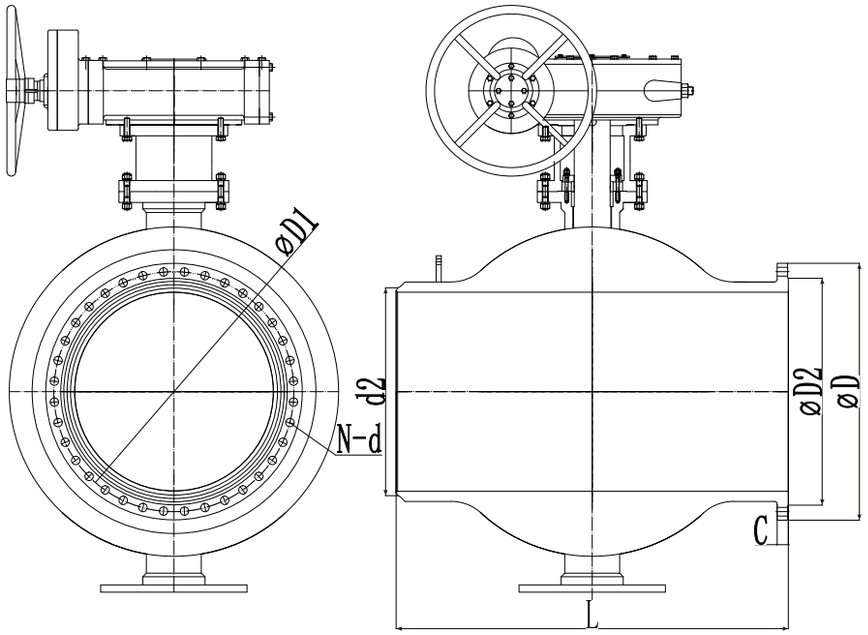
主要产品展示 Main product display

法兰+焊接
Flange+Butt weld

法兰式
Flange Type

主要连接尺寸 Main connecting dimensions



GB/T 9113.1-2000 PN1.6MPa

单位 Unit:mm

公称通径 Nominal size	免维护系列 Maintenance free series		可在线维护系列 Online maintenance series		法兰尺寸 Flange size				
	ϕd2	L	ϕd2	L	ϕD	ϕD1	ϕD2	C	N-d
150	159	520	159	390	285	240	211	24	8- ϕ22
200	219	635	219	520	340	295	266	24	12- ϕ22
250	273	689	273	635	405	355	319	26	12- ϕ26
300	325	762	325	689	460	410	370	28	12- ϕ26
350	377	838	377	762	520	470	429	30	16- ϕ26
400	426	915	426	838	580	525	480	32	16- ϕ30
450	478	991	478	915	640	585	548	34	20- ϕ30
500	529	1143	529	991	715	650	609	36	20- ϕ33
600	630	1380	630	1143	840	770	720	38	20- ϕ36
700	720	1524	720	1380	910	840	794	40	24- ϕ36
800	820	1727	820	1524	1025	950	901	42	24- ϕ39
900	920	1900	920	1727	1125	1050	1001	44	28- ϕ39
1000	1020	2000	1020	1900	1255	1170	1112	46	28- ϕ42
1200	1220	2430	1220	2100	1485	1390	1328	52	32- ϕ48
1400	1420	2680	1420	2430	1685	1590	1530	58	36- ϕ48
1600	1620	2950	1620	2680	1930	1820	1750	64	40- ϕ56

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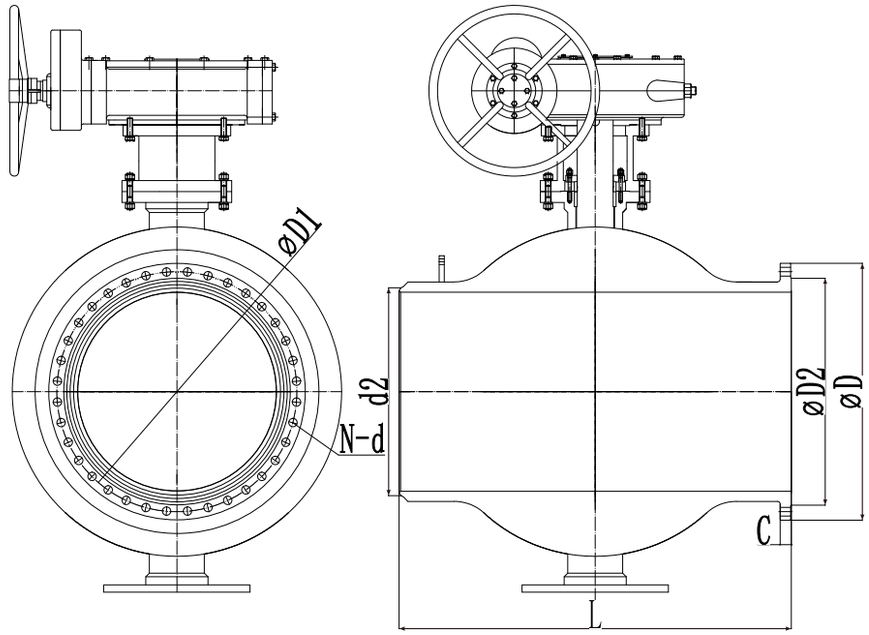
主要连接尺寸 Main connecting dimensions

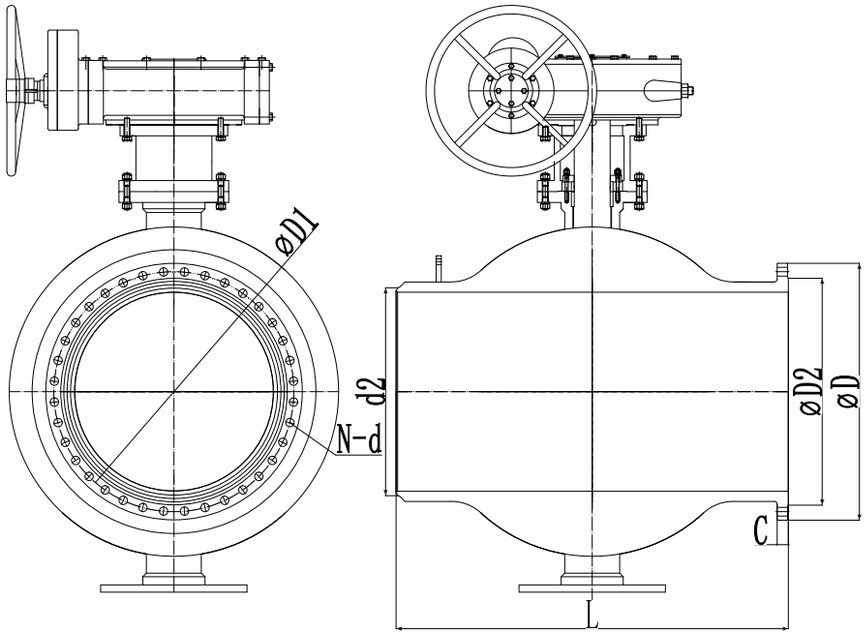


GB/T 9113.1-2000 PN2.5MPa

单位 Unit:mm

公称通径 Nominal size	免维护系列 Maintenance free series		可在线维护系列 Online maintenance series		法兰尺寸 Flange size				
	ϕd2	L	ϕd2	L	ϕD	ϕD1	ϕD2	C	N-d
150	159	520	159	390	300	250	211	28	8- ϕ26
200	219	635	219	520	360	310	274	30	12- ϕ26
250	273	689	273	635	425	370	330	32	12- ϕ30
300	325	762	325	689	485	430	389	34	16- ϕ30
350	377	838	377	762	555	490	448	38	16- ϕ33
400	426	915	426	838	620	550	503	40	16- ϕ36
450	478	991	478	915	670	600	548	46	20- ϕ36
500	529	1143	529	991	730	660	609	48	20- ϕ36
600	630	1380	630	1143	845	770	720	48	20- ϕ39
700	720	1524	720	1380	960	875	820	50	24- ϕ42
800	820	1727	820	1524	1085	990	928	54	24- ϕ48
900	920	1900	920	1727	1185	1090	1028	58	28- ϕ48
1000	1020	2000	1020	1900	1320	1210	1140	62	28- ϕ55
1200	1220	2430	1220	2100	1530	1420	1350	70	32- ϕ55
1400	1420	2680	1420	2430	1755	1640	1560	76	36- ϕ60
1600	1620	2950	1620	2680	1975	1860	1780	84	40- ϕ60

主要连接尺寸 Main connecting dimensions



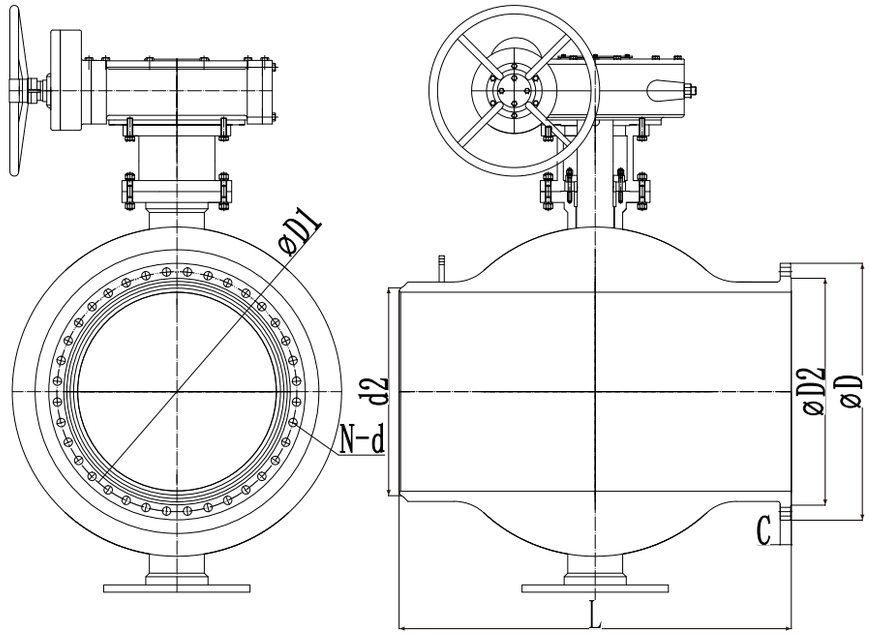
HG/T 20592-2009 PN4.0MPa

单位 Unit:mm

公称通径 Nominal size	免维护系列 Maintenance free series		可在线维护系列 Online maintenance series		法兰尺寸 Flange size				
	ϕd2	L	ϕd2	L	ϕD	ϕD1	ϕD2	C	N-d
150	159	520	159	390	300	250	218	28	8- ϕ26
200	219	635	219	520	375	320	285	34	12- ϕ30
250	273	689	273	635	450	385	345	38	12- ϕ33
300	325	762	325	689	515	450	410	42	16- ϕ33
350	377	838	377	762	580	510	465	46	16- ϕ36
400	426	915	426	838	660	585	535	50	16- ϕ39
450	478	991	478	915	685	610	560	57	20- ϕ39
500	529	1143	529	991	755	670	615	57	20- ϕ42
600	630	1380	630	1143	890	795	735	72	20- ϕ48

古富隆集团 GiFLON
G500 五偏心旋转阀
G500 Penta-eccentric rotary valve

主要连接尺寸 Main connecting dimensions

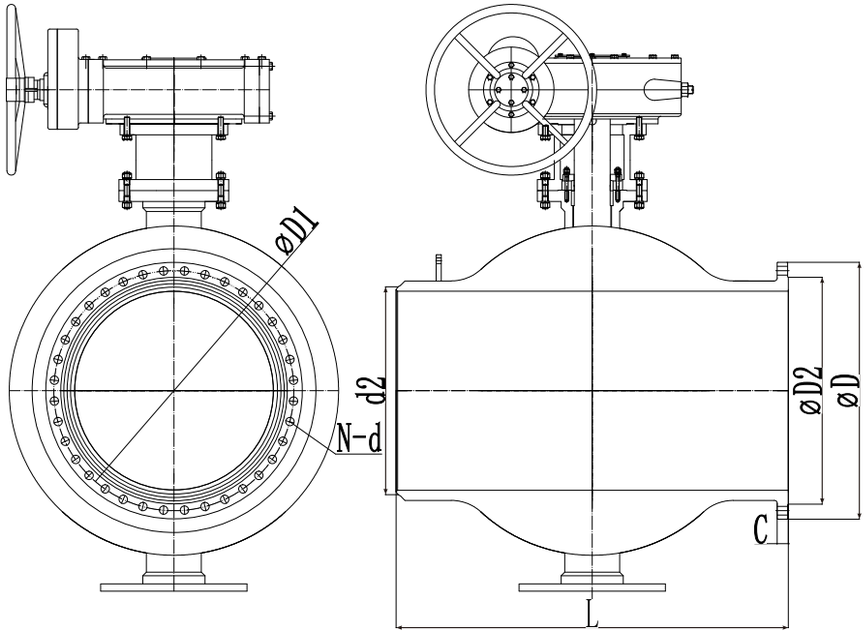


HG/T 20592-2009 PN6.3MPa

单位 Unit:mm

公称通径 Nominal size	免维护系列 Maintenance free series		可在线维护系列 Online maintenance series		法兰尺寸 Flange size				
	ϕd2	L	ϕd2	L	ϕD	ϕD1	ϕD2	C	N-d
150	159	520	159	390	345	280	218	36	8- ϕ33
200	219	635	219	520	415	345	285	42	12- ϕ36
250	273	689	273	635	470	400	345	46	12- ϕ36
300	325	762	325	689	530	460	410	52	16- ϕ36
350	377	838	377	762	600	525	465	56	16- ϕ39
400	426	915	426	838	670	585	535	60	16- ϕ42
450	478	991	478	915	715	630	560	64	20- ϕ42
500	529	1143	529	991	800	705	615	68	20- ϕ48
600	630	1380	630	1143	930	820	735	76	20- ϕ56

主要连接尺寸 Main connecting dimensions



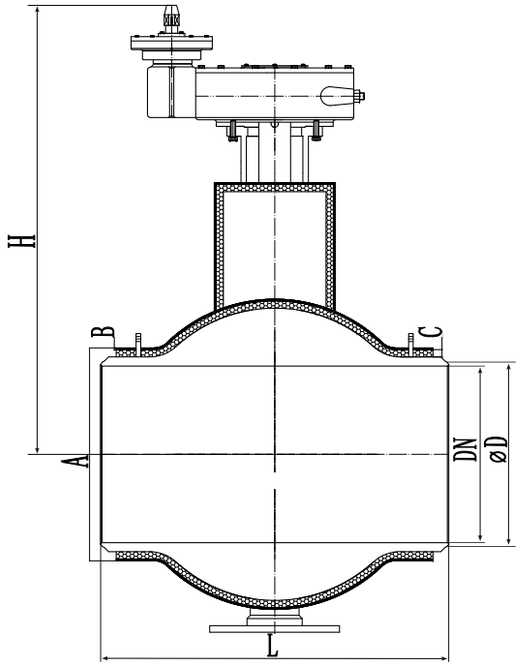
HG/T 20592-2009 PN10.0MPa

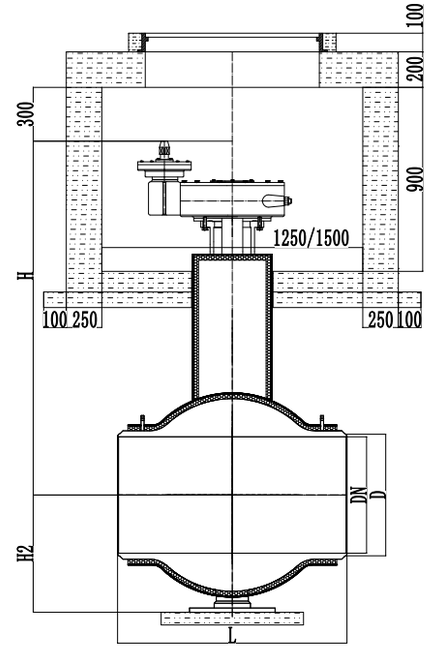
单位 Unit:mm

公称通径 Nominal size	免维护系列 Maintenance free series		可在线维护系列 Online maintenance series		法兰尺寸 Flange size				
	ϕd2	L	ϕd2	L	ϕD	ϕD1	ϕD2	C	N-d
150	159	520	159	390	355	290	218	44	12- ϕ33
200	219	635	219	520	430	360	285	52	12- ϕ36
250	273	689	273	635	505	430	345	60	12- ϕ39
300	325	762	325	689	585	500	410	68	16- ϕ42
350	377	838	377	762	655	560	465	74	16- ϕ48
400	426	915	426	838	715	620	535	82	16- ϕ48
450	478	991	478	915	770	675	560	89	20- ϕ48
500	529	1143	529	991	870	760	615	94	20- ϕ56
600	630	1380	630	1143	990	875	735	102	20- ϕ62

古富隆集团 GiFLON
G500 五偏心旋转阀
G500 Penta-eccentric rotary valve

预制保温直埋系列产品Direct bury product with preset thermal insulation





公称通径 Nominal size	免维护系列 Maintenance free series		可在线维护系列 Online maintenance series		外护管外径 Size of outer casing pipes	外护管壁厚 Thickness of outer casing pipes	保温层厚度 Thickness of thermal insulation layer	中心高度 Height of center
	ϕD	L	ϕD	L	A	B	C	H
150	159	520	159	390	250	4.5	41	根据客户要求 Depends on customers' requirement
200	219	635	219	520	315	5	43	
250	273	689	273	635	400	5.5	58	
300	325	762	325	689	450	6	56.5	
350	377	838	377	762	500	6.5	55	
400	426	915	426	838	560	7	60	
450	478	991	478	915	600	7.5	53.5	
500	529	1143	529	991	655	8	55	
600	630	1380	630	1143	760	9	56	
700	720	1524	720	1380	850	9.5	55.5	
800	820	1727	820	1524	960	10	60	
900	920	1900	920	1727	1055	11	56.5	
1000	1020	2000	1020	1900	1155	12	55.5	
1200	1220	2430	1220	2100	1400	14	76	
1400	1420	2680	1420	2430	1620	16	84	
1600	1620	2950	1620	2680	1830	18	87	

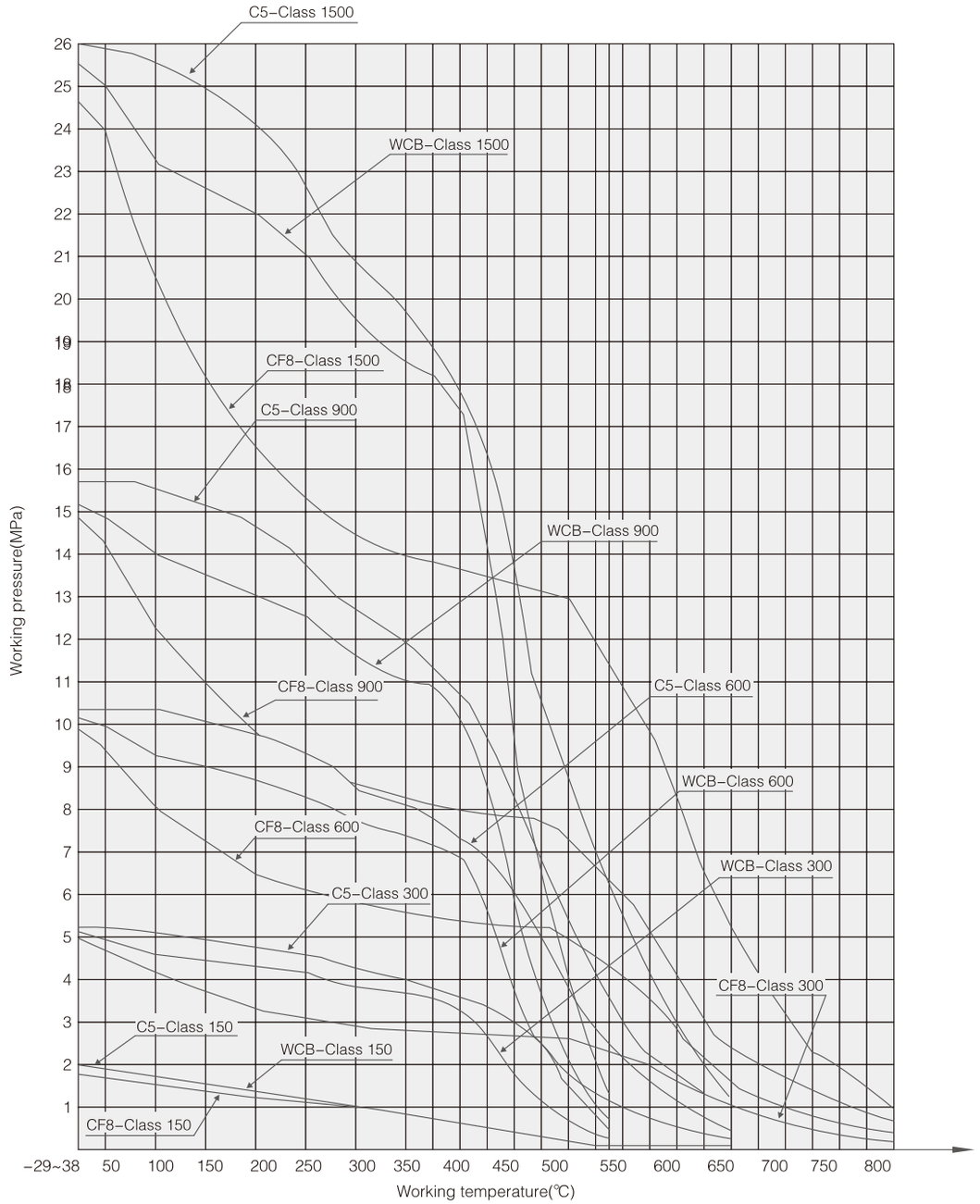
主要零件材质表 Main parts material table

序号 ITEM	零件名称 Componen	碳素钢阀门零件材料 Carbon Stee		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 B8	ASTM A193 B7、ASTM A193 B8	06Cr19Ni10	ASTM A193 B8
2	阀座Seat	ASTM A182 F304/F316+STL	ASTM A182 F304/F316+STL	ASTM A182 F304/F316+STL	ASTM A182 F304/F316+STL
3	底盖Bottom cover	ASTM A105	ASTM A105	06Cr19Ni10	ASTM A182 F304
4	压板圈Pressure plate ring	06Cr19Ni10	ASTM A182 F304	06Cr19Ni10	ASTM A182 F304
5	轴套Shaft sleeve	304+Nitride	ASTM A276 304+Nitride	304+Nitride	ASTM A276 304+Nitride
6	石墨复合垫片 Graphite composite gasket	304+Graphite	ASTM A276 304+Graphite	304+Graphite	ASTM A276 304+Graphite
7	阀芯Trim	CF8/CF3	ASTM A351 CF8/CF3	CF8/CF3	ASTM A351 CF8/CF3
8	阀体Body	ASTM A105、ASTM A350 LF2	ASTM A105、ASTM A350 LF2	ASTM A182 F304	ASTM A182 F304
9	轴套Shaft sleeve	304+Nitride	ASTM A276 304+Nitride	304+Nitride	ASTM A276 304+Nitride
10	填料压套Packing bushing	304	ASTM A276 304	304	ASTM A276 304
11	填料压板Packing Gland	Q235B	A570 Gr.D	304	ASTM A276 304
12	填料垫Packing gasket	304+Graphite	ASTM A276 304+Graphite	304+Graphite	ASTM A276 304+Graphite
13	螺栓Stud bolt	ASTM A193 B7	ASTM A193 B7	06Cr19Ni10	ASTM A193 B8
14	垫圈Spring gasket	65Mn	ASTM A29 1566	GB93	ANSIB18.21.1
15	螺栓Stud bolt	ASTM A193 B7	ASTM A193 B7	06Cr19Ni10	ASTM A193 B8
16	螺母Nut	ASTM A194 2H	ASTM A194 2H	06Cr19Ni10	ASTM A194 B8
17	支架Yoke	WCB	ASTM A216 WCB	WCB	ASTM A216 WCB
18	阀杆Shaft	20Cr13/17-4PH	20Cr13/17-4PH	20Cr13/17-4PH	20Cr13/17-4PH

古富隆集团 GiFLON
G500 五偏心旋转阀
G500 Penta-eccentric rotary valve

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

Pressure-temperature
Ratings to ASME B16.34



材质表 Materials list

Astm standard	Chemical compostions [%]										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	2.0–30	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

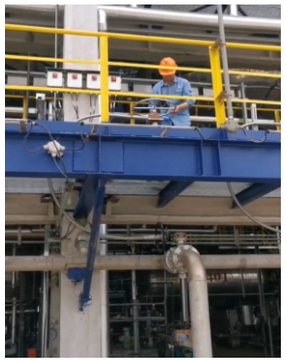
古富隆集团 GIFLON
G500 五偏心旋转阀
G500 Penta-eccentric rotary valve

可供选择的辅助功能 Optional accessibility features

★便携式开关工具 Portable open/close tools

还可提供电动、气动型 Electric and pneumatic driven can also be provided。

★远传操作功能 Transmitting operation function



柔性远传操作机构
Flexible remote operation device。

分体式电动执行机构
Separated electric actuators。

★电动、气动、液动、气液联动执行机构
Electric、Pneumatic、Hydraulic、hydro-pneumatic aligned actuators

应用领域 Application scene

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
Ethylence 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
火柜气，酸气隔离
热烈气
催化裂化器装置
PETROLEUM REFINING
Oil Storage Isolation
Steam Supply Valves
Desulphurization Systems and Tail Gas Treaters
Flare GasSour 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 Isolatior

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
LiquidLime 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
气化厂和储存设备
液化天然气运输系统
CRYOGENICS
All Liquid Gases
Ljquid and Natural Gas Service
Oil Field Recovery System
Gasification Plants and Storage
LNG Transportation Service







古富隆集团 GIFLON
G500 五偏心旋转阀
G500 Penta-eccentric rotary valve

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	1、填料超期使用、已老化。 The packing is in exceeded use and gets aged. 2、操作时用力过大。 Excessive force is used in operation. 3、活节螺栓没有拧紧。 The eyelet bolt is not tightened.	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. 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. 3、均匀拧紧压住填料用螺栓。 Evenly tighten the bolts used to tightly press the packing.
密封面泄漏 leaking at the sealing surface	1、关闭不到位。 Closing is not in place 2、久闭的阀门在密封面上积垢。 The sealing surface of a long time closed valve gets scaled. 3、密封面上损伤严重。 The sealing surface gets seriously injured	1、注意安装检查。 Pay attention to the installation checkup. 2、关严到位。 Make closing in place. 3、将阀门开一条缝，让高速流体冲掉密封上赃物。 Let the valve in crack to have the dirty on the seal flushed out by the high speed fluid. 4、重新研磨，加厚调节垫片补偿。 Regrind and thicken the adjusting gasket compensation.
法兰连接处泄漏 leaking at the flange connection	1、螺栓拧紧力不均。 The bolts are unevenly tightened. 2、垫片老化损伤。 The gasket gets aged and injured. 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.	1、重新均匀拧紧螺栓。Evenly tighten the bolts again. 2、及时更换。Replace it in time. 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.
手柄、手轮的损坏 damage of handle and handwheel	1、使用不正确。 Incorrect use. 2、紧固件松脱。 The fastener gets loosened. 3、手柄、手轮与阀杆连接损伤。 Damaged connection between the handle, handwheel and stem.	1、禁止使用管子钳、长杠杆、撞击工具等。 Never use grip wrench, long lever, impacting tools. 2、随时修配。 Repair and fit it in time. 3、随时修复。 Repair it in time.
蜗轮、蜗杆传动卡咬 seizure between worm and gear	1、不清洁嵌入赃物，影响润滑。 Dirt gets inlaid to affect the lubrication. 2、操作不善。 Improper operation.	1、请保持清洁，定期加油。 Keep it clean and oil it in a fixed period of time. 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.
电动安装故障 Electric installation failure	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. 2、电动故障。Electric failure.	1、应加油，操持清洁，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. 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.