



Triple Eccentric Butterfly Valve Product Catalogue



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VALVE SOLUTION PROVIDER

Leader in the development of butterfly valves and ball valves



Part One About DBV

Premier Manufacturer of High-quality Custom Valves

DBV History:

DBV valve was founded in 2001. Our company created two valve brands "DBV" and "Dombor".

In 2017, the founder led the team to return to Oubei, the hometown of Chinese valves in Wenzhou, and set up the company headquarters of DBV in Wenzhou, and established professional sales and service networks in Shanghai and Wenzhou. The headquarters company has production workshops for butterfly valves, ball valves, gate valves, Globe Valves and check valves.

DBV Quality Control:

Advanced physical and chemical test center, professional CNC processing, pressure testing, automatic production facilities and experienced technical production team.

achieving all kinds of certificates such as
API6D, API609, API607, API6FA, CE, ISO9001, ISO158481, ISO14001, ISO45001, TS, ATEX, SIL3, CU-TR.....

DBV

DBV History

2001 - 2009

Gavin and Sea established DBV, an industrial valve brand for a wide business range in 2001. In the following years, we passed the ISO9001 quality management system certification by making our production capabilities compliant with global standards as well as passing TS-related certification.

2010 - 2016

The creation of our full series of hard-sealed butterfly valves was successfully developed during 2010-2011. In 2015, we produced our first ultra-high-pressure 1500# valve and the DN2600 (104 inches) large-diameter all-metal flange hard sealed butterfly valve.

2017 - 2019

In 2017, the company's leadership made a major decision to set Wenzhou as the headquarters of DBV and set up a sales team in Shanghai. The non-regional industry company DBV was established in Wenzhou in 2018.

This factory has 20,000 square meters of workspace, high-end processing equipment & testing equipment, and an established valve test center. Till 2019, the company achieved an annual output of 5,000 tons of valves, providing us with good economic benefits.

2020 - Now

In 2020, DBV obtained a series of national and international authoritative certifications such as the TS license for special equipment manufacturing, CE, API, and SIL3. Since 2020, we have actively responded to the global epidemic, ensuring production and providing high-quality products. DBV is always on the way to become a better industry leader.

Innovation for sustainability

DBV Valve continues to excel in trend-setting R&D and sustainability practices to Valve performance for every valve product, reduce costs and ensure optimal performance for every valve product.

have allowed us to earn numerous intellectual property rights and quality certifications, have allowed us to earn numerous intellectual property rights and quality certifications.



Professional Service

Providing constant our production cycle, our team also handles on-site technical training and handles on-site technical



Production Strength

With a factory employing 500 workers, a factory employing 5 production lines and numerous production lines and numerous machines, we easily produce up to 8,000 tons of valves



Strict Quality Control

In conjunction with third party inspection, each valve is tested in a certified laboratory using advanced testing equipment prior to delivery.



R&D Capabilities

With over 15 years of experience, our team continues to provide the latest valve solutions with industry and market trends.



20 Years of Experience

Since 2001, we have been running an efficient production system, constantly innovating our valves to obtain efficient global resources.



DBV

Part Two Quality Control

**We Take Pride in Our
High-Quality Work**

Understanding how important product quality is to the success of a brand, DBV places a premium on maintaining high-quality standards in both our valves and our services.

Devoting human and financial resources, along with our commitment to quality, we always perform at our best to manufacture reliable valves that surpass global certification requirements.



DBV Valve Making Things Better



Experienced Quality Inspection Team

With over 10 years of experience in the industry, our expert team of quality inspectors has the right skill set to ensure our valves pass global standards.



Professional Laboratory

Product and material testing is handled in-house via our testing laboratory, equipped with the latest testing equipment comparable to third-party professional facilities.



International Certificates

Conducting various tests and witness auditing, we have obtained most completely certificate: API 6D, API 609, API 607, API 6FA, SIL3, CE, ISO 9001, ISO 18001, TS, CU-TR 010/032, ISO 15848-1 (fugitive emission certificate).

Branded and Reliable Raw Materials

Carbon Steel

WCB, LCB, WCC, LC1, A105, LF2

Stainless Steel

CF8, CF8M, CF3, CF3M, 310S, 904L, F304, F316, F304L, F316L, CF8C, F347

Cr-mo Alloy

WC6, WC9, C5, C12A, F11, F22, F5, F91

Duplex Stainless Steel

4A, 5A, 6A, F51, F53, F55, CK3MCUN, CD4MCU, CK20

Copper Alloy

C95800, C95500, C83600

Monel Alloy

MONEL 400, MONEL 500, M35-1

Inconel Alloy

INCONEL600, INCONEL 625, INCONEL 800

Ti Alloy

TITANIUM GR2, GR3, GR5, GR12

Hast Alloy

HAST ALLOY C276

Key Part of Quality Management and Assurance



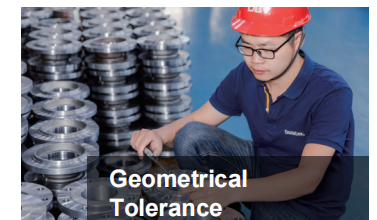
Analysis of Chemical Element



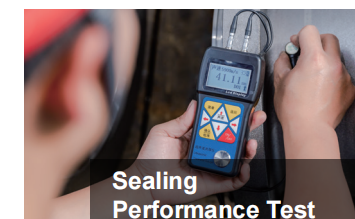
Mechanical Performance Testing



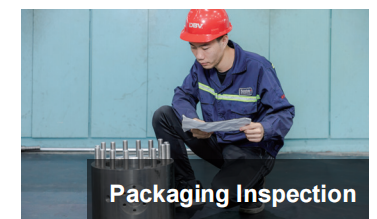
Processing Surface Roughness



Geometrical Tolerance



Sealing Performance Test



Packaging Inspection

Part Three Our Equipment

5

Production Lines

20000 m²

Manufacturing Area

8000tons

Annual Output

\$32 Million

Total annual sales
(US\$)

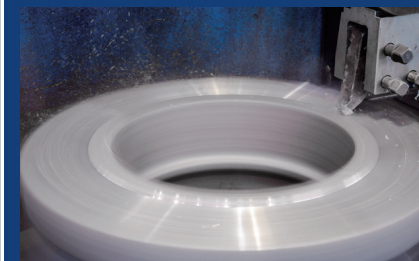
Machinery for Highly Efficient Valve Production



52 Sets of CNC Machines



2.5-meter Vertical Lathe



8 Sets of 1.6-meter Vertical Lathes

DBV Valve

DBV Capabilities at a Glance

A major pillar in our continued success as a global valve manufacturer is our fully-functional production facility, packed with state-of-the-art processing equipment and talented staff.

- Rough Machining
- Fine Machining
- Heat Treating
- Boring
- Surface Finishing
- Drilling

How We Handle Details Makes Us Different

The performance, durability, and service life of DBV industrial valves come from how we process and prepare each of our raw materials: properly, with great attention to detail.



DBV

Part Four Our Partners

Win-Win Partnership

With a wide range of industrial valves, DBV can cooperate with any kind of client.

When you are constructing or forming a valve system, you need a specific solution for your project requirements. DBV can assist you with our full-service support as well as system maintenance programs for all of your orders.

To provide the right valve solutions for all your customers, you need a diverse range of industrial valves that fits their needs. Working with DBV gives you a rich selection of pump valves for any of your clients.





Benefits from Cooperation

Design Confirmation

Expert designers create practical valve designs based on the data acquired during the consultation, along with any special requirements you may have. The completed design is forwarded to you, ensuring that the design specifications capture your unique branding or marketing concepts.

After getting your approval, the design is then forwarded to our production team for sample making.

30-Day Lead Time

Customized valve orders take a maximum of 30 days for completion, including the prototyping phase.

For standard orders, OEM requests, or urgent purchases, our warehouse is packed with stock standard parts, allowing our team to complete your orders within 7 days from the date of your request.

Value-Added Delivery

As we value your business with us, we add free accessories to your purchase at the time of shipment, amounting to 10% of the total order amount.

Per request, we can also include additional documents to the shipment, like product parameters, test results, and other important information.

Responsive After-Sales Service

All valves from DBV come with a 24-month warranty period that covers technical assistance, on-site repairs, and free product replacements.

Professional aftersales team handles your concerns via email and video calls, while our on-site technical support staff are certified experts in the field and provide fast, effective solutions for any kind of issues.

所采用的新技术、新工艺说明
Description of New Technology

三偏心蝶阀
Triple Eccentric Butterfly Valve

所谓三偏心是指在双偏心结构的基础上再增加一个角偏心，即使蝶阀的密封面呈倾斜锥形。这种结构的特点是将蝶板周边外侧加工成外斜锥面，将密封阀座内侧加工成内斜锥面。这时蝶阀的密封断面变成了椭圆形，蝶板密封面的形状也因此上下不对称。由于密封面为斜锥形，被阀杆轴分隔为偏大的一侧蝶板沿着大倾斜曲面向上方压向阀座，偏小的一侧蝶板沿着小倾斜曲面向下方压向阀座。蝶板密封圈与阀座间的密封不是靠阀座的弹性变形，而是完全依靠接触面的压紧实现密封，故三偏心蝶阀的开闭基本上无摩擦，并且随着关闭压力的增加，阀门越关越紧。从三偏心蝶阀的结构原理不难看出，三偏心蝶阀有以下优点：

- 1)密封性能好，提高了系统的可靠性；
- 2)摩擦阻力小，开闭省力、灵活；
- 3)使用寿命长，可以实现反复多次开关；
- 4)承压及耐高温能力强，适用范围广。

东宝三偏心蝶阀其适用范围已可以耐压高达 2500 磅级，耐温低至-196℃高达 850℃，密封达到 0 泄漏，调控比高达 100:1 以上。

产品的主要特点.
Main products' features

01

双向均可承压，实现无流向限制的安装方式。

The pressure of bidirectional flow could be afforded to achieve no flow restrictions on the installation.

03

全金属密封设计，密封面采用司太立合金堆焊技术，解决了高温高压、低温等严苛工况下，蝶阀密封性能差的难题；

The design of fully metal to metal sealing,The sealing surface adopts the technology of overlaying stellite alloy, which solves the problem of poor butterfly valve sealing performance under the harsh conditions of high pressure, high temperature and low temperature effectively.

05

全新的三偏心结构设计，实现0摩擦，性能更加稳定，密封使用寿命延长。通过优化设计，确保蝶阀从低温到高温的灵活启闭，完全符合严苛工况下阀门零泄漏的密封标准。

The new design of triple eccentric makes the valve zero friction, more stable performance and longer service life. The compact design ensures that the butterfly valve flexible opening and closing from low temperature to high temperature, and excellent sealing performance, in full compliance with the sealing standard of zero leakage of valve in severe working conditions.

Triple eccentric refers to an angle-added on the basis of the double eccentric structure, as the butterfly valve sealing surface shows anoblique cone. This structure is characterized by the outer side of the disc to be processed into an oblique cone, and also the inner side of the sealing seat is processed into an oblique cone. At this time, the section of the valve sealing surface the becomes oval, thus the shape of the disc sealing surface is under the vertical asymmetry. Because the sealing surface is the oblique cone, the large part of the disc separated by the stem shaft presses the seat upwards along the large inclined surface, and the large part of the disc presses the seat downwards along the small inclined surface. The seal between the disc seal ring and the seat does not rely on the elastic deformation of the seat, but completely depends on the compact of the touching surface. So there is no friction in the process of the triple eccentric butterfly valve basically opening and closing, and the valve closes tightly with the closing pressure increasing. It is obvious from the principle and structure of the triple eccentric butterfly valve, the triple eccentric butterfly valve has the following advantages:

- 1)The sealing performance and reliability of the system are improved.
- 2)The friction is low, and the valve opening and closing flexibly.
- 3)The valve service life is longer and it could switch repeatedly.
- 4)The resistance of pressure and high temperature is improved, and the range of applications is wide.

The highest pressure of DBV triple eccentric butterfly valve could reach up to 2500 lb, and the temperature range is -196up to 850. The sealing performance could be zero leakage and the regulation ratio up to 100:1.

02

可更换的阀座和密封环设计，不会因为密封磨损问题而导致整机报废，降低使用成本；

The design of renewable seat and seal ring could avoid the valve damage caused by the wear of seal ring and reduce the cost of use.

04

东宝全金属密封结构蝶阀与多层密封蝶阀的区别在于，常规多层次金属密封结构为金属片与石墨层叠安装，多层次密封面易受流体冲蚀，使用寿命短。而东宝蝶阀密封副则采用全金属锻造而成的密封环，并在密封表面喷焊司太立合金，其优点为抗冲刷、寿命长、耐磨损，可应用于各类高温高压恶劣工况。

DBV fully metal to metal sealing structure is different from multilayer sealing butterfly valve. Common multilayer metal sealing structure consists of the metal sheet and graphite laminated in stallation, and multilayer sealing surface is susceptible to fluid erosion leading to short service life. However, DBV butterfly valve adopts all metal forged seal ring, and overlays stellite alloy on the sealing surface. Its advantages are anti-wear, anti-erosion and long service life, etc. DBV butterfly valve is suitable for many poor working conditions such as high pressure and high temperature.

执行标准 Executive standard

设计按 JB/T8527 的规定
法兰按 GB/T9113.1
结构长度按 GB/T12221的规定
压力试验按 GB/T13927、JB/T9092的规定
设计按 ANSI B16.34的规定
法兰按 ANSI B16.5或MSS SP-44的规定
结构长度按 API609的规定
压力试验按 API598的规定
(如需其他标准可另技术确认)

Design standard according to JB/T8527
Flange dimension according to GB/T9113.1
Face to Face according to GB/T 12221
Pressure Test according to GB/T13927,JB/T9092
Design standard according to ANSI B16.34
Flange dimension according to ANSI B16.5 or MSS-SP-44
Face to Face according to API609
Pressure Test according to API 598
(other standard options according to technical confirmation)

法兰式
Flange Type



对夹式
Wafer Type



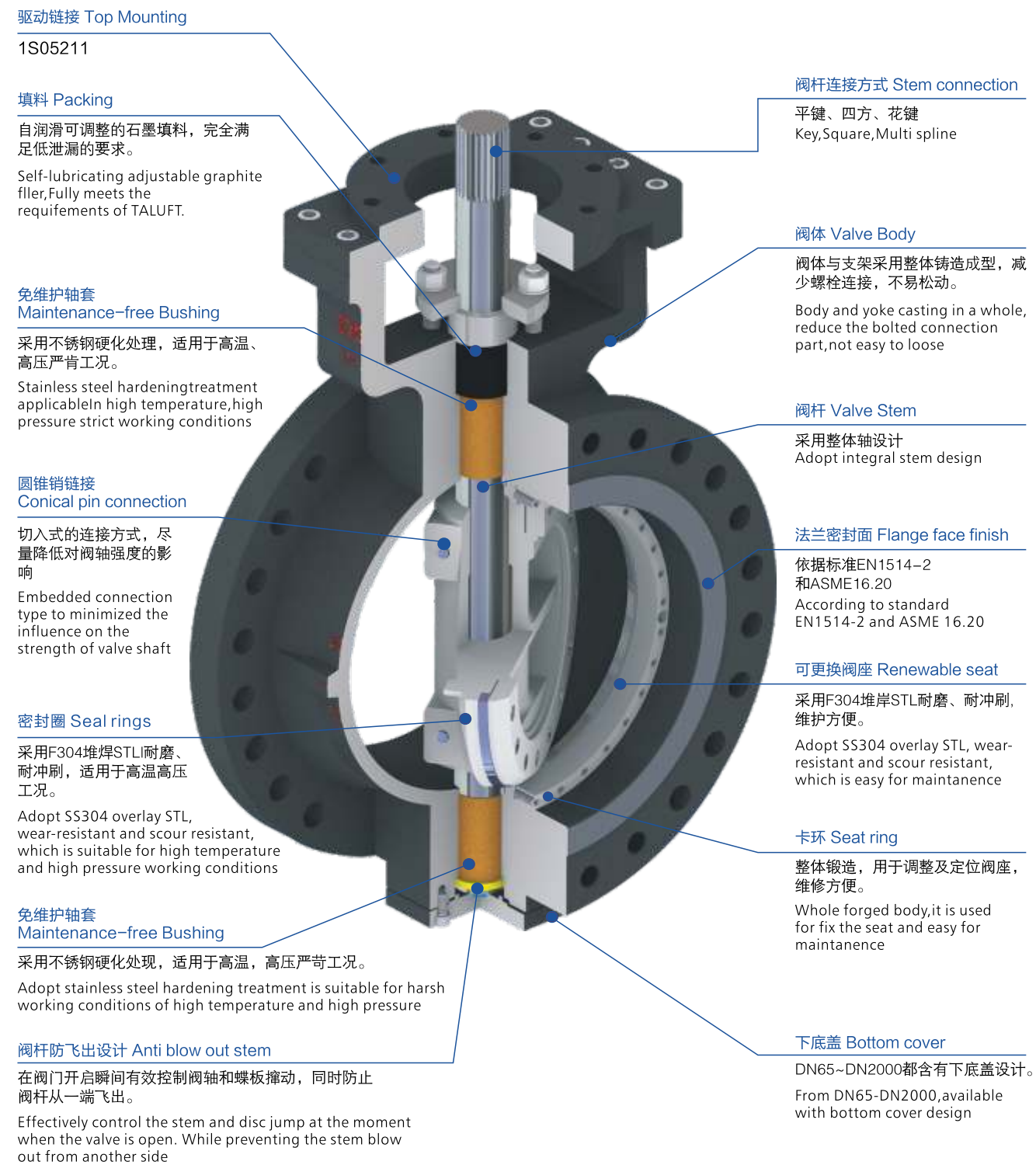
凸耳式
Lug Type



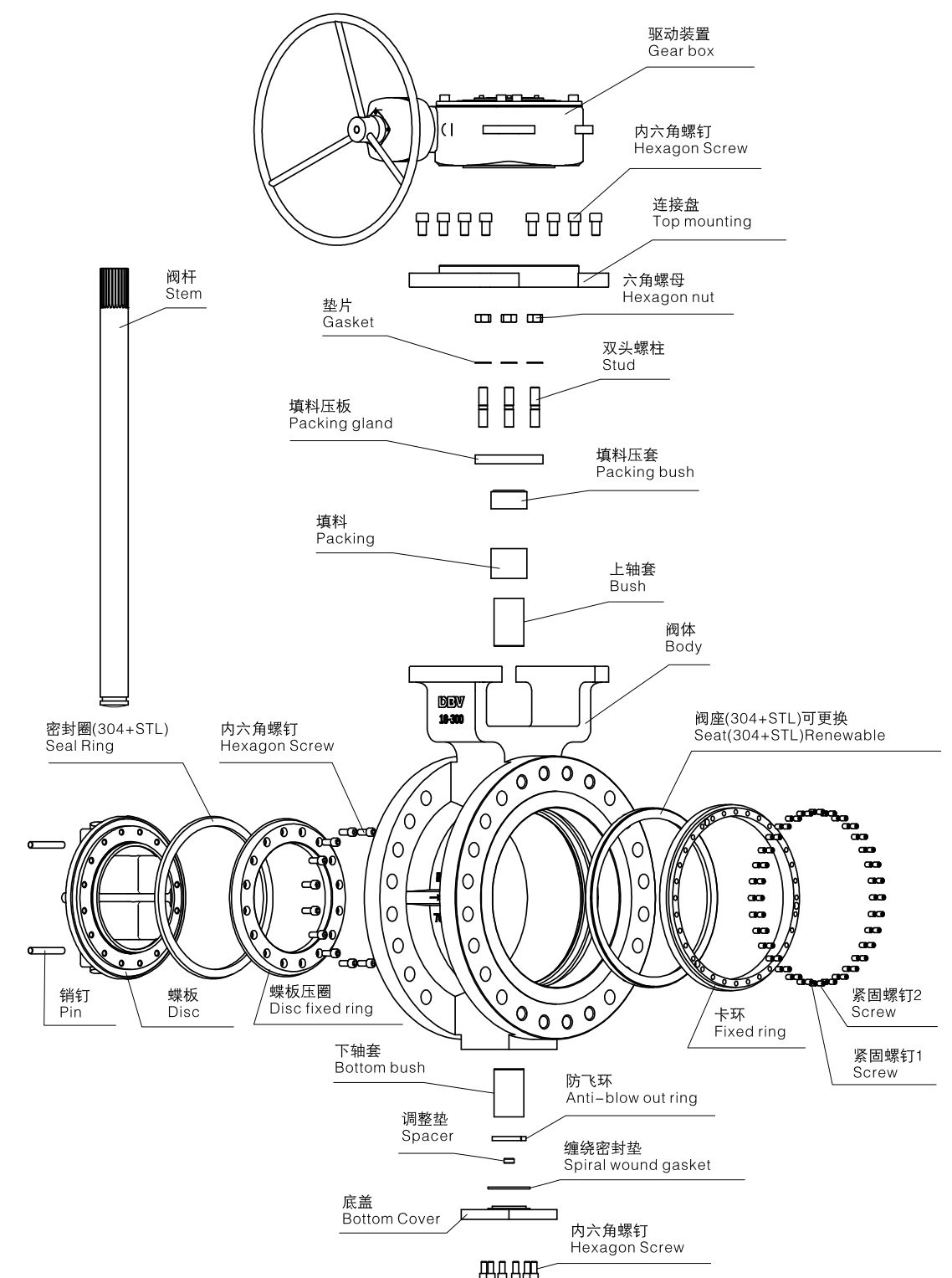
对焊式
Butt weld Type

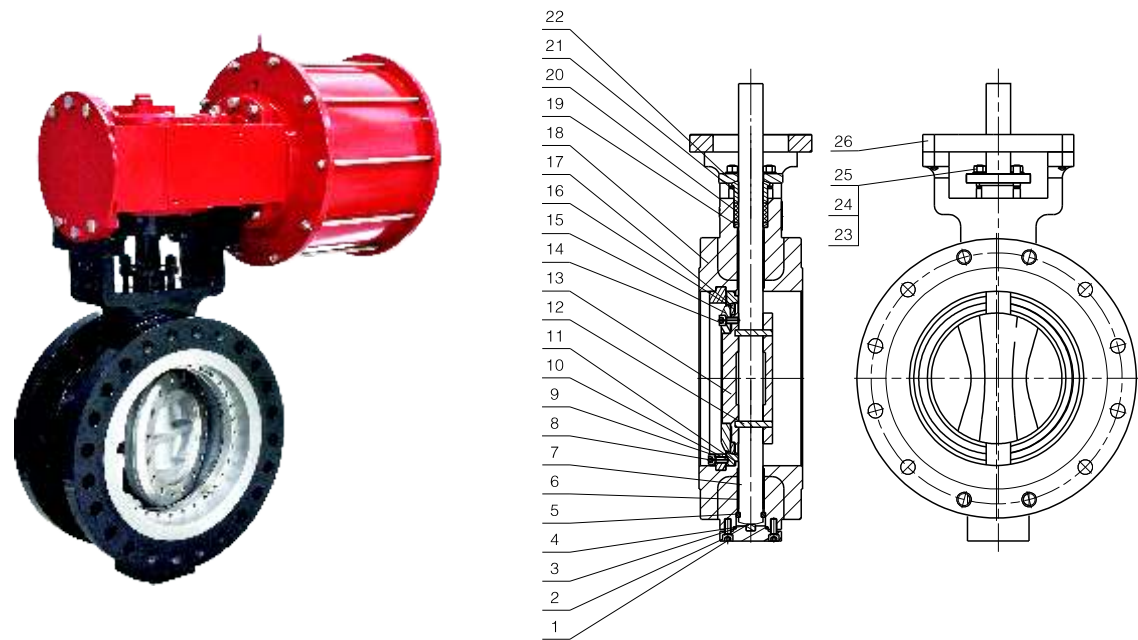


主要零部件分解图 Decomposition diagram of main parts



主要零部件分解图 Decomposition diagram of main parts

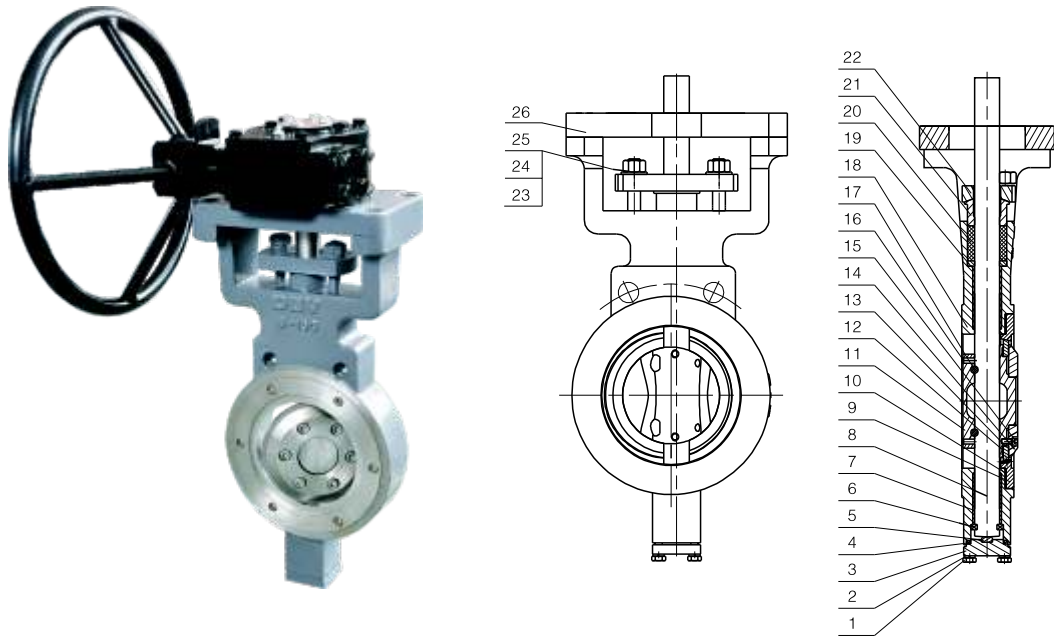




法兰式 Flange Type

序号	零件名称 Part Name	材料 Materials
1	内六角螺钉 Hexagon screw	A193 B7
2	底盖 Bottom cover	A29M 1025
3	垫片 Gasket	304+Graphite
4	调整垫 Spacer	SS304
5	对开环 Seat ring	SS304
6	轴套 Bushing	304+Nitride
7	阀杆 Stem	17-4PH
8	内六角螺钉 Hexagon screw	A193 B8
9	压环 Fixed ring	F304
10	阀座 Seat	F304+STL
11	阀座垫片 Body Sealing	304+Graphite
12	销钉 Pin	SS304
13	蝶板 disc	A351 CF8
14	内六角螺钉 Hexagon screw	A193 B8
15	压板圈 Gland	F304
16	垫片 Gasket	304+Graphite
17	密封圈 Seal ring	F304+STL
18	阀体 Body	A216 WCB
19	填料垫片 Packing gasket	SS304
20	填料 Packing	Graphite
21	填料压套 Packing Bush	A29M 1025
22	填料压板 Packing Gland	A29M 1025
23	双头螺栓 stud	ASTM A193 B7
24	弹簧垫圈 Spring gasket	A29M 5140
25	螺母 Nut	ASTM A194 2H
26	连接盘 Top mounting	A29M 1025

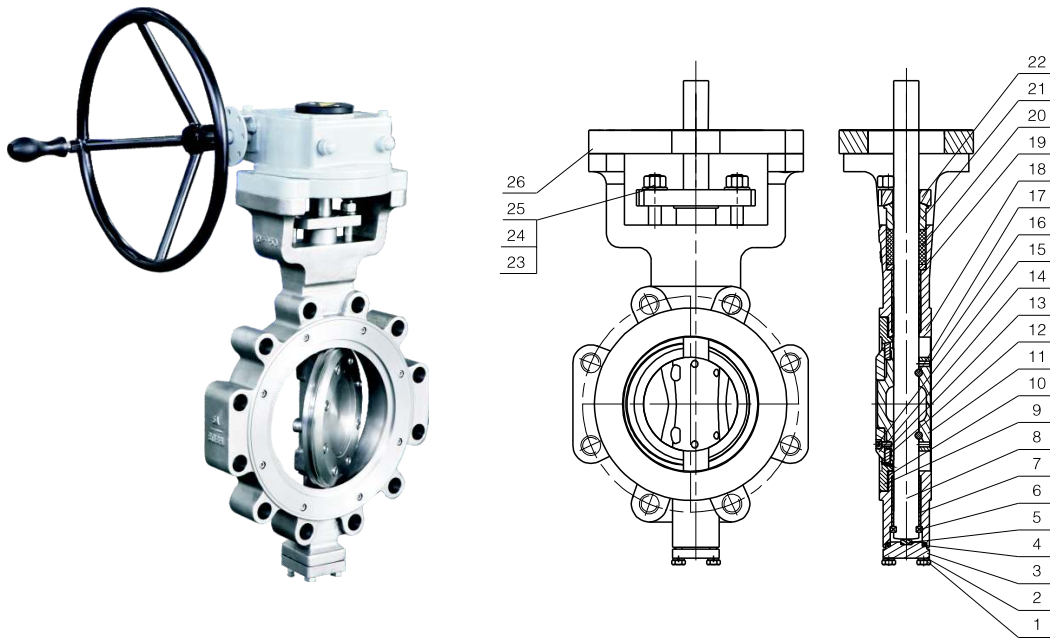
我们可以根据客户要求生产各种不同材质的阀门
We also can produce the body material of valves as per other customer's requirements with different materials.



对夹式 Wafer Type

序号	零件名称 Part Name	材料 Materials
1	内六角螺钉 Hexagon screw	A193 B7
2	弹簧垫圈 Spring gasket	A29M 5140
3	底盖 Bottom cover	A29M 1025
4	垫片 Gasket	304+Graphite
5	调整垫 Spacer	SS304
6	防飞环 Seat ring	SS304
7	轴套 Bushing	304+Nitride
8	阀杆 Stem	17-4PH
9	阀座 Seat	F304+STL
10	阀座垫片 Body Sealing	304+Graphite
11	蝶板 disc	A351 CF8
12	垫片 Gasket	304+Graphite
13	密封圈 Seal ring	F304+STL
14	压板圈 Gland	F304
15	内六角螺钉 Hexagon screw	A193 B8
16	紧定螺钉 Tighten screws	A193 B8
17	销钉 Pin	SS304
18	阀体 Body	A216 WCB
19	填料垫片 Packing gasket	SS304
20	填料 Packing	Graphite
21	填料压套 Packing Bush	A29M 1025
22	填料压板 Packing Gland	A29M 1025
23	双头螺栓 stud	ASTM A193 B7
24	弹簧垫圈 Spring gasket	A29M 5140
25	螺母 Nut	ASTM A194 2H
26	连接盘 Top mounting	A29M 1025

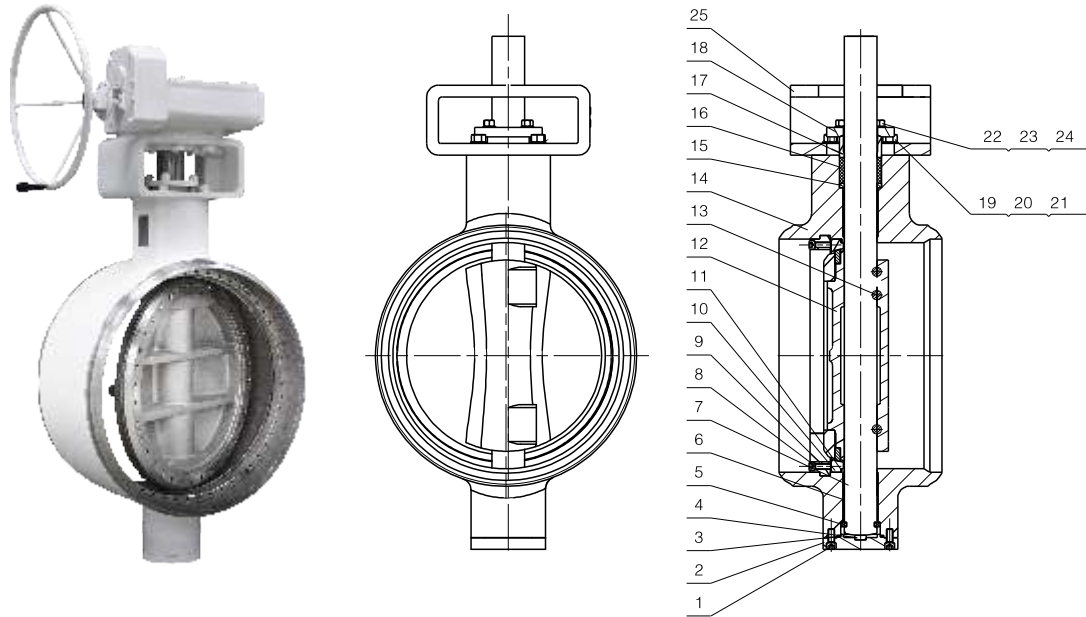
我们可以根据客户要求生产各种不同材质的阀门
We also can produce the body material of valves as per other customer's requirements with different materials.



凸耳式 Lug Type

序号	零件名称 Part Name	材料 Materials
1	外六角螺钉 Hexagon screw	A193 B7
2	弹簧垫圈 Spring gasket	A29M 5140
3	底盖 Bottom Cover	A29M 1025
4	垫片 Gasket	304+Graphite
5	调整垫 Spacer	SS304
6	防飞环 Seat ring	SS304
7	轴套 Bushing	304+Nitride
8	阀杆 Stem	17-4PH
9	阀座 Seat	F304+STL
10	阀座垫片 Body Sealing	304+Graphite
11	蝶板 disc	A351 CF8
12	垫片 Gasket	304+Graphite
13	密封圈 Seal ring	F304+STL
14	压板圈 Gland	F304
15	内六角螺钉 Hexagon screw	A193 B8
16	紧定螺钉 Tighten screws	A193 B8
17	销钉 Pin	SS304
18	阀体 Body	A216 WCB
19	填料垫片 Packing gasket	SS304
20	填料 Packing	Graphite
21	填料压套 Packing Bush	A29M 1025
22	填料压板 Packing Gland	A29M 1025
23	双头螺栓 stud	ASTM A193 B7
24	弹簧垫圈 Spring gasket	A29M 5140
25	螺母 Nut	ASTM A194 2H
26	连接盘 Top mounting	A29M 1025

我们可以根据客户要求生产各种不同材质的阀门
We also can produce the body material of valves as per other customer's requirements with different materials.

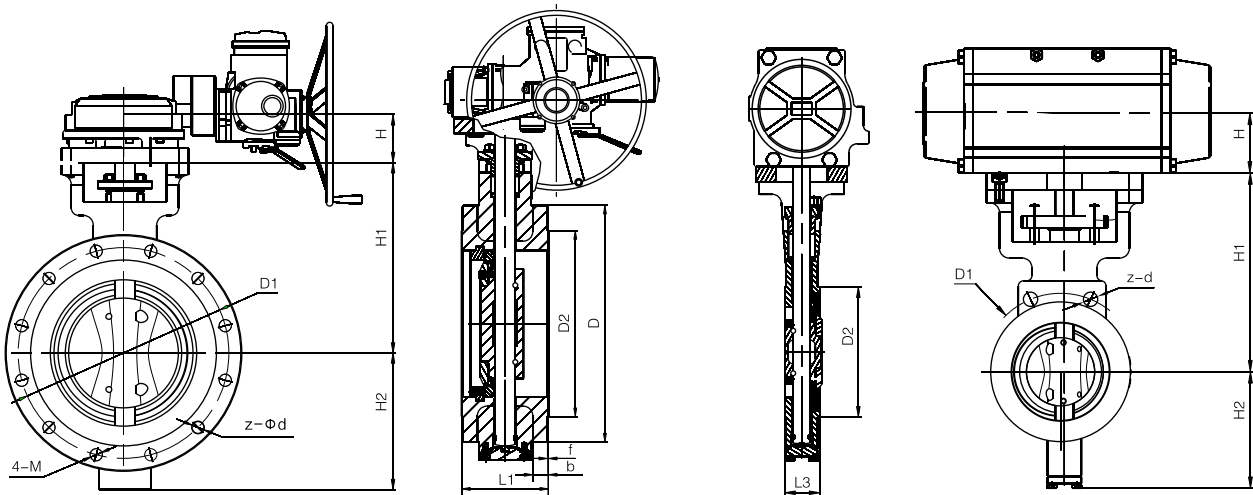


对焊式 Butt weld Type

序号	零件名称 Part Name	材料 Materials
1	内六角螺钉 Hexagon screw	A193 B7
2	底盖 Bottom cover	A29M 1025
3	垫片 Gasket	304+Graphite
4	调整垫 Spacer	SS304
5	对开环 Seat ring	SS304
6	轴套 Bushing	304+Nitride
7	阀杆 Stem	17-4PH
8	内六角螺钉 Hexagon screw	A193 B8
9	压环 Fixed ring	F304
10	阀座 Seat	F304+STL
11	阀座垫片 Body Sealing	304+Graphite
12	蝶板 disc	A351 CF8
13	压板圈 Gland	F304
14	垫片 Gasket	304+Graphite
15	密封圈 Seal ring	F304+STL
16	销钉 Pin	SS304
17	阀体 Body	A105
18	填料垫片 Packing gasket	SS304
19	填料 Packing	Graphite
20	填料压套 Packing Bush	A29M 1025
21	填料压板 Packing Gland	A29M 1025
22	双头螺栓 stud	A193 B7
23	弹簧垫圈 Spring gasket	A29M 5140
24	螺母 Nut	A194 2H
25	双头螺栓 stud	A193 B7
	弹簧垫圈 Spring gasket	A29M 5140
	螺母 Nut	A194 2H
	支架 Yoke	A216 WCB

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PN1.0MPa



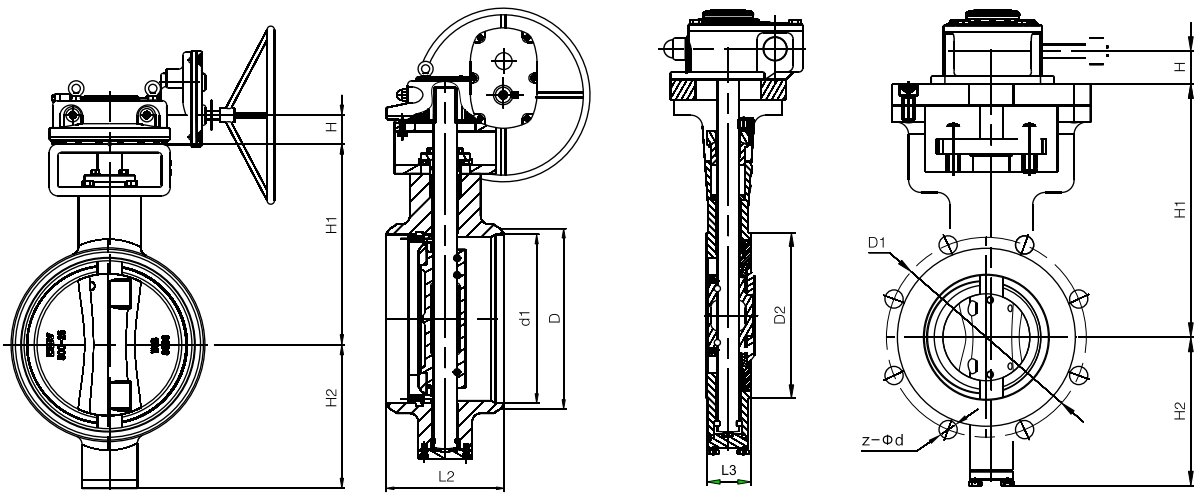
法兰式 Flange Type

对夹式 Wafer Type

主要连接尺寸 / Main connecting dimensions

公称通径 Nominal diameter	L1	L2	L3	D	D1	D2	b	f	N	Z-Φd	M	d1	H	H1	H2
DN(mm)	PN1.0(MPa)														
DN50	108	150	43	165	125	102	18	3	4	4-Φ18	16	47	30	203	99
DN80	114	180	49	200	160	138	18	3	8	4-Φ18	16	78	40	232	124
DN100	127	190	56	220	180	158	20	3	8	4-Φ18	16	96	40	255	137
DN125	140	200	64	250	210	188	20	3	8	4-Φ18	16	121	40	274	161
DN150	140	210	70	285	240	212	22	3	8	4-Φ22	20	146	50	287	174
DN200	152	230	71	340	295	268	22	3	8	4-Φ22	20	202	65	321	208
DN250	165	250	76	395	350	320	24	3	12	8-Φ22	20	245	75	350	242
DN300	178	270	83	445	400	370	26	4	12	8-Φ22	20	303	85	397	283
DN350	190	290	92	505	460	430	26	4	16	12-Φ22	20	351	85	450	323
DN400	216	310	102	565	515	482	26	4	16	12-Φ26	24	398	95	473	354
DN450	222	330	114	615	565	532	28	4	20	16-Φ26	24	450	95	524	380
DN500	229	350	127	670	620	585	28	4	20	16-Φ26	24	501	105	594	423
DN600	267	390	154	780	725	685	34	5	20	16-Φ30	27	602	110	651	486
DN700	292	430	165	895	840	800	34	5	24	20-Φ30	27	692	118	688	545
DN800	318	470	190	1015	950	905	36	5	24	20-Φ33	30	792	125	818	664
DN900	330	510	200	1115	1050	1005	38	5	28	24-Φ33	30	892	140	877	725
DN1000	410	550	216	1230	1160	1110	38	5	28	24-Φ36	33	992	160	971	784
DN1200	470	630	276	1455	1380	1330	44	5	32	28-Φ39	36	1192	180	1105	903
DN1400	530	710	390	1675	1590	1535	48	5	36	32-Φ42	39	1392	190	1206	1042
DN1600	600	790	440	1915	1820	1760	52	5	40	36-Φ48	45	1592	210	1246	1116
DN1800	670	870	490	2115	2020	1960	56	5	44	40-Φ48	45	1792	220	1320	1187
DN2000	760	950	540	2325	2230	2170	60	5	48	44-Φ48	45	1992	230	1411	1303

PN1.6MPa



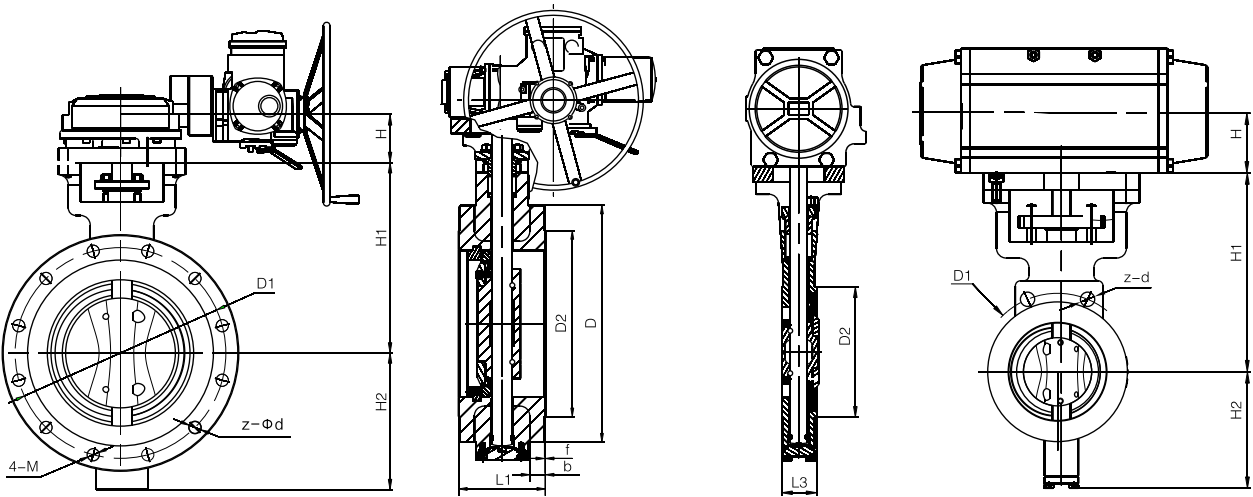
对焊式 Butt weld Type

凸耳式 Lug Type

主要连接尺寸 / Main connecting dimensions

公称通径 Nominal diameter	L1	L2	L3	D	D1	D2	b	f	N	Z-Φd	M	d1	H	H1	H2
DN(mm)	PN1.6(MPa)														
DN50	108	150	43	165	125	102	18	3	4	4-Φ18	16	47	30	213	109
DN80	114	180	49	200	160	138	20	3	8	4-Φ18	16	78	36	242	134
DN100	127	190	56	220	180	158	22	3	8	4-Φ18	16	96	42	265	147
DN125	140	200	64	250	210	188	22	3	8	4-Φ18	16	121	48	284	171
DN150	140	210	70	285	240	212	22	3	8	4-Φ22	20	146	54	297	184
DN200	152	230	71	340	295	268	24	3	12	8-Φ22	20	202	60	334	218
DN250	165	250	76	405	355	320	26	3	12	8-Φ26	24	245	66	363	256
DN300	178	270	83	460	410	378	28	4	12	8-Φ26	24	303	84	410	297
DN350	190	290	92	520	470	428	30	4	16	12-Φ26	24	351	99	463	337
DN400	216	310	102	580	525	490	32	4	16	12-Φ30	27	398	106	486	368
DN450	222	330	114	640	585	550	34	4	20	16-Φ30	27	450	118	540	393
DN500	229	350	127	715	650	610	36	4	20	16-Φ33	30	501	125	610	436
DN600	267	390	154	840	770	725	38	5	20	16-Φ36	33	602	138	6383	499
DN700	292	430	165	910	840	795	40	5	24	20-Φ36	33	692	139	706	557
DN800	318	470	190	1025	950	900	42	5	24	20-Φ39	36	792	143	836	676
DN900	330	510	200	1125	1050	1000	44	5	28	24-Φ39	36	892	152	899	737
DN1000	410	550	216	1255	1170	1115	46	5	28	24-Φ42	39	992	195	993	796
DN1200	470	630	276	1485	1390	1330	52	5	32	28-Φ48	45	1192	208	1127	915
DN1400	530	710	390	1685	1590	1530	58	5	36	32-Φ48	45	1392	210	1228	1054
DN1600	600	790	440	1930	1820	1750	64	5	40	36-Φ55	52	1592	230	1268	1128
DN1800	670	870	490	2130	2020	1950	68	5	44	40-Φ55	52	1792	240	1342	1199
DN2000	760	950	540	2345	2230	2150	70	5	48	44-Φ60	56	1992	260	1433	1315

PN2.5MPa



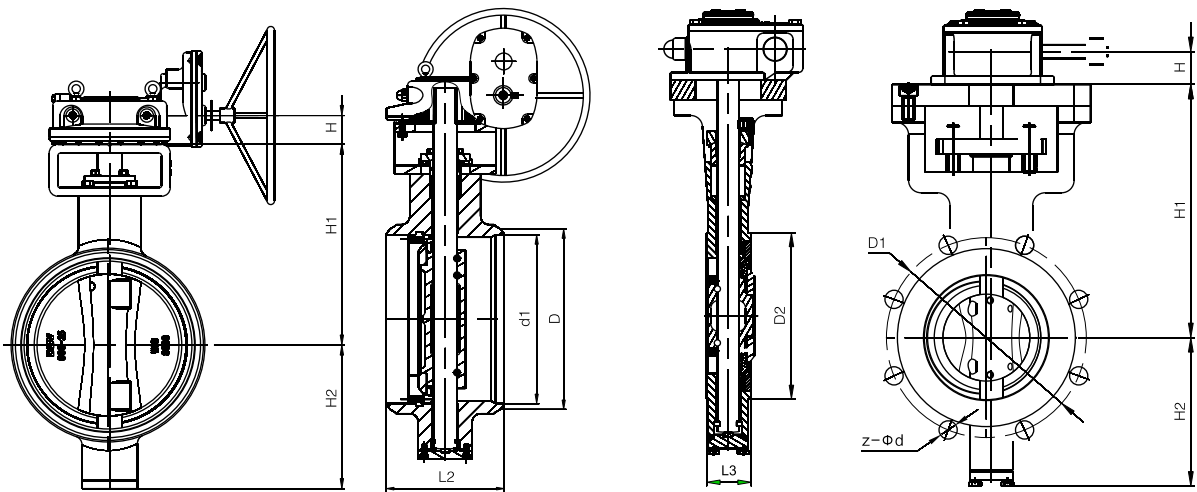
法兰式 Flange Type

对夹式 Wafer Type

主要连接尺寸 / Main connecting dimensions

公称通径 Nominal diameter	L1	L2	L3	D	D1	D2	b	f	N	Z-Φd	M	d1	H	H1	H2
DN(mm)	PN2.5(MPa)														
DN50	108	150	43	165	125	102	20	3	4	4-Φ18	16	47	25	208	104
DN80	114	180	49	200	160	138	24	3	8	4-Φ18	16	78	31	237	129
DN100	127	190	56	235	190	162	24	3	8	4-Φ22	20	96	37	260	142
DN125	140	200	64	270	220	188	26	3	8	4-Φ26	24	121	43	279	166
DN150	140	210	70	300	250	218	28	3	8	4-Φ26	24	146	49	292	179
DN200	152	230	71	360	310	278	30	3	12	8-Φ26	24	202	55	329	213
DN250	165	250	76	425	370	335	32	3	12	8-Φ30	27	245	61	358	251
DN300	178	270	83	485	430	395	34	4	16	12-Φ30	27	303	79	405	292
DN350	190	290	92	555	490	450	38	4	16	12-Φ33	30	351	94	458	332
DN400	216	310	102	620	550	505	40	4	16	12-Φ36	33	398	93	481	363
DN450	222	330	114	670	600	555	46	4	20	16-Φ36	33	450	105	534	389
DN500	229	350	127	730	660	615	48	4	20	16-Φ36	33	501	114	604	431
DN600	267	390	154	845	770	720	58	5	20	16-Φ39	36	602	127	661	494
DN700	292	430	165	960	875	820	50	5	24	20-Φ42	39	692	128	698	552
DN800	318	470	190	1085	990	930	54	5	24	20-Φ48	45	792	132	828	671
DN900	330	510	200	1185	1090	1030	58	5	28	24-Φ48	45	892	141	891	732
DN1000	410	550	216	1320	1210	1140	62	5	28	24-Φ55	52	992	184	985	791
DN1200	470	630	276	1530	1420	1350	70	5	32	28-Φ55	52	1192	194	1119	910
DN1400	530	710	390	1755	1640	1560	76	5	36	32-Φ60	56	1392	258	1203	1012
DN1600	600	790	440	1975	1860	1780	84	5	40	36-Φ60	56	1592	259	1270	1103
DN1800	670	870	490	2195	2070	1985	90	5	44	40-Φ68	64	1792	260	1424	1219
DN2000	760	950	540	2425	2300	2210	96	5	48	44-Φ68	64	1992	259	1550	1345

PN4.0MPa



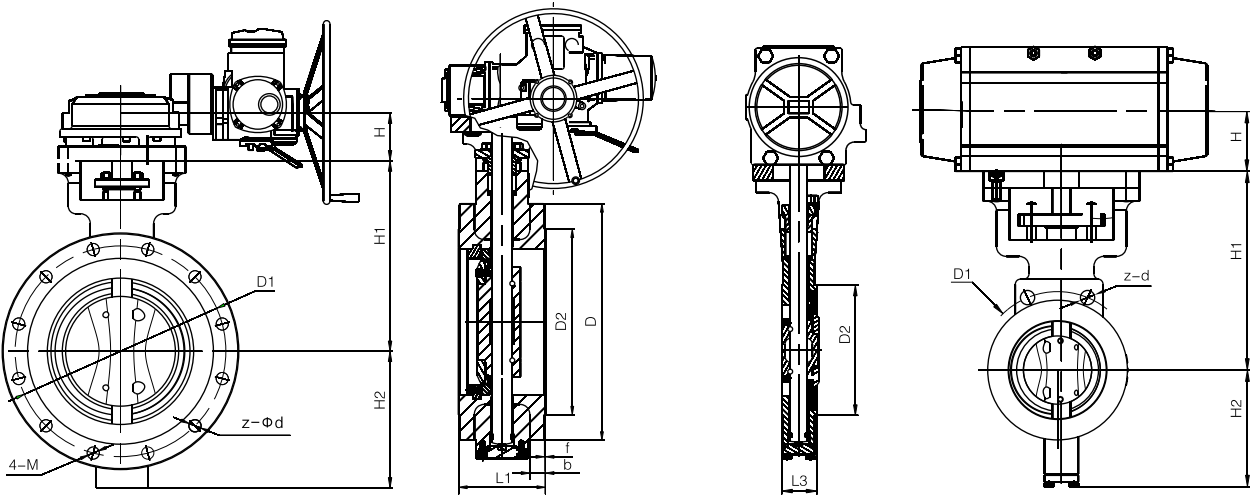
对焊式 Butt weld Type

凸耳式 Lug Type

主要连接尺寸 / Main connecting dimensions

公称通径 Nominal diameter	L1	L2	L3	D	D1	D2	b	f	N	Z-Φd	M	d1	H	H1	H2
DN(mm)	PN4.0(MPa)														
DN80	150	150	43	165	125	102	20	3	4	4-Φ18	16	47	35	150	130
DN80	180	180	49	200	160	138	24	3	8	4-Φ18	16	78	40	181	146
DN100	190	190	56	235	190	162	24	3	8	4-Φ22	20	96	41	221	167
DN125	200	200	64	270	220	188	26	3	8	4-Φ26	24	120	42	248	188
DN150	210	210	70	300	250	218	28	3	8	4-Φ26	24	145	73	289	209
DN200	230	230	71	375	320	285	34	3	12	8-Φ30	27	200	74	324	250
DN250	250	250	76	450	385	345	38	3	12	8-Φ33	30	252	90	340	291
DN300	270	270	83	515	450	410	42	4	16	12-Φ33	30	301	91	431	327
DN350	290	290	127	580	510	465	46	4	16	12-Φ36	33	351	122	522	368
DN400	310	310	140	660	585	535	50	4	16	12-Φ39	36	398	115	539	419
DN450	330	330	160	685	610	560	57	4	20	16-Φ39	36	448	116	510	430
DN500	350	350	170	755	670	615	57	4	20	16-Φ42	39	495	138	556	475
DN600	390	390	200	890	795	735	72	5	20	16-Φ48	45	595	139	655	551

PN6.4MPa



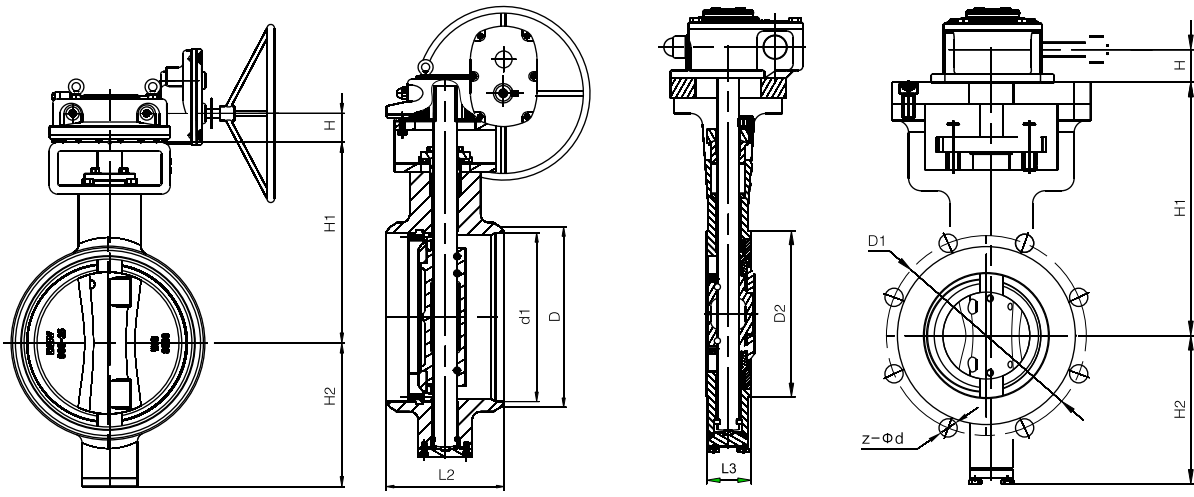
法兰式 Flange Type

对夹式 Wafer Type

主要连接尺寸 / Main connecting dimensions

公称通径 Nominal diameter	L1	L2	L3	D	D1	D2	b	f	N	Z-Φd	M	d1	H	H1	H2
DN(mm)	PN6.3(MPa)														
DN80	150	150	43	180	135	102	26	3	4	4-Φ22	20	47	41	162	142
DN80	180	180	64	215	170	138	28	3	8	4-Φ22	20	77	46	203	168
DN100	190	190	64	250	200	162	30	3	8	4-Φ26	24	94	47	243	189
DN125	200	200	70	295	240	188	34	3	8	4-Φ30	27	118	78	280	220
DN150	210	210	76	345	280	218	36	3	8	4-Φ33	30	142	76	331	251
DN200	230	230	89	415	345	285	42	3	12	8-Φ36	33	198	92	366	292
DN250	250	250	H4	470	400	345	46	3	12	8-Φ36	33	246	93	372	323
DN300	270	270	114	530	460	410	52	4	16	12-Φ36	33	294	124	458	354
DN350	290	290	127	600	525	465	56	4	16	12-Φ39	36	342	123	449	405
DN400	310	310	140	670	585	535	60	4	16	12-Φ42	39	368	143	553	433
DN500	350	350	170	800	705	615	68	4	20	16-Φ48	45	485	144	590	509
DN600	390	390	200	930	820	735	76	4	20	16-Φ56	52	585	193	689	595

PN10.0MPa



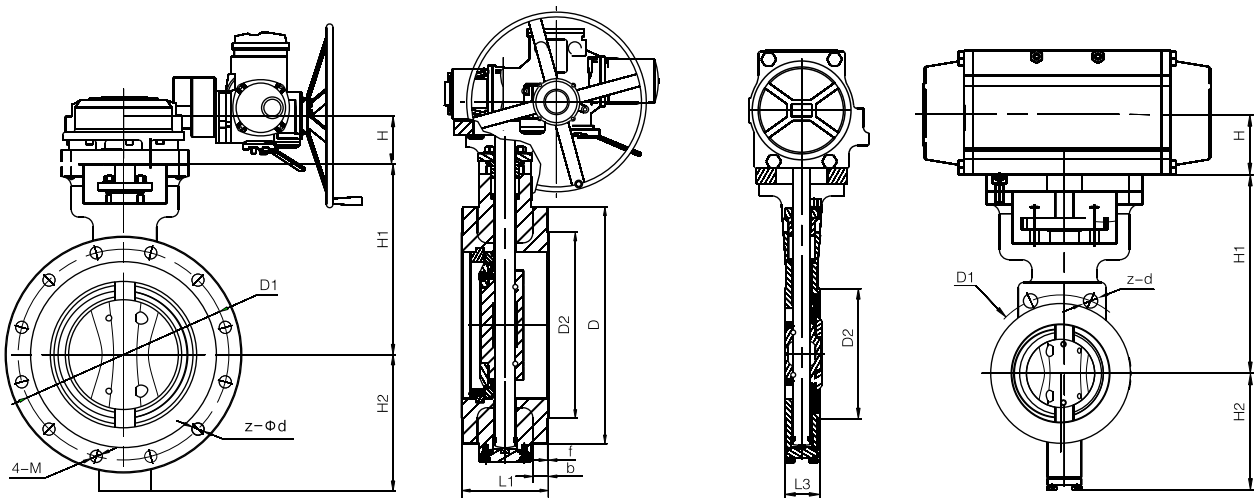
对焊式 Butt weld Type

凸耳式 Lug Type

主要连接尺寸 / Main connecting dimensions

公称通径 Nominal diameter	L1	L2	L3	D	D1	D2	b	f	N	Z-Φd	M	d1	H	H1	H2
DN(mm)	PN10.0(MPa)														
DN50	150	150	43	195	145	102	28	3	4	4-Φ26	24	47	48	193	138
DN80	180	180	64	230	180	138	32	3	8	4-Φ26	24	75	43	184	149
DN100	190	190	64	265	210	162	36	3	8	4-Φ30	27	92	44	214	160
DN125	200	200	70	315	250	188	40	3	8	4-Φ33	30	112	45	236	176
DN150	210	210	76	355	290	218	44	3	12	8-Φ33	30	136	46	277	197
DN200	230	230	89	430	360	285	52	3	12	8-Φ36	33	190	77	302	228
DN250	250	250	114	505	430	345	60	3	12	8-Φ39	36	236	70	318	259
DN300	270	270	114	585	500	410	68	4	16	12-Φ42	39	284	86	354	285
DN350	290	290	127	655	560	465	74	4	16	12-Φ48	45	332	88	395	315
DN400	310	310	140	715	620	535	82	4	16	12-Φ48	45	376	89	486	351
DN500	350	350	170	870	780	615	94	4	20	16-Φ56	52	475	120	523	407
DN600	390	390	200	990	875	735	102	4	20	16-Φ62	56	575	121	612	463

Class 150Lb



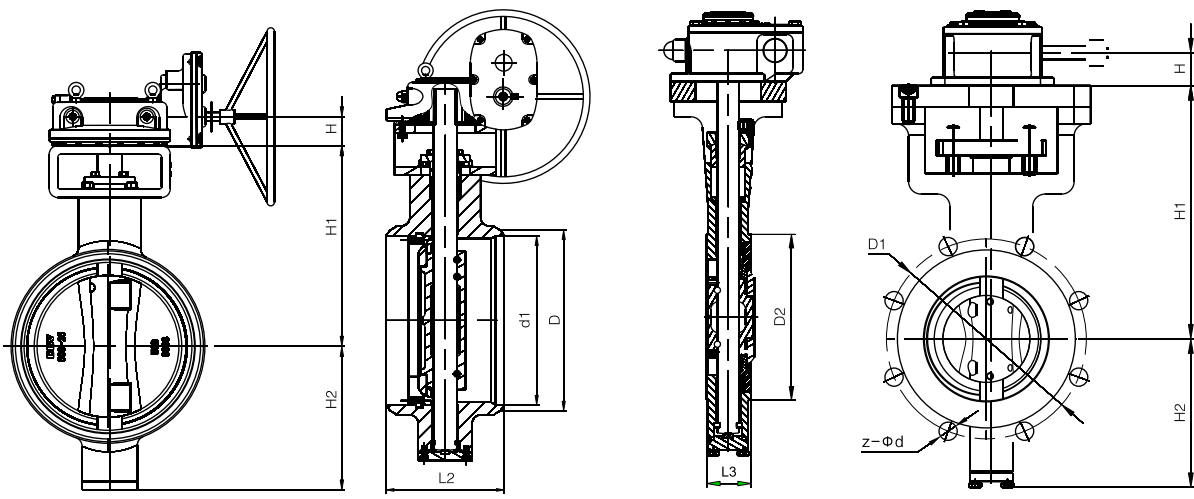
法兰式 Flange Type

对夹式 Wafer Type

主要连接尺寸 / Main connecting dimensions

公称通径 Nominal diameter		L1	L2	L3	D	D1	D2	b	f	N	Z-Φd	M	d1	H	H1	H2
in	mm	150LB														
2"	DN50	108	150	43	150	120.7	92.1	17.5	2	4	4-Φ19	5/8	52.5	206	104	25
3"	DN80	114	180	48	190	152.4	127	22.3	2	4	4-Φ19	5/8	77.9	235	129	31
4"	DN100	127	190	54	230	190.5	157.2	22.3	2	8	4-Φ19	5/8	102.3	258	142	37
5"	DN125	140	200	56	255	215.9	185.7	22.3	2	8	4-Φ22	3/4	128.2	277	166	43
6"	DN150	140	210	57	280	241.3	215.9	23.9	2	8	4-Φ22	3/4	154.1	290	179	49
8"	DN200	152	230	64	345	298.5	269.9	27	2	8	4-Φ22	3/4	202.7	327	213	55
10"	DN250	165	250	71	405	362	323.8	28.6	2	12	8-Φ26	7/8	254.5	356	251	61
12"	DN300	178	270	81	485	431.8	381	30.2	2	12	8-Φ26	7/8	304.8	403	292	79
14"	DN350	190	290	92	535	476	412.8	33.4	2	12	8-Φ29	1	336.6	454	332	94
16"	DN400	216	310	102	595	539.8	469.9	35	2	16	12-Φ29	1	387.4	477	363	92
18"	DN450	222	330	114	635	577.9	533.4	38.1	2	16	12-Φ32	1-1/8	434.9	531	384	104
20"	DN500	229	350	127	700	63	584.2	41.3	2	20	16-Φ32	1-1/8	482.6	601	427	112
24"	DN600	267	390	154	815	749.3	692.2	46.1	2	20	16-Φ35	1-1/4	581.1	658	490	125
28"	DN700	292	430	229	835	795.3	762	43	2	40	36-Φ22	3/4	672.7	695	548	126
32"	DN800	318	470	241	940	900.1	864	44.6	2	48	44-Φ22	3/4	770.7	825	667	130
36"	DN900	330	510	241	1055	1009.6	972	50.9	2	44	40-Φ26	7/8	869.3	888	728	139
40"	DN1000	410	550	300	1175	1120.8	1080	54.1	2	44	40-Φ30	1	967.3	982	787	182
48"	Dn1200	470	630	360	1390	1335.1	1289	63.6	2	44	40-Φ33	1-1/8	1164	1116	906	195

Class 300Lb



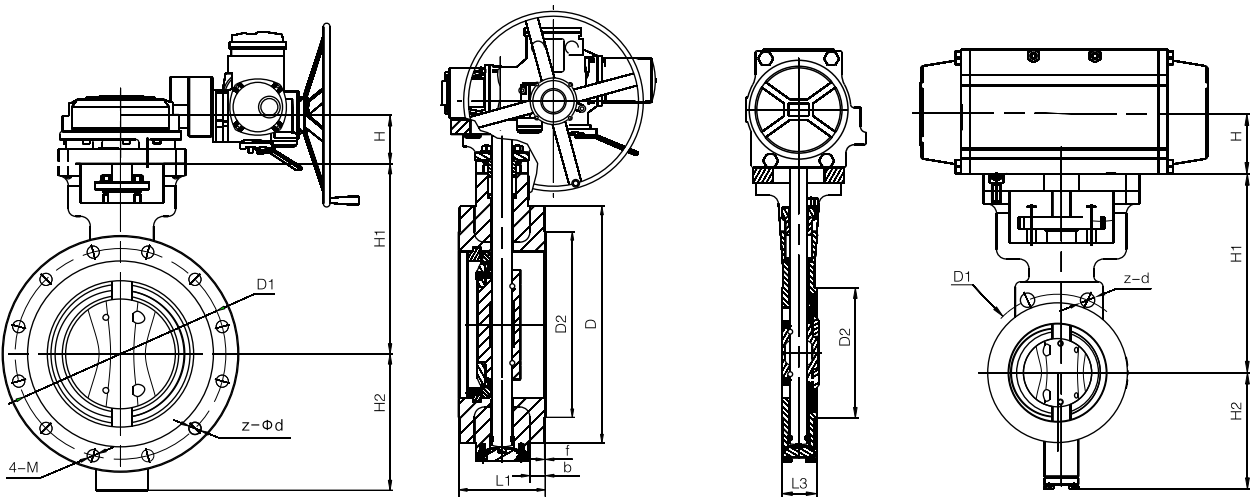
对焊式 Butt weld Type

凸耳式 Lug Type

主要连接尺寸 / Main connecting dimensions

公称通径 Nominal diameter		L1	L2	L3	D	D1	D2	b	f	N	Z-Φd	M	d1	H	H1	H2
in	mm	300LB														
2"	DN50	150	150	43	165	127	92.1	20.7	2	8	4-Φ19	5/8	52.5	147	130	27
3"	DN80	180	180	48	210	168.3	127	27	2	8	4-Φ22	3/4	77.9	172	156	30
4"	DN100	190	190	54	255	200	157.2	30.2	2	8	4-Φ22	3/4	102.3	208	177	29
5"	DN125	200	200	56	280	235	185.7	33.4	2	8	4-Φ22	3/4	128.2	282	215	58
6"	DN150	210	210	59	320	269.9	215.9	35	2	12	8-Φ22	3/4	154.1	283	216	57
8"	DN200	230	230	73	380	330.2	269.9	39.7	2	12	8-Φ26	7/8	202.7	300	252	71
10"	DN250	250	250	83	445	387.4	323.8	46.1	2	16	12-Φ29	1	254.5	341	293	70
12"	DN300	270	270	92	520	450.8	381	49.3	2	16	12-Φ32	1-1/8	304.8	404	332	69
14"	DN350	290	290	117	585	514.4	412.8	52.4	2	20	16-Φ32	1-1/8	336.6	426	363	68
16"	DN400	310	310	133	650	571.5	469.9	55.6	2	20	16-Φ35	1-1/4	387.4	482	399	97
18"	DN450	330	330	149	710	628.6	533.4	58.8	2	24	20-Φ35	1-1/4	434.9	546	430	99
20"	DN500	350	350	159	775	685.8	584.2	62	2	24	20-Φ35	1-1/4	482.6	580	466	118
24"	DN600	390	390	181	915	812.8	692.2	68.3	2	24	20-Φ42	1-1/2	581.1	650	547	117
28"	DN700	430	430	229	920	857.2	787	87.4	2	36	32-Φ36	1-1/4	672.7	815	608	186
32"	DN800	470	470	241	1055	977.9	902	101.6	2	32	28-Φ42	1-1/2	770.7	876	740	185
36"	DN900	510	510	241	1170	1089	1010	101.6	2	32	28-Φ45	1-5/8	869.3	957	801	184
40"	DN1000	550	550	300	1275	1190.6	1114	114.3	2	40	36-Φ45	1-5/8	967.3	928	772	183
48"	Dn1200	630	630	360	1510	1416	1327	127	2	40	36-Φ51	1-7/8	1164	1019	873	232

Class 600Lb



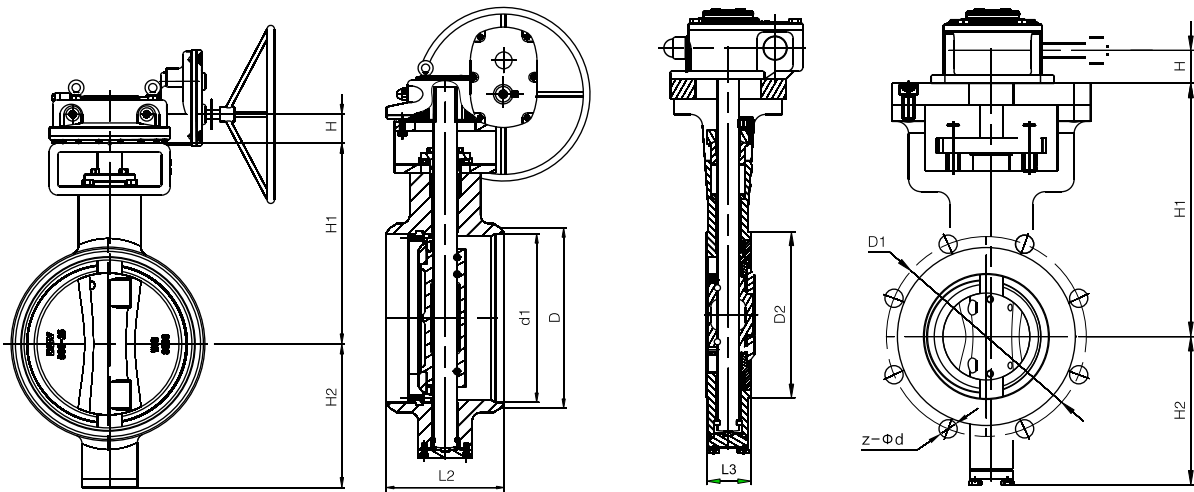
法兰式 Flange Type

对夹式 Wafer Type

主要连接尺寸 / Main connecting dimensions

公称通径 Nominal diameter		L1	L2	L3	D	D1	D2	b	f	N	Z-φd	M	d1	H	H1	H2
in	mm	600LB														
2"	DN50	150	150	43	165	127	92.1	25.4	7	8	4-Φ19	5/8	52.5	185	1137	43
3"	DN80	180	180	54	210	168.3	127	31.8	7	8	4-Φ22	3/4	77.9	213	158	48
4"	DN100	190	190	64	275	215.9	157.2	38.1	7	8	4-Φ26	7/8	102.3	220	194	49
5"	DN125	200	200	70	330	266.7	185.7	44.5	7	8	4-Φ29	1	128.2	250	223	83
6"	DN150	210	210	78	355	292.1	215.9	47.7	7	12	8-Φ29	1	154.1	318	239	87
8"	DN200	230	230	102	420	349.2	269.9	55.6	7	12	8-Φ32	1-1/8	198.5	332	280	88
10"	DN250	250	250	117	510	431.8	323.8	63.5	7	16	12-Φ35	1-1/4	247.7	394	326	89
12"	DN300	270	270	140	560	489	381	66.7	7	20	16Φ35	1-1/4	295.3	459	357	120
14"	DN350	290	290	155	605	527	412.8	69.9	7	20	16-Φ39	1-3/8	325.4	470	381	121
16"	DN400	310	310	178	685	603.2	469.9	76.2	7	20	16-Φ42	1-1/2	363.5	575	427	142
18"	DN450	330	330	200	745	654	533.4	82.6	7	20	16-Φ45	1-5/8	409.5	625	468	143
20"	DN500	350	350	216	815	723.9	584.2	88.9	7	24	20-Φ45	1-5/8	455.6	661	504	140
24"	Dn600	390	390	232	940	838.2	692.2	101.6	7	24	20-Φ52	1-7/8	547.7	747	569	190

Class 900~1500Lb



对焊式 Butt weld Type

凸耳式 Lug Type

主要连接尺寸 / Main connecting dimensions

公称通径 Nominal diameter		L1	L2	L3	D	D1	D2	b	f	N	Z-φd	M	d1	H	H1	H2
in	mm	900LB														
4"	DN100	235	235	80	290	235	157.2	44.5	7	8	4-Φ32	1-1/8	77.9	255	197	82
6"	DN150	250	250	104	380	317.5	215.9	55.6	7	12	8-Φ32	1-1/8	102.3	331	255	98
8"	DN200	310	310	112	470	393.7	269.9	63.5	7	12	8-Φ39	1-3/8	128.2	377	299	99
10"	DN250	350	350	135	545	469.9	323.8	69.9	7	16	12-Φ39	1-3/8	154.1	430	377	130
12"	DN300	380	380	170	610	533.4	381	79.4	7	20	16-Φ39	1-3/8	198.5	492	401	129
14"	DN350	400	400	173	640	558.8	412.8	85.8	7	20	16-Φ42	1-1/2	247.7	530	438	149
16"	DN400	430	430	210	705	616	469.9	88.9	7	20	16-Φ50	1-5/8	295.3	629	475	151
18"	DN450	460	460	228	785	685.8	533.4	101.6	7	20	16-Φ52	1-7/8	325.4	680	524	201
20"	DN500	490	490	250	855	749.3	584.2	108	7	20	16-Φ54	2	363.5	701	572	202
24"	Dn600	530	530	275	1040	901.7	692.2	139.7	7	20	16-Φ67	2-1/2	409.5	800	705	210

公称通径 Nominal diameter		L1	L2	L3	D	D1	D2	b	f	N	Z-φd	M	d1	H	H1	H2
in	mm	1500LB														
6"	DN150	290	290	160	395	317.5	215.9	82.6	7	12	8-Φ39	1-3/8	102.3	367	271	127
8"	DN200	330	330	180	485	393.7	269.9	92.1	7	12	8-Φ45	1-5/8	128.2	426	322	128
10"	DN250	390	390	200	585	482.6	323.8	108	7	12	8-Φ52	1-7/8	154.1	532	387	149
12"	DN300	430	430	230	675	571.5	381	123.9	7	16	12-Φ54	2	198.5	568	431	150
14"	DN350	470	470	250	750	635	412.8	133.4	7	16	12-Φ61	2-1/4	247.7	634	511	193
16"	DN400	510	510	265	825	704.8	469.9	146.1	7	16	12-Φ67	2-1/2	295.3	680	548	215
18"	DN450	550	550	300	915	774.7	533.4	162	7	16	12-Φ74	2-3/4	325.4	776	611	216
20"	DN500	630	630	340	985	831.8	584.2	177.8	7	16	12-Φ80	3	363.5	830	687	219
24"	DN600	710	710	400	1170	990.6	692.2	203.2	7	16	12-Φ94	3-1/2	409.5	980	790	240

CV值 CV Values

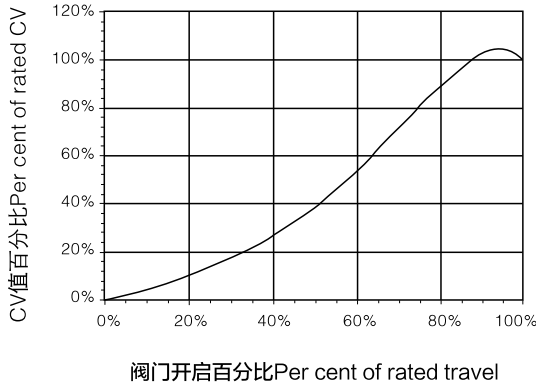
150Lb

Valve size		5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°
mm	inch																		
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	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	21100	23900	25900	27200	27200
750	30	630	1200	1720	2270	2940	3880	5160	6870	8960	11400	14200	17200	20400	23700	28900	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	4120	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

Valve size		5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°
mm	inch																		
80	3	1	6	14	23	31	39	47	54	62	71	82	96	112	125	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	310	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	3200	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

CV曲线图表 CV curve



三偏心硬密封蝶阀 Triple Offset Metal-seated Butterfly Valve

阀门口径 Valve Size		Class 150lb		Class 300lb		Class 600lb	
mm	inch	Cv	Kv	Cv	Kv	Cv	Kv
80	3"	165	143	165	143	150	130
100	4"	290	251	290	251	250	216
150	6"	790	684	725	628	600	519
200	8"	1460	1264	1330	1152	1080	935
250	10"	2200	1905	2110	1827	1700	1472
300	12"	3780	3273	3500	3030	2520	2182
350	14"	5140	4450	4620	4000	4068	3522
400	16"	6940	6009	6280	5437	5380	4658
450	18"	9500	8225	8590	7437	7470	6468
500	20"	13000	11255	11500	9957	9820	8502
600	24"	18800	16277	16180	14009	14940	12935
700	28"	27200	23550	23400	20260		
750	30"	30700	26580	29000	25108		
800	32"	35000	30303	32600	28225		
900	36"	43000	37229	41500	25931		
1000	40"	56900	49264	49900	43203		
1050	42"	61700	53419	57100	49437		
1200	48"	81000	70130	74000	64069		

三偏心蝶阀扭矩值 Triple Offset Butterfly Valve Torques(NM)

公称尺寸		公称压力PN/MPa						CL		
		0.6	1.0	1.6	2.5	4.0	6.4	150	300	600
DN/mm	NPS/in	力矩/N.m								
50	2	22	26	33	53	75	114	35	83	165
65	2 1/2	26	31	54	73	95	127	60	115	191
80	3	30	51	73	90	135	260	155	251	415
100	4	55	92	125	165	245	470	225	355	750
125	5	93	148	205	260	370	570	270	500	880
150	6	160	225	410	500	710	950	425	785	2700
200	8	180	360	540	720	1080	1400	604	1350	3330
250	10	317	466	850	1125	1675	2425	885	1700	5085
300	12	571	895	1220	2530	2185	2835	1820	2250	10650
350	14	737	1460	2010	2550	3650	4350	2265	3745	12700
400	16	945	1750	2550	3365	4975	5825	2700	5330	15350
450	18	1305	2205	3100	3970	5800	12100	3615	6685	18945
500	20	1840	2956	4075	5190	7425	15250	4700	8800	23895
600	24	2500	4995	5415	8545	12000	22120	5100	15100	34550
700	28	2772	5697	6200	12700	20450	24500	8585	23750	39750
750	30	2900	6050	6930	14895	23825	27500	10750	28150	43750
800	32	3520	6576	7880	17865	28500	30500	12300	33745	48950
900	36	4747	7626	8775	23795	32550	34500	15350	44950	56350
1000	40	6225	10545	12200	31995	39000	39500	20570	60500	67595
1050	42	7320	17725	14640	36000	46500	49500	24185	68150	81150
1200	48	11285	18505	21000	44000	55700	65000	30735	78400	101500
1300	52	16470	19625	26950	49000			33850	90150	116050
1400	56	22815	23930	31410	55000			38500	103500	
1500	60	23795	32540	39050	65000			42000	111500	
1600	64	36765	39000	43700	76500			46500	133000	

材质表 Materials List

Astm Standard	Chemical compostions (%)						
	C max	Mn max	P max	S max	Si max	Cr	Mo
A216 WCB	0.30	1.00	0.040	0.045	0.60	≤0.50	≤0.20
A216 WCC	0.25	1.20	0.040	0.045	0.60	≤0.50	≤0.20
A352 LC3	0.15	0.50–0.80	0.040	0.045	0.60	/	/
A217 WC6	0.05–0.20	0.50–0.80	0.040	0.045	0.60	1.00–1.50	0.45–0.65
A217 WC9	0.05–0.18	0.40–0.70	0.040	0.045	0.60	2.00–2.75	0.9–1.20
A217 C5	0.20	0.40–0.70	0.040	0.045	0.75	4.00–6.50	0.45–0.65
A361 CF3	0.03	1.50	0.040	0.040	2.00	17.0–21.0	≤0.50
A361 CF3M	0.03	1.50	0.040	0.040	1.50	17.0–21.0	2.0–3.0
A351 CF8	0.08	1.50	0.040	0.040	2.00	18.0–21.0	≤0.50
A351 CF8M	0.08	1.50	0.040	0.040	1.50	18.0–21.0	2.0–3.0
A351 CF8C	0.08	1.50	0.040	0.040	2.00	18.0–21.0	≤0.50
A351 CN7M	0.07	1.50	0.040	0.040	1.50	19.0–22.0	2.0–3.0
A105	0.35	0.60–1.50	0.035	0.040	0.10–0.35	≤0.30	≤0.12
A182 F6A	0.15	1.00	0.040	0.030	1.00	11.5–13.5	/
A182 F304	0.08	2.00	0.045	0.030	1.00	18.0–20.0	/
A182 F304L	0.03	2.00	0.045	0.030	1.00	18.0–20.0	/
A182 F316	0.08	2.00	0.045	0.030	1.00	16.0–18.0	2.0–3.0
A182 F316L	0.03	2.00	0.045	0.030	1.00	16.0–18.0	2.0–3.0
A182 F321	0.08	2.00	0.045	0.030	1.00	17.00–19.00	/
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
A182 F22	0.05–0.15	0.30–0.60	0.040	0.040	0.50	2.0–2.5	0.87–1.13
A182 F5	0.15	0.30–0.60	0.030	0.030	0.50	4.0–6.0	0.44–0.65
A350 LF2	0.3	0.60–1.35	0.035	0.040	0.15–0.30	≤0.30	≤0.12
A276 410	0.08–0.15	1.00	0.040	0.030	1.00	11.5–13.5	/
A276 420	0.15	1.00	0.040	0.030	1.00	12.0–14.0	/
A276 321	0.08	2.00	0.045	0.030	1.00	17.0–19.0	/
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
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
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
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
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
A193 B8	0.08	2.00	0.045	0.030	1.00	18.0–20.0	/
A193 B8M	0.08	2.00	0.045	0.030	1.00	16.0–18.0	2.00–3.00
A194 2H	≥0.40	1.00	0.040	0.050	0.40	/	/
A194 7	0.38–0.48	0.75–1.00	0.035	0.040	0.15–0.35	0.80–1.10	0.15–0.25
A194 8	0.08	2.00	0.045	0.030	1.00	18.0–20.0	/
A194 8M	0.08	2.00	0.045	0.030	1.00	16.0–18.0	2.00–3.00

材质表 Materials List

Chemical compostions (%)			Mechanical Properties				Hardness Brinell min
Ni	Cu max	V max	Tensile [MPa]min	Yield [MPa]min	Elongation [%]min	Reduction [%]min	
≤0.50	0.30	0.03	485–655	250	22	35	187
≤0.50	0.30	0.03	485–655	275	22	35	/
3.00–4.00	/	/	485–655	275	24	35	/
0.50	0.50	/	485–655	275	20	35	/
0.50	0.50	/	485–655	275	20	35	/
0.50	0.50	/	620–795	415	18	35	/
8.0–12.0	/	/	485	205	35	/	/
9.0–13.0	/	/	485	205	30	/	/
8.0–11.0	/	/	485	205	35	/	/
9.0–12.0	/	/	485	205	30	/	/
9.0–12.0	/	/	485	205	30	/	/
27.5–30.5	3.0–4.0	/	425	107	35	/	/
≤0.40	0.40	0.08	485	250	22	30	187
≤0.50	/	/	485	275	18	35	143–207
8.0–11.0	/	/	515	205	30	50	/
8.0–13.0	/	/	485	170	30	50	/
10.0–14.0	/	/	515	205	30	50	/
10.0–15.0	/	/	485	170	30	50	/
9.0–12.0	/	/	515	205	30	50	/
/	/	/	485	275	20	30	143–207
/	/	/	415	205	20	30	170
≤0.50	/	/	485	275	20	35	143–217
≤0.40	0.40	0.08	485–655	250	22	30	/
/	/	/	480	275	16	50	/
/	/	/	/	/	/	/	241
9.0–12.0	/	/	515	205	30	40	/
/	/	/	860	725	16	50	/
/	/	/	100	80	16	50	235
/	/	/	860	720	16	50	321
/	/	/	690	550	18	50	235
0.25–0.35			860	725	18	50	321
8.00–11.00	/	/	515	205	30	50	223
10.0–14.0	/	/	515	205	30	50	223
/	/	/	/	/	/	/	248–352
/	/	/	/	/	/	/	248–352
8.0–11.0	/	/	/	/	/	/	126–300
10.0–14.0	/	/	/	/	/	/	126–300