六偏心原理结构

六偏心原理与形状

六偏心全金属硬碰硬蝶阀具有双向无气泡紧密关闭性能，这种几何形状保证阀瓣密封只是在关闭位置时才与阀座接触，因此不会产生摩擦或磨损，密封时会产生一种扭矩使得密封具有足够的“焊接”性能，确保密封接触的均匀一致性。

六偏心：

偏心1：轴向偏心 阀轴中心线与密封面中心线偏离，确保阀座与阀板之间的密封。

偏心2：径向偏心 阀轴旋转中心与阀体中心线偏离，阀门开启时，使阀板密封面迅速脱离阀座密封面。

偏心3：角度偏心 采用斜角胎具对正圆阀座(阀体)进行第三次偏心角度，加工成不规则椭圆形椎体密封面，可以形成瞬间脱离密封面(“零”摩擦)。

偏心4：位置偏心 利用偏心夹角及位置偏移补偿第三次偏心椭圆椎体密封截面，从而形成一个正圆密封截面。

偏心5：异型球面相切偏心 将蝶板密封设计成偏心异型球面。将密封环异型弧面与阀座斜面相切，保证阀门的“零”泄漏。在第二次偏心结构的作用下使阀门越关越紧从而也可以实现正向自密封反向扭矩密封。

偏心6：阀轴向阀体一侧偏移偏心 阀轴中心线偏移阀体中心线形成第六偏心，提高阀座流量CV值，从而减小压力损失。依靠管道法兰压紧阀座，保证阀门在高温高压环境下不会产生泄漏，主要应用于超高压、高温恶劣严苛等工况使用。

执行标准

- 设计按 JB/T8527 的规定
- 法兰按 GB/T9113.1的规定
- 结构长度按 API609的规定
- 结构长度按 GB/T12221的规定
- 压力试验按 GT/T13927、JB/T9092的规定
- 压力试验按 API598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
- (如需其他标准可另技术确定)

Enforce Standards

- Design according to JB/T8527
- Flange according to GB/T9113.1
- Structure length in accordance with API609
- The length of the structure shall be GB/T12221
- Pressure test according to GT/T13927, JB/T9092 regulations
- Pressure test in accordance with API598
- Design according to ANSI B16.34
- Flanges according to ANSI B16.5 or MSS SP-44
- (Other standards can be determined separately if needed)



D 3 S6 9 46

SIX ECCENTRIC PRINCIPLE STRUCTURE

Six Eccentric Principles and Shapes

The six-eccentric all-metal butterfly valve has a bi-directional, bubble-free tight closure. This geometry ensures that the disc seal is only in contact with the seat in the closed position, so there is no friction or wear. When sealed, a torque is created to give the seal sufficient "weld" performance to ensure uniform sealing contact.

SIX ECCENTRIC

ECCENTRICITY 1: Axial eccentricity The center line of the valve shaft deviates from the center line of the sealing surface to ensure the seal between the seat and the valve plate.

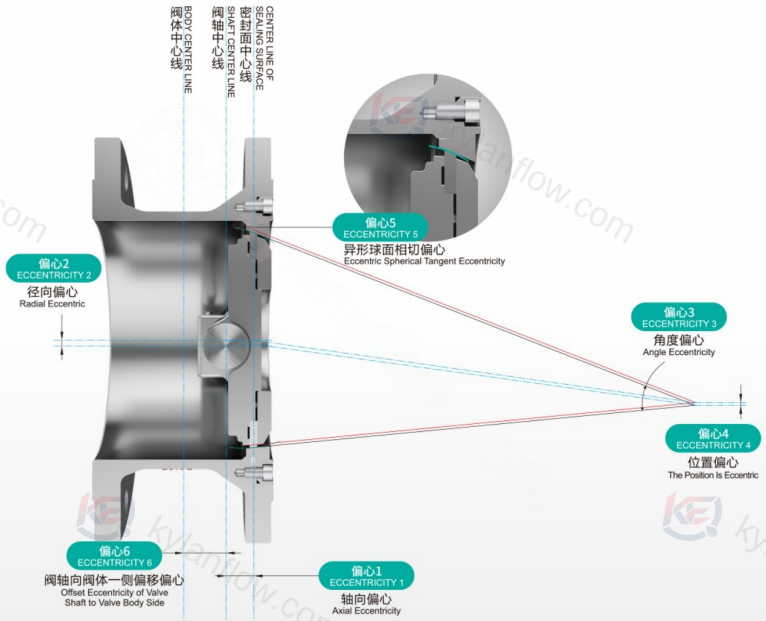
ECCENTRICITY 2: Radial eccentric The rotating center of the valve shaft deviates from the center line of the valve body, and the sealing surface of the valve plate is quickly removed from the sealing surface of the valve seat when the valve is opened.

ECCENTRICITY 3: Angle eccentricity The third eccentric Angle of the positive round valve seat (valve body) is processed into an irregular oval body sealing surface, which can form an instant release from the sealing surface (" zero "friction).

ECCENTRICITY 4: The position is eccentric The eccentric Angle and position offset are used to compensate the sealing section of the third eccentric elliptic body, so as to form a circular sealing section.

ECCENTRICITY 5: Eccentric spherical tangent eccentricity The disc seal is designed to be eccentric shaped spherical surface. The sealing ring curved surface is tangent to the bevel of the seat to ensure "zero" leakage of the wide door. Under the action of the second eccentric structure, the valve becomes tighter and tighter, so that the forward self-sealing reverse torque seal can also be realized.

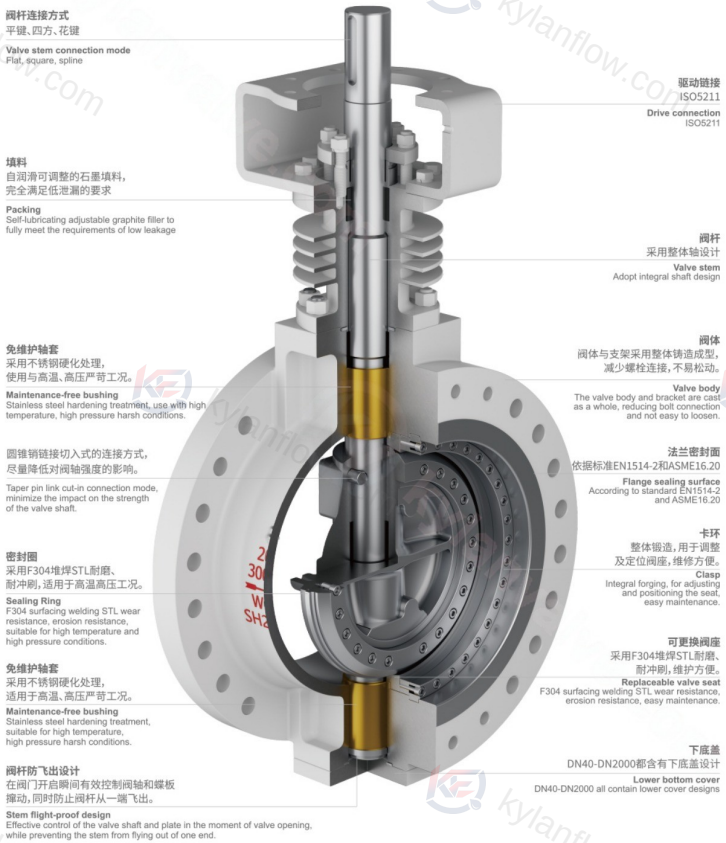
ECCENTRICITY 6: Offset eccentricity of valve shaft to valve body side The center line of the valve shaft is offset by the center line of the valve body to form a sixth eccentricity, which increases the valve seat flow CV value and reduces pressure loss. Relying on the pipe flange to press the valve seat to ensure that the valve will not leak in high temperature and high pressure environment, mainly used in ultra-high pressure, high temperature harsh harsh conditions.



全金属高温蝶阀

ALL METAL HIGH-TEMPERATURE
BUTTERFLY VALVE

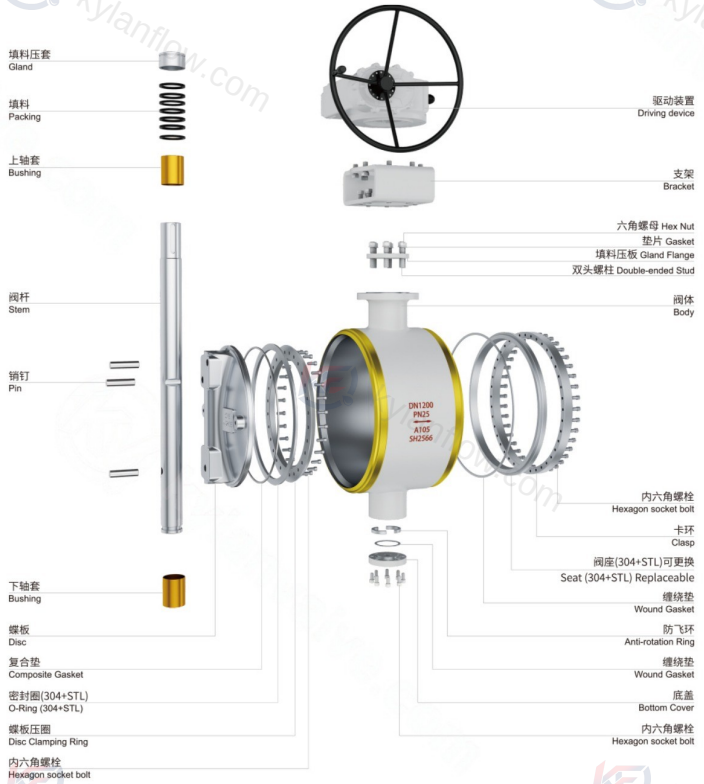
结构特点 Structural Characteristics



全金属硬碰硬焊接蝶阀

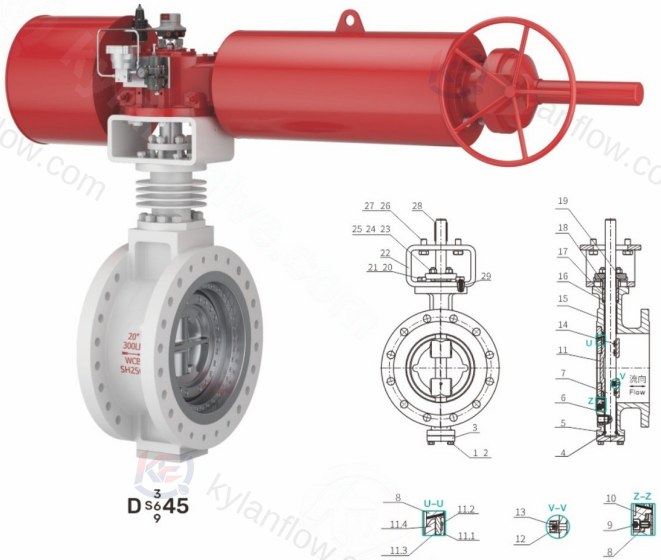
ALL-METAL METAL TO METAL
WELDING BUTTERFLY VALVE

主要零部件分解图 Breakdown of Main Parts



全金属硬碰硬法兰蝶阀

ALL METAL METAL TO METAL FLANGE BUTTERFLY VALVE



法兰式 Flange Type

No.	名称 Part Name	材料 Material	No.	名称 Part Name	材料 Material
1	外六角螺栓 Hex Bolt	8.8级	13	紧定螺钉 Set screw	A2-70
2	弹簧垫 Spring Washer	65Mn	14	圆柱销 Pin	SS304
3	底盖 Bottom Cover	SS304	15	阀体 Body	ASTM A216WCB
4	缠绕垫 Wound Gasket	SS304+石墨 Graphite	16	填料垫片 Gasket	SS304
5	防飞环 Anti-rotation Ring	SS304	17	填料 Packing	柔性石墨 Flexible graphite
6	轴套 Bushing	SS304+氮化 Nitriding	18	填料压套 Gland	SS304
7	阀杆 Stem	17-4PH XM-19	19	填料压板 Gland Flange	ASTM A182 F304
8	阀座 Seat	ASTM F304+STL	20	外六角螺栓 Hex Bolt	8.8级
9	内六角圆柱头螺钉 Hexagon socket bolt	A2-70	21	弹垫 Spring Washer	65Mn
10	缠绕垫 Wound Gasket	SS304+石墨 Graphite	22	支架 Bracket	WCB
11	蝶板装配 Disc Assembly	组合件 Assembly	23	双头螺柱 Double-ended Stud	ASTM A193 B7
11.1	蝶板 Disc	ASTM CF8	24	垫片 Washer	300HV
11.2	复合垫 Composite Gasket	SS304+石墨 Graphite	25	六角螺母 Hex Nut	ASTM A194 2H
11.3	密封圈 O-Ring	ASTM F304+STL	26	外六角螺栓 Hex Bolt	8.8级
11.4	蝶板压圈 Disc Clamping Ring	ASTM F304	27	弹垫 Spring Washer	65Mn
11.5	内六角圆柱头螺钉 Socket Head Cap Screw	A2-70	28	平键 Flat Key	45#
12	定位块 Locating block	SS304	29	内螺纹圆柱销 Pin	SS304

我们可以根据客户要求生产不同材质阀门 We can produce different materials of valves according to customer requirements

全金属硬碰硬焊接蝶阀

ALL-METAL METAL TO METAL WELDING BUTTERFLY VALVE



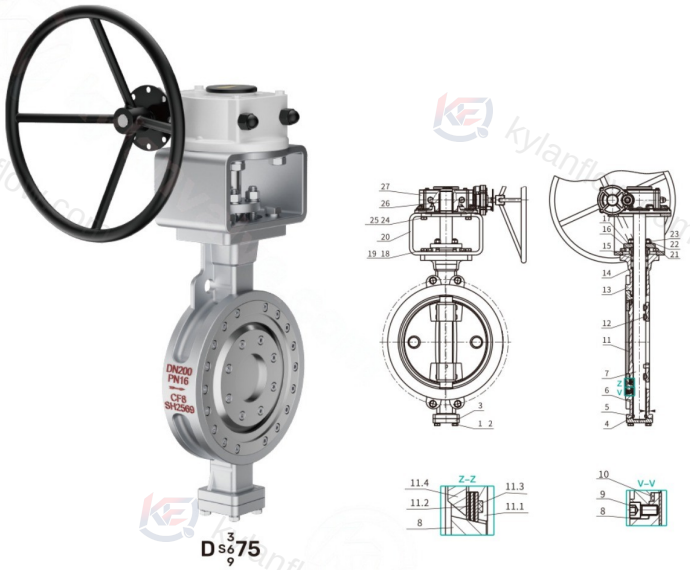
对焊式 Butt Welding Type

No.	名称 Part Name	材料 Material	No.	名称 Part Name	材料 Material
1	外六角螺栓 Hex Bolt	8.8级	14	阀体 Body	A105
2	底盖 Bottom Cover	A105	15	填料垫片 Gasket	SS304
3	缠绕垫 Wound Gasket	SS304+石墨 Graphite	16	填料 Packing	柔性石墨 Flexible graphite
4	防旋动装置 Anti-channeling Device	SS304	17	填料压套 Gland	A105
5	轴套 Bushing	滑动轴承 Plain Bearing	18	防飞环 Anti-rotation Ring	SS304
6	阀杆 Stem	17-4PH XM-19	19	碟簧 Disc spring	65Mn
7	防尘装置 Dustproof Device	柔性石墨 Flexible graphite	20	填料压板 Gland Flange	SS304
8	缠绕垫 Wound Gasket	SS304+石墨 Graphite	21	外六角螺栓 Hex Bolt	A4-70
9	阀座 Seat	ASTM F304+STL(HF)	22	弹垫 Spring Washer	SS304
10	卡环 Clasp	A105	23	支架 Bracket	Q235B
11	内六角圆柱头螺钉 Hexagon socket bolt	A4-70	24	双头螺柱 Double-ended Stud	ASTM A193 B7
12	蝶板装配 Disc Assembly	组合件 Assembly	25	垫片 Washer	300HV
12.1	蝶板 Disc	ASTM CF8M	26	六角螺母 Hex Nut	ASTM A194 2H
12.2	复合垫 Composite Gasket	SS304+石墨 Graphite	27	外六角螺栓 Hex Bolt	8.8级
12.3	密封圈 O-Ring	ASTM F304+STL(HF)	28	弹垫 Spring Washer	65Mn
12.4	蝶板压圈 Disc Clamping Ring	ASTM F316	29	蜗轮 Worm gear	组合件 Assembly
12.5	内六角圆柱头螺钉 Socket Head Cap Screw	A4-70	30	平键 Flat Key	45#
13	圆柱销 Pin	SS304			

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全金属硬碰硬对夹蝶阀

ALL METAL METAL TO METAL
WAFER BUTTERFLY VALVE



D$^{3}_{S6}$75

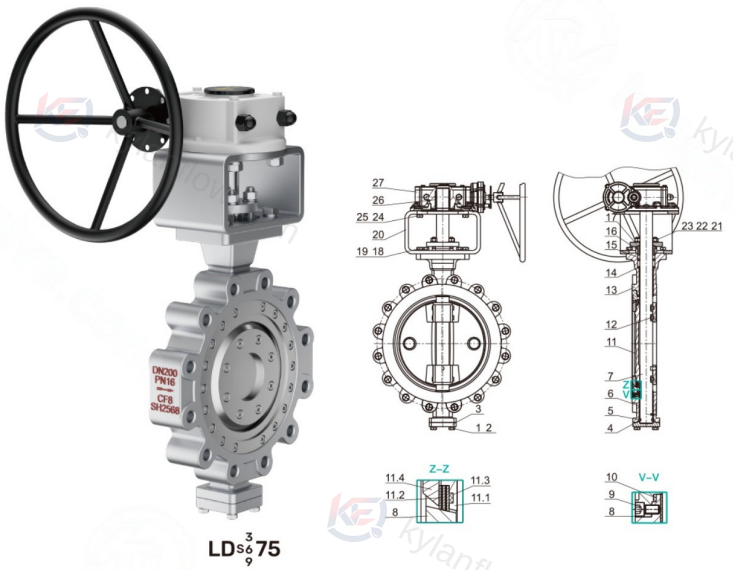
对夹式 Wafer Type

No.	名称 Part Name	材料 Material	No.	名称 Part Name	材料 Material
1	外六角螺栓 Hex Bolt	8.8级	12	圆柱销 Pin	SS304
2	弹簧垫 Spring Washer	65Mn	13	阀体 Body	ASTM A216WCB
3	底盖 Bottom Cover	A105	14	填料垫片 Gasket	SS304
4	缠绕垫 Wound Gasket	SS304+石墨 Graphite	15	填料 Packing	柔性石墨 Flexible graphite
5	防飞环 Anti-rotation Ring	SS304	16	填料压套 Gland	25#
6	轴套 Bushing	SS304+氮化 Nitriding	17	填料压板 Gland Flange	ASTM A182 A105
7	阀杆 Stem	17-4PH XM-19	18	外六角螺栓 Hex Bolt	8.8级
8	阀座 Seat	ASTM F304+STL	19	弹垫 Spring Washer	65Mn
9	内六角螺栓 Hexagon socket bolt	A2-70	20	支架 Bracket	WCB
10	缠绕垫 Wound Gasket	SS304+石墨 Graphite	21	双头螺柱 Double-ended Stud	ASTM A193 B7
11	蝶板装配 Disc Assembly	组合件 Assembly	22	垫片 Washer	300HV
11.1	蝶板 Disc	ASTM WCB	23	六角螺母 Hex Nut	ASTM A194 2H
11.2	复合垫 Composite Gasket	SS304+石墨 Graphite	24	外六角螺栓 Hex Bolt	8.8级
11.3	密封圈 O-Ring	ASTM F304+STL	25	弹垫 Spring Washer	65Mn
11.4	蝶板压圈 Disc Clamping Ring	ASTM A105	26	平键 Flat Key	45#
11.5	内六角圆柱头螺钉 Socket Head Cap Screw	8.8级	27	蜗轮 Worm Wheel	组合件 Assembly

我们可以根据客户要求生产不同材质阀门 We can produce different materials of valves according to customer requirements

全金属硬碰硬凸耳蝶阀

ALL METAL METAL TO METAL
LUG BUTTERFLY VALVE



LD$^{3}_{S6}$75

凸耳式 LugType

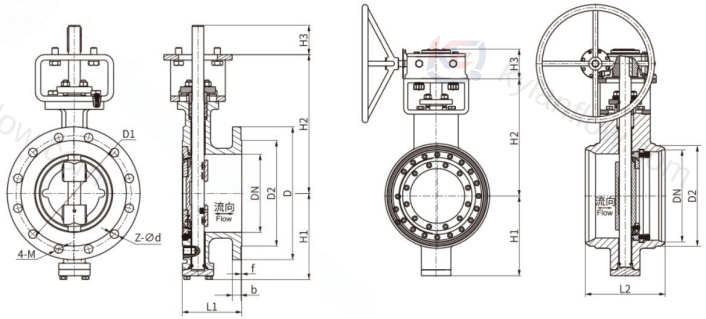
No.	名称 Part Name	材料 Material	No.	名称 Part Name	材料 Material
1	外六角螺栓 Hex Bolt	8.8级	12	圆柱销 Pin	SS304
2	弹簧垫 Spring Washer	65Mn	13	阀体 Body	ASTM A216WCB
3	底盖 Bottom Cover	A105	14	填料垫片 Gasket	SS304
4	缠绕垫 Wound Gasket	SS304+石墨 Graphite	15	填料 Packing	柔性石墨 Flexible graphite
5	防飞环 Anti-rotation Ring	SS304	16	填料压套 Gland	25#
6	轴套 Bushing	SS304+氮化 Nitriding	17	填料压板 Gland Flange	ASTM A182 A105
7	阀杆 Stem	17-4PH	18	外六角螺栓 Hex Bolt	8.8级
8	阀座 Seat	ASTM F304+STL	19	弹垫 Spring Washer	65Mn
9	内六角螺栓 Hexagon socket bolt	A2-70	20	支架 Bracket	WCB
10	缠绕垫 Wound Gasket	SS304+石墨 Graphite	21	双头螺柱 Double-ended Stud	ASTM A193 B7
11	蝶板装配 Disc Assembly	组合件 Assembly	22	垫片 Washer	300HV
11.1	蝶板 Disc	ASTM WCB	23	六角螺母 Hex Nut	ASTM A194 2H
11.2	复合垫 Composite Gasket	SS304+石墨 Graphite	24	外六角螺栓 Hex Bolt	8.8级
11.3	密封圈 O-Ring	ASTM F304+STL	25	弹垫 Spring Washer	65Mn
11.4	蝶板压圈 Disc Clamping Ring	ASTM A105	26	平键 Flat Key	45#
11.5	内六角圆柱头螺钉 Socket Head Cap Screw	8.8级	27	蜗轮 Worm Wheel	组合件 Assembly

我们可以根据客户要求生产不同材质阀门 We can produce different materials of valves according to customer requirements

全金属硬碰硬蝶阀

ALL METAL METAL TO METAL BUTTERFLY VALVE

PN1.0MPa



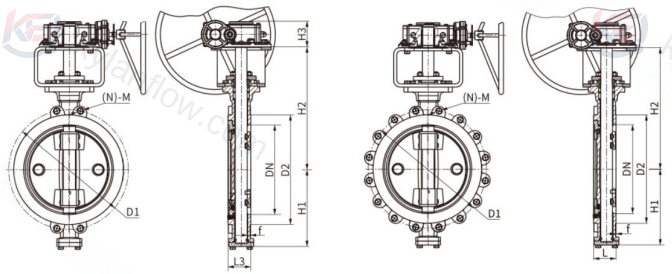
法兰式 Flange Type　　对焊式 Butt Welding Type

主要外形及连接尺寸 Main Outline And Connection Dimensions

单位 Unit:mm

公称通径 NOMINAL DIAMETER	L1	L2	L3	D	D1	D2	b	f	N	Z-Φd	M	d1	H1	H2	H3
DN(mm)	PN1.0(MPa)														
DN50	108	150	43	165	125	102	18	3	4	4-Φ18	16	47	102	224	30
DN80	114	180	49	200	160	138	18	3	8	4-Φ18	16	78	136	246	40
DN100	127	190	56	220	180	158	20	3	8	4-Φ18	16	96	146	278	40
DN125	140	200	64	250	210	188	20	3	8	4-Φ18	16	121	175	295	40
DN150	140	210	70	285	240	212	22	3	8	4-Φ22	20	146	190	310	50
DN200	152	230	71	340	295	268	22	3	8	4-Φ22	20	202	220	358	65
DN250	165	250	76	395	350	320	24	3	12	8-Φ22	20	245	261	378	75
DN300	178	270	83	445	400	370	26	4	12	8-Φ22	20	303	301	425	85
DN350	190	290	92	505	460	430	26	4	16	12-Φ22	20	351	338	475	85
DN400	216	310	102	565	515	482	26	4	16	12-Φ26	24	398	375	502	95
DN450	222	330	114	615	565	532	28	4	20	16-Φ26	24	450	298	553	95
DN500	229	350	127	670	620	585	28	4	20	16-Φ26	24	501	455	632	105
DN600	267	390	154	780	725	685	34	5	20	16-Φ30	27	602	211	682	110
DN700	292	430	165	895	840	800	34	5	24	20-Φ30	27	692	568	703	118
DN800	318	470	190	1015	950	905	36	5	24	20-Φ33	30	792	685	835	125
DN900	330	510	200	1115	1050	1005	38	5	28	24-Φ33	30	892	746	897	140
DN1000	410	550	216	1230	1160	1110	38	5	28	24-Φ36	33	992	799	992	160
DN1200	470	630	276	1455	1380	1330	44	5	32	28-Φ39	36	1192	925	1130	180
DN1400	530	710	390	1675	1590	1535	48	5	36	32-Φ42	39	1392	1070	1229	190
DN1600	600	790	440	1915	1820	1760	52	5	40	36-Φ48	45	1592	1129	1270	210
DN1800	670	870	490	2115	2020	1960	56	5	44	40-Φ48	45	1792	1190	1380	220
DN2000	760	950	540	2325	2230	2170	60	5	48	44-Φ48	45	1992	1329	1433	230

PN1.6MPa



对夹式 Wafer Type　　凸耳式 LugType

主要外形及连接尺寸 Main Outline And Connection Dimensions

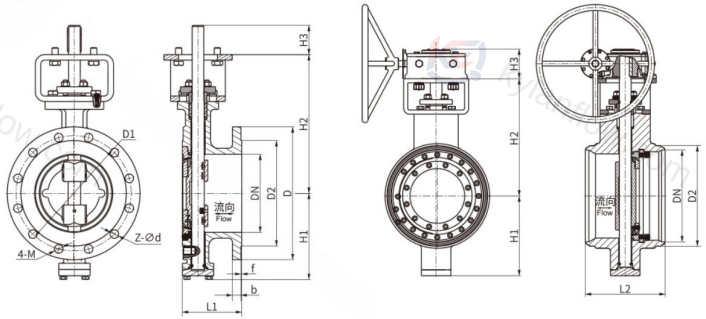
单位 Unit:mm

公称通径 NOMINAL DIAMETER	L1	L2	L3	D	D1	D2	b	f	N	Z-Φd	M	d1	H1	H2	H3
DN(mm)	PN1.6(MPa)														
DN50	108	150	43	165	125	102	18	3	4	4-Φ18	16	47	109	213	30
DN80	114	180	49	200	160	138	20	3	8	4-Φ18	16	78	134	242	36
DN100	127	190	56	220	180	158	22	3	8	4-Φ18	16	96	147	265	42
DN125	140	200	64	250	210	188	22	3	8	4-Φ18	16	121	171	284	48
DN150	140	210	70	285	240	212	22	3	8	4-Φ22	20	146	184	297	54
DN200	152	230	71	340	295	268	24	3	12	8-Φ22	20	202	218	334	60
DN250	165	250	76	405	355	320	26	3	12	8-Φ26	24	245	256	363	66
DN300	178	270	83	460	410	378	28	4	12	8-Φ26	24	303	297	410	84
DN350	190	290	92	520	470	428	30	4	16	12-Φ26	24	351	337	463	99
DN400	216	310	102	580	525	490	32	4	16	12-Φ30	27	398	368	486	106
DN450	222	330	114	640	585	550	34	4	20	16-Φ30	27	450	393	540	118
DN500	229	350	127	715	650	610	36	4	20	16-Φ33	30	501	436	610	125
DN600	267	390	154	840	770	725	38	5	20	16-Φ36	33	602	499	6383	138
DN700	292	430	165	910	840	795	40	5	24	20-Φ36	33	692	557	706	139
DN800	318	470	190	1025	950	900	42	5	24	20-Φ39	36	792	676	836	143
DN900	330	510	200	1125	1050	1000	44	5	28	24-Φ39	36	892	737	899	152
DN1000	410	550	216	1255	1170	1115	46	5	28	24-Φ42	39	992	796	993	195
DN1200	470	630	276	1485	1390	1330	52	5	32	28-Φ48	45	1192	915	1127	208
DN1400	530	710	390	1685	1590	1530	58	5	36	32-Φ48	45	1392	1054	1228	210
DN1600	600	790	440	1930	1820	1750	64	5	40	36-Φ55	52	1592	1128	1268	230
DN1800	670	870	490	2130	2020	1950	68	5	44	40-Φ55	52	1792	1199	1342	240
DN2000	760	950	540	2345	2230	2150	70	5	48	44-Φ60	56	1992	1315	1433	260

全金属硬碰硬蝶阀

ALL METAL METAL TO METAL BUTTERFLY VALVE

PN2.5MPa

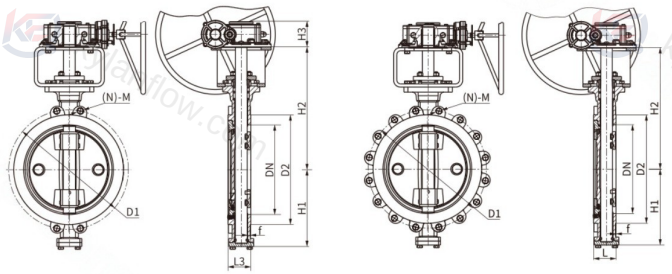


法兰式 Flange Type　　对焊式 Butt Welding Type

主要外形及连接尺寸 Main Outline And Connection Dimensions　单位 Unit:mm

公称通径 NOMINAL DIAMETER	L1	L2	L3	D	D1	D2	b	f	N	Z-Φd	M	d1	H1	H2	H3
DN(mm)	PN2.5(MPa)														
DN50	108	150	43	165	125	102	20	3	4	4-Φ18	16	47	104	208	25
DN80	114	180	49	200	160	138	24	3	8	4-Φ18	16	78	129	237	31
DN100	127	190	56	235	190	162	24	3	8	4-Φ22	20	96	142	260	37
DN125	140	200	64	270	220	188	26	3	8	4-Φ26	24	121	166	279	43
DN150	140	210	70	300	250	218	28	3	8	4-Φ26	24	146	179	292	49
DN200	152	230	71	360	310	278	30	3	12	8-Φ26	24	202	213	329	55
DN250	165	250	76	425	370	335	32	3	12	8-Φ30	27	245	251	358	61
DN300	178	270	83	485	430	395	34	4	16	12-Φ30	27	303	291.5	404.5	79
DN350	190	290	92	555	490	450	38	4	16	12-Φ33	30	351	332	458	94
DN400	216	310	102	620	550	505	40	4	16	12-Φ36	33	398	363	481	93
DN450	222	330	1!4	670	600	555	46	4	20	16-Φ36	33	450	389	534	105
DN500	229	350	127	730	660	615	48	4	20	16-Φ36	33	501	430.5	604	114
DN600	267	390	154	845	770	720	58	5	20	16-Φ39	36	602	493.5	661	127
DN700	292	430	165	960	875	820	50	5	24	20-Φ42	39	692	551.5	698	128
DN800	318	470	190	1085	990	930	54	5	24	20-Φ48	45	792	671	828	132
DN900	330	510	200	1185	1090	1030	58	5	28	24-Φ48	45	892	732.2	891	141
DN1000	410	550	216	1320	1210	1140	62	5	28	24-Φ55	52	992	791.2	985	184
DN1200	470	630	276	1530	1420	1350	70	5	32	28-Φ55	52	1192	910	1119	194
DN1400	530	710	390	1755	1640	1560	76	5	36	32-Φ60	56	1392	1012	1203	258
DM1600	600	790	440	1975	1860	1780	84	5	40	36-Φ60	56	1592	1103	1270	259
DM1800	670	870	490	2195	2070	1985	90	5	44	40-Φ68	64	1792	1219	1424	260
DM2000	760	950	540	2425	2300	2210	96	5	48	44-Φ68	64	1992	1345	1550	259

PN4.0MPa



对夹式 Wafer Type　　凸耳式 LugType

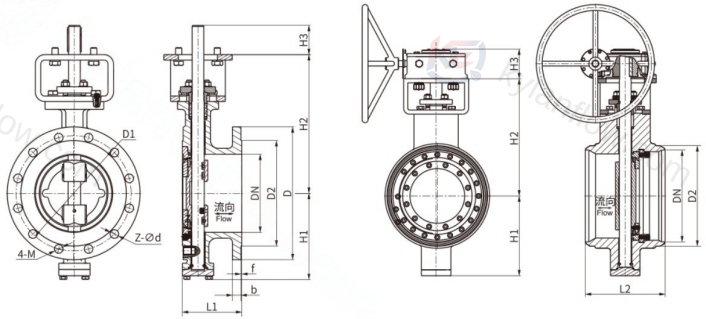
主要外形及连接尺寸 Main Outline And Connection Dimensions　单位 Unit:mm

公称通径 NOMINAL DIAMETER	L1	L2	L3	D	D1	D2	b	f	N	Z-Φd	M	d1	H1	H2	H3
DN(mm)	PN4.0(MPa)														
DN80	150	150	43	165	125	102	20	3	4	4-Φ18	16	47	130	150	35
DN80	180	180	49	200	160	138	24	3	8	4-Φ18	16	78	146	181	40
DN100	190	190	56	235	190	162	24	3	8	4-Φ22	20	96	167	221	41
DNI25	200	200	64	270	220	188	26	3	8	4-Φ26	24	120	188	248	42
DN150	210	210	70	300	250	218	28	3	8	4-Φ26	24	145	209	289	73
DN200	230	230	71	375	320	285	34	3	12	8-Φ30	27	200	250	324	74
DN250	250	250	76	450	385	345	38	3	12	8-Φ33	30	252	291	340	90
DN300	270	270	83	515	450	410	42	4	)6	12-Φ33	30	301	327	431	91
DN350	290	290	127	580	510	465	46	4	16	12-Φ36	33	351	368	522	122
DN400	310	310	140	660	585	535	50	4	16	12-Φ39	36	398	419	539	115
DN450	330	330	160	685	610	560	57	4	20	16-Φ39	36	448	430	510	116
DN500	350	350	170	755	670	615	57	4	20	16-Φ42	39	495	475	556	138
DN600	390	390	200	890	795	735	72	5	20	16-Φ48	45	595	551	655	139
DN700	430	430	300	995	900	840	64	5	24	20-Φ48		686			
DN800	470	470	300	1140	1030	960	72	5	24	20-Φ56		787			
DN900	510	510		1250	1140	1070	76	5	28	24-Φ56		889			
DN1000	550	550		1360	1250	1180	80	5	28	24-Φ56					
DN1200	630	630		1575	1460	1380	88	5	32	28-Φ62					
DN1400	710	710		1795	1680	1600	98	5	36	32-Φ62					

全金属硬碰硬蝶阀

ALL METAL METAL TO METAL BUTTERFLY VALVE

PN6.3MPa

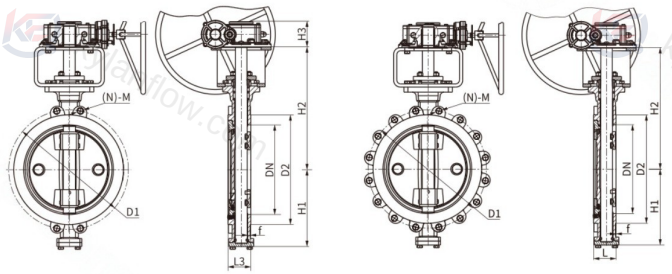


法兰式 Flange Type　　对焊式 Butt Welding Type

主要外形及连接尺寸 Main Outline And Connection Dimensions　单位 Unit:mm

公称通径 NOMINAL DIAMETER	L1	L2	L3	D	D1	D2	b	f	N	Z-Φd	M	d1	H1	H2	H3
DN(mm)	PN6.3(MPa)														
DN80	150	150	43	180	135	102	26	3	4	4-Φ22	20	47	142	162	41
DN80	180	180	64	215	170	138	28	3	8	4-Φ22	20	77	168	203	46
DN100	190	190	64	250	200	162	30	3	8	4-Φ26	24	94	189	243	47
DN125	200	200	70	295	240	188	34	3	8	4-Φ30	27	118	220	280	78
DN150	210	210	76	345	280	218	36	3	8	4-Φ33	30	142	251	331	76
DN200	230	230	89	415	345	285	42	3	12	8-Φ36	33	198	292	366	92
DN250	250	250	114	470	400	345	46	3	12	8-Φ36	33	246	323	372	93
DN300	270	270	114	530	460	410	52	4	16	12-Φ36	33	294	354	458	124
DN350	290	290	127	600	525	465	56	4	16	12-Φ39	36	342	405	449	123
DN400	310	310	140	670	585	535	60	4	16	12-Φ42	39	368	433	553	143
DN500	350	350	170	800	705	615	68	4	20	16-Φ48	45	485	509	590	144
DN600	390	390	200	930	820	735	76	4	20	16-Φ56	52	585	595	689	193
DN700	430	430		1045	935	840	84	5	20	20-Φ56					
DN800	470	470		1165	1050	960	92	5	24	24-Φ62					
DN900	510	510		1285	1170	1070	98	5	24	24-Φ62					
DN1000	550	550		1415	1290	1180	108	5	28	24-Φ70					
DN1200	630	630		1665	1530	1380	126	5	28	28-Φ78					

PN10.0MPa



对夹式 Wafer Type　　凸耳式 LugType

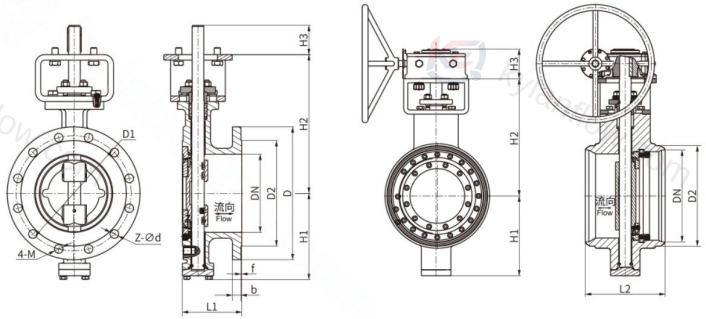
主要外形及连接尺寸 Main Outline And Connection Dimensions　单位 Unit:mm

公称通径 NOMINAL DIAMETER	L1	L2	L3	D	D1	D2	b	f	N	Z-Φd	M	d1	H1	H2	H3
DN(mm)	PN10.0(MPa)														
DN50	150	150	43	195	145	102	28	3	4	4-Φ26	24	47	146	203	42
DN80	180	180	64	230	180	138	32	3	8	4-Φ26	24	75	160	196	42
DN100	190	190	64	265	210	162	36	3	8	4-Φ30	27	92	175	235	44
DN125	200	200	70	315	250	188	40	3	8	4-Φ33	30	112	186	254	45
DN150	210	210	76	355	290	218	44	3	12	8-Φ33	30	136	210	298	46
DN200	230	230	89	430	360	285	52	3	12	8-Φ36	33	190	248	323	77
DN250	250	250	114	505	430	345	60	3	12	8-Φ39	36	236	275	346	70
DN300	270	270	114	585	500	410	68	4	16	12-Φ42	39	284	296	384	90
DN350	290	290	127	655	560	465	74	4	16	12-Φ48	45	332	323	425	90
DN400	310	310	140	715	620	535	82	4	16	12-Φ48	45	376	374	502	90
DN500	350	350	170	870	780	615	94	4	20	16-Φ56	52	475	426	556	120
DN600	390	390	200	990	875	735	102	4	20	16-Φ62	56	575	499	630	120
DN700	430			1145	1020	8840	120	5	20	20-Φ70					
DN800	470			1265	1140	960	130	5	24	20-Φ70					

全金属硬碰硬蝶阀

ALL METAL METAL TO METAL BUTTERFLY VALVE

Class 150Lb



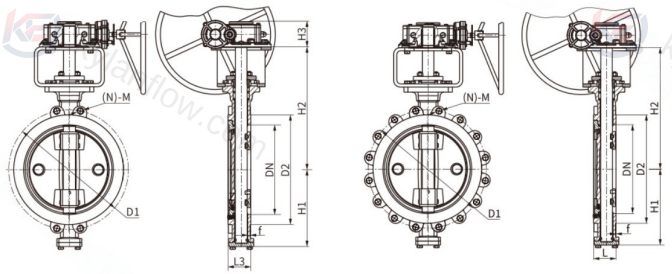
法兰式 Flange Type　　对焊式 Butt Welding Type

主要外形及连接尺寸 Main Outline And Connection Dimensions

单位 Unit:mm

公称通径 NOMINAL DIAMETER		L1	L2	L3	D	D1	D2	b	f	N	Z-Φd	M	d1	H1	H2	H3
in	mm	150LB														
2"	DN50	108	150	43	150	120.7	92.1	17.5	2	4	4-Φ19	5/8	52.5	104	206	25
3"	DN80	114	180	48	190	152.4	127	22.3	2	4	4-Φ19	5/8	77.9	129	235	31
4"	DN100	127	190	54	230	190.5	157.2	22.3	2	8	4-Φ19	5/8	102.3	142	258	37
5"	DN125	140	200	56	255	215.9	185.7	22.3	2	8	4-Φ22	3/4	128.2	166	277	43
6"	DN150	140	210	57	280	241.3	215.9	23.9	2	8	4-Φ22	3/4	154.1	179	290	49
8"	DN200	152	230	64	345	298.5	269.9	27	2	8	4-Φ22	3/4	202.7	213	327	55
10"	DN250	165	250	71	405	362	323.8	28.6	2	12	8-Φ26	7/8	254.5	251	356	61
12"	DN300	178	270	81	485	431.8	381	30.2	2	12	8-Φ26	7/8	304.8	292	403	79
14"	DN350	190	290	92	535	476	412.8	33.4	2	12	8-Φ29	1	336.6	332	454	94
16"	DN400	216	310	102	595	539.8	469.9	35	2	I6	12-Φ29	1	387.4	363	477	92
18"	DN450	222	330	114	635	577.9	533.4	38.1	2	16	12-Φ32	1-1/8	434.9	384	531	104
20"	DN500	229	350	127	700	63	584.2	41.3	2	20	16-Φ32	1-1/8	482.6	427	601	112
24"	DN600	267	390	154	815	749.3	692.2	46.1	2	20	16-Φ35	1-1/4	581.1	490	658	125
28"	DN700	292	430	229	835	795.3	762	43	2	40	36-Φ22	3/4	672.7	548	695	126
32"	DN800	318	470	241	940	900.1	864	44.6	2	48	44-Φ22	3/4	770.7	667	825	130
36"	DN900	330	510	241	1055	1009.6	972	50.9	2	44	40-Φ26	7/8	869.3	728	888	139
40"	DN1000	410	550	300	1175	1120.8	1080	54.1	2	44	40-Φ30	1	967.3	787	982	182
48"	DN1200	470	630	360	1390	1335.1	1289	63.6	2	44	40-Φ33	1-1/8	1164	906	1116	195
56"	DN1400	530			1745	1651	1575	74	2		44-Φ48					
60"	DN1600	600			1855	1759	1676	86	2		48-Φ48					

Class 300Lb



对夹式 Wafer Type　　凸耳式 LugType

主要外形及连接尺寸 Main Outline And Connection Dimensions

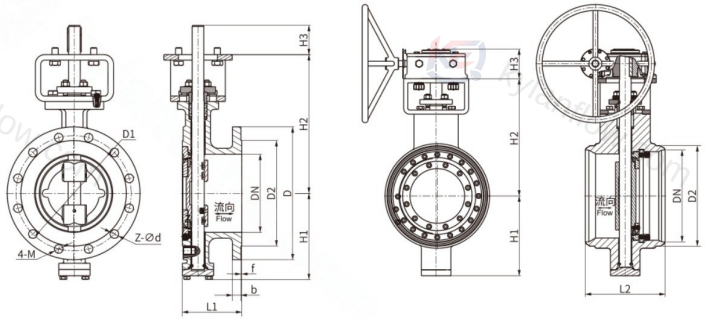
单位 Unit:mm

公称通径 NOMINAL DIAMETER		L1	L2	L3	D	D1	D2	b	f	N	Z-Φd	M	d1	H1	H2	H3
in	mm	300LB														
2"	DN50	150	150	43	165	127	92.1	20.7	2	8	4-Φ19	5/8	52.5	130	147	27
3"	DN80	180	180	48	210	168.3	127	27	2	8	4-Φ22	3/4	77.9	156	172	30
4"	DN100	190	190	54	255	200	157.2	30.2	2	8	4-Φ22	3/4	102.3	177	208	29
5"	DN125	200	200	56	280	235	185.7	33.4	2	8	4-Φ22	3/4	128.2	215	282	58
6"	DN150	210	210	59	320	269.9	215.9	35	2	12	8-Φ22	3/4	154.1	216	283	57
8"	DN200	230	230	73	380	330.2	269.9	39.7	2	12	8-Φ26	7/8	202.7	252	300	71
10"	DN250	250	250	83	445	387.4	323.8	46.1	2	16	12-Φ29	1	254.5	293	341	70
12"	DN300	270	270	92	520	450.8	381	49.3	2	16	12-Φ32	1-1/8	304.8	332	404	69
14"	DN350	290	290	117	585	514.4	412.8	52.4	2	20	16-Φ32	1-1/8	336.6	363	426	68
16"	DN400	310	310	133	650	571.5	469.9	55.6	2	20	16-Φ35	1-1/4	387.4	399	482	97
18"	DN450	330	330	149	710	628.6	533.4	58.8	2	24	20-Φ35	1-1/4	434.9	430	546	99
20"	DN500	350	350	159	775	685.8	584.2	62	2	24	20-Φ35	1-1/4	482.6	466	580	118
24"	DN600	390	390	181	915	812.8	692.2	68.3	2	24	20-Φ42	1-1/2	581.1	547	650	117
28"	DN700	430	430	229	920	857.2	787	87.4	2	36	32-Φ36	1-1/4	672.7	608	815	186
32"	DN800	470	470	241	1055	977.9	902	101.6	2	32	28-Φ42	1-1/2	770.7	740	876	185
36"	DN900	510	510	241	1170	1089	1010	101.6	2	32	28-Φ45	1-5/8	869.3	801	957	184
40"	DN1000	550	550	300	1275	1190.6	1114	114.3	2	40	36-Φ45	1-5/8	967.3	772	928	183
48"	DN1200	630	630	360	1510	1416	1327	127	2	40	36-Φ51	1-7/8	1164	873	1019	232
56"	DN1400	710	710		1710	1600.2	1518	154.5	2	40	36-Φ60					

全金属硬碰硬蝶阀

ALL METAL METAL TO METAL BUTTERFLY VALVE

Class 600Lb



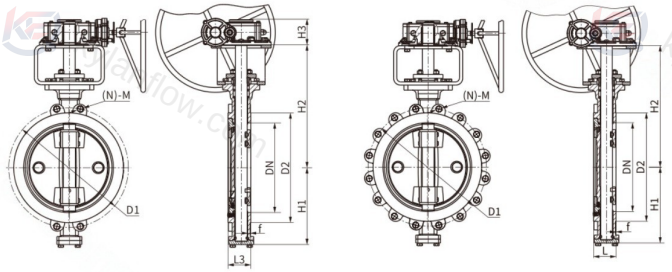
法兰式 Flange Type　　对焊式 Butt Welding Type

主要外形及连接尺寸 Main Outline And Connection Dimensions

单位 Unit:mm

公称通径 NOMINAL DIAMETER		L1	L2	L3	D	D1	D2	b	f	N	Z-Φd	M	d1	H1	H2	H3
in	mm	600LB														
2"	DN50	150	150	43	165	127	92.1	25.4	7	8	4-Φ19	5/8	52.5	137	185	43
3"	DN80	180	180	54	210	168.3	127	31.8	7	8	4-Φ22	3/4	77.9	158	213	48
4"	DN100	190	190	64	275	215.9	157.2	38.1	7	8	4-Φ26	7/8	102.3	194	220	49
5"	DN125	200	200	70	330	266.7	185.7	44.5	7	8	4-Φ29	1	128.2	223	250	83
6"	DN150	210	210	78	355	292.1	215.9	47.7	7	12	8-Φ29	1	154.1	239	318	87
8"	DN200	230	230	102	420	349.2	269.9	55.6	7	12	8-Φ32	1-1/8	198.5	280	332	88
10"	DN250	250	250	117	510	431.8	323.8	63.5	7	16	12-Φ35	1-1/4	247.7	326	394	89
12"	DN300	270	270	140	560	489	381	66.7	7	20	16Φ35	1-1/4	295.3	357	459	120
14"	DN350	290	290	155	605	527	412.8	69.9	7	20	16-Φ39	1-3/8	325.4	381	470	121
16"	DN400	310	310	178	685	603.2	469.9	76.2	7	20	16-Φ42	1-1/2	363.5	427	575	142
18"	DN450	330	330	200	745	654	533.4	82.6	7	20	16-Φ45	1-5/8	409.5	468	625	143
20"	QN500	350	350	216	815	723.9	584.2	88.9	7	24	20-Φ45	1-5/8	455.6	504	661	140
24"	DN600	390	390	232	940	838.2	692.2	101.6	7	24	20-Φ52	1-7/8	547.7	569	747	190
28"	DN700	430	430		1075	965.2	800	118	7		24-Φ54					
32"	DN800	470	470		1195	1079.5	914	124.5	7		24-Φ60					
36"	DN900	510	510		1315	1193.8	1022	131	7		24-Φ67					
40"	DN1000	550	550		1320	1212.5	1111	165	7		28-Φ60					

Class 900~1500Lb



对夹式 Wafer Type　　凸耳式 LugType

主要外形及连接尺寸 Main Outline And Connection Dimensions

单位 Unit:mm

公称通径 NOMINAL DIAMETER		L1	L2	L3	D	D1	D2	b	f	N	Z-Φd	M	d1	H1	H2	H3
in	mm	900LB														
4"	DN100	235	235	80	290	235	157.2	44.5	7	8	4-Φ32	1-1/8	77.9	197	255	82
6"	DN150	250	250	104	380	317.5	215.9	55.6	7	12	8-Φ32	1-1/8	102.3	255	331	98
8"	DN200	310	310	112	470	393.7	269.9	63.5	7	12	8-Φ39	1-3/8	128.2	299	377	99
10"	DN250	350	350	135	545	469.9	323.8	69.9	7	16	12-Φ39	1-3/8	154.1	377	430	130
12"	DN300	380	380	170	610	533.4	381	79.4	7	20	16-Φ39	1-3/8	198.5	401	492	129
14"	DN350	400	400	173	640	558.8	412.8	85.8	7	20	16-Φ42	1-1/2	247.7	438	530	149
16"	DN400	430	430	210	705	616	469.9	88.9	7	20	16-Φ50	1-5/8	295.3	475	629	151
18"	DN450	460	460	228	785	685.8	533.4	101.6	7	20	16-Φ52	1-7/8	325.4	524	680	201
20"	DN500	490	490	250	855	749.3	584.2	108	7	20	16-Φ54	2	363.5	572	701	202
24"	DN600	530	530	275	1040	901.7	692.2	139.7	7	20	16-Φ67	2-1/2	409.5	705	800	210

公称通径 NOMINAL DIAMETER		L1	L2	L3	D	D1	D2	b	f	N	Z-Φd	M	d1	H1	H2	H3
in	mm	1500LB														
6"	DN150	290	290	160	395	317.5	215.9	82.6	7	12	8-Φ39	1-3/8	102.3	275	380	130
8"	DN200	330	330	180	485	393.7	269.9	92.1	7	12	8-Φ45	1-5/8	128.2	332	430	130
10"	DN250	390	390	200	585	482.6	323.8	108	7	12	8-Φ52	1-7/8	154.1	398	540	150
12"	DN300	430	430	230	675	571.5	381	123.9	7	16	12-Φ54	2	198.5	435	578	155
14"	DN350	470	470	250	750	635	412.8	133.4	7	16	12-Φ61	2-1/4	247.7	519	655	200
16"	DN400	510	510	265	825	704.8	469.9	146.1	7	16	12-Φ67	2-1/2	295.3	556	690	220
18"	DN450	550	550	300	915	774.7	533.4	162	7	16	12-Φ74	2-3/4	325.4	623	786	220
20"	DN500	630	630	340	985	831.8	584.2	177.8	7	16	12-Φ80	3	363.5	698	840	225
24"	DN600	710	710	400	1170	990.6	692.2	203.2	7	16	12-Φ94	3-1/2	409.5	795	995	255

低温蝶阀

CRYOGENIC BUTTERFLY VALVE

所采用的新技术、新工艺说明
Description of The New Technology & New Process Adopted

执行标准 Enforce Standards

·设计标准符合	Design standards	API609, ASME B16.34, ASME VI, BS6364, DIN3840
·连接标准符合	Connection standard	ASME B16.10, ISO5752
·微泄露试验符合	Microleakage test	ISO15848, API622, SHELL SPE77-312, TA-LUFT
·防火试验符合	Fire test	API607, BS6755, ISO/FDIS10497
·强度和密封试验标准符合	Strength and sealing test	API598, BS6364, EN12266\ISO5208

材料选择

·在选择低温条件下使用材料，考虑以下两个方面的要求；
·承受持久或瞬间温差应力；
·承受压力和温度交变的各种载荷，无明显弹塑性变形；
·超低温条件下材料要有足够的组织稳定性，以保证密封性；
·具备耐压、耐磨、耐蚀和可焊接性；

Material Selection

· When selecting materials for use at low temperatures, consider the following two requirements;
· Enduring or transient temperature difference stress;
· Withstand various loads of alternating pressure and temperature, without obvious elastic-plastic deformation;
· Under ultra-low temperature conditions, the material should have sufficient organizational stability to ensure tightness;
· With pressure resistance, wear resistance, corrosion resistance and weldability;

深冷处理

·奥氏体不锈钢作为超低温阀门主要承压件的材料在常温下处于亚稳定状态，当温度降低到相变点Ms点以下时，部分奥氏体会变成体心立方晶格的马氏体，阀门密封结构会有一定的变形；
·低于阀门工作温度；
·深冷处理时间2~6h、2-4次，消除材料相变和塑性变形的影响，保证超低温阀门的密封性能

Cryogenic Treatment

· Austenitic stainless steel as the main pressure part of the ultra-low temperature valve is in a metastable state at room temperature. When the temperature is reduced to the phase transition point Ms point, some austenitic steel will become martensite of body-centered cubic lattice, and the valve seal structure will have a certain deformation;
· Lower than the valve operating temperature;
· Cryogenic treatment time of 2~6h, 2-4 times, eliminate the influence of material phase transition and plastic deformation, ensure the sealing performance of ultra-low temperature valve;

长颈阀盖结构

·防止因填料函部分过冷出现填料以及阀盖上部的零件结霜或冷冻现象。
·防止金属材料和非金属材料的低温收缩性的不一致导致阀门的操作扭矩增大和填料的磨损。
·阀盖颈部的长度尺寸根据 BS6364或MSS SP-134标准要求确定；根据试验或用户要求有限元分析的方式验证确定。

Long neck valve cover structure

· Prevent frosting or freezing of packing and parts above the valve cover due to partial undercooling of the packing box.
· Prevent the inconsistency of low temperature shrinkage of metal and non-metal materials resulting in increased operating torque of the valve and wear of the packing.
· The length and dimension of the valve cap neck shall be determined according to the requirements of BS6364 or MSS SP-134 standard; According to the test or user requirements of the method of finite element analysis verification.

滴水盘结构

·设置滴水盘减缓阀体介质温度项阀体上端及填料部分传递，保证滴水盘上部阀盖及填料部分温度在零度以上。
·滴水盘和直径超过中法兰直径，可以防止低温凝华和水蒸气滴落在中法兰及螺栓上引起冷量损失和腐蚀，影响在线维修。

Long neck valve cover structure

· Set the drip pan to slow down the transmission of the upper end of the valve body and the packing part of the medium temperature item of the valve body, and ensure that the temperature of the upper valve cover and the packing part of the drip pan is above zero.
· The drip pan and diameter exceed the diameter of the middle flange, which can prevent low temperature condensation and water vapor dripping on the middle flange and bolts, causing cold loss and corrosion, affecting online maintenance.

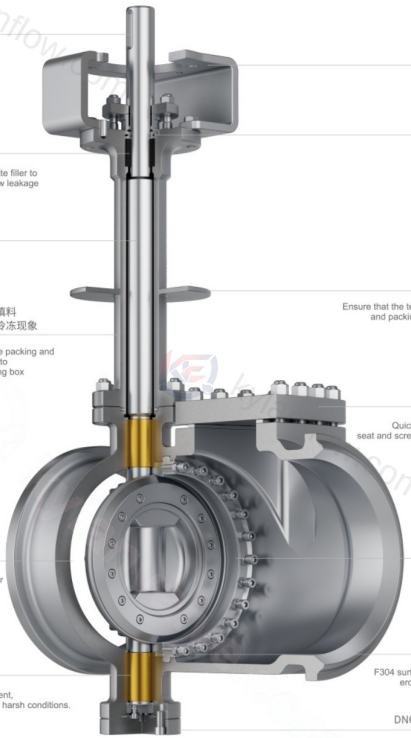
在线维修结构

·在线快速拆卸和装配阀座和螺板密封元件，实现在线维修；
·密封组件和拆卸和重新装配不需要任何特殊工具；

Long neck valve cover structure

· Fast online disassembly and assembly of valve seat and screw seal element for online maintenance;
· Sealing components and disassembly and reassembly do not require any special tools;

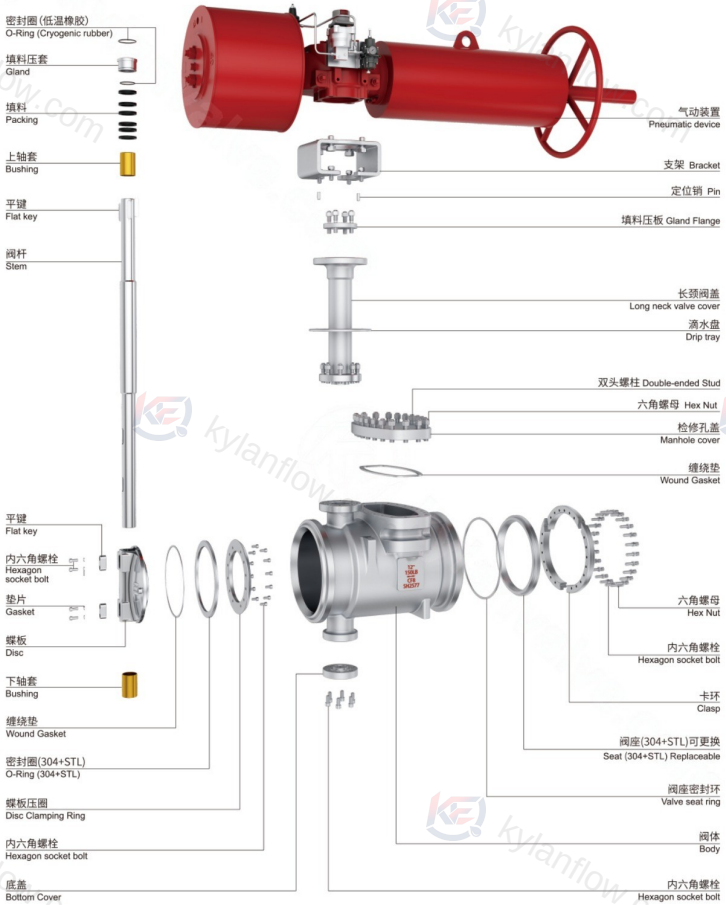
结构特点 Structural Characteristics

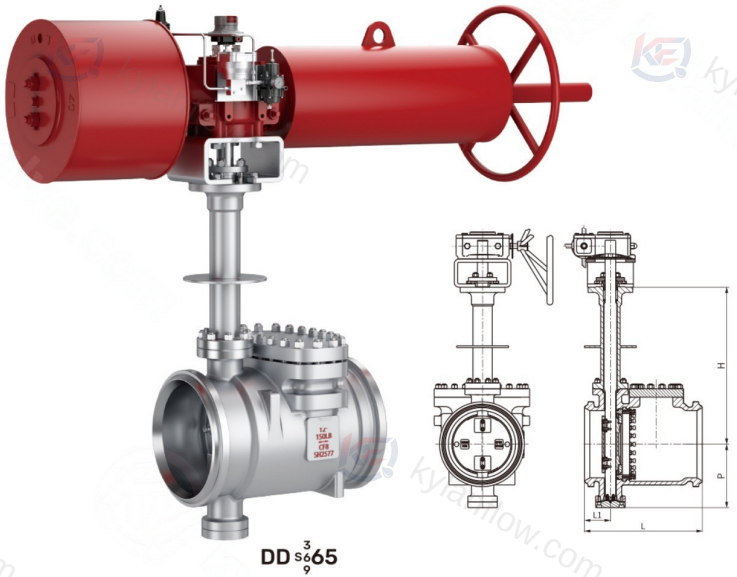


低温蝶阀

CRYOGENIC BUTTERFLY VALVE

主要零部件分解图 Breakdown of Main Parts





DD S 3 9 65

主要外形尺寸及Cv值 Main dimensions and Cv values

Class 150

单位 Unit:mm

DN	NPS	H	P	L	L1	Cv
150	6	610	122	403	125	903
200	8	640	148	450	130	1730
250	10	665	180	602	140	2810
300	12	715	207	502	145	1475
350	14	760	232	572	165	5850
400	16	807	270	610	165	7850
450	18	855	303	660	175	10190
500	20	932	331	711	185	12880
600	24	1050	395	813	190	19370

DN	NPS	H	P	L	L1	Cv
650	26	1110	430	864	200	23200
700	28	1170	455	914	215	27440
750	30	1220	500	914	215	32100
800	32	1240	520	965	230	37210
900	36	1295	560	1016	265	48790
950	38	1510	648	1016	315	55200
1000	40	1590	680	1100	335	62320
1050	42	1590	703	1200	335	69860

蝶阀Cv值及开启角度 BUTTERFLY VALVE Cv VALUE AND OPENING ANGLE

蝶阀Cv值及开启角度
Butterfly Valve Cv Value and Opening Angle

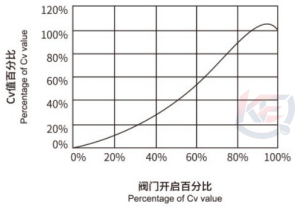
150Lb

Valve size mm	inch	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°
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

300Lb

Valve size mm	inch	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°
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	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

Cv曲线图表 Cv Curve Chart



硬碰硬蝶阀扭矩值 METAL TO METAL BUTTERFLY VALVE TORQUE VALUE

蝶阀Cv值Kv值 Butterfly Valve CV Value KV Value

公称通径NOMINAL DIAMETER		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		

蝶阀扭矩值 Butterfly Valve Torque Value

公称通径 NOMINAL DIAMETER		公称压力 Nominal pressure 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	

蝶阀材质表

BUTTERFLY VALVE MATERIAL LIST

材质表 Material 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	0.6	≤0.50	≤0.20
A216 WCC	0.25	1.20	0.040	0.045	0.6	≤0.50	≤0.20
A352 LC3	0.15	0.50-0.80	0.040	0.045	0.6	/	/
A217 WC6	0.05-0.20	0.50-0.80	0.040	0.045	0.6	1.00-1.50	0.45-0.65
A217 WC9	0.05-0.18	0.40-0.70	0.040	0.045	0.6	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	17.00-21.00	≤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	17.0-19.0	/
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	0.30	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

Chemical compostions(%)			Mechancal 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