



JIANGSU SINOVAL MACHINERY CO., LTD.

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Jiangsu Sinoval Machinery Co., Ltd.

Forged steel valves & Instrument Valve Series



***FORGED STEEL VALVES
INSTRUMENT VALVE SERIES***

JIANGSU SINOVAL MACHINERY CO., LTD.

COMPANY PROFILE

Jiangsu Sinoval Machinery Co., Ltd. , always adheres to an idea of "Surviving on Quality, Developing on Technology", and now has developed into a new high-tech enterprise integrated with research & production, development, manufacturing, detection and sales of industrial valves. With a registered capital of 98800000 YUAN, the company now has near 200 staffs, possesses the fixed assets of 57250000 YUAN and covers an area of 61200m². Therein, there are near 30 engineering technicians and many after-sales service personnel. Valve CAD special software is adopted for design, and design software including three-dimensional drawing and finite element analysis, etc. are equipped. It also has a complete quality assurance system and detection means, as well as instruments like spectrum analyzer, etc. Within more than 400 sets of existing production equipment, machining equipment includes many sets of numerically-controlled lathe, digital-display boring machine and vertical lathe with a swing diameter of 4m. In terms of thermal equipment, it owns fusing soldering welder, automatic powder plasma spray-welding machine, ion nitriding furnace, high-frequency hardening furnace, etc. as well as advanced detection equipment such as universal material testing machine, automatic microcomputer demagnetizing instrument and leak detector, etc., which provides guarantee for production of high-quality products.

In the same industry, it initiatively passes TS certification of Manufacture License of Special Equipment. It is also member of Sinopec Goods and Materials Resources Market, and the membership of China National Petroleum Corporation First-Class Supply Network and China General Machinery Industry Association Valve Branch. The company has persisted in depending on technological innovation and constantly absorbed advanced experience

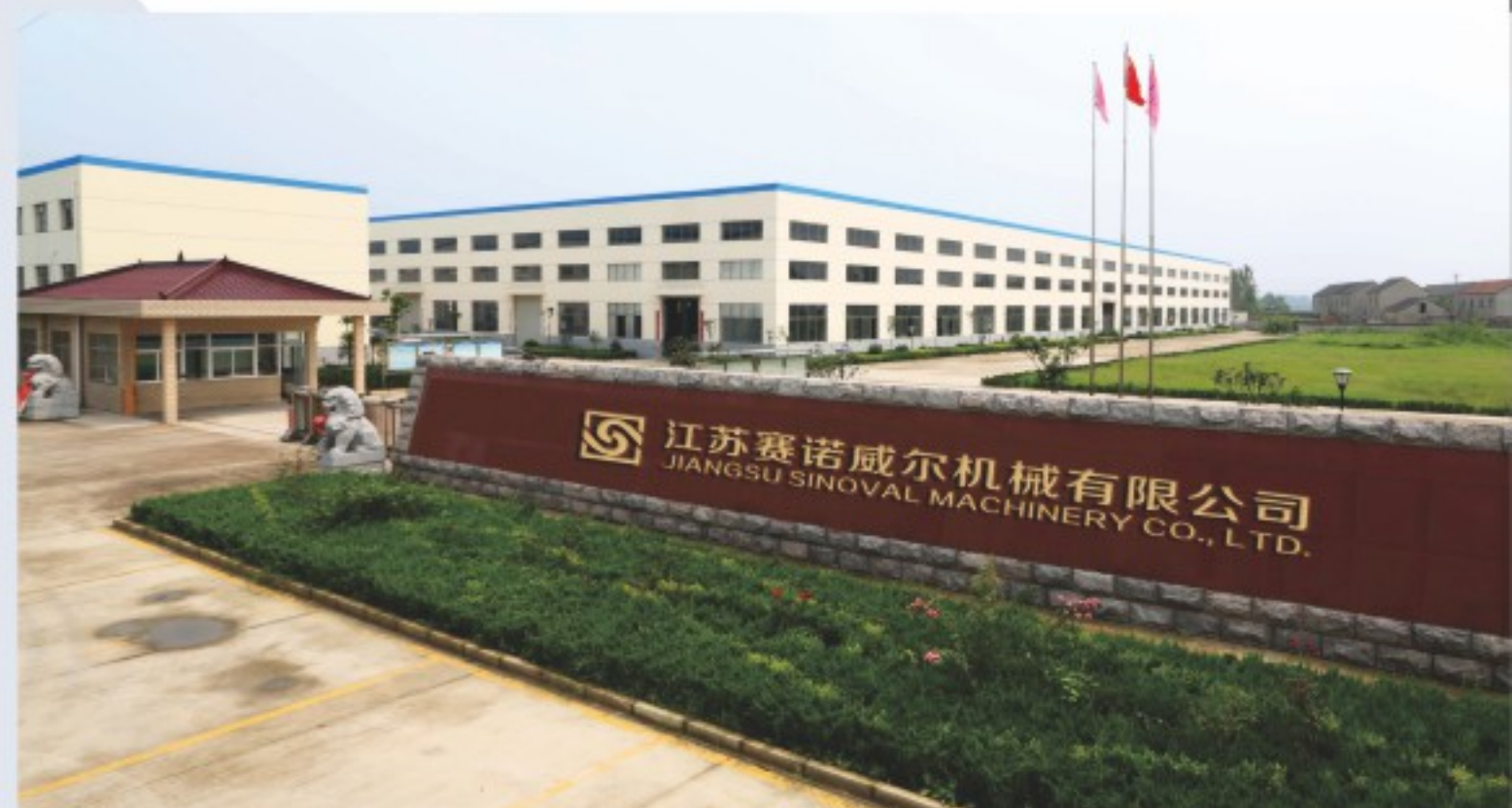
at home and abroad, introduced advanced manufacturing technique and complete detection equipment, and established a high-quality modern team.

Company's leading products include above 1500 models like power station valve, gate valve, ball valve, stop valve, butterfly valve, non-return flap valve, fixed ball valve and various needle valves, valve units and instrumentation tube fittings, etc., with more than 6800 specifications, widely used in power station, nuclear power, petroleum, chemical industry, metallurgy, building, pharmacy, paper manufacturing, coal mine and other industries. Its products have a good sale in America, Canada, Germany, the Middle East and other countries and districts, well praised and trusted by users.

The company could respectively provide drive modes including manual drive, motor drive, pneumatic drive and manual-pneumatic-hydraulic linkage, etc. according to user's demand. Also, various materials including carbon steel, stainless steel, heat resistant steel and superior alloy steel, etc. could be respectively selected and used. It also undertakes manufacturing business of various special valves. As for standards adopted, in addition to national standards and industrial standards, international advanced standards including American API, ASME, Japanese JIS, British BS, German DIN, etc. are also adopted.

Our company will stick to an idea of "market demand-oriented", constantly make innovations and is dedicated to provide users with quality trustworthy products and perfect after-sale service. JiangSu Sinoval Machinery Co., Ltd. shares technology of new century with you and takes you to feel a close world-top manufacturing technology. Welcoming new and old customers to arrive and visit our company and give guidance!

JIANGSU SINOVAL MACHINERY CO., LTD.



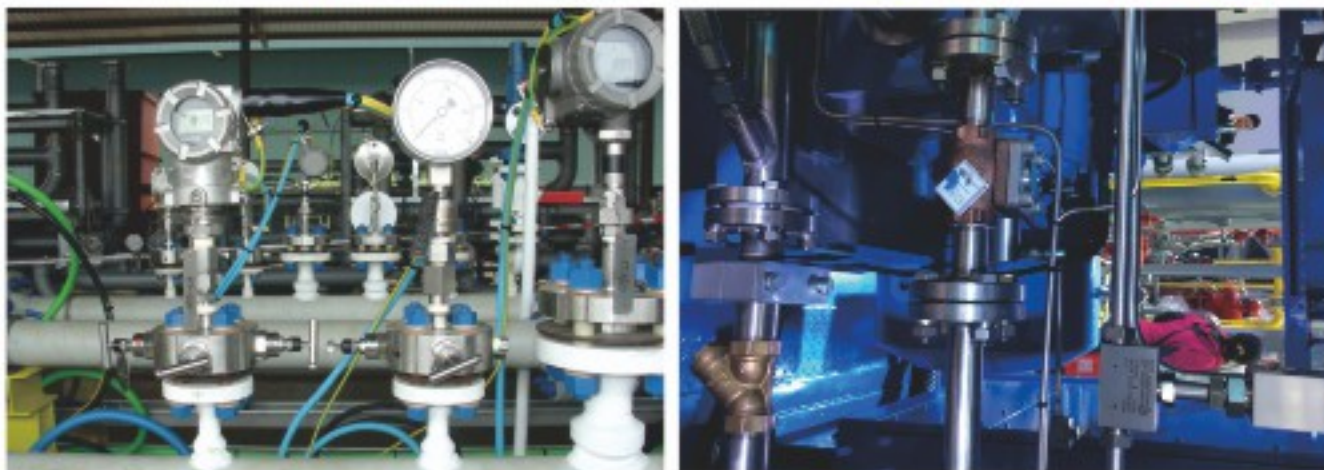
WOKSHOP DISPLAY

Quality embodies our dignity, a kind of elite quality refused to mediocrity. Meticulous, dental laboratories, standardized management system and systematized quality guarantee system, let Sainuo Weier product quality, in every corner of the world in the clear Sainuo Weier with collaborators fruitful efforts, are prompting "Sinoval" has become the world's most impeccable quality.



ENGINEERING PERFORMANCE

Products are widely used in petrochemical, refining, gas, paper making, pharmacy, urban construction and other industries with long distance pipeline and other projects. Products are sold well all over the country, and has been praised by domestic customers.



FORGED STEELBALL VALVE SERIES 001

Split Body Floating Ball Valve	002-008
Flange, Butt Welding, Top Mounted Type Trunnion Ball Valve	009-022
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Forged Steel Metal Hard Seal Trunnion Ball Valve	024
High-Pressure Forged-Steel Ball Valve	025-026
Forged Steel Floating Ball Valve	027-028

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Natural Gas Pipelines Dedicated Welding Ball Valve	030
Fully Welded Ball Valve	031-034
Natural Gas Pipelines Dedicated Welding Ball Valve	035-036
Forged Steel Ball Valve Structure Drawing	037-038
Butt-Weld Connection Cast Steel Trunnion Type Ball Valve	039
Welding Structure Trunnion Type Ball Valve	040-041
Welding Structure Trunnion Type Ball Valve	042-047

FORGED STEEL SMALL DIAMETER VALVE SERIES 048

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Pressure Sealing Gate Valve	052
Female Threaded And Socket Welded Gate Valve	053-054
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Special Purposes Gate Valve	056
Female Threaded And Socket Welded Globe Valve	057-058
Pressure Sealing Globe Valve	059
Female Threaded And Socket Welded Globe Valve	060-061
Female Threaded And Socket Welded Y Type Globe Valve	062
Y Type Globe Valve	063-064
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Female Threaded And Socket Welded Check Valve	067-070
Female Threaded Welded Y Type Check Valve	071
Y Type Pressure Sealed Check Valve	072
Y Type Check Valve	073-074
Flange And Butt- Welded Check Valve	075-076

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Cryogenic Globe Valve	079-080
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Bellow Globe Valve	085-087
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PNEUMATIC LINE BALL VALVE SERIES 126

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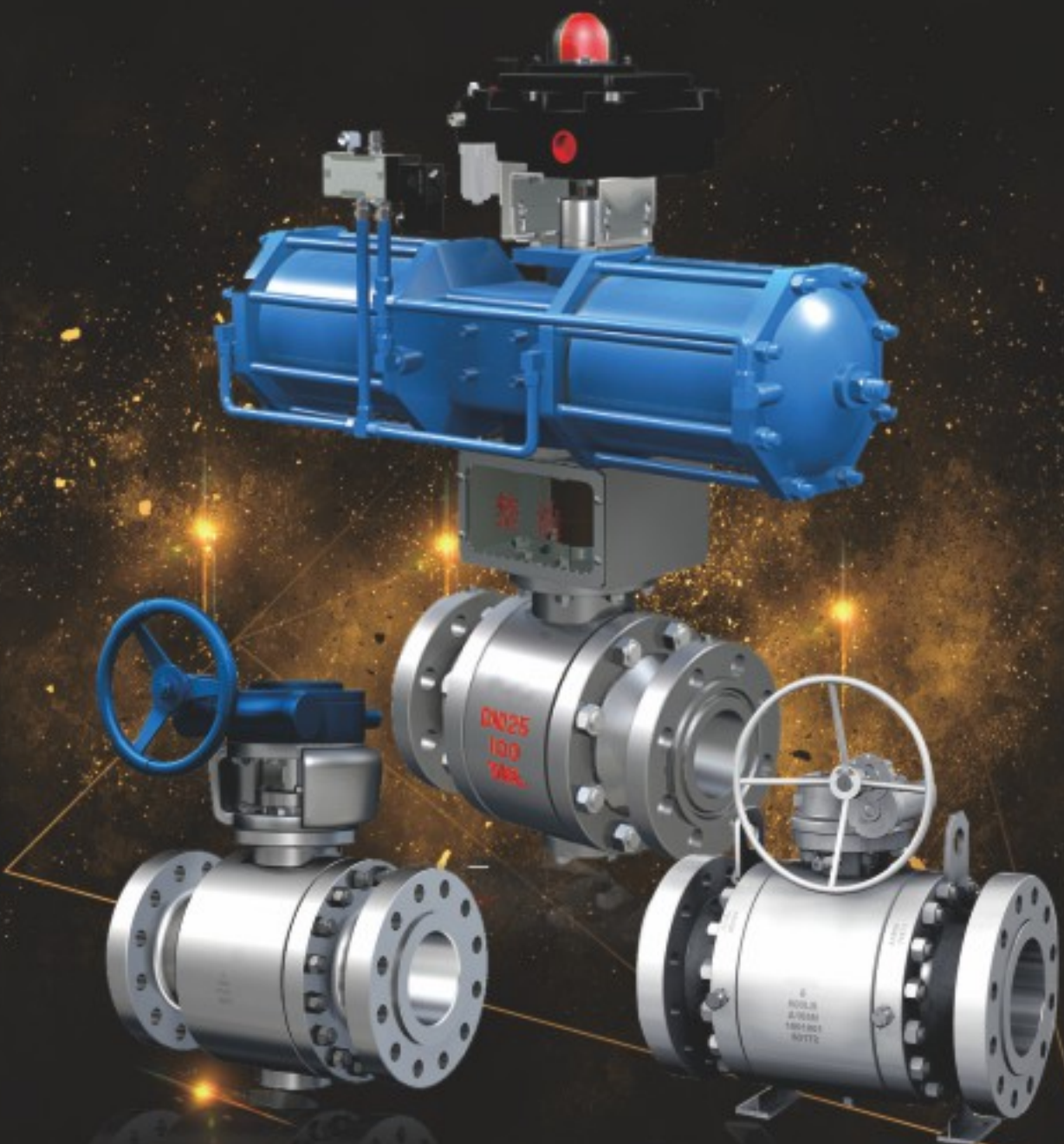
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FORGED STEEL BALL VALVE SERIES



001

Tel: +86-0515-87214888

Split Body Floating Ball Valve

JIANGSU SINOVAL



Side Entry Floating Ball Valve Summary

The floating ball valve is simple structure type. It has two seat supporting the ball, the ball can tightly move towards the sealing to ensure seal at outlet end.

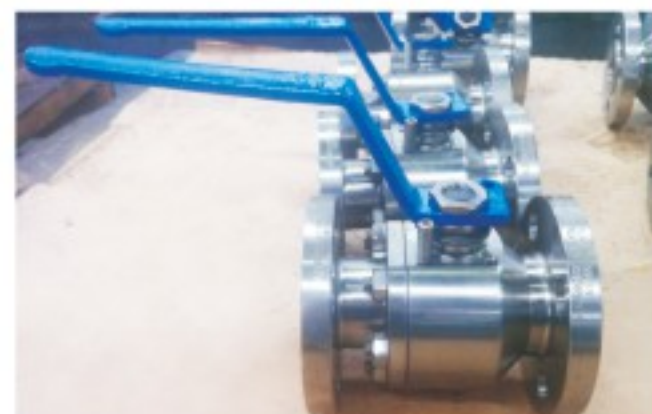
Design Feature

Standard design

API 608, ISO 17292 design and construction
ASME B16.5, B16.25 ends connection
Anti-blowout stem
Fire-safe, anti-static
Floating ball type
Fire safe acc to ISO 10497, API 607,
API 6FA, BS 6755-2

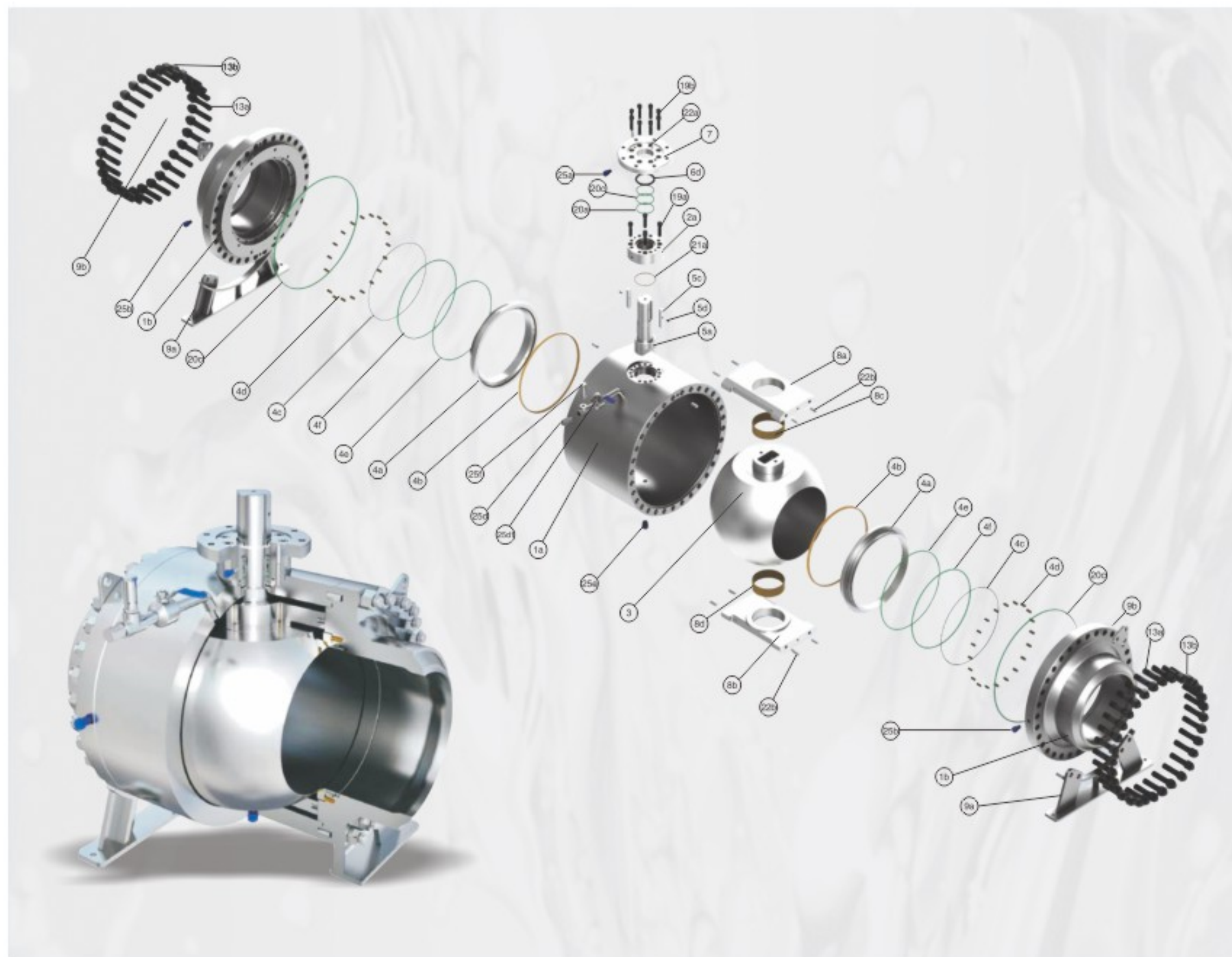
Optional design

Connection end as required
Unidirectional seal type
Extended stem
Extended bonnet
Metal to metal seat
On-site maintenance pocket overlay
Seat or stem seal area overlay
Wetted parts overlay



002

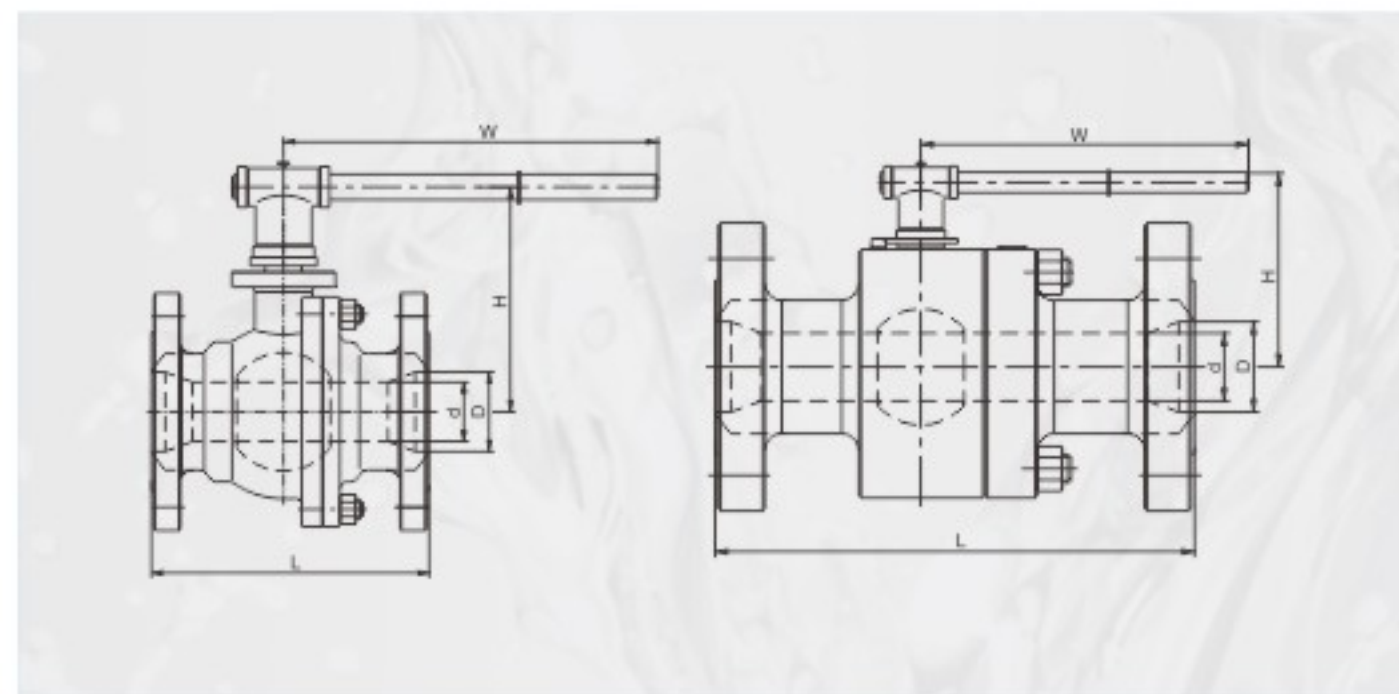
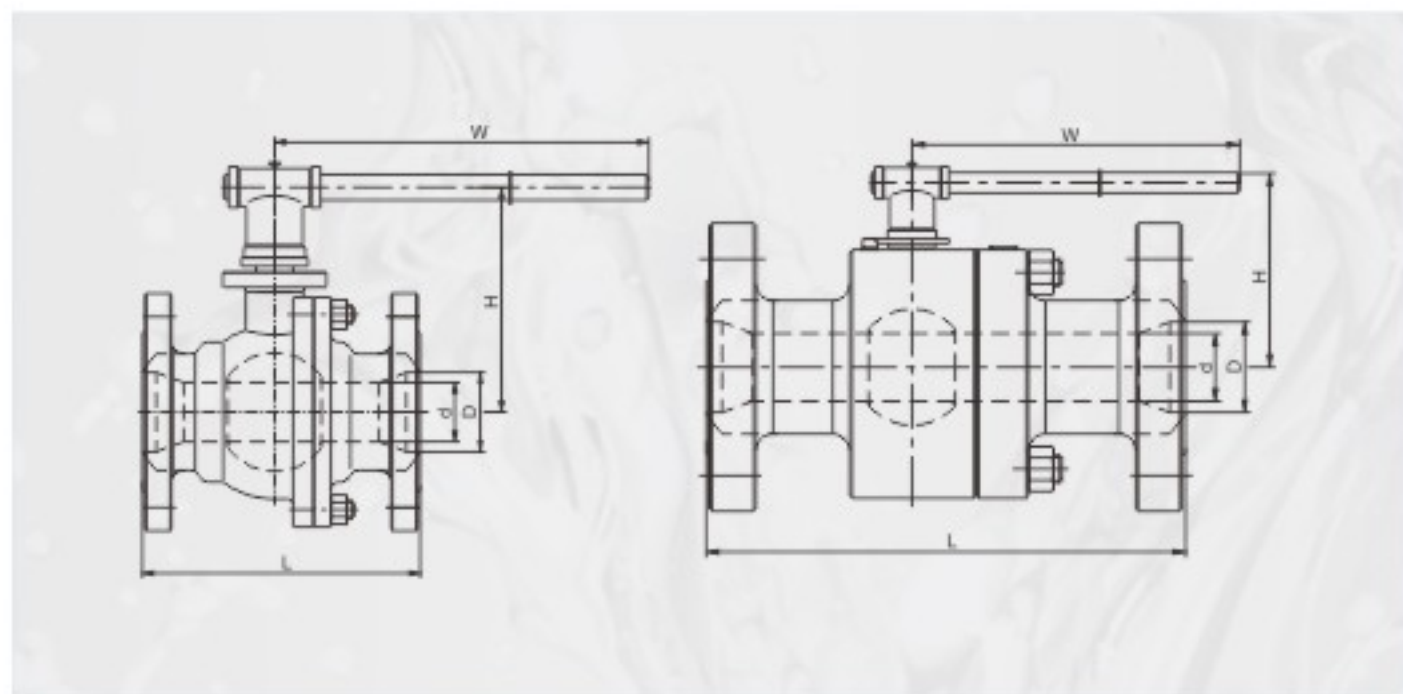
Website: www.snwejx.com



Main Parts Specification

Part No.	Part name	Part No.	Part name
1a	Body	8d	Bushing
1b	Closure	9a	Supporting feet
2a	Bonnet	9b	Lifting lugs
3	Ball	13a	Bolt
4a	Seat	13b	Nut
4b	Sealing ring	19a	Stud
4c	Gasket	19b	Stud
4d	Spring	20a	O-ring
4e	O-ring 1	20c	O-ring
4f	O-ring 2	21a	Thrust washer
5a	Stem	22a	Pin
5c	Key	22b	Pin
5d	Screw	25a	Sealant injection
6d	Packing	25b	Sealant injection
7	Mounting plate	25d	Vent Valve
8a	Bearing retainer	25d1	Isolation Valve
8b	Bearing retainer	25e	Drain Valve
8c	Bushing	25f	Relieving Valve





Form Main Types and Connecting Dimension

Class		CLASS 150 Full bore						CLASS 300 Full bore					
NPS	d	L-RF	L-RTJ	L-WE	H	W	WT(Kg)	L-RF	L-RTJ	L-WE	H	W	WT(Kg)
1/2"	13	108	108	140	81	150	2.8	140	151	140	81	150	3
3/4"	19	117	117	152	85	150	3.7	152	165	152	85	150	4
1"	25	127	140	165	98	180	5.3	165	178	165	98	180	6.6
1 1/2"	38	165	178	190	133	280	8.3	190	203	190	133	280	12.9
2"	49	178	191	216	141	280	15	216	232	216	141	280	21.4
2 1/2"	62	191	203	241	139	400	22.5	241	257	241	139	400	32.5
3"	74	203	216	283	150	400	27	283	298	283	150	400	45
4"	100	229	241	305	223	650	44.2	305	321	305	223	650	64.8
6"	150	394	406	457	297	*280	127.6	403	419	403	297	*300	147.5
8"	201	457	470	521	378	*280	221.8	502	518	521	378	*300	287.5
10"	252	533	546	559	408	*400	430	568	584	559	408	*400	550
12"	303	610	622	635	430	*400	680						

Form Main Types and Connecting Dimension

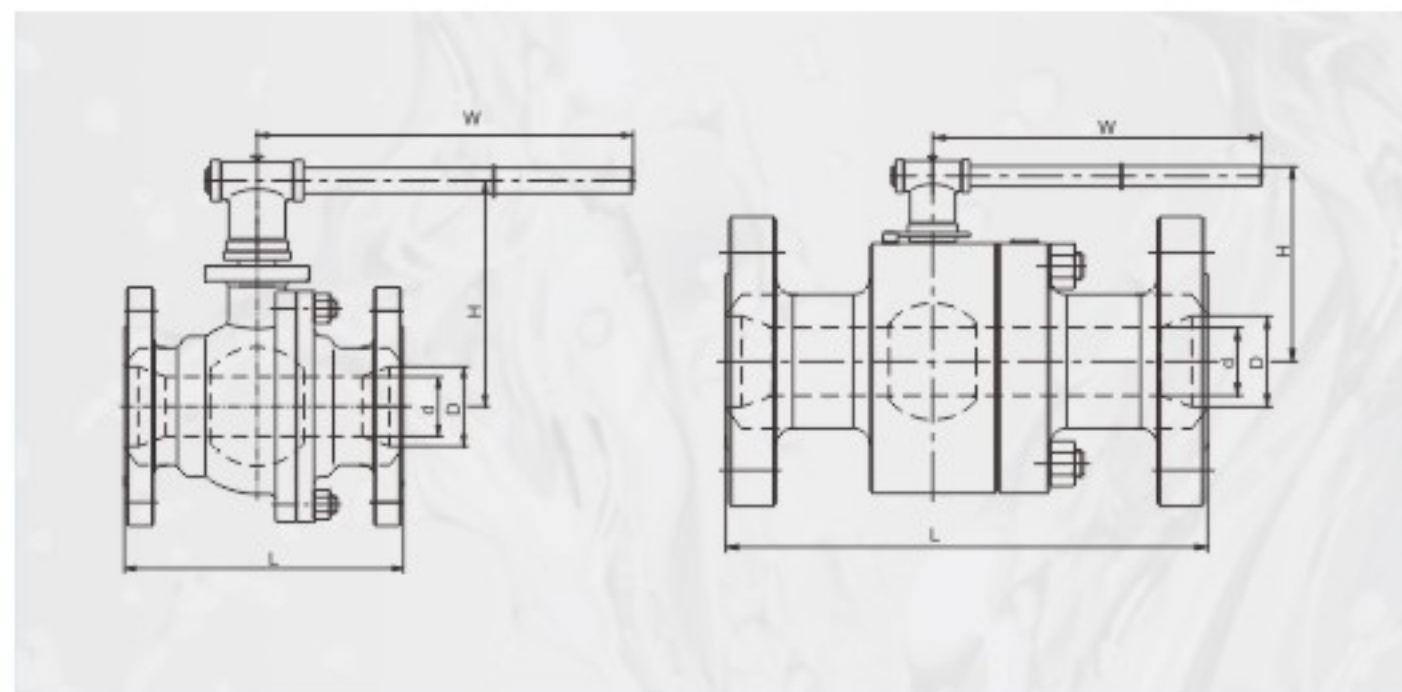
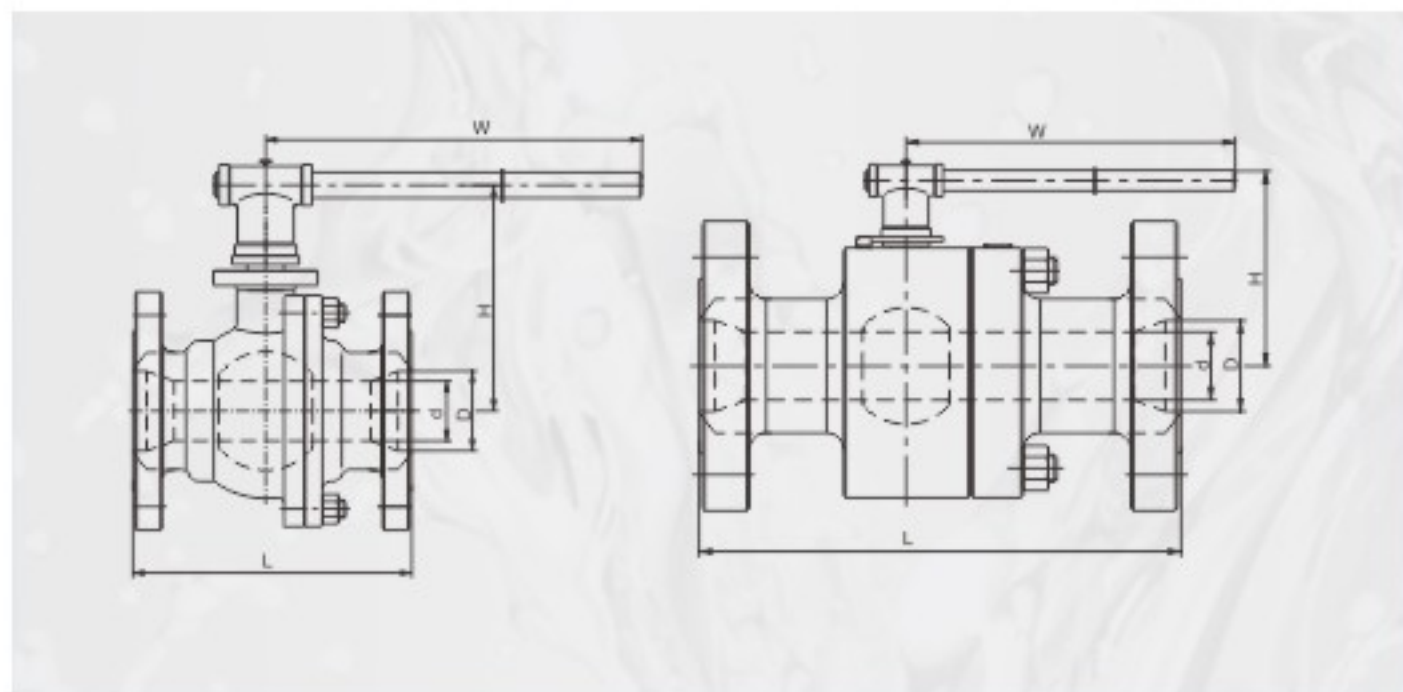
Class		CLASS 900 Full bore						CLASS 1500 Full bore					
NPS	d	L-RF	L-RTJ	L-WE	H	W	WT(Kg)	L-RF	L-RTJ	L-WE	H	W	WT(Kg)
1/2"	13	216	216	216	75	140	5	216	216	216	75	140	5
3/4"	19	229	229	229	91	180	8	229	229	229	91	180	8
1"	25	254	254	254	108	250	10	254	254	254	108	250	10
1 1/2"	38	305	305	305	133	400	20	305	305	305	133	400	20
2"	49	368	371	368	150	500	30	368	371	368	150	500	30
2 1/2"	62	419	422	419	155	500	42	419	422	419	155	500	42
3"	74	381	384	381	160	500	55	368	371	368	160	500	65
4"	100												

Form Main Types and Connecting Dimension

Class		CLASS 400 Full bore						CLASS 600 Full bore					
NPS	d	L-RF	L-RTJ	L-WE	H	W	WT(Kg)	L-RF	L-RTJ	L-WE	H	W	WT(Kg)
1/2"	13	165	167	165	66	150	3.5	165	167	165	66	150	3.5
3/4"	19	190	190	190	88	170	5	190	190	190	88	170	5
1"	25	216	216	216	90	250	7.5	216	216	216	90	250	7.5
1 1/2"	38	241	241	241	120	400	15	241	241	241	120	400	15
2"	49	292	295	292	135	400	29.4	292	295	292	135	400	29.4
2 1/2"	62	330	333	330	150	400	39.3	330	333	330	150	400	39.3
3"	74	356	359	356	164	400	58.2	356	359	356	164	400	58.2
4"	100	406	410	406	224	995	81.2	432	435	432	224	995	81.2

Form Main Types and Connecting Dimension

Class		CLASS 2500 Full bore					
NPS	d	L-RF	L-RTJ	L-WE	H	W	WT(Kg)
1/2"	13	264	264	264	88	230	7.5
3/4"	19	273	273	273	117	230	12
1"	25	308	308	308	128	300	15
1 1/2"	38	384	387	384	148	400	30
2"	42	451	454	451	183	500	37.5



Form Main Types and Connecting Dimension

Class			CLASS 150 Reduced bore						CLASS 300 Reduced bore					
NPS	D	d	L-RF	L-RTJ	L-WE	H	W	WT(Kg)	L-RF	L-RTJ	L-WE	H	W	WT(Kg)
3/4"x1/2"	19	13	117	117	152	81	150	3.5	152	165	152	81	150	3.7
1"x3/4"	25	19	127	140	165	85	150	5	165	178	165	85	150	5.8
1 1/2"x1"	38	32	165	178	190	98	180	7.5	190	203	190	98	180	10.5
2"x1 1/2"	49	38	178	191	216	133	280	10	216	232	216	133	280	16.1
2 1/2"x2"	62	49	191	203	241	141	280	16	241	257	241	141	280	24.5
3"x2"	74	49	203	216	283	141	280	21	283	298	283	141	280	34.7
3"x2 1/2"	74	62	203	216	283	139	400	28	283	298	283	139	400	44
4"x3"	100	74	229	241	305	150	400	35	305	321	305	150	400	53
6"x4"	150	100	394	406	457	223	650	73	403	419	403	223	650	100
8"x6"	201	150	457	470	521	297	*280	120	502	518	521	297	*300	170
10"x8"	252	201	533	546	559	378	*280	200	502	518	521	378	*300	250
12"x10"	303	252	610	622	635	408	*400	470	568	584	559	408	*400	
14"x12"	334	303	686	699	762	430	*400	500						

Form Main Types and Connecting Dimension

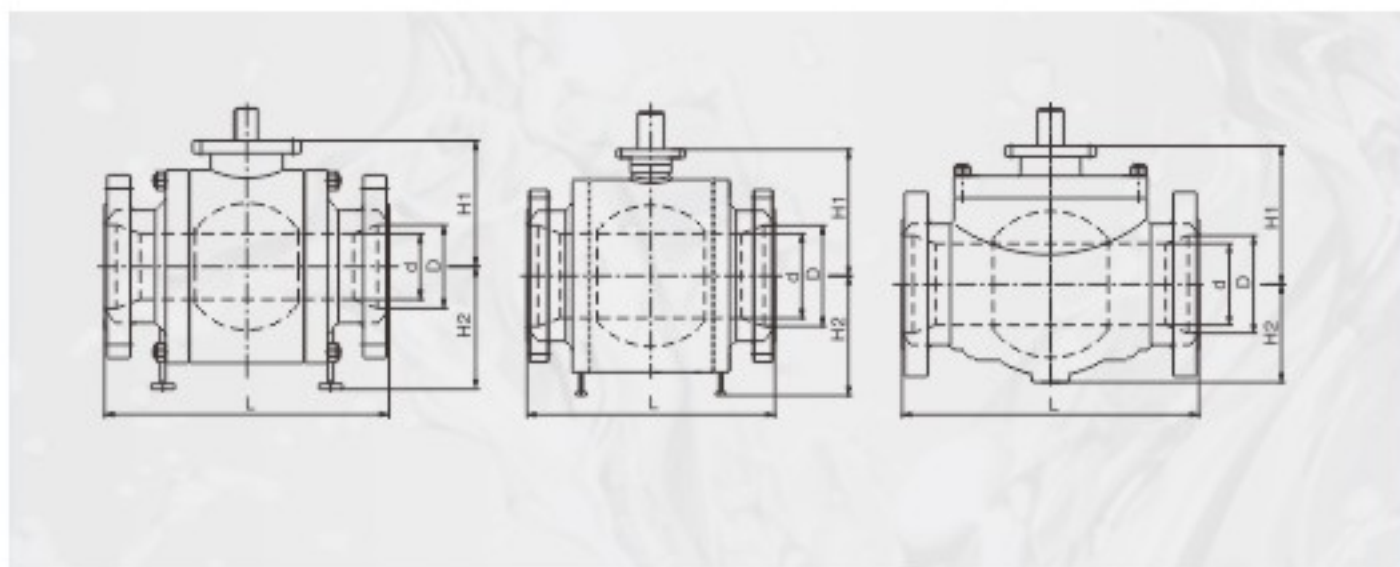
Class			CLASS 900 Reduced bore						CLASS 1500 Reduced bore					
NPS	D	d	L-RF	L-RTJ	L-WE	H	W	WT(Kg)	L-RF	L-RTJ	L-WE	H	W	WT(Kg)
3/4"x1/2"	19	13	229	229	229	75	140	7	229	229	229	75	140	7
1"x3/4"	25	19	254	254	254	91	180	9.5	254	254	254	91	180	9.5
1 1/2"x1"	38	32	305	305	305	108	250	16.5	305	305	305	108	250	16.5
2"x1 1/2"	49	38	368	371	368	133	400	23	368	371	368	133	400	23
2 1/2"x2"	62	49	419	422	419	150	500	32	419	422	419	150	500	42
3"x2"	74	49	381	384	381	150	500	42	368	371	368	150	500	60
3"x2 1/2"	74	62	381	384	381	155	500	53	368	371	368	155	500	65
4"x3"	100	74	457	460	457	160	500	65	470	473	470	160	500	78
6"x4"	150	100												

Form Main Types and Connecting Dimension

Class			CLASS 400 Reduced bore						CLASS 600 Reduced bore					
NPS	D	d	L-RF	L-RTJ	L-WE	H	W	WT(Kg)	L-RF	L-RTJ	L-WE	H	W	WT(Kg)
3/4"x1/2"	19	13	190	190	190	66	150	4	165	167	165	66	150	4
1"x3/4"	25	19	216	216	216	88	170	5.5	190	190	190	88	170	5.5
1 1/2"x1"	38	32	241	241	241	90	250	10.5	216	216	216	90	250	10.5
2"x1 1/2"	49	38	292	295	292	120	400	20	241	241	241	120	400	20
2 1/2"x2"	62	49	330	333	330	135	400	25	330	333	330	135	400	25
3"x2"	74	49	356	359	356	135	400	29	356	359	356	135	400	29
3"x2 1/2"	74	62	356	359	356	150	400	42	356	359	356	150	400	42
4"x3"	100	74	406	410	406	164	400	59	432	435	432	164	400	59
6"x4"	150	100	495	498	495	224	995	95	432	435	432	224	995	95

Form Main Types and Connecting Dimension

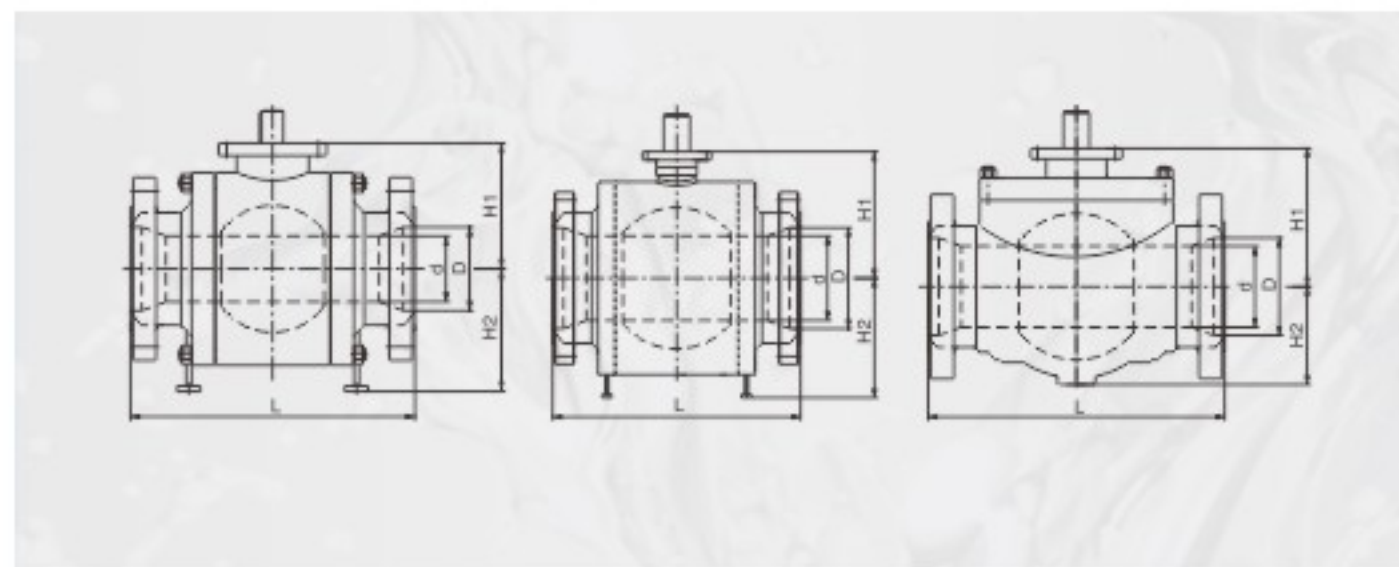
Class			CLASS 2500 Reduced bore					
NPS	D	d	L-RF	L-RTJ	L-WE	H	W	WT(Kg)
3/4"x1/2"	19	13	273	273	273	88	230	11
1"x3/4"	25	19	308	308	308	117	230	14
1 1/2"x1"	38	25	384	387	384	128	300	25
2"x1 1/2"	42	38	451	454	451	148	400	35
3"x2"	62	52	578	584	578	183	500	60



Form Main Types and Connecting Dimension

ASME Class 150 Full Bore

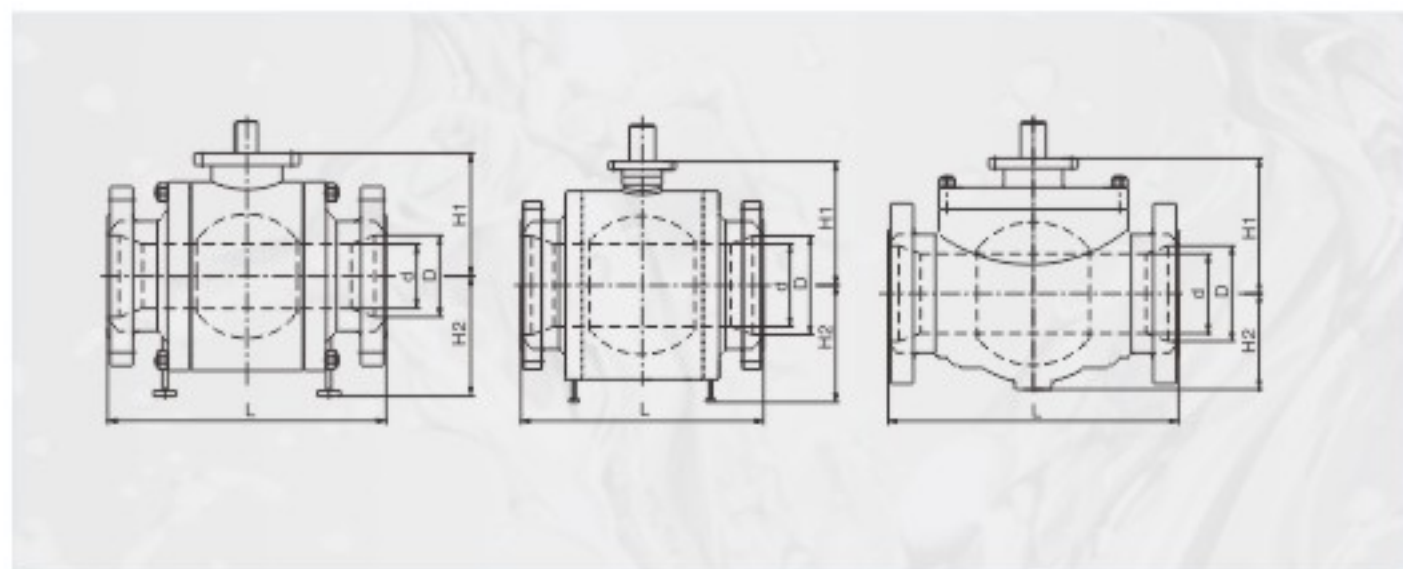
Valve type		Side entry						Fully welded						Top entry					
NPS	D	L-RF	L-RTJ	L-WE	H1	H2	WT (kg)	L-RF	L-RTJ	L-WE	H1	H2	WT (kg)	L-RF	L-RTJ	L-WE	H1	H2	WT (kg)
2"	49	178	191	216	106	102	16	178	191	216	106	102	14.5	292	295	292	207	85	30
2 1/2"	62	191	203	241	155	105	20	191	203	241	155	105	18	330	330	330	211	95	40
3"	74	203	216	283	157	111	39	203	216	283	157	111	35.5	356	359	356	223	114	57
4"	100	229	241	305	198	187	55	229	241	305	198	187	50	432	435	432	280	140	100
6"	150	394	406	457	242	235	169	394	406	457	242	235	135	559	562	559	275	219	215
8"	201	457	470	521	288	280	244	457	470	521	288	280	283	660	664	660	321	265	407
10"	252	533	546	559	323	320	439	533	546	559	323	320	430	787	791	787	355	315	560
12"	303	610	622	635	375	355	688	610	622	635	375	355	558	838	841	838	470	405	710
14"	334	686	699	762	430	400	886	686	699	762	430	400	793	889	892	889	455	432	760
16"	385	762	775	838	448	470	1215	762	775	838	448	470	1134	991	994	991	460	451	1100
18"	436	864	876	914	477	510	1625	864	876	914	477	510	1468	1092	1095	1092	503	472	1512
20"	487	914	927	991	520	550	1850	914	927	991	520	550	1946	1194	1200	1194	560	560	1930
22"	538	991	1003	1092	528	477	2359	991	1003	1092	528	477	2123	1295	1305	1295	565	591	2750
24"	589	1067	1080	1143	640	640	3120	1067	1080	1143	640	640	3200	1397	1407	1397	610	600	3200
26"	633	1143	1270	1245	675	700	4120	1143	1270	1245	675	700	3813	1448	1461	1448	670	632	3800
28"	684	1245	1376	1346	728	720	5200	1245	1376	1346	728	720	4505	1549	1562	1549	730	710	4600
30"	735	1295	1423	1397	749	780	5946	1295	1423	1397	749	780	4707	1651	1664	1651	800	790	5630
32"	779	1372	1555	1524	803	760	7020	1372	1555	1524	803	760	6287	1778	1794	1778	846	830	7085
34"	830	1473	1655	1626	850	900	7800	1473	1655	1626	850	900	7020	1930	1946	1930	870	880	7800
36"	874	1524	1758	1727	895	930	10300	1524	1758	1727	895	930	9450	2083	2099	2083	935	933	9100
40"	976	1753		1780	965	948	13350	1753		1780	965	948	11450	2337	2337	2337	1012	1030	12790
42"	1020	1790		1840	965	948	14280	1790		1840	965	948	12852	2437	2437	2437	1070	1065	15100
48"	1166	1995		2100	1097	1066	24210	1995		2100	1097	1066	24000	2540	2540	2540	1190	1230	22600
56"	1360	2300		2250	1302	1253	34100	2300		2250	1302	1253	30690						
60"	1458	2489		2489	1418	1380	38500	2489		2489	1418	1380	42300						



Form Main Types and Connecting Dimension

ASME Class 150 Reduced Bore

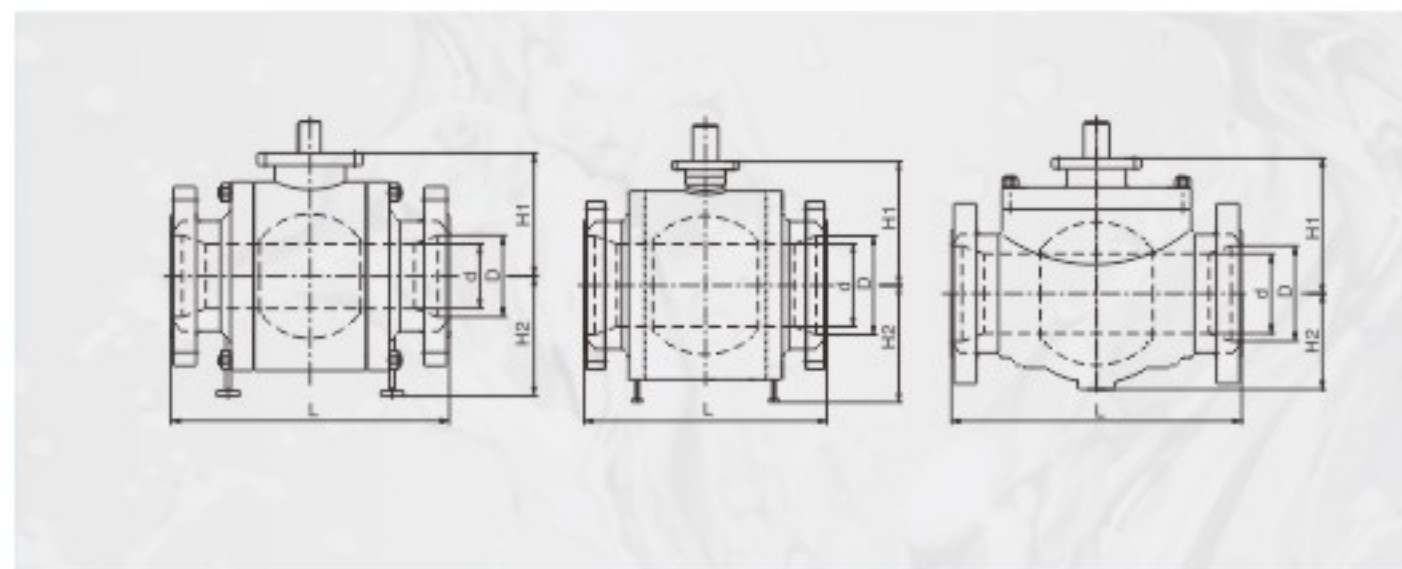
Valve type			Side entry						Fully welded						Top entry					
NPS	D	d	L-RF	L-RTJ	L-WE	H1	H2	WT (kg)	L-RF	L-RTJ	L-WE	H1	H2	WT (kg)	L-RF	L-RTJ	L-WE	H1	H2	WT (kg)
2"x1½"	49	38	178	191	216	106	102	16	178	191	216	106	102	14.5	292	295	292	207	85	25
2½"x2"	62	49	191	203	241	106	102	20	191	203	241	106	102	18	330	330	330	210	87	32
3"x2"	74	49	203	216	283	106	102	21	203	216	283	106	102	19	356	359	356	210	87	34
3"x2½"	74	62	203	216	283	130	110	22	203	216	283	130	110	20	356	359	356	215	95	50
4"x3"	100	74	229	241	305	157	111	45	229	241	305	157	111	41	432	435	432	225	110	70
6"x4"	150	100	394	406	457	198	187	68	394	406	457	198	187	61.5	559	562	559	270	143	130
8"x6"	201	150	457	470	521	242	235	186	457	470	521	242	235	151	660	664	660	275	215	250
10"x8"	252	201	533	546	559	288	280	266	533	546	559	288	280	294	787	791	787	320	262	455
12"x10"	303	252	610	622	635	323	320	478	610	622	635	323	320	440	838	841	838	355	310	485
14"x10"	334	252	686	699	762	323	320	507	686	699	762	323	320	513	889	892	889	355	310	665
14"x12"	334	303	686	699	762	375	355	724	686	699	762	375	355	588	889	892	889	475	395	790
16"x12"	385	303	762	775	838	375	355	767	762	775	838	375	355	843	991	994	991	475	395	940
16"x14"	385	334	762	775	838	430	400	935	762	775	838	430	400	838	991	994	991	450	430	908
18"x16"	436	385	864	876	914	448	470	1265	864	876	914	448	470	1162	1092	1095	1092	460	450	1248
20"x16"	487	385	914	927	991	448	470	1310	914	927	991	448	470	1235	1194	1200	1194	460	450	1542
20"x18"	487	436	914	927	991	477	510	1670	914	927	991	477	510	1521	1194	1200	1194	495	470	1740
24"x20"	589	487	1067	1080	1143	520	550	1970	1067	1080	1143	520	550	2120	1397	1407	1397	550	580	2378
30"x24"	735	589	1295	1423	1397	640	640	3420	1295	1423	1397	640	640	3695	1651	1664	1651	590	592	4008
36"x30"	874	735	1524	1758	1727	749	780	6376	1524	1758	1727	749	780	5554	2083	2099	2083	795	765	7048
40"x36"	976	874	1753		1780	895	930	10700	1753		1780	895	930	9622						



Form Main Types and Connecting Dimension

ASME Class 300 Full Bore

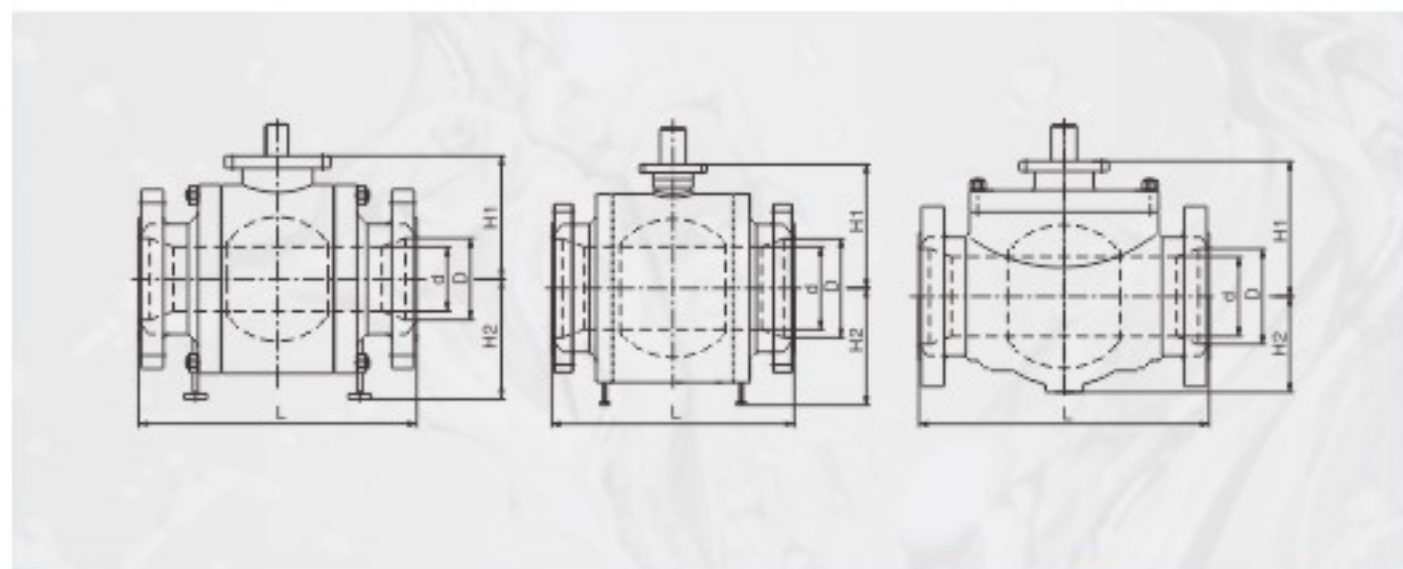
Valve type		Side entry						Fully welded						Top entry					
NPS	D	L-RF	L-RTJ	L-WE	H1	H2	WT (kg)	L-RF	L-RTJ	L-WE	H1	H2	WT (kg)	L-RF	L-RTJ	L-WE	H1	H2	WT (kg)
2"	49	216	232	216	100	85	21	216	232	216	100	85	19	292	295	292	211	90	36
2 1/2"	62	241	257	241	125	100	25	241	257	241	125	100	22.5	330	330	330	218	105	50
3"	74	283	298	283	158	121	50	283	298	283	158	121	45	356	359	356	226	119	63
4"	100	305	321	305	191	142	87	305	321	305	191	142	78.5	432	435	432	286	145	106
6"	150	403	419	403	242	235	192	403	419	403	242	235	140	559	562	559	282	224	221
8"	201	502	518	521	288	280	333	502	518	521	288	280	308	660	664	660	325	270	412
10"	252	568	584	559	337	320	559	568	584	559	337	320	469	787	791	787	360	320	566
12"	303	648	664	635	375	355	728	648	664	635	375	355	590	838	841	838	475	410	715
14"	334	762	778	762	407	400	985	762	778	762	407	400	845	889	892	889	460	437	766
16"	385	838	854	838	473	460	1390	838	854	838	473	460	1180	991	994	991	465	456	1106
18"	436	914	930	914	485	510	1810	914	930	914	485	510	1600	1092	1095	1092	508	477	1519
20"	487	991	1010	991	540	555	2350	991	1010	991	540	555	2112	1194	1200	1194	565	565	1936
22"	538	1092	1114	1092	560	575	2788	1092	1114	1092	560	575	2509	1295	1305	1295	572	596	2756
24"	589	1143	1165	1143	673	635	3715	1143	1165	1143	673	635	3300	1397	1407	1397	617	605	3208
26"	633	1245	1270	1245	677	700	4780	1245	1270	1245	677	700	4286	1448	1461	1448	678	637	3808
28"	684	1346	1372	1346	762	720	5600	1346	1372	1346	762	720	4920	1549	1562	1549	738	715	4607
30"	735	1397	1422	1397	772	800	6530	1397	1422	1397	772	800	5940	1651	1664	1651	811	795	5638
32"	779	1524	1553	1524	815	848	7820	1524	1553	1524	815	848	7050	1778	1794	1778	850	835	7092
34"	830	1626	1654	1626	820	8860	9040	1626	1654	1626	820	8860	8136	1930	1946	1930	877	885	7811
36"	874	1727	1756	1727	918	950	12010	1727	1756	1727	918	950	10205	2083	2099	2083	942	938	9112
40"	976	1850		1780	987	980	15000	1850		1780	987	980	12546	2337	2337	2337	1020	1036	12798
42"	1020	1900		1840	1012	1020	16105	1900		1840	1012	1020	17550	2437	2437	2437	1081	1070	15113
48"	1166	2180		2100	1208	1200	25300	2180		2100	1208	1200	22540	2540	2540	2540	1201	1236	22614
56"	1360	2300		2250	1285	1270	38155	2300		2250	1285	1270	34340						
60"	1458	2743		2743	1380	1440	46600	2743		2743	1380	1440	44910						



Form Main Types and Connecting Dimension

ASME Class 300 Reduced Bore

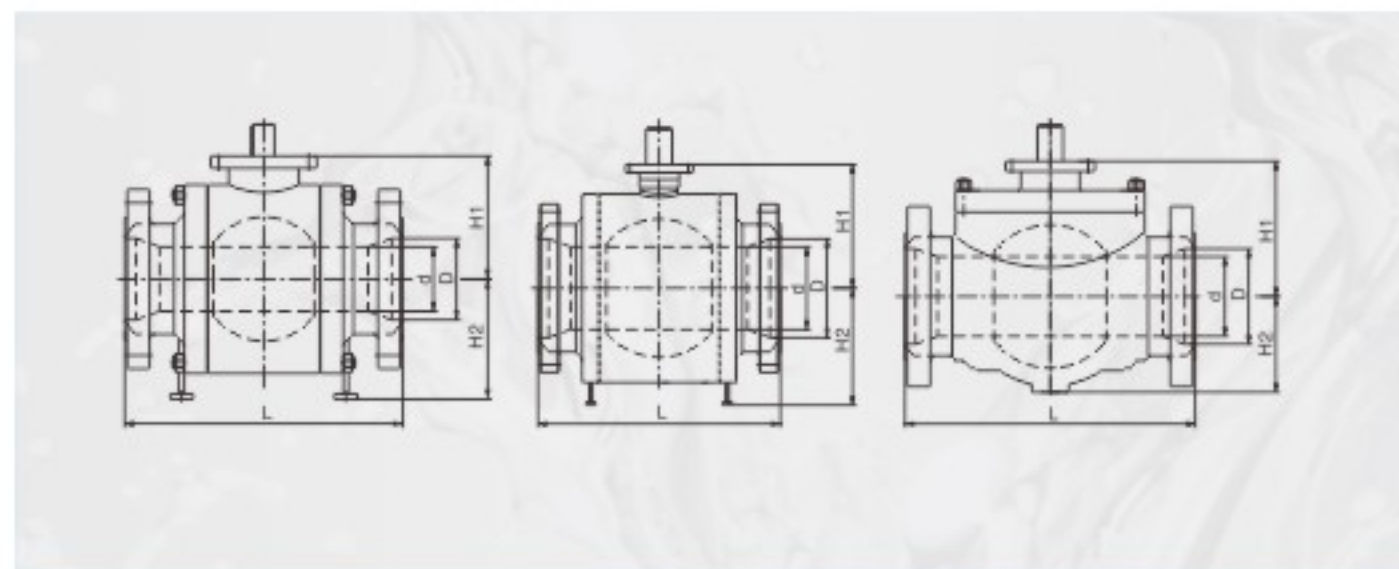
Valve type			Side entry						Fully welded						Top entry					
NPS	D	d	L-RF	L-RTJ	L-WE	H1	H2	WT (kg)	L-RF	L-RTJ	L-WE	H1	H2	WT (kg)	L-RF	L-RTJ	L-WE	H1	H2	WT (kg)
2"x1½"	49	38	216	232	216	100	85	20	216	232	216	100	85	18	292	295	292	206	80	26
2½"x2"	62	49	241	257	241	100	85	26	241	257	241	100	85	23.5	330	330	330	211	90	40
3"x2"	74	49	283	298	283	125	100	28	283	298	283	125	100	25	356	359	356	211	90	42
3"x2½"	74	62	283	298	283	125	100	30.5	283	298	283	125	100	27.5	356	359	356	218	105	60
4"x3"	100	74	305	321	305	158	121	58	305	321	305	158	121	53	432	435	432	226	119	82
6"x4"	150	100	403	419	403	191	142	106	403	419	403	191	142	96	559	562	559	286	145	161
8"x6"	201	150	502	518	521	242	235	218	502	518	521	242	235	170	660	664	660	282	224	285
10"x8"	252	201	568	584	559	288	280	370	568	584	559	288	280	322	787	791	787	325	270	536
12"x10"	303	252	648	664	635	337	320	610	648	664	635	337	320	485	838	841	838	360	320	572
14"x10"	334	252	762	778	762	337	320	685	762	778	762	337	320	552	889	892	889	360	320	781
14"x12"	334	303	762	778	762	375	355	807	762	778	762	375	355	620	889	892	889	475	410	916
16"x12"	385	303	838	854	838	375	355	862	838	854	838	375	355	672	991	994	991	475	410	1092
16"x14"	385	334	838	854	838	407	400	1045	838	854	838	407	400	890	991	994	991	460	437	1095
18"x16"	436	385	914	930	914	473	460	1460	914	930	914	473	460	1208	1092	1095	1092	465	456	1462
20"x16"	487	385	991	1010	991	473	460	1545	991	1010	991	473	460	1292	1194	1200	1194	465	456	1809
20"x18"	487	436	991	1010	991	485	510	1900	991	1010	991	485	510	1657	1194	1200	1194	508	477	2023
24"x20"	589	487	1143	1165	1143	540	555	2550	1143	1165	1143	540	555	2335	1397	1407	1397	565	565	2774
30"x24"	735	589	1397	1422	1397	673	635	4210	1397	1422	1397	673	635	3900	1651	1664	1651	617	605	4665
36"x30"	874	735	1727	1756	1727	772	800	7250	1727		1727	772	800	6948	2083	2099	2083	811	795	8298
40"x36"	976	874	1850		1780	918	950	12000	1850		1780	918	950	10376						



Form Main Types and Connecting Dimension

ASME Class 400 Full Bore

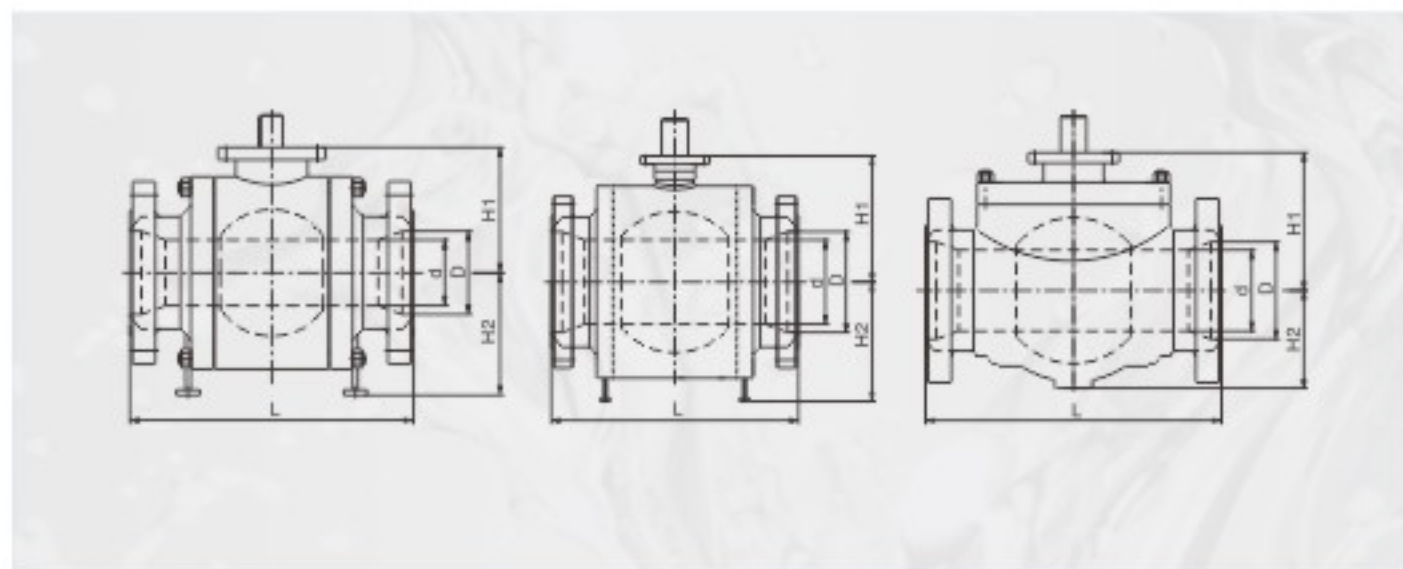
Valve type		Side entry						Fully welded						Top entry					
NPS	D	L-RF	L-RTJ	L-WE	H1	H2	WT (kg)	L-RF	L-RTJ	L-WE	H1	H2	WT (kg)	L-RF	L-RTJ	L-WE	H1	H2	WT (kg)
2"	49	292	295	292	102	98	36	292	295	292	12	98	32.5	292	295	292	240	85	41
2 1/2"	62	330	333	330	130	110	51	330	333	330	130	110	46	330	330	330	270	95	52
3"	74	356	359	356	165	128	72	356	359	356	165	128	65	356	359	356	305	116	67
4"	100	406	410	406	210	160	102	406	410	406	210	160	92	432	435	432	275	140	230
6"	150	495	498	495	242	235	230	495	498	495	242	235	180	559	562	559	296	180	420
8"	201	597	600	597	289	280	420	597	600	597	289	280	322	660	664	660	324	275	417
10"	252	673	676	673	337	320	630	673	676	673	337	320	496	787	791	787	365	325	570
12"	303	762	765	762	379	365	902	762	765	762	379	365	687	838	841	838	480	415	720
14"	334	826	829	826	398	395	1121	826	829	826	398	395	890	889	892	889	465	442	770
16"	385	902	905	902	453	470	1612	902	905	902	453	470	1345	991	994	991	470	461	1112
18"	436	978	981	978	500	510	2010	978	981	978	500	510	1678	1092	1095	1092	512	482	1523
20"	487	1054	1060	1054	540	560	2446	1054	1060	1054	540	560	2291	1194	1200	1194	570	570	1940
22"	538	1143	1153	1143	625	593	3787	1143	1153	1143	625	593	3411	1295	1305	1295	578	602	2760
24"	589	1232	1241	1232	641	660	4095	1232	1241	1232	641	660	3792	1397	1407	1397	622	610	3213
26"	633	1308	1321	1308	681	700	5020	1308	1321	1308	681	700	4500	1448	1461	1448	682	640	3813
28"	684	1397	1410	1397	738	760	6200	1397	1410	1397	738	760	5170	1549	1562	1549	742	722	4612
30"	735	1524	1537	1524	781	800	7370	1524	1537	1524	781	800	7542	1651	1664	1651	817	804	5640
32"	779	1651	1667	1651	819	850	9890	1651	1667	1651	819	850	8008	1778	1794	1778	855	840	7103
34"	830	1778	1794	1778	840	850	11336	1778	1794	1778	840	850	10202	1930	1946	1930	893	890	7822
36"	874	1880	1895	1880	920	880	13250	1880	1895	1880	920	880	11005	2083	2099	2083	947	944	9118
40"	976	2000		1900	987	980	18335	2000		1900	987	980	13540	2337	2337	2337	1025	1041	12805
42"	1020	2100		1950	1012	1020	21356	2100		1950	1012	1020	19220	2437	2437	2437	1086	1075	15118
48"	1166	2400		2180	1208	1200	31195	2400		2180	1208	1200	24000	2540	2540	2540	1506	1240	22619
56"	1360	2710		2385	1290	1450	47483	2710		2385	1290	1450	42735						
60"	1458	2949		2949	1510	1550	61500	2949		2949	1510	1550	47700						



Form Main Types and Connecting Dimension

ASME Class 400 Reduced Bore

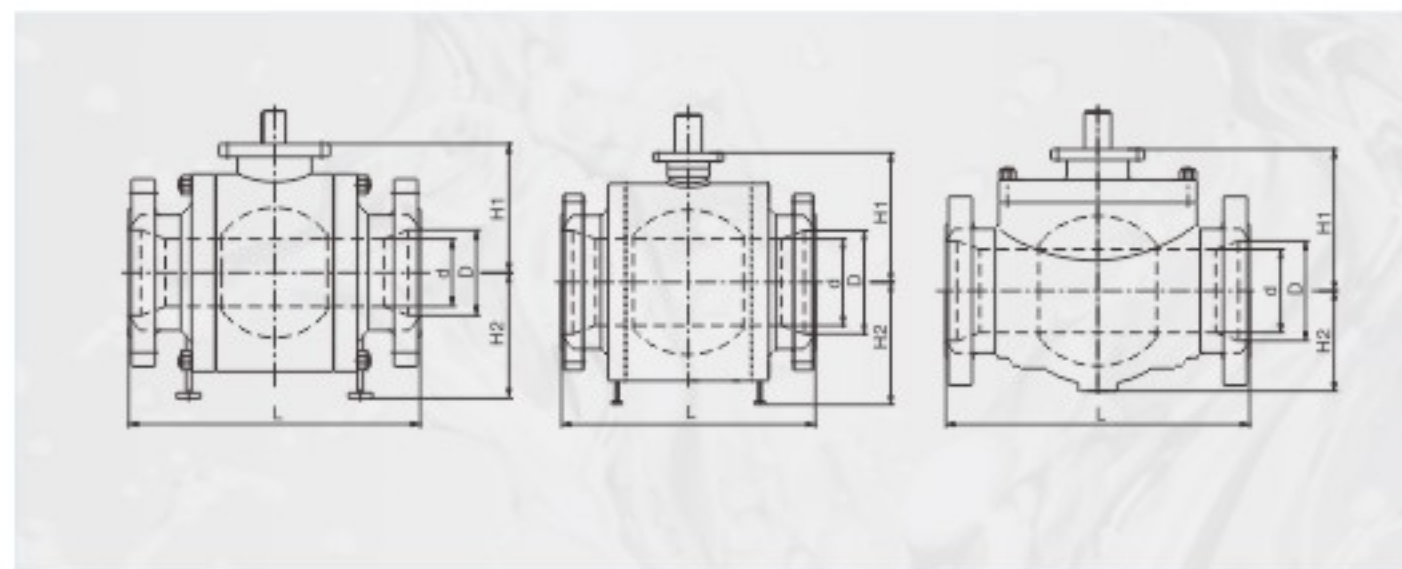
Valve type			Side entry						Fully welded						Top entry					
NPS	D	d	L-RF	L-RTJ	L-WE	H1	H2	WT (kg)	L-RF	L-RTJ	L-WE	H1	H2	WT (kg)	L-RF	L-RTJ	L-WE	H1	H2	WT (kg)
2"x1½"	49	38	292	295	292	102	98	35	292	295	292	102	98	31.5	292	295	292	210	85	34
2 ½"x2"	62	49	330	333	330	102	98	40	330	333	330	102	98	36	330	330	330	215	95	40
3"x2"	74	49	356	359	356	130	110	50	356	359	356	130	110	45	356	359	356	215	95	46
3"x2½"	74	62	356	359	356	130	110	55	356	359	356	130	110	49.5	356	359	356	223	110	70
4"x3"	100	74	406	410	406	165	128	90	406	410	406	165	128	81	432	435	432	232	124	94
6"x4"	150	100	495	498	495	210	160	138	495	498	495	210	160	118	559	562	559	283	154	280
8"x6"	201	150	597	600	597	242	235	272	597	600	597	242	235	205	660	664	660	287	129	318
10"x8"	252	201	673	676	673	289	280	495	673	676	673	289	280	346	787	791	787	324	275	600
12"x10"	303	252	762	765	762	337	320	678	762	765	762	337	320	511	838	841	838	365	325	719
14"x10"	334	252	826	829	826	337	320	795	826	829	826	337	320	562	889	892	889	365	325	991
14"x12"	334	303	826	829	826	379	365	1025	826	829	826	379	365	705	889	892	889	480	415	1191
16"x12"	385	303	902	905	902	379	365	1160	902	905	902	379	365	751	991	994	991	480	415	1411
16"x14"	385	334	902	905	902	398	395	1260	902	905	902	398	395	937	991	994	991	465	442	1377
18"x16"	436	385	978	981	978	453	470	1705	978	981	978	453	470	1375	1092	1095	1092	470	461	1856
20"x16"	487	385	1054	1060	1054	453	470	1852	1054	1060	1054	453	470	1455	1194	1200	1194	470	461	2896
20"x18"	487	436	1054	1060	1054	500	510	2165	1054	1060	1054	500	510	1740	1194	1200	1194	512	482	2930
24"x20"	589	487	1232	1241	1232	540	560	2785	1232	1241	1232	540	560	2552	1397	1407	1397	570	570	3518
30"x24"	735	589	1524	1537	1524	641	660	4660	1524	1537	1524	641	660	4480	1651	1664	1651	622	610	5968
36"x30"	874	735	1880	1895	1880	781	800	8150	1880		1880	781	800	8673	2083	2099	2083	817	804	10572
40"x36"	976	874	2000		1900	920	880	13260	2000		1900	920	880	11070						



Form Main Types and Connecting Dimension

ASME Class 600 Full Bore

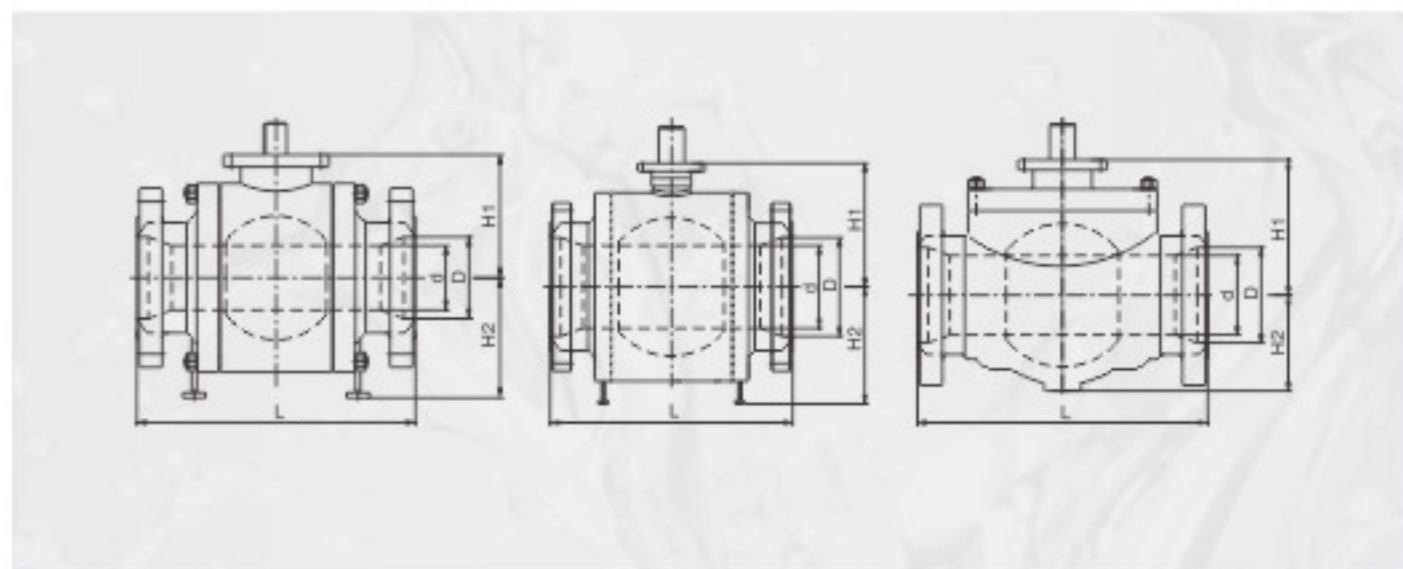
Valve type		Side entry						Fully welded						Top entry					
NPS	D	L-RF	L-RTJ	L-WE	H1	H2	WT (kg)	L-RF	L-RTJ	L-WE	H1	H2	WT (kg)	L-RF	L-RTJ	L-WE	H1	H2	WT (kg)
2"	49	292	295	292	102	98	36	292	295	292	102	98	32.5	292	295	292	240	85	41
2 1/2"	62	330	333	330	130	110	51	330	333	330	130	110	46	330	330	330	270	95	52
3"	74	356	359	356	165	128	72	356	359	356	165	128	65	356	359	356	305	116	67
4"	100	432	435	432	210	160	123	432	435	432	210	160	92	432	435	432	275	140	230
6"	150	559	562	559	248	235	290	559	562	559	248	235	210	559	562	559	296	180	420
8"	201	660	664	660	297	280	456	660	664	660	297	280	332	660	664	660	324	275	417
10"	252	787	791	787	337	320	777	787	791	787	337	320	549	787	791	787	365	325	570
12"	303	838	841	838	379	365	1029	838	841	838	379	365	750	838	841	838	480	415	720
14"	334	889	892	889	398	400	1295	889	892	889	398	400	950	889	892	889	465	442	770
16"	385	991	994	991	447	458	1732	991	994	991	447	458	1510	991	994	991	470	461	1112
18"	436	1092	1095	1092	541	510	2400	1092	1095	1092	541	510	1860	1092	1095	1092	512	482	1523
20"	487	1194	1200	1194	589	560	2820	1194	1200	1194	589	560	2465	1194	1200	1194	570	570	1940
22"	538	1295	1305	1295	642	600	3787	1295	1305	1295	642	600	3411	1295	1305	1295	578	602	2760
24"	589	1397	1407	1397	692	645	4770	1397	1407	1397	692	645	4220	1397	1407	1397	622	610	3213
26"	633	1448	1461	1448	730	690	5785	1448	1461	1448	730	690	4850	1448	1461	1448	682	640	3813
28"	684	1549	1562	1549	794	790	6900	1549	1562	1549	794	790	5560	1549	1562	1549	742	722	4612
30"	735	1651	1664	1651	820	835	8355	1651	1664	1651	820	820	7542	1651	1664	1651	817	804	5640
32"	779	1778	1794	1778	833	860	9890	1778	1794	1778	833	860	8480	1778	1794	1778	855	840	7103
34"	830	1930	1946	1930	850	860	11336	1930	1946	1930	850	860	10202	1930	1946	1930	893	890	7822
36"	874	2083	2099	2083	920	880	16170	2083	2099	2083	920	880	11910	2083	2099	2083	947	944	9118
40"	976	2000		1900	987	980	18335	2000		2000	987	980	14000	2169	2169	2169	1025	1041	12805
42"	1020	2100		1950	1012	1020	21356	2100		2100	1012	1020	19220	2437	2437	2437	1086	1075	15118
48"	1168	2400		2180	1208	1200	31195	2400		2400	1208	1200	24000	2435	2435	2435	1506	1240	22619
56"	1360	2710		2385	1290	1450	47483	2710			1290	1450	42735						
60"	1458	2949		2949	1510	1550	61500	2949			1510	1550	47700						



Form Main Types and Connecting Dimension

ASME Class 600 Reduced Bore

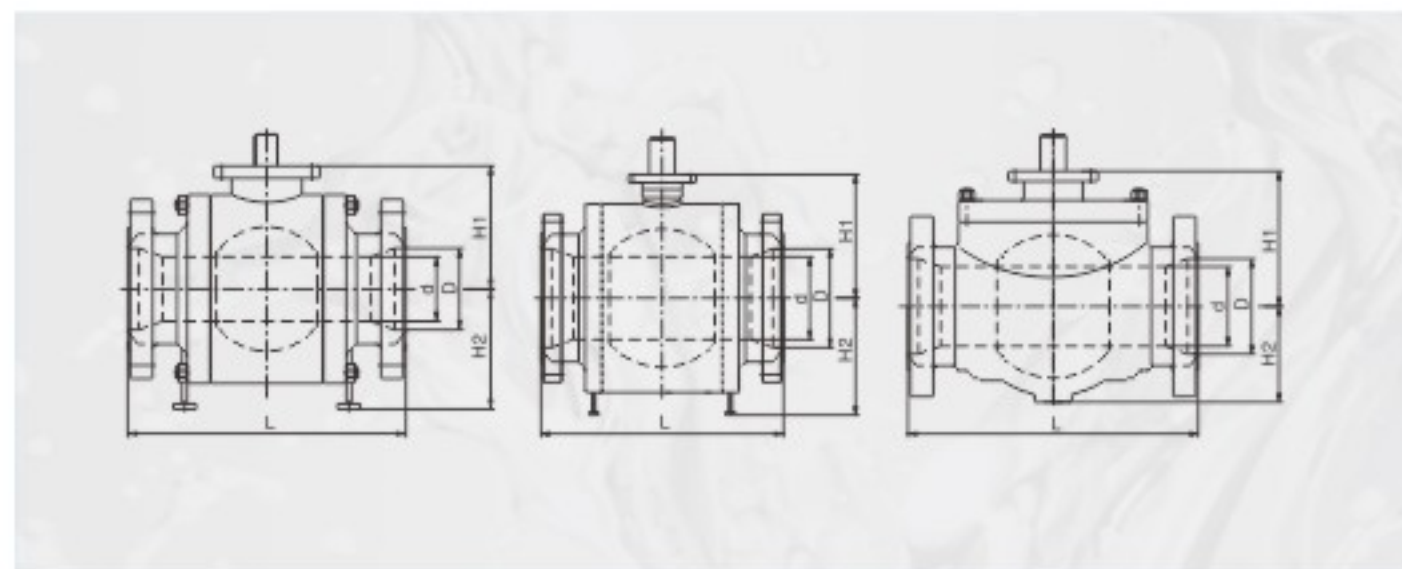
Valve type			Side entry						Fully welded						Top entry					
NPS	D	d	L-RF	L-RTJ	L-WE	H1	H2	WT (kg)	L-RF	L-RTJ	L-WE	H1	H2	WT (kg)	L-RF	L-RTJ	L-WE	H1	H2	WT (kg)
2"x1 1/2"	49	38	292	295	292	102	98	35	292	295	292	102	98	31.5	292	295	292	210	85	34
2 1/2"x2"	62	49	330	333	330	102	98	40	330	333	330	102	98	36	330	330	330	215	95	40
3"x2"	74	49	356	359	356	130	110	50	356	359	356	130	110	45	356	359	356	215	95	46
3"x2 1/2"	74	62	356	359	356	130	110	55	356	359	356	130	110	49.5	356	359	356	223	110	70
4"x3"	100	74	432	435	432	165	128	90	432	435	432	165	128	81	432	435	432	232	124	94
6"x4"	150	100	559	562	559	210	160	160	559	562	559	210	160	124	559	562	559	283	154	280
8"x6"	201	150	660	664	660	248	235	332	660	664	660	248	235	235	660	664	660	287	129	318
10"x8"	252	201	787	791	787	297	280	540	787	791	787	297	280	377	787	791	787	324	275	600
12"x10"	303	252	838	841	838	337	320	825	838	841	838	337	320	560	838	841	838	365	325	719
14"x10"	334	252	889	892	889	337	320	942	889	892	889	337	320	595	889	892	889	365	325	991
14"x12"	334	303	889	892	889	379	365	1152	889	892	889	379	365	765	889	892	889	480	415	1191
16"x12"	385	303	991	994	991	379	365	1288	991	994	991	379	365	820	991	994	991	480	415	1411
16"x14"	385	334	991	994	991	398	400	1442	991	994	991	398	400	1018	991	994	991	465	442	1377
18"x16"	436	385	1092	1095	1092	447	458	1838	1092	1095	1092	447	458	1555	1092	1095	1092	470	461	1856
20"x16"	487	385	1194	1200	1194	447	458	2000	1194	1200	1194	447	458	1686	1194	1200	1194	470	461	2896
20"x18"	487	436	1194	1200	1194	541	510	2578	1194	1200	1194	541	510	1966	1194	1200	1194	512	482	2930
24"x20"	589	487	1397	1407	1397	289	560	3215	1397	1407	1397	289	560	2798	1397	1407	1397	570	570	3518
30"x24"	735	589	1651	1664	1651	692	645	5380	1651	1664	1651	692	645	4872	1651	1664	1651	622	610	5968
36"x30"	874	735	2083	2099	2083	789	820	9375	2083		2083	789	820	8942	2083	2099	2083	817	804	10572
40"x36"	976	874	2000		1900	920	880	15950	2000		1900	920	880	11320						



Form Main Types and Connecting Dimension

ASME Class 900 Full Bore

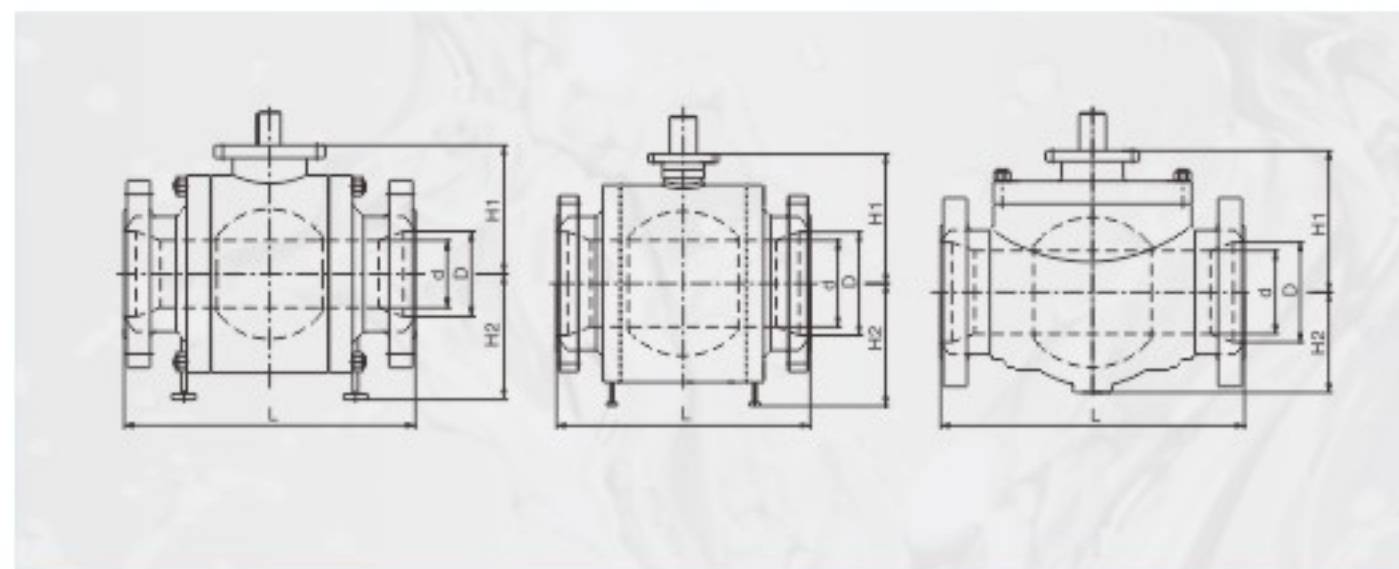
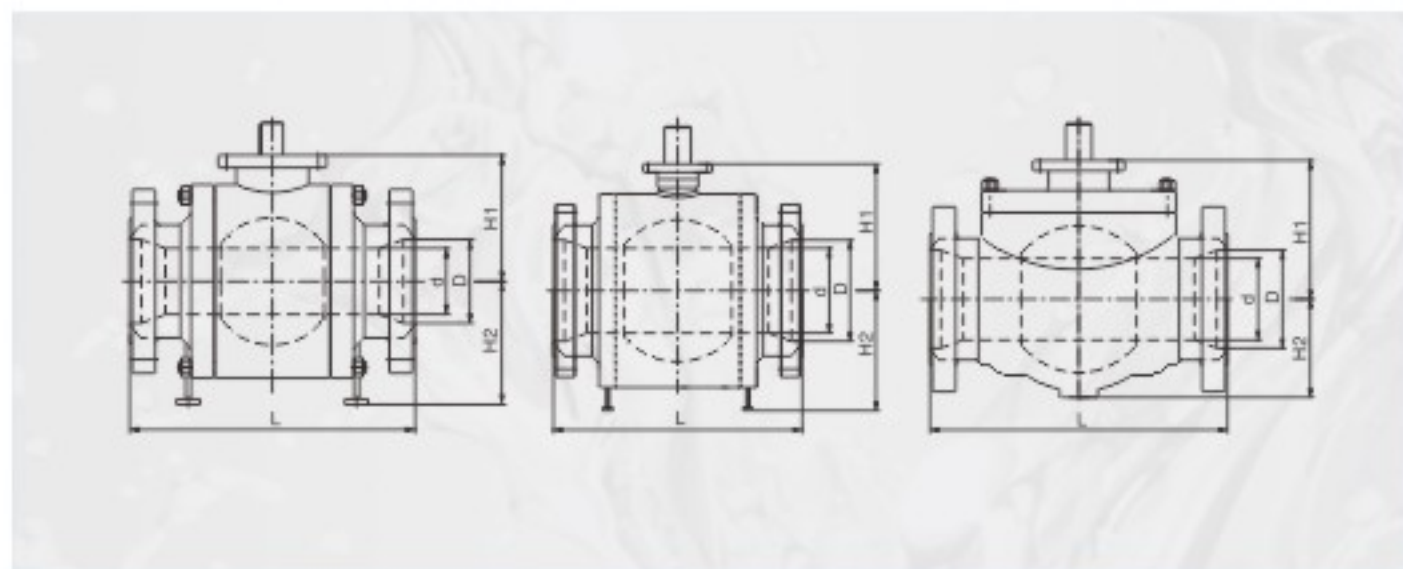
Valve type		Side entry						Fully welded						Top entry					
NPS	D	L-RF	L-RTJ	L-WE	H1	H2	WT (kg)	L-RF	L-RTJ	L-WE	H1	H2	WT (kg)	L-RF	L-RTJ	L-WE	H1	H2	WT (kg)
2"	49	368	371	368	104	103	70	368	371	368	104	103	45	368	371	368	295	110	52
2 1/2"	62	419	422	419	130	115	102	419	422	419	130	115	55	419	422	419	260	115	80
3"	74	381	384	381	163	132	105	381	384	381	163	132	68	381	384	381	230	122	110
4"	100	457	460	457	211	169	183	457	460	457	211	169	135	457	460	457	283	154	200
6"	150	610	613	610	259	213	372	610	613	610	259	213	234	610	613	610	329	203	430
8"	201	737	740	737	297	264	719	737	740	737	297	264	440	737	740	737	375	245	800
10"	252	838	841	838	342	333	1140	838	841	838	342	333	692	838	841	838	431	275	1000
12"	303	965	968	965	384	379	1426	965	968	965	384	379	1035	965	968	965	511	322	1300
14"	322	1029	1038	1029	398	368	1758	1029	1038	1029	398	368	1303	1029	1038	1029	520	443	1695
16"	373	1130	1140	1130	436	137	2630	1130	1140	1130	436	137	1795	1130	1140	1130	582	390	2560
18"	423	1219	1232	1219	484	497	3585	1219	1232	1219	484	497	2460	1219	1232	1219	580	487	3400
20"	471	1321	1334	1321	532	503	5190	1321	1334	1321	532	503	3240	1321	1334	1321	625	605	4400
22"	522	1435	1448	1435	575	565	5380	1435	1448	1435	575	565	4842	1435	1448	1435			
24"	570	1549	1568	1549	617	633	8515	1549	1568	1549	617	633	5088	1549	1568	1549	690	625	7200
26"	617	1651	1674	1651	635	660	9200	1651	1674	1651	635	660	5906	1651	1674	1651			
28"	665	1753	1775	1753	674	706	11630	1753	1775	1753	674	706	7116	1753	1775	1753	820	723	10400
30"	712	1880	1902	1880	723	777	13770	1880	1902	1880	723	777	10989	1880	1902	1880	880	800	12875
32"	760	2032	2054	2032	784	809	16600	2032	2054	2032	784	809	10470	2032	2054	2032	938	870	15950
34"	808	2159	2188	2159	807	852	17200	2159	2188	2159	807	852	15480	2159	2188	2159	982	920	17500
36"	855	2286	2315	2286	848	898	23235	2286	2315	2286	848	898	12900	2286	2315	2286	1050	990	20600
40"	956	2180	2210	2100	1160	1000	23260	2180	2210	2100	1160	1000	17930						
42"	1006	2250	2280	2180	1200	1080	27600	2250	2280	2180	1200	1080	21258						
48"	1149	2450	2480	2380	1262	1195	34800	2450	2480	2380	1262	1195	28000						
56"	1360	2949		2400	1416	1404	47483	2949		2400	1416	1404	42735						



Form Main Types and Connecting Dimension

ASME Class 900 Reduced Bore

Valve type			Side entry						Fully welded						Top entry					
NPS	D	d	L-RF	L-RTJ	L-WE	H1	H2	WT (kg)	L-RF	L-RTJ	L-WE	H1	H2	WT (kg)	L-RF	L-RTJ	L-WE	H1	H2	WT (kg)
2"x1½"	49	38	368	371	368	104	103	70	368	371	368	104	103	39	368	371	368	161	95	50
2½"x2"	62	49	419	422	419	104	103	81	419	422	419	104	103	47	419	422	419	211	84	75
3"x2"	74	49	381	384	381	130	115	86	381	384	381	130	115	52	381	384	381	211	84	70
3"x2½"	74	62	381	384	381	130	115	96	381	384	381	130	115	55	381	384	381	220	110	105
4"x3"	100	74	457	460	457	163	132	127	457	460	457	163	132	75	457	460	457	230	122	140
6"x4"	150	100	610	613	610	211	169	243	610	613	610	211	169	165	610	613	610	283	154	273
8"x6"	201	150	737	740	737	259	213	452	737	740	737	259	213	270	737	740	737	329	209	548
10"x8"	252	201	838	841	838	297	264	802	838	841	838	297	264	480	838	841	838	375	245	906
12"x10"	303	252	965	968	965	342	333	1258	965	968	965	342	333	725	965	968	965	431	275	1090
14"x10"	322	252	1029	1038	1029	342	333	1440	1029	1038	1029	342	333	792	1029	1038	1029	380	324	1495
14"x12"	322	303	1029	1038	1029	384	379	1612	1029	1038	1029	384	379	1060	1029	1038	1029	511	322	1800
16"x12"	373	303	1130	1140	1130	384	379	1758	1130	1140	1130	384	379	1128	1130	1140	1130	515	360	2100
16"x14"	373	322	1130	1140	1130	398	368	1916	1130	1140	1130	398	368	1386	1130	1140	1130	520	360	2300
18"x16"	423	373	1219	1232	1219	436	437	2885	1219	1232	1219	436	137	1850	1219	1232	1219	536	380	2837
20"x16"	471	373	1321	1334	1321	436	437	3142	1321	1334	1321	436	137	2000	1321	1334	1321	582	390	3515
20"x18"	471	423	1321	1334	1321	484	497	3856	1321	1334	1321	484	497	2581	1321	1334	1321	580	485	3875
24"x20"	570	471	1549	1568	1549	532	503	6222	1549	1568	1549	532	503	3695	1549	1568	1549	629	604	5395
30"x24"	712	570	1880	1902	1880	617	633	9522	1880	1902	1880	617	633	6072	1880	1902	1880	640	665	9000
36"x30"	855	712	2286	2315	2286	723	777	15575	2286	2315	2286	723	777	12522	2286	2315	2286	777	795	15235
40"x36"	956	855	2180	2210	2100	848	898	23505	2180	2210	2100	848	898	12200						



Form Main Types and Connecting Dimension

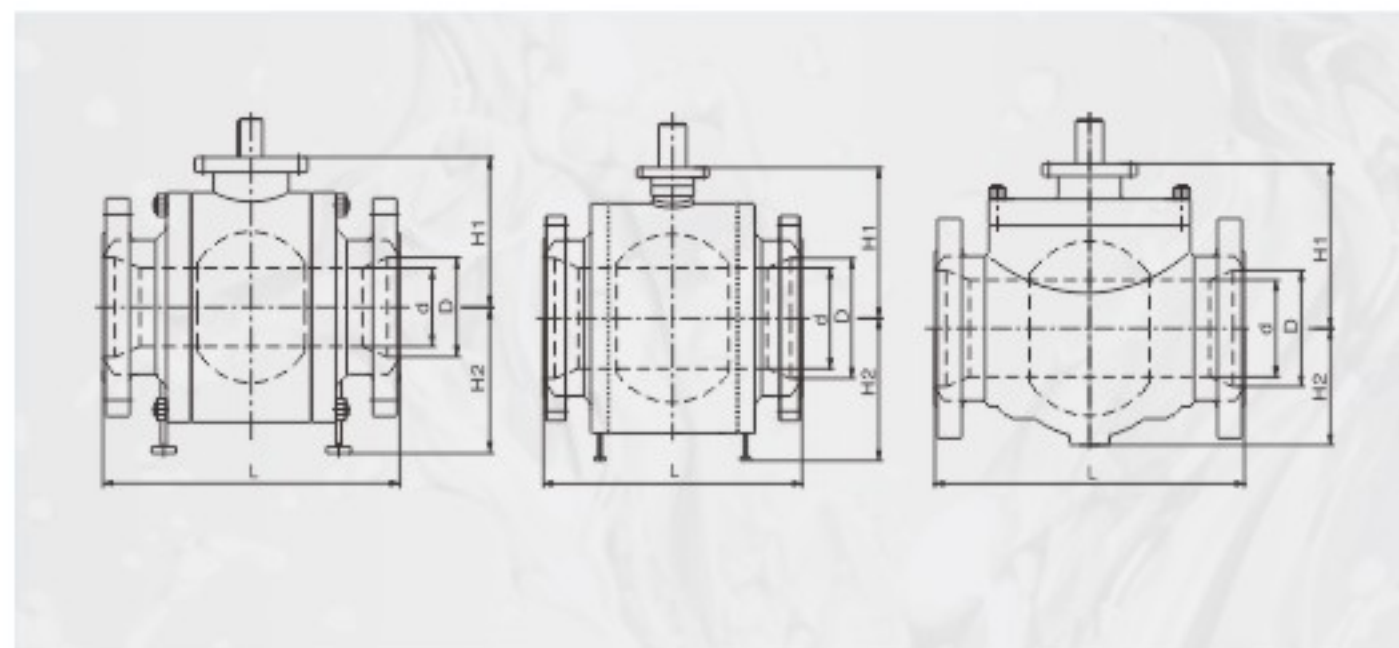
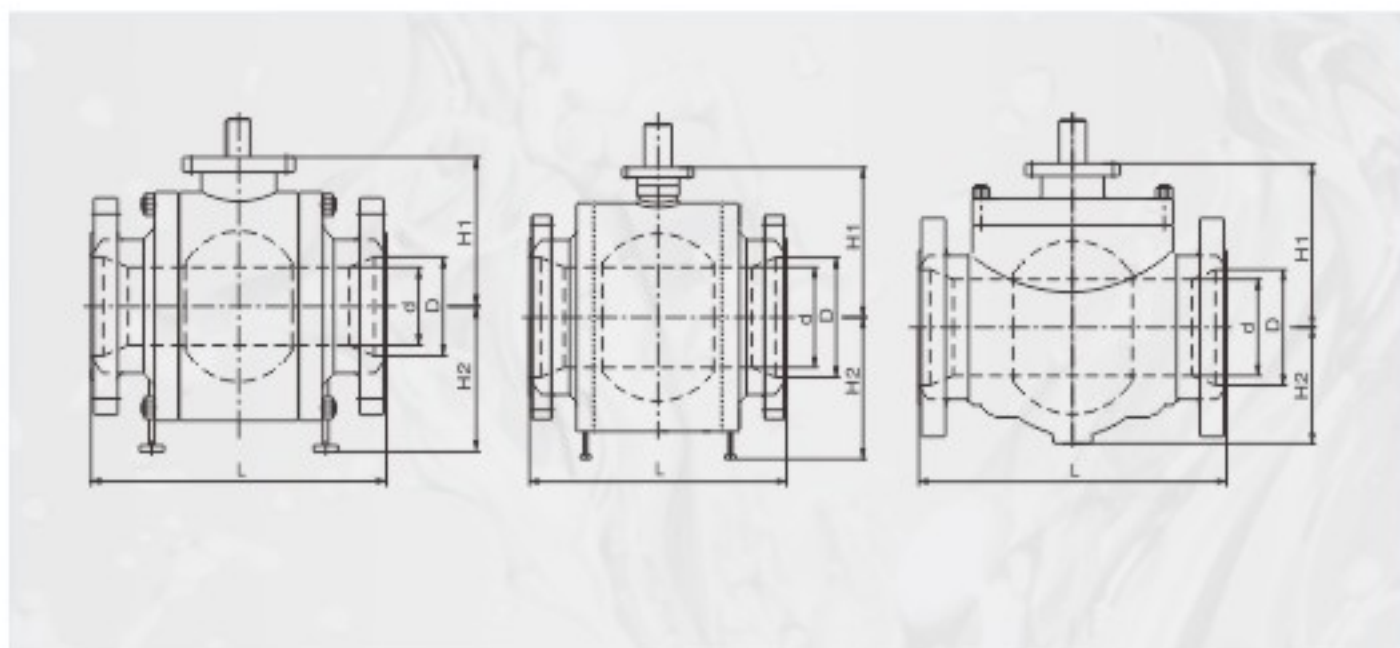
ASME Class 1500 Full Bore

Valve type		Side entry							Fully welded							Top entry						
NPS	D	L-RF	L-RTJ	L-WE	H1	H2	WT (kg)		L-RF	L-RTJ	L-WE	H1	H2	WT (kg)		L-RF	L-RTJ	L-WE	H1	H2	WT (kg)	
2"	49	368	371	368	106	104	50		368	371	368	106	104	45		368	371	368	201	100	56	
2 1/2"	62	419	422	419	130	115	72		419	422	419	130	115	67		419	422	419	215	110	100	
3"	74	470	473	470	167	128	97		470	473	470	167	128	89		470	473	470	230	122	153	
4"	100	546	549	546	179	170	198		546	549	546	179	170	179		546	549	546	293	164	278	
6"	144	705	711	705	260	233	480		705	711	705	260	233	437		705	711	705	245	416	600	
8"	192	832	841	832	304	290	820		832	841	832	304	290	745		832	841	832	465	273	1100	
10"	239	991	1000	991	363	352	1500		991	1000	991	363	352	1357		991	1000	991	574	330	1438	
12"	287	1130	1146	1130	417	425	2250		1130	1146	1130	417	425	2045		1130	1146	1130	520	427	2017	
14"	315	1257	1276	1257	437	426	2850		1257	1276	1257	437	426	2565		1257	1276	1257	550	456	2612	
16"	360	1384	1407	1384	475	493	4070		1384	1407	1384	475	493	3708		1384	1407	1384	565	487	3890	
18"	406	1537	1559	1537	563	608	6195		1537	1559	1537	563	608	5634		1537	1559	1537	592	527	5100	
20"	454	1664	1686	1664	617	645	9075		1664	1686	1664	617	645	7020		1664	1686	1664	650	630	6678	
24"	546	1945	1972	1945	698	724	14280		1945	1972	1945	698	724	11120		1945	1972	1945	660	640	11700	
28"	641	2032	2061	2032	941	1037	13100		2032	2061	2032	941	1037	11790								
30"	686	2286	2315	2286	1035	1066	14100		2286	2315	2286	1035	1066	12240								
32"	730	2415	2444	2415	1060	1165	15100		2415	2444	2415	1060	1165	13590								
36"	819	2743	2755	2743	1180	1306	18840		2743	2755	2743	1180	1306	16956								

Form Main Types and Connecting Dimension

ASME Class 1500 Reduced Bore

Valve type		Side entry							Fully welded							Top entry						
NPS	D	d	L-RF	L-RTJ	L-WE	H1	H2	WT (kg)	L-RF	L-RTJ	L-WE	H1	H2	WT (kg)		L-RF	L-RTJ	L-WE	H1	H2	WT (kg)	
2"x1 1/2"	49	38	368	371	368	104	103	41	368	371	368	104	103	41		368	371	368	161	95	50	
2 1/2"x2"	62	49	419	422	419	104	103	50	419	422	419	104	103	44		419	422	419	211	105	98	
3"x2"	74	49	470	473	470	130	115	68	470	473	470	130	115	48		470	473	470	211	105	110	
3"x2 1/2"	74	62	470	473	470	130	115	95	470	473	470	130	115	65		470	473	470	220	110	150	
4"x3"	100	74	546	549	546	167	128	122	546	549	546	167	128	88		546	549	546	229	121	203	
6"x4"	144	100	705	711	705	179	170	285	705	711	705	179	170	266		705	711	705	293	164	376	
8"x6"	192	144	832	841	832	260	233	566	832	841	832	260	233	437		832	841	832	416	245	703	
10"x8"	239	192	991	1000	991	304	290	1022	991	1000	991	304	290	920		991	1000	991	465	273	1273	
12"x10"	287	239	1130	1146	1130	363	352	1760	1130	1146	1130	363	352	1584		1130	1146	1130	574	330	1535	
14"x10"	315	239	1257	1276	1257	363	352	2145	1257	1276	1257	363	352	1931		1257	1276	1257	580	330	2100	
14"x12"	315	287	1257	1276	1257	417	425	2500	1257	1276	1257	417	425	2250		1257	1276	1257	580	427	2698	
16"x12"	360	287	1384	1407	1384	417	425	2800	1384	1407	1384	417	425	2520		1384	1407	1384	630	427	3200	
16"x14"	360	315	1384	1407	1384	437	426	3245	1384	1407	1384	437	426	2921		1384	1407	1384	640	455	3100	
18"x16"	406	360	1537	1559	1537	475	493	4970	1537	1559	1537	475	493	4473		1537	1559	1537	657	493	4200	
20"x16"	454	360	1664	1686	1664	475	493	5135	1664	1686	1664	475	493	4622		1664	1686	1664	657	493	4500	
20"x18"	454	406	1664	1686	1664	563	608	7500	1664	1686	1664	563	608	6750		1664	1686	1664	693	527	5900	
24"x20"	546	454	1945	1972	1945	617	645	10875	1945	1972	1945	617	645	9788		1945	1972	1945	757	620	9200	



Form Main Types and Connecting Dimension

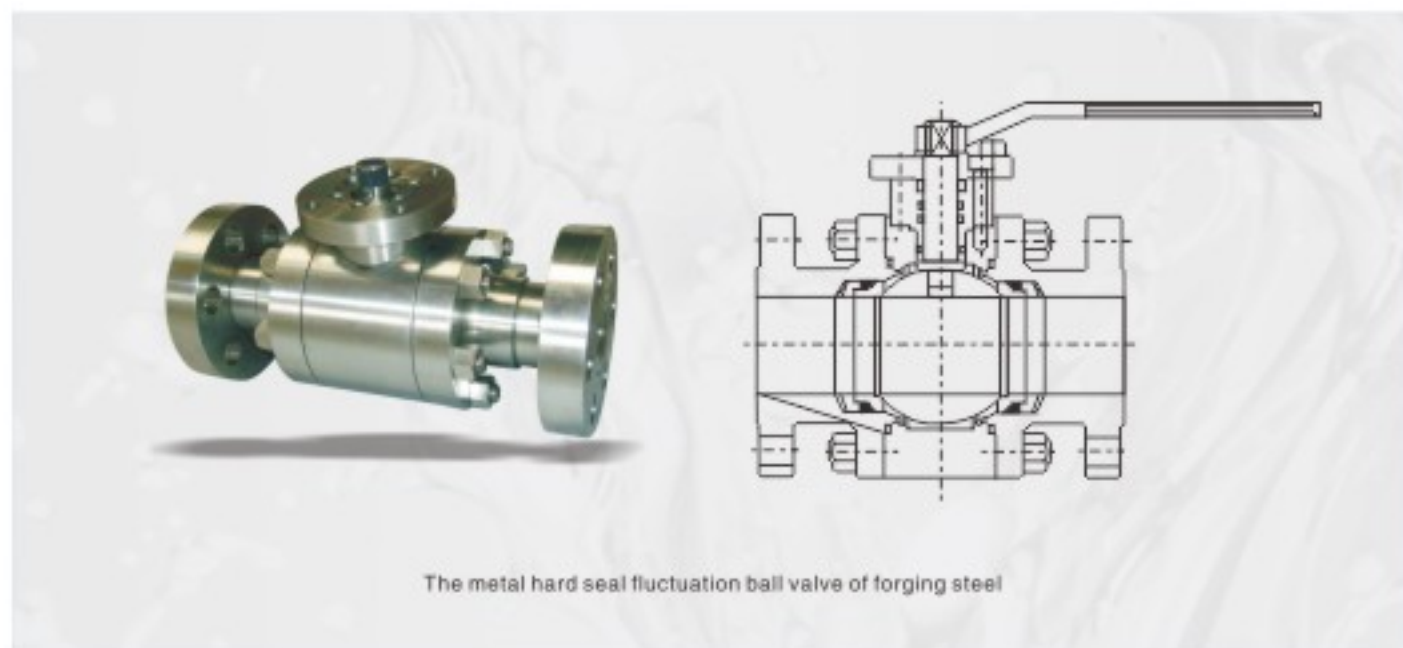
ASME Class 2500 Full Bore

Valve type		Side entry						Top entry					
NPS	D	L-RF	L-RTJ	L-WE	H1	H2	WT (kg)	L-RF	L-RTJ	L-WE	H1	H2	WT (kg)
2"	42	451	454	451	120	127	88	451	454	451	212	98	120
2 1/2"	52	508	540	508	150	162	135	508	540	508	225	110	180
3"	62	578	584	578	177	198	187	578	584	578	243	122	246
4"	87	673	683	673	227	233	380	673	683	673	299	164	470
6"	131	914	927	914	264	252	770	914	927	914	355	243	937
8"	179	1022	1038	1022	383	339	1357	1022	1038	1022	424	292	1410
10"	223	1270	1292	1270	453	422	2100	1270	1292	1270	503	352	2600
12"	265	1422	1445	1422	520	482	3210	1422	1445	1422	588	436	4200
14"	292	1681	1681	1681	578	558	5520						
16"	333	1962	1962	1962	650	620	6520						
18"	374	2134	2134	2134	810	740	8630						
20"	419	2286	2286	2286	900	825	11640						

Form Main Types and Connecting Dimension

ASME Class 2500 Reduced Bore

Valve type			Side entry						Top entry					
NPS	D	d	L-RF	L-RTJ	L-WE	H1	H2	WT (kg)	L-RF	L-RTJ	L-WE	H1	H2	WT (kg)
2"x1 1/2"	42	38	451	454	451	120	82	65	451	454	451	212	98	80
2 1/2"x2"	52	42	508	540	508	127	88	105	508	540	508	212	98	160
3"x2"	62	42	578	584	578	162	135	155	578	584	578	212	98	190
3"x2 1/2"	62	52	578	584	578	162	135	210	578	584	578	220	100	230
4"x3"	87	62	673	683	673	198	187	264	673	683	673	243	122	300
6"x4"	131	87	914	927	914	233	380	510	914	927	914	299	164	670
8"x6"	179	131	1022	1038	1022	252	770	1090	1022	1038	1022	355	243	1150
10"x8"	223	179	1270	1292	1270	339	1357	1663	1270	1292	1270	424	292	2100
12"x10"	265	223	1422	1445	1422	422	2100	2555	1422	1445	1422	503	352	3300
16"x12"	333	265	1962	1962	1962	482	3210	5170						
18"x14"	374	292	2134	2134	2134	558	5520	6670						
20"x16"	419	333	2286	2286	2286	620	6520	8955						



The metal hard seal fluctuation ball valve of forging steel

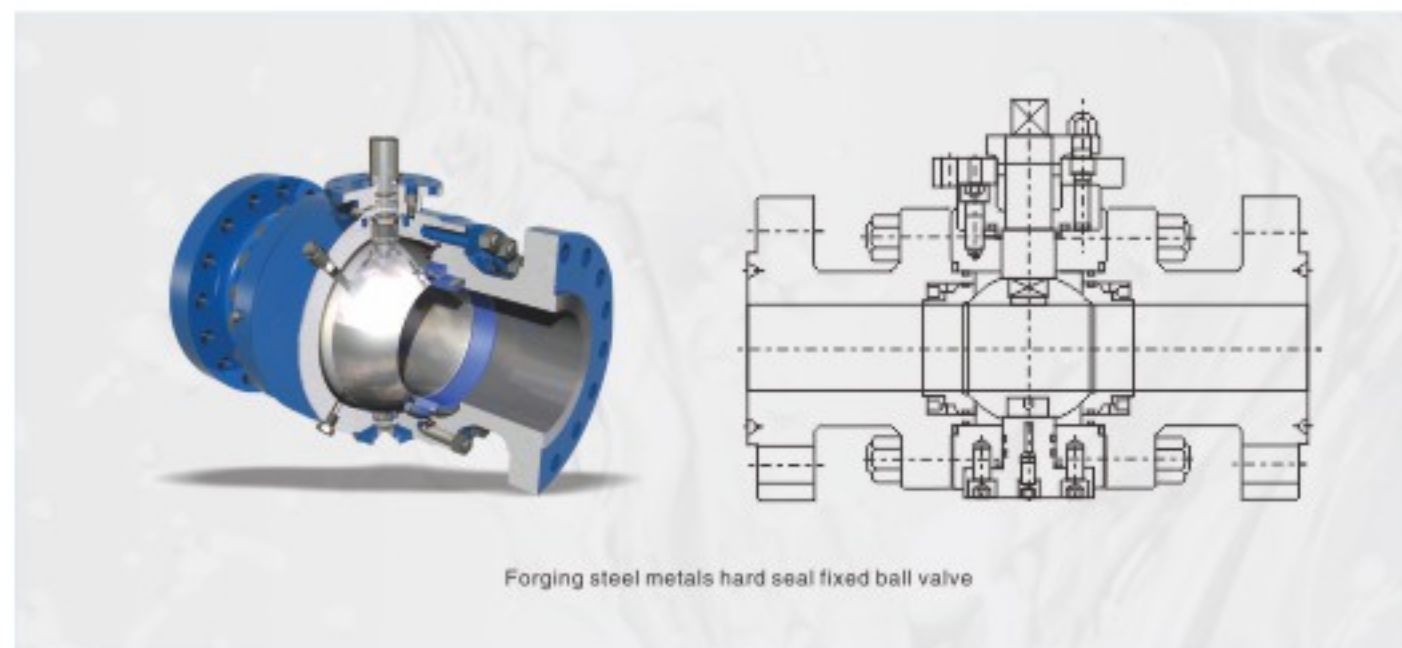
■ The metal hard seal fluctuation ball valve of forging steel:

Metal hard seal fluctuation ball valve generally uses the cast steel with valve body, according to user's request, also may use the forging steel valve body, and the size connection for forging steel ball valve flange, the structural length and so on, the main dimension is same of the cast steel ball valve.

■ Product scope

The metal hard seal fluctuation ball valve product scope sees the table

Size	DN	15	20	25	32	40	50	65	80	100	125	160
	NPS	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6
pressure class or the nominal pressure	Class150 PN20	☆	☆	☆	☆	☆	☆	☆	☆	△	△	△
	Class300 PN50	☆	☆	☆	☆	☆	☆	☆	☆	△	-	-
	Class600 PN110	☆	☆	☆	☆	☆	△	△	△	-	-	-
	Class900 PN150	☆	☆	☆	☆	△	△	△	-	-	-	-
	Class1500 PN260	☆	☆	☆	☆	△	△	-	-	-	-	-
	PN16	☆	☆	☆	☆	☆	☆	☆	☆	△	△	△
	PN25	☆	☆	☆	☆	☆	☆	☆	△	△	△	△
	PN40	☆	☆	☆	☆	☆	☆	☆	△	△	-	-
	PN63	☆	☆	☆	☆	☆	△	△	△	-	-	-
	PN100	☆	☆	☆	☆	☆	△	△	△	-	-	-



Forging steel metals hard seal fixed ball valve

■ Forging steel metals hard seal fixed ball valve

Metal hard seal fixed ball valve generally uses the cast steel valve body, according to user request, also may use the forging steel, the forging steel metal hard seal fixed ball valve flange size and the structural length and the cast steel fixed ball valve is same.

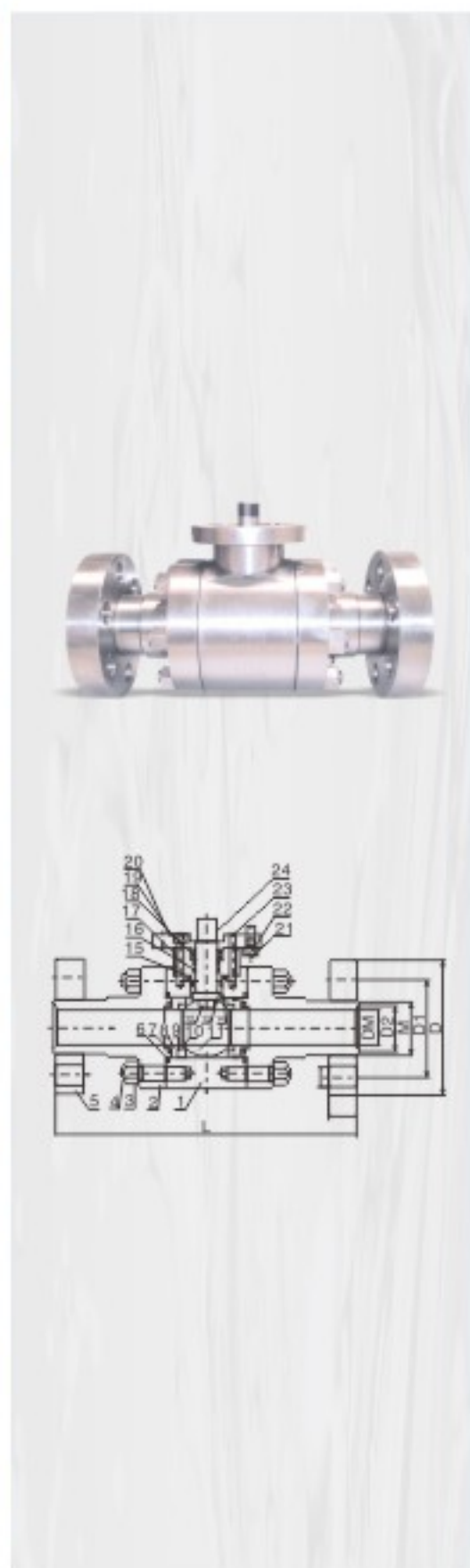
■ Product scope

Metals hard seals fixed ball valve's scope of product sees the next table.

Size	DN	100	125	150	200	250	300	350	400	450	500	600
	NPS	4	5	6	8	10	12	14	16	18	20	24
pressure class or the nominal pressure	Class150 PN20	△	△	△	△	△	△	△	△	△	△	△
	Class300 PN50	△	△	△	△	△	△	△	△	△	△	-
	Class600 PN110	△	△	△	△	△	△	△	△	-	-	-
	Class900 PN150	△	△	△	△	△	△	-	-	-	-	-
	Class1500 PN260	△	△	△	△	△	△	-	-	-	-	-
	Class2500 PN420	△	△	△	△	-	-	-	-	-	-	-
	PN16	△	△	△	△	△	△	△	△	△	△	△
	PN25	△	△	△	△	△	△	△	△	△	△	-
	PN40	△	△	△	△	△	△	△	△	△	△	-
	PN63	△	△	△	△	△	△	△	△	-	-	-
	PN100	△	△	△	△	△	△	△	△	-	-	-
	PN160	△	△	△	△	△	-	-	-	-	-	-



NO	Part name	standard			
		Carbon steel		stainless steel	
		GB	ASTM	GB	ASTM
01	Body	25	A105	1Cr18Ni9Ti 1Cr18Ni12Mo2Ti	F304/F316/ F304L/F316L
02	Body cap				
03	Nut	45	A193-2H	0Cr18Ni	A193-B8M
04	Stud	35CrMoA	A193-B7	1Cr17Ni2	A193-B8M
05	Flange	25	A105	1Cr18Ni9Ti 1Cr18Ni12Mo2Ti	F304/F316/ F304L/F316L
06	Type O sealing ring	VITON			
07	Type O sealing ring	VITON			
08	Seat retainer	25HRC	A105HRC	1Cr18Ni9Ti 1Cr18Ni12Mo2Ti	F304/F316/ F304L/F316L
09	Type O sealing ring	VITON			
10	Seat	NYION			
11	Ball	1Cr18Ni9Ti	304	1Cr18Ni9Ti 1Cr18Ni12Mo2Ti	F304/F316/ F304L/F316L
12	Stem	2Cr13	A276-410	1Cr18Ni9Ti 1Cr18Ni12Mo2Ti	F304/F316/ F304L/F316L
13	Thrust Bearing	PTFE			
14	Type O sealing ring	VITON			
15	Type O sealing ring	VITON			
16	Type O sealing ring	VITON			
17	Stem bearing	Metal Backed PTFE			
18	Packing	GRAPHITE			
19	Bolt	35CrMoA	A193-B7	1Cr17Ni2	A193-B8M
20	Connecting Piece	25	A105	1Cr18Ni9Ti 1Cr18Ni12Mo2Ti	F304/F316/ F304L/F316L
21	Stud	35CrMoA	A193-B7	1Cr17Ni2	A193-B8M
22	Nut	45	A193-2H	0Cr18Ni	A193-B8M
23	Pin	45	A193-2H	0Cr18Ni	A193-B8M
24	Key	40Cr	40Cr	1Cr17Ni2	1Cr17Ni2



Features

1. All the components are forged ones.
2. Lower-loading stem and backward sealing construction have been setup for positive sealing at stuffing position and backing-outprotecting of the handle.
3. Interbedded valve seat is applied on whose base RO-ring is also mounted for avoiding the leakage of medium.

Main Performance Specification

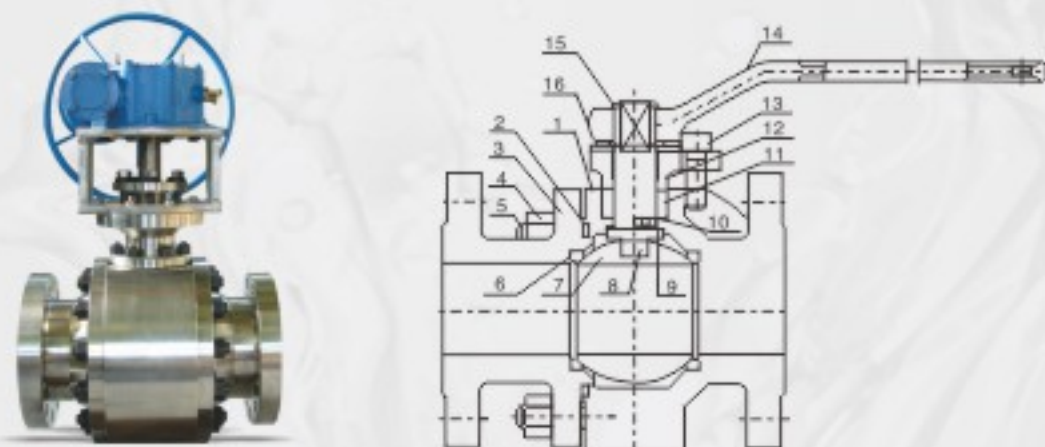
PN(MPa) Nominal diameter	Test pressure(MPa)		
	Shell	High-pressure liquid sealing	Low-pressure hermetic sealing
16.0	24	17.6	0.6
32.0	48	35.2	
Applicable temperature		-40~80℃	
Applicable medium		Water,oil products,nitrogen,ammonia,hydrgen, and liquefied gas etc.	

Form Main Types and Connecting Dimension

PN(mm) Nominal diameter	DN(mm) Nominal pressure	(mm)Main dimension						
		L	D	D1	M	D2	b	z-φd
16.0	10	210	95	60	M24×2	18	20	3-φ18
	15	230	95	60	M24×2	20	20	3-φ18
	20	240	105	68	M33×2	28	20	3-φ18
	25	260	105	68	M33×2	28	22	3-φ18
	32	300	115	80	M42×2	38	24	4-φ18
	40		165	115	M52×2	48	30	6-φ28
	50	400	165	115	M64×3	58	32	6-φ28
	65	490	200	145	M80×3	74	40	6-φ28
	80	580	225	170	M100×3	94	50	6-φ38
	100	100	260	190	M125×4	115	60	6-φ38
	125	750	300	235	M155×4	146	75	8-φ38
	150	800	330	255	M215×4	163	78	8-φ48
	200	850	400	315	M215×6	193	90	8-φ48
32.0	10	210	95	60	M24×2	18	20	3-φ18
	15	230	105	68	M33×2	28	20	3-φ18
	20	240	105	68	M33×2	28	20	3-φ18
	25	260	115	80	M42×2	35	25	4-φ18
	32	300	135	95	M52×2	41	30	4-φ28
	40	40	165	115	M64×3	47	35	6-φ28
	50	400	200	145	M80×3	70	40	6-φ29
	65	490	225	170	M100×3	90	50	6-φ33
	80	580	260	195	M125×4	112	55	6-φ36
	100	620	300	235	M155×4	135	65	8-φ36
	125	750	330	255	M175×4	146	78	8-φ42
	150	800	400	315	M215×6	163	90	8-φ48
	200	850	480	380	M265×6	193	120	8-φ68



Class150/300

**Application standard**

1. Temp & Pressure: ASME B16.34, BS 5351
2. Wall thickness: ASME B16.34, BS 5351
3. Bore dimension: API 6D, BS 5351
4. Length of the structure: ASME B16.10, API 6D
5. Flange dimensions: ASME B16.5, BS 1560
6. Test & inspection: API 6D, BS 5146
7. Body material: A105, LF2, F304, F304L, F316, F316L

Main Part Materials List

NO	Part name	Carbon steel	Low Temp steel	Stainless steel
1	Body	ASTM A105	ASTM A350 LF2	ASTM A182 L316
2	Gasket	304+GRAPHITE	304+GRAPHITE	316+GRAPHITE
3	Bonnet	ASTM A105	ASTM A305 LF2	ASTM A182 L316
4	Nut	ASTM A194-2H/2HM	ASTM A194 7M	ASTM A194 2HM/B
5	Stud	ASTM A193-B7/B7M	ASTM A320 7M	ASTM A193-B7M/B8
6	Sealing ring	RPTFE	RPTFE	RPTFE
7	Ball	ASTM A105+ENP	ASTM A350 LF2+ENP	ASTM A182 F316
8	Stem	ASTM A182-F6a	ASTM A182-F6a	ASTM A182-F316
9	Gasket	304+PTFE	304+PTFE	306+PTFE
10	Antistatic device	ASTM A182-F304	ASTM A182-F304	ASTM A182-F304/F316
11	Packing	PTFE/GRAPHITE	PTFE/GRAPHITE	PTFE/GRAPHITE
12	Packing gland	CARBON STEEL	CARBON STEEL	STAINLESS STEEL
13	Screw	ASTM A193-B7/B7M	ASTM A193-7M	ASTM A193-B8
14	Lever	ASTM A216-WCB	ASTM A216-WCB	ASTM A216-WCB
15	Back stop	CARBON STEEL	CARBON STEEL	CARBON STEEL
16	Stopper plate	CARBON STEEL	CARBON STEEL	STAINLESS STEEL

**Class 150 Dimension Chart**

Unit(mm)

Specifications	in	1/2	3/4	1	1 1/2	2	2 1/2	3	4	5	6	8	10
	mm	15	20	25	40	50	65	80	100	125	150	200	125
Bore		15	20	25	40	50	65	80	100	125	150	200	250
L		108	117	127	165	178	190	203	229	356	394	457	533
H		84	88	95	120	140	160	180	208	220	335		
W		130	130	140	250	250	400	140	450	450	1050		

1/2"-4" Lever operation

6"-8" Optional gear operation

6"-8" Gear operation(For customer choice)

10"Gear operation

Test pressure

Shells experiments(Liquid)Shell(Hydrostatic): 3.10MPa(450psi)

Pressure testings(Gas)Shell(Air): 0.55MPa(80psi)

Middle filling pieces PTFE(Metal twines for customer choice)

Packing PTFE(Flexible graphite supplies customer choice)

Valve levers A182-F6a(Other material supply customer choice)

Spheroids ASTM A105+ENP(Other material customer choices)

Class 300 Dimension Chart

Unit(mm)

Specifications	in	1/2	3/4	1	1 1/2	2	2 1/2	3	4	5	6	8
	mm	15	20	25	40	50	65	80	100	125	150	200
Bore		15	20	25	40	50	65	80	100	125	150	200
L		140	150	165	191	216	241	283	305	381	403	502
H		84	88	95	120	140	160	180	208	220	335	
W		130	130	140	250	250	400	400	450	450	1050	

12"-4" Lever operation

6"-8" Optional gear operation

6"-8" Worm Worm operations(For customer)

Test pressure

Shells experiments(Liquid): 7.7MPa(1125psi)

Pressure testings(gas): 0.55MPa(80psi)

Middle filling pieces PTFE(Metal twines for customer choice)

Packing PTFE(Flexible graphite supplies customer choice)

Valve levers A182-F6a(Other material customer choices)

Spheroids ASTM A105+ENP(Other material customer choices)

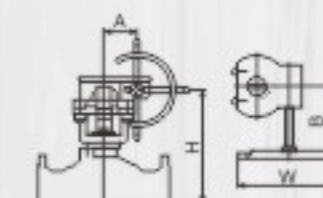
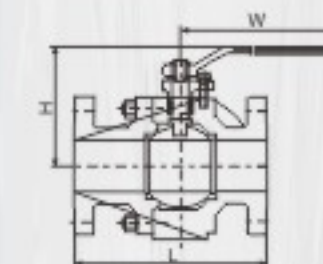
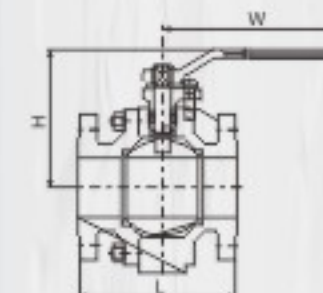
Gear operation dimension chart

Unit(mm)

CLASS	150	300	Gear operator			
			H	W	B	A
Specifications (inch)	6	6	257	350	205	125
	8	8	306	355	320	185
	10	10	365	165	140	160

Unique feature

Structure fire: Anti-static devices: bell locking devices: stem-fly structure: high-performance sealing materials: valve pressure-temperature ratings by ANSI B16.34; the main valve connecting flange-size by ANSI B16.5.



FULL WELDING BALL VALVE SERIES



Product Overview

Natural gas pipelines dedicated welding ball valve is a dedicated to natural gas pipeline ball valve, mainly by the body, the extension rod, radiation tube parts, such as gas fully welded ball valve adopts the cylinder form made radiation tube structure with extension rod can be customized according to customer requirements. The valve has excellent quality and stable performance, which can not be reached by the ordinary ball valve. Besides, it has the advantages of strong adaptability, no maintenance and long life. Widely used in gas, gas and other gas pipelines.

Application Scope

City gas: gas output pipeline, trunk and the regional supply, etc. Central heating: large heating equipment output pipeline, trunk and feeder. Heat exchangers, piping and the opening and closing of each circuit. Steel mills: all kinds of fluid pipes, exhaust emission, gas and heat supply, fuel supply, etc. All kinds of industrial equipment: all kinds of pipes, all kinds of industrial gas and heat pipe heat treatment.

Product Features

1. Integral welding ball valve, no external leakage phenomenon;
2. Elastic gasket and carbon fiber reinforced seal can be used in tens of thousands of times.
3. The processing of the ball adopts advanced equipment to ensure high machining accuracy of the ball;
4. Adjust the length and height of the valve body according to the construction and design requirements of the pipeline;
5. Natural gas all-welded ball valve is widely used in urban heat supply, natural gas pipeline, gas and other gas pipelines.

Main Technical Parameters

Valve model: Q367F

Connection mode: Welding

Product specification: DN200~1400mm

Work pressure: PN2.5~6.4MPa

Temperature range: -29℃~+250℃

Product material: WCB, A105, F11, F22, CF8, 304 and so on

Applicable medium: other gases, such as natural gas, gas, etc.

Driving mode: manual, worm, hydraulic, electric, pneumatic, etc.



Installation Method And Maintenance Of Buried Full Welded Ball Valve

In the fully welded ball valve, there is a kind of buried fully welded ball valve. The method of the buried full welding ball valve is introduced in detail.

1. In order to ensure the tightness and safety of the valve, the pressure test should be carried out before the installation of the full welded ball valve (directly buried full welded ball valve)

(1). Strength experiment. Strength experiment using water as medium; Weld the high pressure protective cap on the sleeve of both sides of the valve, the valve open to 45°, the sleeves on the pressure test valve water injected, 1.5 times the boost to the valve nominal pressure, is qualified

(2). The tightness test. Close experiment using nitrogen as medium; the valve closed, from the sleeves on the pressure test valve to inject nitrogen into the valve, pressure rose to 1.1 times the nominal pressure valve, release valve in the hose cavity into the container for detection, the insertion depth is 1cm; 5min is no bubbles as eligible.

2. Fully welded ball valve device

(1). The valve is hoisted. Should choose accurate method of lifting the valve, in order to protect the stem, not the chain tied hand wheel, ear or actuator. Valve protection cap sleeves at both ends not before welding removal.

(2). Valve welding technology. Buried fully welded ball valve and the main pipeline connected through welding, weld quality must comply with the "flexor melting welding joint radiography" (GB 3323-2005) grade II standard, usually a welding can not completely guarantee that all qualified, so when ordering a valve should be required at both ends of the valve manufacturers in the increase of 1.0m long tube, once the weld not qualified, there is enough length of the unqualified weld cut and re welding. In addition, in the ball valve and pipe welding, the valve should be in the 100% completely open position, so as to avoid the ball valve is spattered welding slag damage, the same ensure that the temperature of the internal seal of the valve does not exceed 140°C, and appropriate cooling measures can be taken when necessary.

(3). The valve well is masonry. Buried fully welded ball valve with special structure design, maintenance free features, buried outside

of the valve before coating PU special anti-corrosion coating, while 3 were emergency grease the seat and stem injection pipe, vent pipe and the stem cavity according to the buried depth appropriate to extend to the staff on the ground to complete the operation. After realizing the direct burial, the small valve hand well can be built.

3. Ordinary operation and protection: in order to extend the service life of the valve, the following procedures should be followed operate and protect the valve.

(1). Buried fully welded ball valve operation, valves are often operated to avoid impurities in the seat or valve ball surface accumulation, but also to avoid excessive wear of the inlay part of the valve seat.

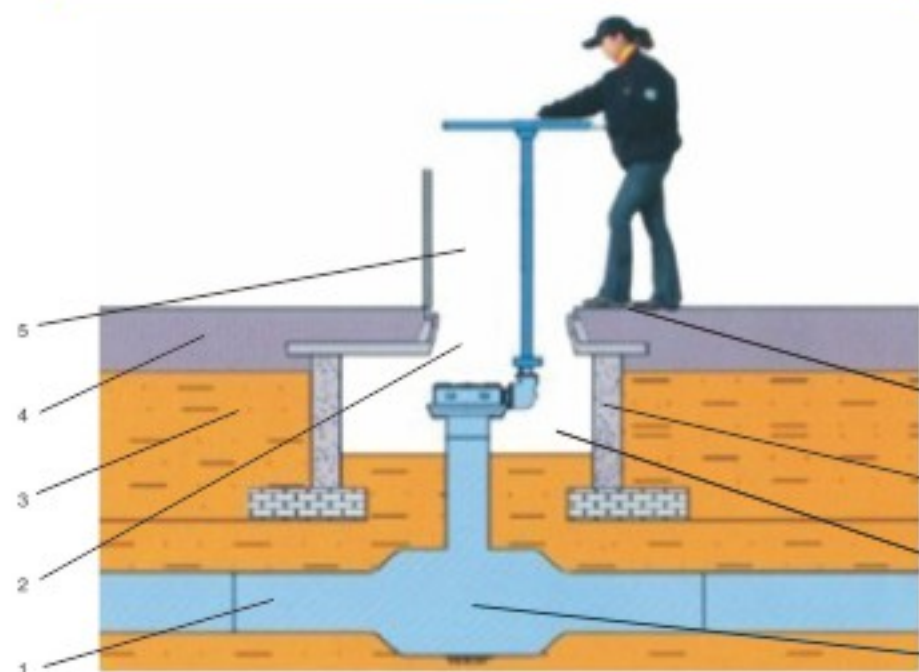
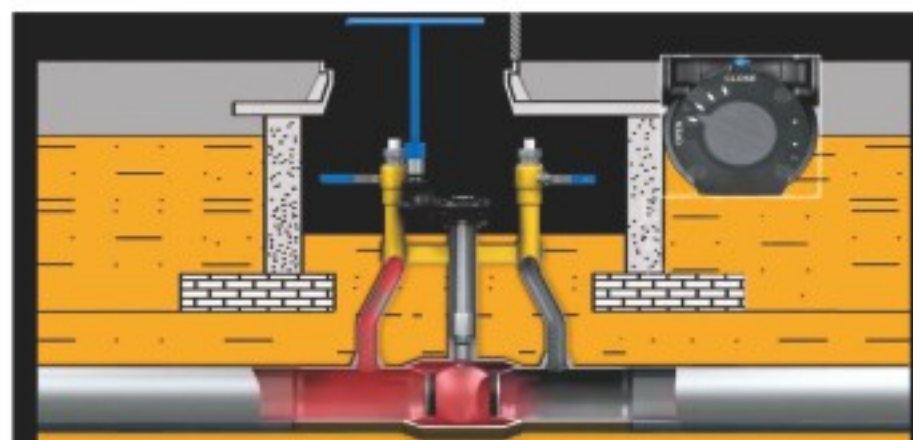
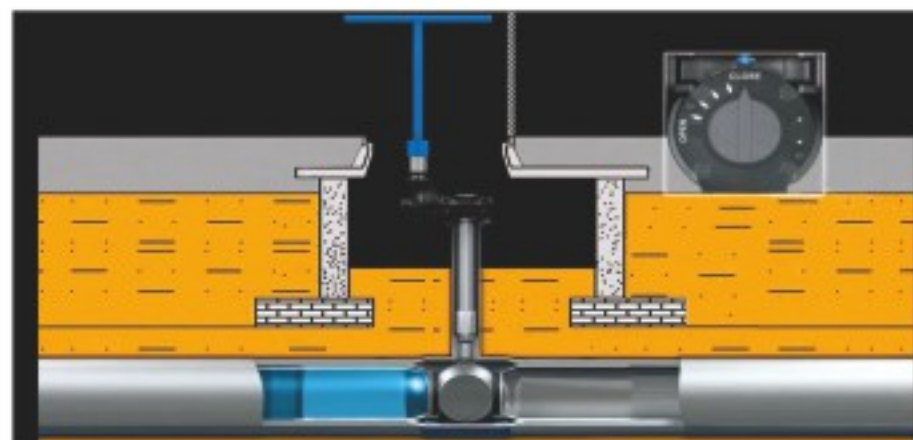
1) Request at the opening and closing time. Too fast valve switching will cause the valve to distort too much load and damage the stem. If the switch is too slow, the valve seat will wear away for a long time, and the operation time should be kept in a suitable scale. According to experience, the size and the lower limit of valve's switch time (seconds) can be half of the nominal scale (inch) of the valve, and the upper limit can be estimated by 5 times of the nominal scale of the valve (inch).
2) The valve is in the operation state, the valve ball should be in the fully open or fully closed, not in a semi open or semi closed range, to avoid the damage of valve seat.

(2). Ordinary protection

Seat cavity is the most easy to pipeline valve polluted area, clean the ball valve once every other year so that the seat chamber is not contaminated and the seat is free to operate, every year at least in the switch into the right amount of grease, reduce the ball and seat agglutination and friction between the valve ball and seat, reduce unnecessary loss. All welded ball valve good technical features of the whole gas transmission pipeline welding, it can enhance tube (valve) overall stress resistance, geological disasters, such as geological subsidence resistance, to avoid the possibility of a leak, increases the life span of the reliability of the valve is advantageous to the daily ball valve installation and maintenance.



Underground Buried Type Ball Valve Construction Drawing



Modern vehicles and pedestrians in densely populated city, the road is also very complex. So in the construction and maintenance of gas supply pipe for the safety of the construction time and construction is also very high.

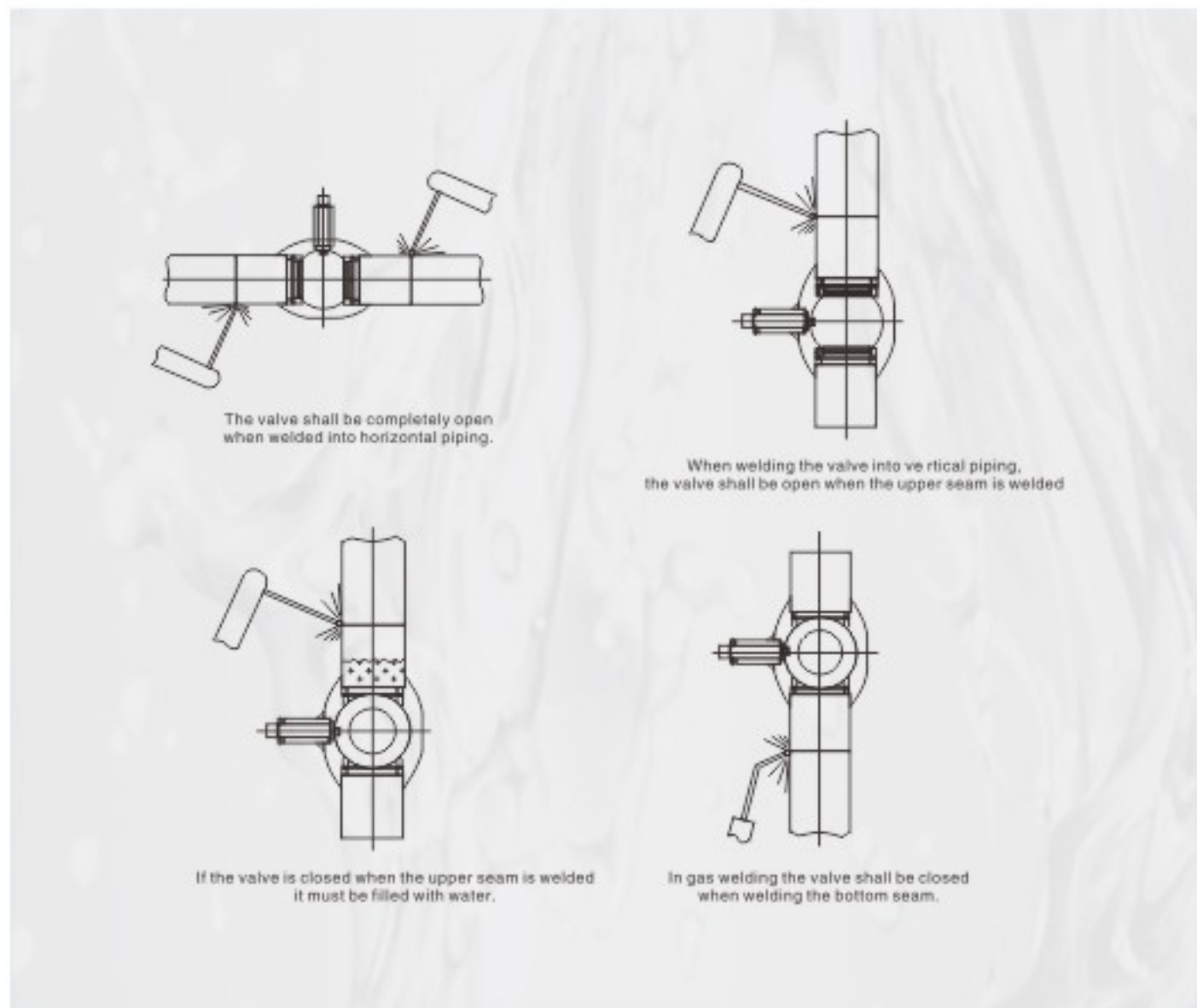
It adopts full welded ball valve, can be directly buried deep underground. Using the latest methods of engineering construction can reduce the valve control of space, and greatly reduce the construction cost and project time. And can prevent the risk of gas explosion, JIANGSU SINOVAL Full welded ball valve is very safe.

Directly buried type ball valve drive, the operator does not need to enter the underground, you just need to on the ground for transmission operation, very safe and convenient.

1. Buried pipeline
2. Valve chamber
3. Buried medium
4. Cement surface
5. Well cap
6. Valve
7. Diffuse valve
8. Build a wall
9. Road surface



Fully Welded Ball Valve Install Matters Needing Attention

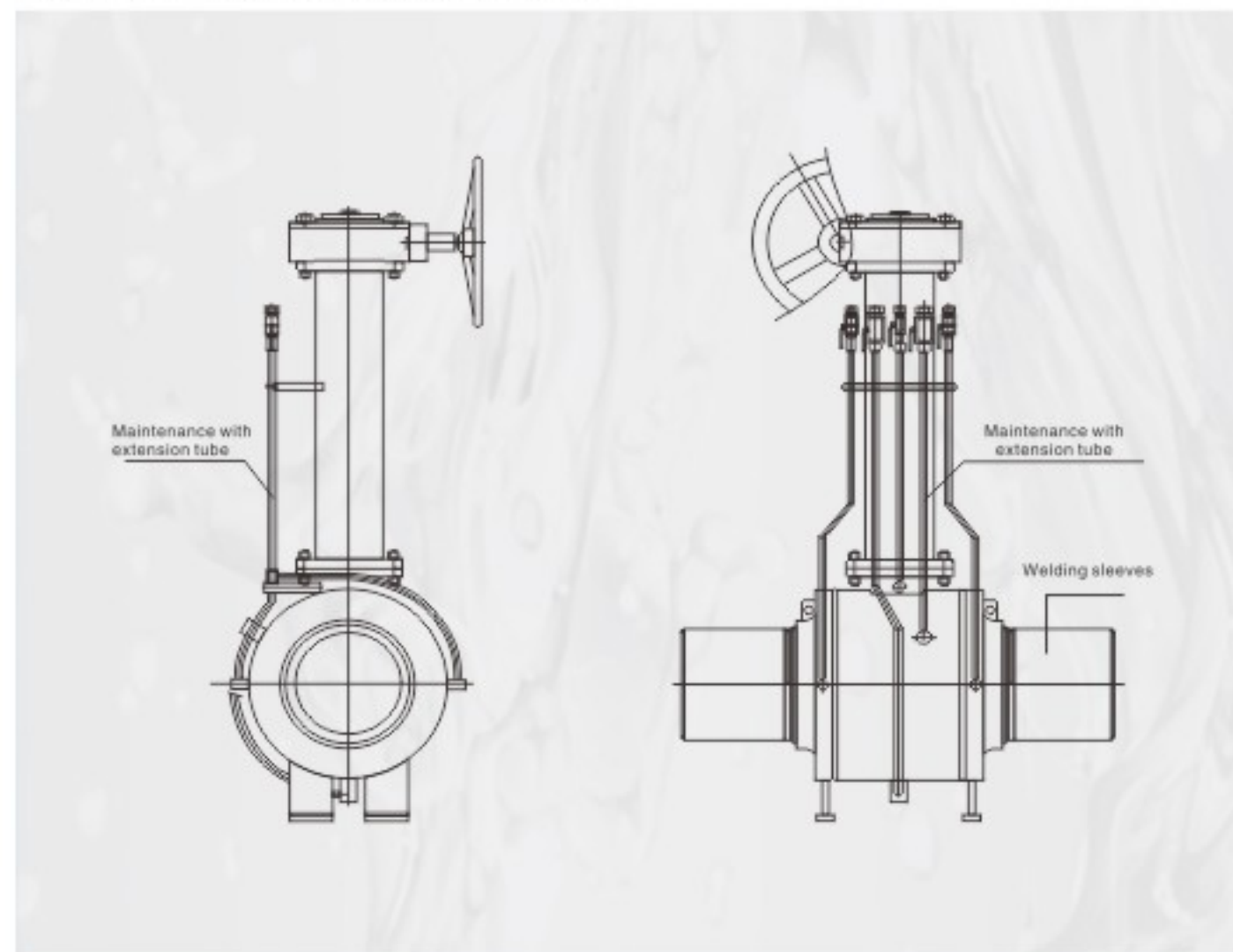


1. Down at the ends of the protection cover, check if there is a fault, whether to clean valve hole. If there is any foreign body is clean, to avoid foreign body damage between grooves and ball valve seat sealing surface.
2. Try to open and close the ball valve a few times, confirm the ball valve can work normally.
3. Before install the ball valve to the pipeline, pipe welding surface should be clean sweep clean. Installing a ball valve, don't have to pay special attention to the installation of the ball valve direction (either end can be installed at the upstream end).
4. To be welded ball valve open, avoid in the process of welding welding slag into the valve.
5. After completion of welding, such as valve cool completely before valve switch operation.
6. When the installation of turbine vortex lever actuators (Valves size DN200 and above or special customization), according to the first valve switch position, reference to the arrow direction (OFF/NO) adjustment of the opening of the actuator position, make the direction of arrow switch actuator and valve switch position is consistent; Will dock standard flange correct actuator and valve body, and adjust the limit bolt (open at the bottom of the black protective cap, loose nut, fixed adjustment limit bolt together with hex wrench, a fixed nut tightening up, after the completion of fine black protective cap) the position of the valve can be completely closed and open, you can refer to the arrow direction (arrow must be horizontal or vertical).



Buried Working Design

Used for buried conditions of valve, valve set extension rod, maintenance with extension tube (on both sides of the channel at the bottom of the exhaust pipe + on both sides of the seat on the tube body drainage pipe) and the control valve, valve operating position as for above ground, convenient for operating position. Valve surface corrosion resistant asphalt coating protection or epoxy cathodic protection, piping jumper and protective measures, to adapt to the buried use environment.



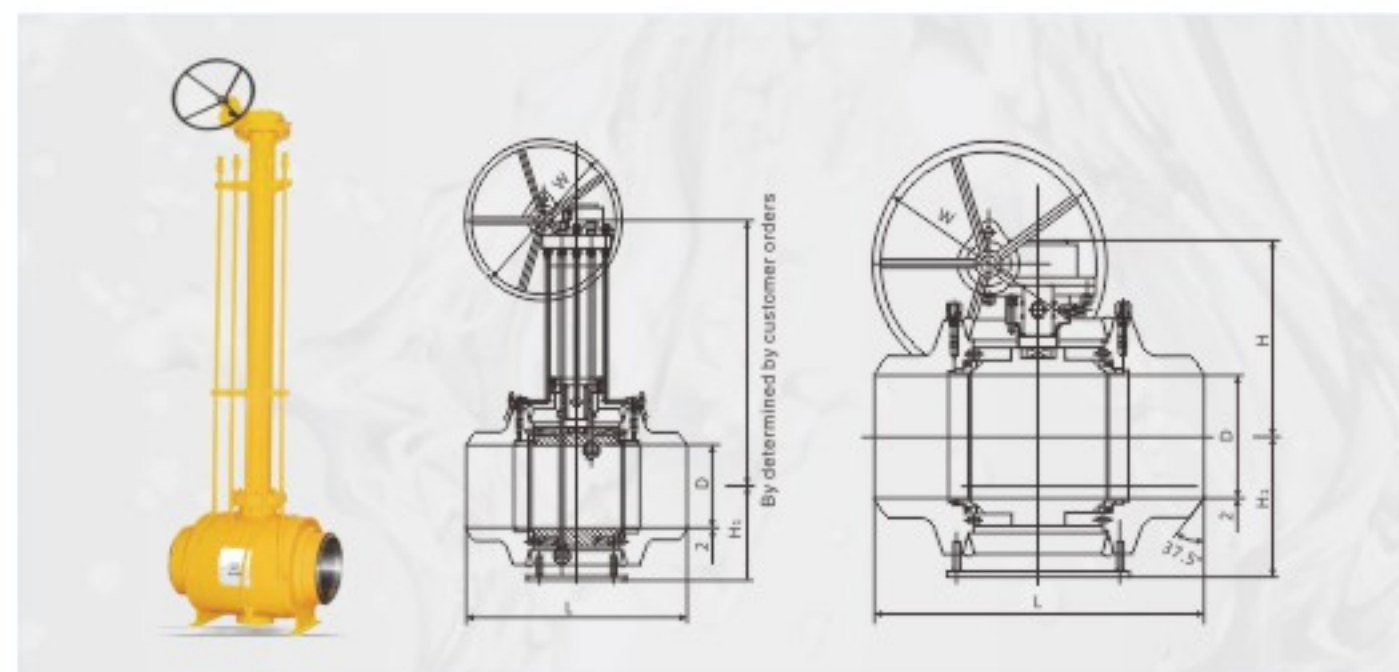
Valves With Sleeves And Pipeline Of Common Steel Pipe (Q235B and 20 #) Weldability Instructions

Sleeves material	Piping material	Q235B	20 [#]	16Mn
	Welding			
WCB		J507(E5015), H10Mn2, TIG R40		
Q235B		J427(E4315), H08A, H08MnA		N/A
20 [#]				N/A
16MN				J507(E5015), H10Mn2



Main Parts Material

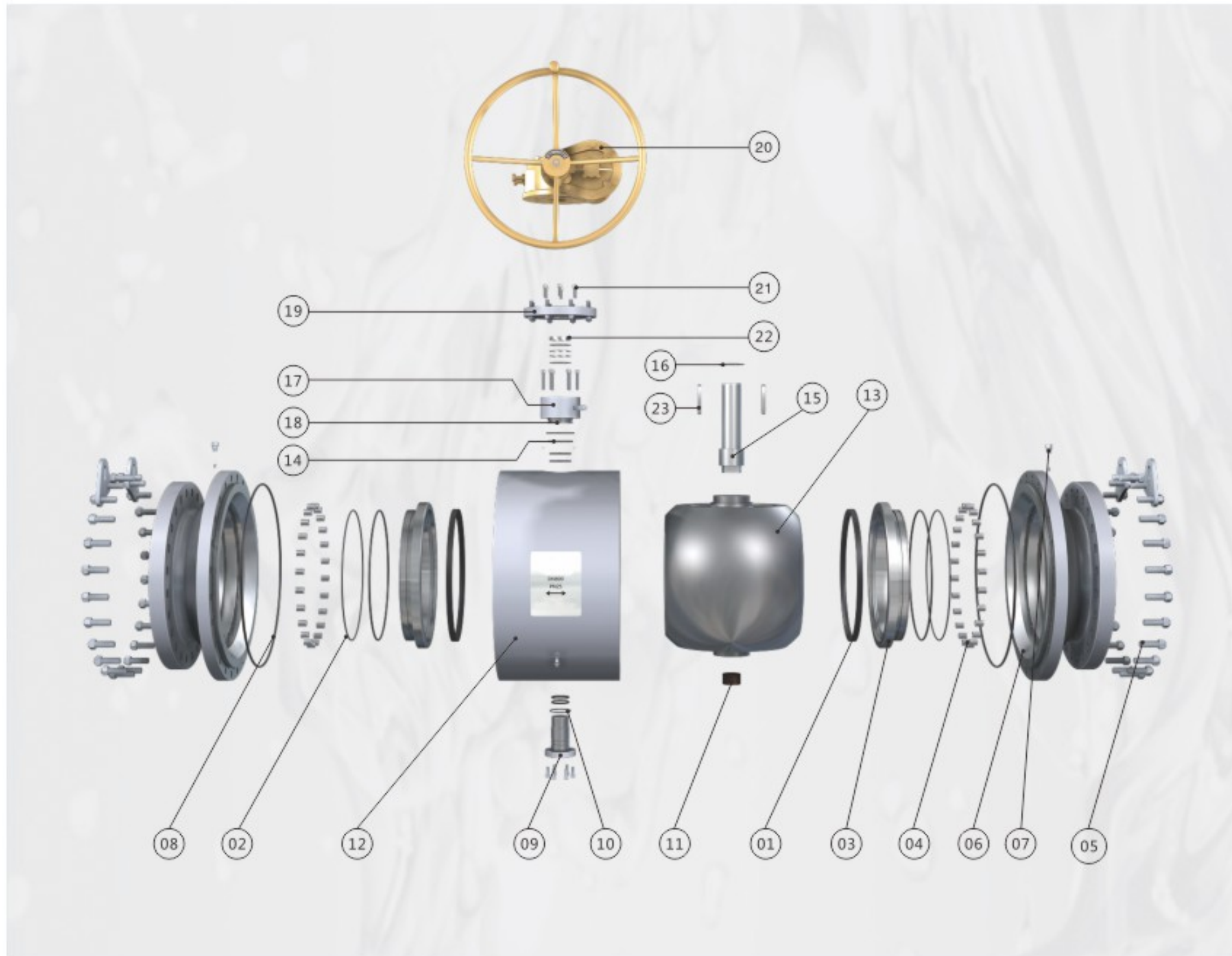
Parts Name	Material
Body	Steel ST 37.0
Flange	Steel R ST 37-2
Welding end	Steel ST 37.0
Ball	Stainless steel CF8/AISI 304
Fluorine rubber	Viton [®]
Seat	PTFE,20%C
Back-up ring	2Cr13
Disc spring	65Mn
Intermediate ring	Viton [®]
Stem	2Cr13
Friction packing	PTFE,20%C
O-ring	Viton [®]
O-ring	Viton [®]
Washer	Steel ST 37.0
Bedding set pressure	Steel ST 37.0
Platform	Steel ST 37.0



Form Main Types and Connecting Dimension

(Class150-300)

NPS(in)	L	D	H ₁	H	W	WT(kg)
2"	216	51	100	165	460	40
3"	283	76	110	190	460	70
4"	305	100	130	200	460	95
6"	457	150	176	270	460	180
8"	521	201	218	330	460	280
10"	559	252	270	380	600	440
12"	635	303	300	420	600	570
14"	762	337	340	450	600	800
16"	838	367	395	530	600	1480
20"	991	489	470	600	600	2400
24"	1143	591	580	680	600	4050
28"	1346	686	640	760	600	6460
32"	1524	781	730	870	600	7200
36"	1727	876	980	980	600	8700
40"	1956	978	1010	1040	600	12500



Main Parts Specification

No.	Part Name
01	O*Ring
02	Sealing ring
03	Seat*
04	Spring
05	Bolt
06	Body
07	Grease injection valve
08	Gasket
09	Stem*
10	Gasket
11	Bushing
12	Body
13	Ball**
14	Bushing
15	Stem*
16	Gasket
17	Bonnet
18	Packing
19	Yoke
20	Driving
21	Connection set
22	Gland
23	Fitting pin
24	Blow down stopple





W(K)Q(3, 6, 7, 8, 9)47F(Y, N, P)

Technical specification

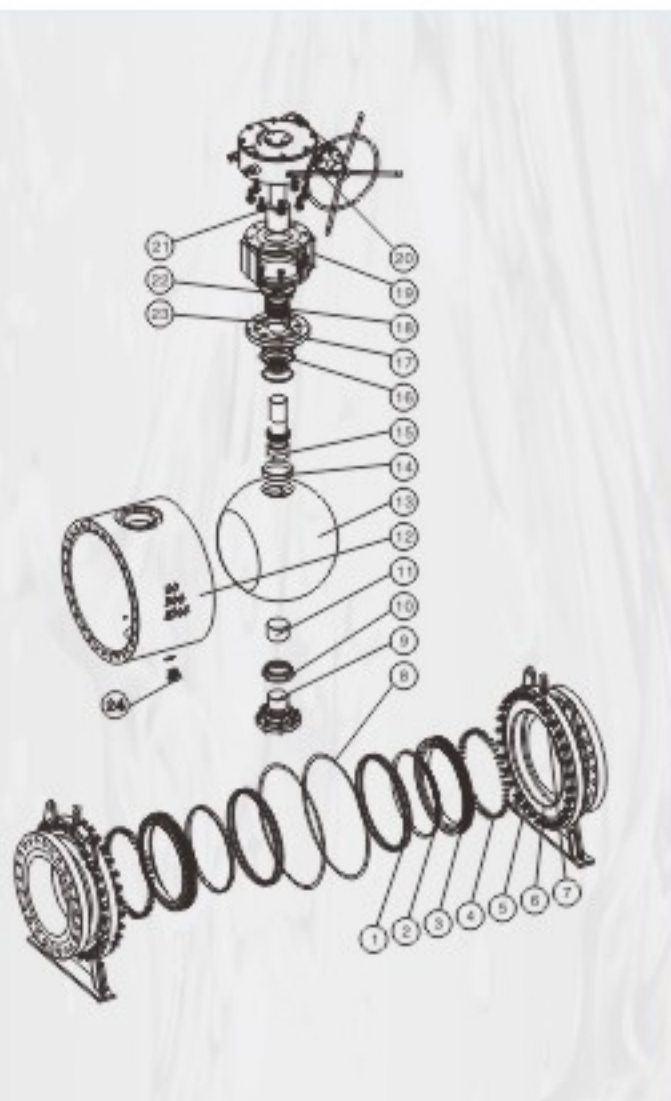
Design Standard	GB/T 12237 GB/T 19672	API 6D
Face to Face	GB/T 12221	API 6D ASME B16.10
Flanged Size	GB/T 9113 JB/T 79	ASME B16.5 ASME B16.47
Test & Inspection	JB/T 9092 GB/T 19672	API 598 API 6D

*Notes: 1. The sizes of serial valve connecting flange ends can be designed according to customer's requirement.
2. DN>1000(40"), the design standard is accordance with (Specification of the length pipe valve)

Form of Major Parts Materials

No.	Part name	Materials	
		GB	ASTM
1	"O"Ring	Viton	Viton
2	Sealing ring	PTFE	PTFE
3	Seat*	25	A105
4	Spring	60Si2Mn	Inconel X-750
5	Bolt	35CrMoA	A193-B7
6	Bonnet	WCB	A216-WCB
7	Grease injection valve	Assembled	Assembled
8	Gasket	Graphite+stainless steel	Graphite+stainless steel
9	Stem*	1Cr13	A182-F6a
10	Gasket	Graphite+stainless steel	Graphite+stainless steel
11	Bushing	PTFE&Nikelium	PTFE&Nikelium
12	Body	25	A105
13	Ball**	25+ENP	A105+ENP
14	Bushing	PTFE&Nikelium	PTFE&Nikelium
15	Stem*	1Cr13	A182-F6a
16	Gasket	Graphite+stainless steel	Graphite+stainless steel
17	Cover	25	A105
18	Packing	Graphite+stainless steel	Graphite+stainless steel
19	Yoke	WCB	A216-WCB
20	Driving	Assembled	Assembled
21	Connection set	45	AISI C1045
22	Gland	WCB	A216-WCB
23	Fitting pin	1Cr13	A276-410
24	Blow down stopple	25	A105

Notes: *The material of this part about the anti-sulphur type valve is GB(1Cr18Ni9), ASTM (A276-321)**The material of this part about the anti-sulphur type valve is GB(1Cr18Ni9, CF8+Ni.P), ASTM(A182-304, CF8+Ni.P)Major parts of the valve series and materials of sealing surface differ according to actual working condition and customer's special requirement.



W(K)Q(3, 6, 7, 8, 9)47F(Y, N, P)

Technical specification

Design Standard	GB/T 12237 GB/T 19672	API 6D
Face to Face	GB/T 12221	API 6D ASME B16.10
Flanged Size	GB/T 9113 JB/T 79	ASME B16.5 ASME B16.47
Test & Inspection	JB/T 9092 GB/T 19672	API 598 API 6D

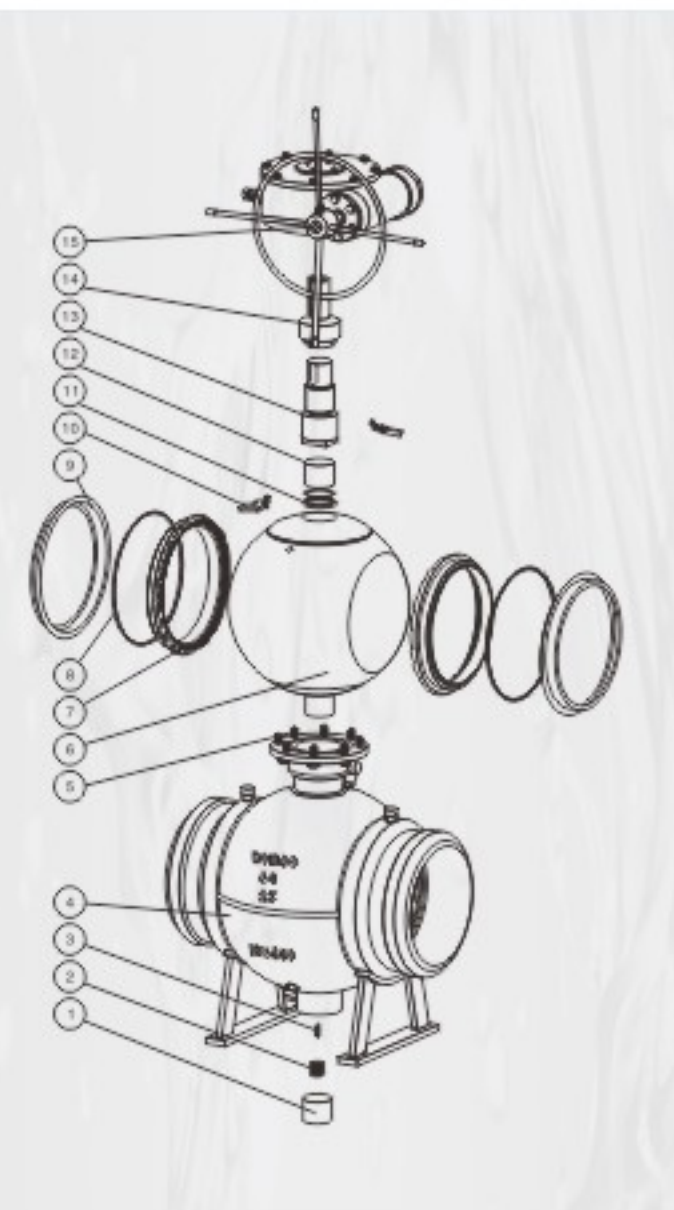
*Notes: 1. The sizes of serial valve connecting flange ends can be designed according to customer's requirement.
2. DN>1000(40"), the design standard is accordance with (Specification of the length pipe valve)

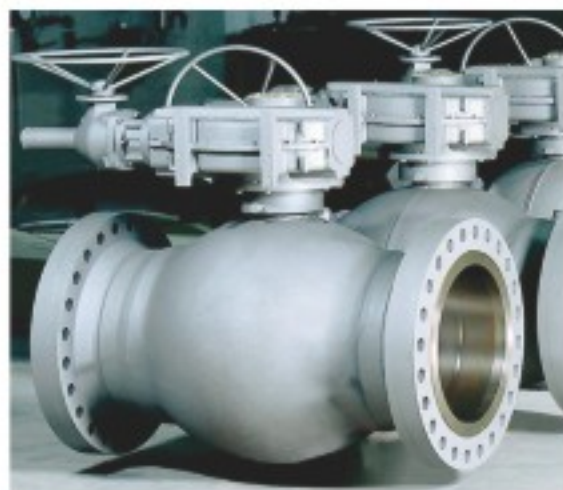
Form of Major Parts Materials

No.	Part name	Materials	
		GB	ASTM
1	Bushing	PTFE&Nikelium	PTFE&Nikelium
2	Machine screw	25	A105
3	Spring	60Si2Mn	Inconel X-750
4	Body	25	A105
5	Bolt	35CrMoA	A193-B7
6	Ball**	WCB+ENP	A216-WCB+ENP
7	Seat*	25	A105
8	Sealing ring	PTFE	PTFE
9	Dish spring	60Si2Mn	AISI 9260
10	Device for seat rotating	Assembled	
11	Sealing ring for stem	PTFE	PTFE
12	Bushing	PTFE&Nikelium	PTFE&Nikelium
13	Stem*	1Cr13	A182-F6a
14	Connection set	45	AISI C1045
15	Driving	Assembled	

Notes: *The material of this part about the anti-sulphur type valve is GB (1Cr18Ni9), ASTM (A276-321)

**The material of this part about the anti-sulphur type valve is GB (1Cr18Ni9, CF8+NLP), ASTM(A182-304, CF8+Ni.P)Major parts of the valve series and materials of sealing surface differ according to actual working condition and customer's special requirement.





W(K)Q(3' 6' 7' 8' 9)47F(Y' N' P)

Technical specification

Design Standard	GB/T 12237 GB/T 19672	API 6D
Face to Face	GB/T 12221	API 6D ASME B16.10
Flanged Size	GB/T 9113 JB/T 79	ASME B16.5 ASME B16.47
Test & Inspection	JB/T 9092 GB/T 19672	API 598 API 6D

*Notes: 1. The sizes of serial valve connecting flange ends can be designed according to customer's requirement.
2. DN>1000(40"), the design standard is accordance with 《Specification of the length pipe valve》

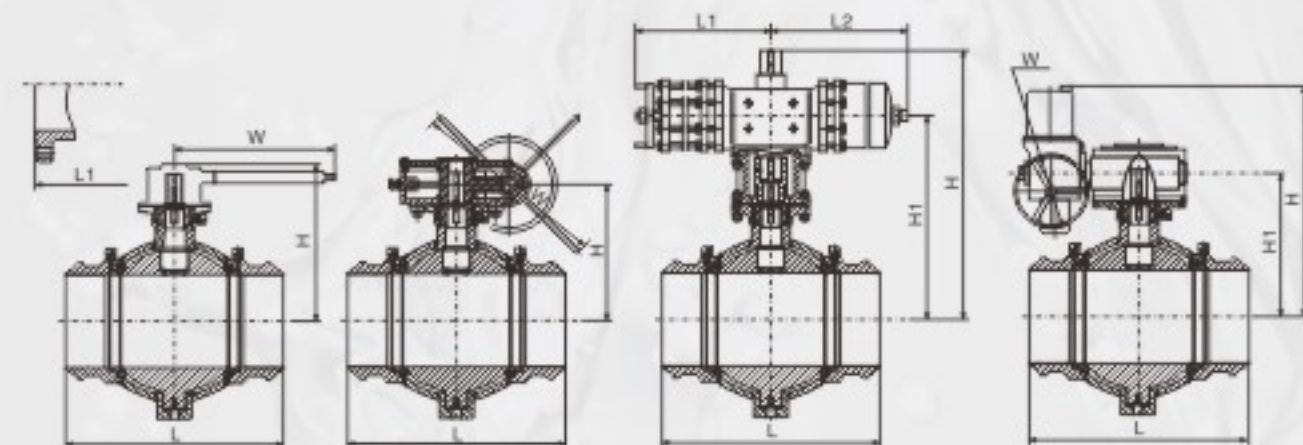
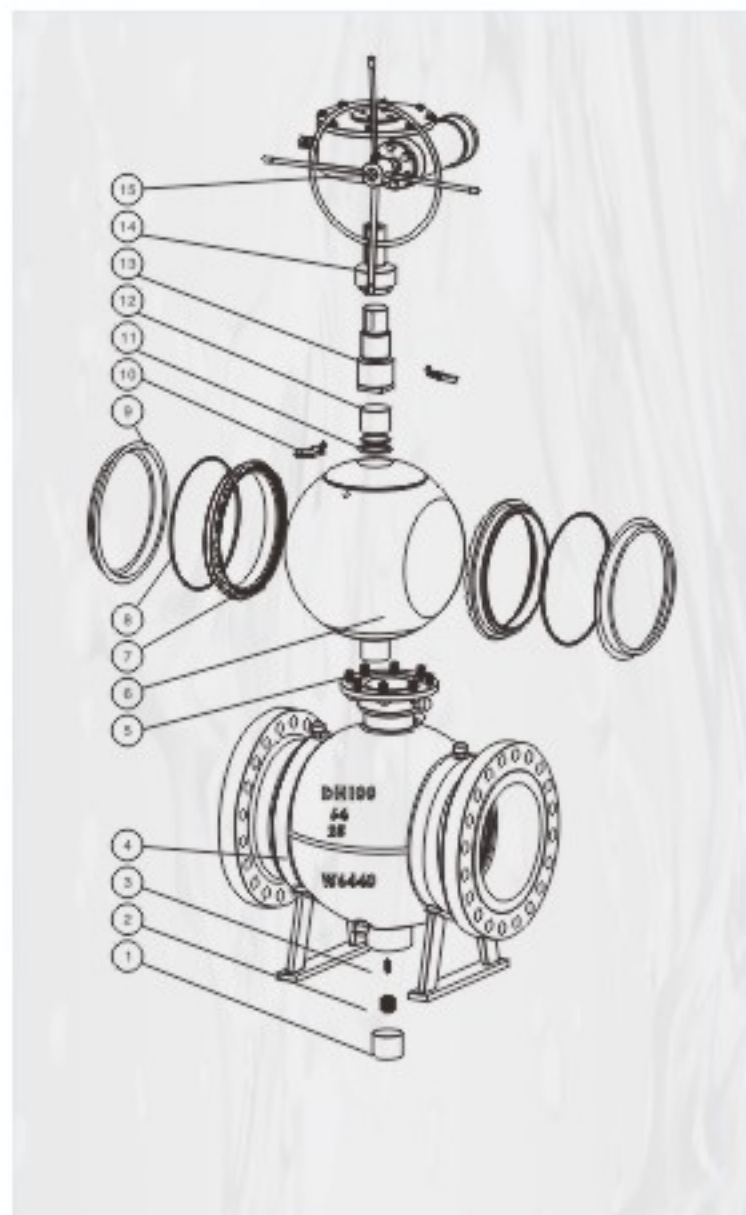
Form of Major Parts Materials

No.	Part name	Materials	
		GB	ASTM
1	Bushing	PTFE&Nikelium	PTFE&Nikelium
2	Machine screw	25	A105
3	Spring	60Si2Mn	Inconel X-750
4	Body	25	A105
5	Bolt	35CrMoA	A193-B7
6	Ball**	WCB+ENP	A216-WCB+ENP
7	Seat*	25	A105
8	Sealing ring	PTFE	PTFE
9	Dish spring	60Si2Mn	AISI 9250
10	Decive for seat rotating	Assembled	
11	Sealing ring for stem	PTFE	PTFE
12	Bushing	PTFE&Nikelium	PTFE&Nikelium
13	Stem*	1Cr13	A182-F6a
14	Connection set	45	AISI C1045
15	Driving	Assembled	

Notes: *The material of this part about the anti-sulphur type valve is GB(1Cr18Ni9), ASTM (A276-321)

**The material of this part about the anti-sulphur type valve is GB (1Cr18Ni9, CF8+Ni.P), ASTM(A182-304, CF8+Ni.P)

Major parts of the valve series and materials of sealing surface differ according to actual working condition and customer's special requirement.

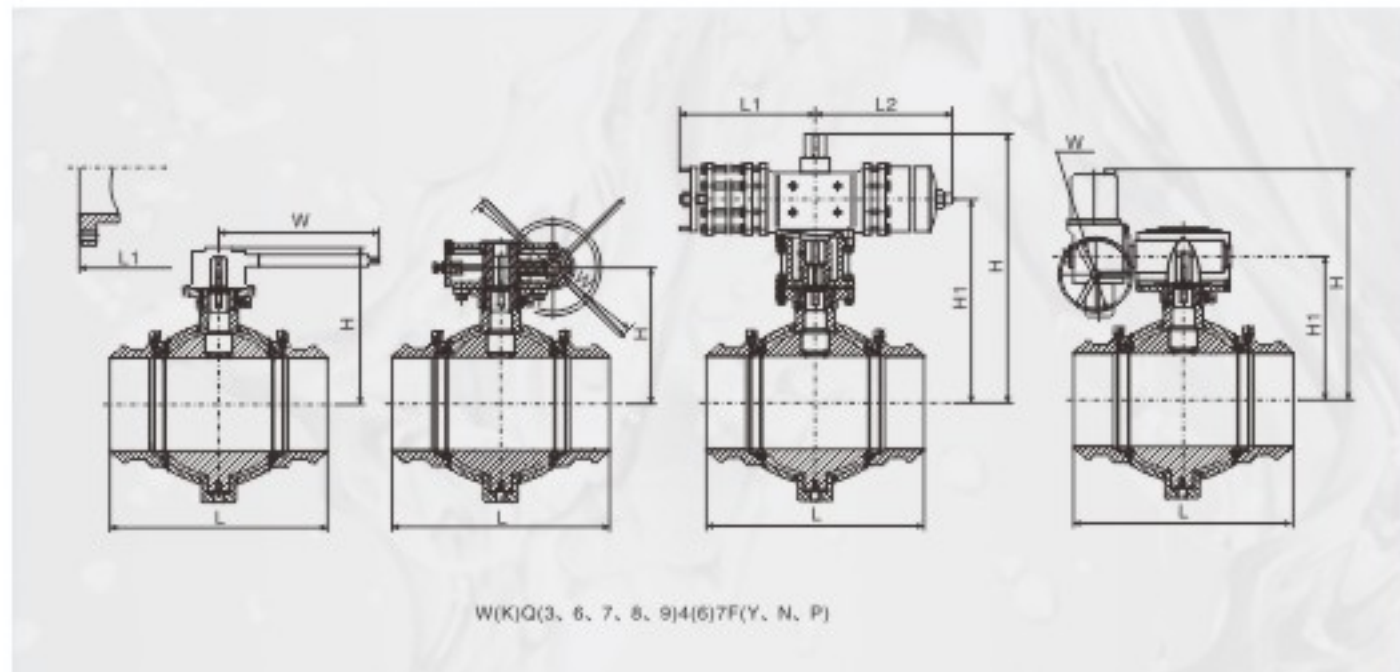


W(K)Q(3, 6, 7, 8, 9)4(6)7F(Y, N, P)

Form Main Types and Connecting Dimension

PN1.6MPa CLASS 150

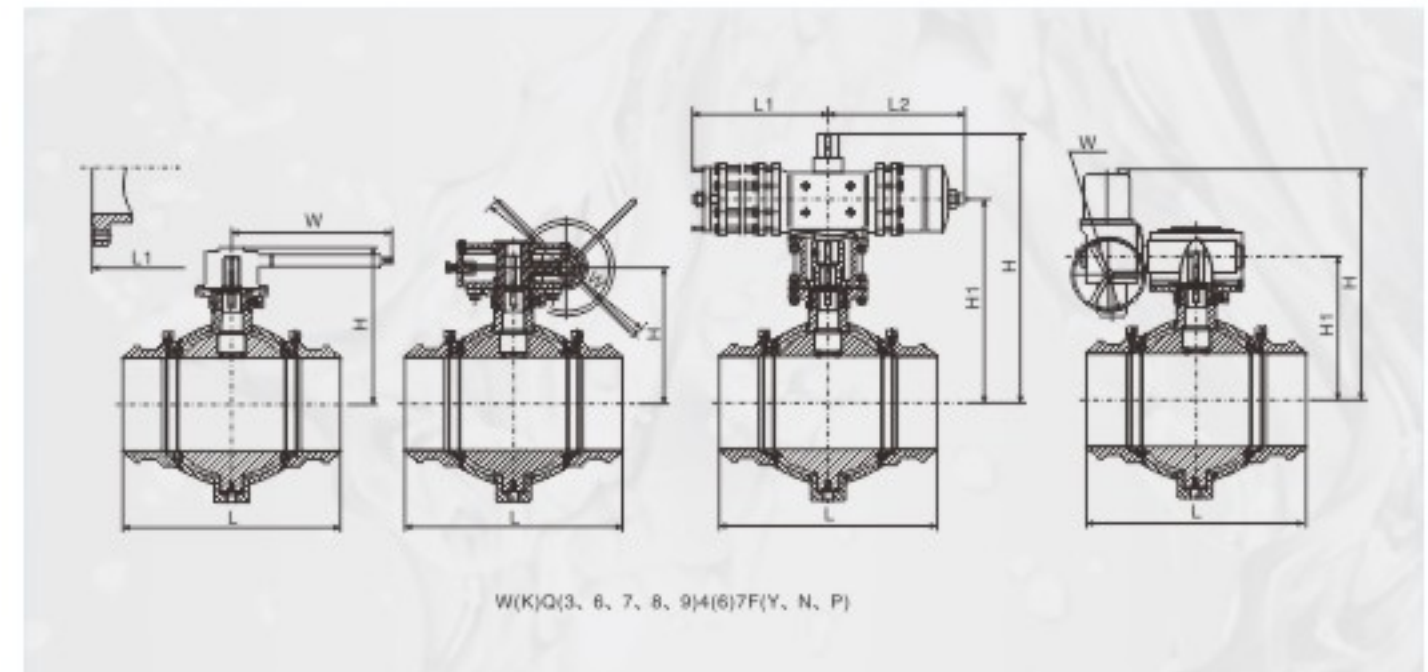
DN	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900	1000	1050	1200	1400	1500
NPS	in	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	42	48	56	60
Flange	L	216	241	283	305	381	457	521	559	635	762	838	914	991	1143	1346	1524	1727	1930	1829	2180	2300	2400
Butt Welding	L1	178	191	203	229	356	394	457	533	610	686	762	864	914	1067	1245	1372	1524	1721	1689	2100	2250	2400
Hand-Operated	H	107	125	152	178	300	330	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	W	230	350	400	450	700	750	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	kg	23	42	50	65	70	82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Worm Gear Operated	H	-	-	-	-	-	-	337	385	414	447	510	538	585	665	730	930	990	1070	1260	1370	1480	1550
	W	-	-	-	-	-	-	600	600	800	800	800	800	800	800	800	800	800	800	800	800	800	800
	kg	-	-	-	-	-	-	133	208	312	413	577	780	1028	1706	2534	3644	4966	6800	8500	11173	12300	15800
Air-Operating	H	269	379	389	479	552	666	804	839	972	1127	1459	1529	1599	1645	1160	1460	1510	1610	-	-	-	-
	H1	174	248	258	322	395	457	595	630	728	883	1154	1224	1294	915	930	1100	1150	1250	-	-	-	-
	L1	89	148	148	287	287	378	378	378	530	530	680	680	680	1455	1455	1665	1665	1960	-	-	-	-
	L2	181	257	257	287	287	378	378	378	530	530	680	680	680	1455	1455	1665	1665	1960	-	-	-	-
	kg	40	50	72	80	110	130	180	300	350	450	610	820	1100	1900	2600	4000	5100	7200	-	-	-	-
Electric Driving	H	-	-	-	-	-	435	480	532	600	610	670	760	763	903	982	1108	1445	1655	1954	2064	2174	2244
	H1	-	-	-	-	-	215	262	315	320	360	420	510	590	630	725	835	880	970	1230	1340	1450	1520
	W	-	-	-	-	-	200	200	200	280	280	280	305	305	305	400	400	460	460	600	600	600	600
	kg	-	-	-	-	-	145	196	310	360	475	625	880	1200	2100	2750	4230	6000	7800	9000	12500	14000	17000



Form Main Types and Connecting Dimension

PN2.5, 4.0MPa CLASS 300

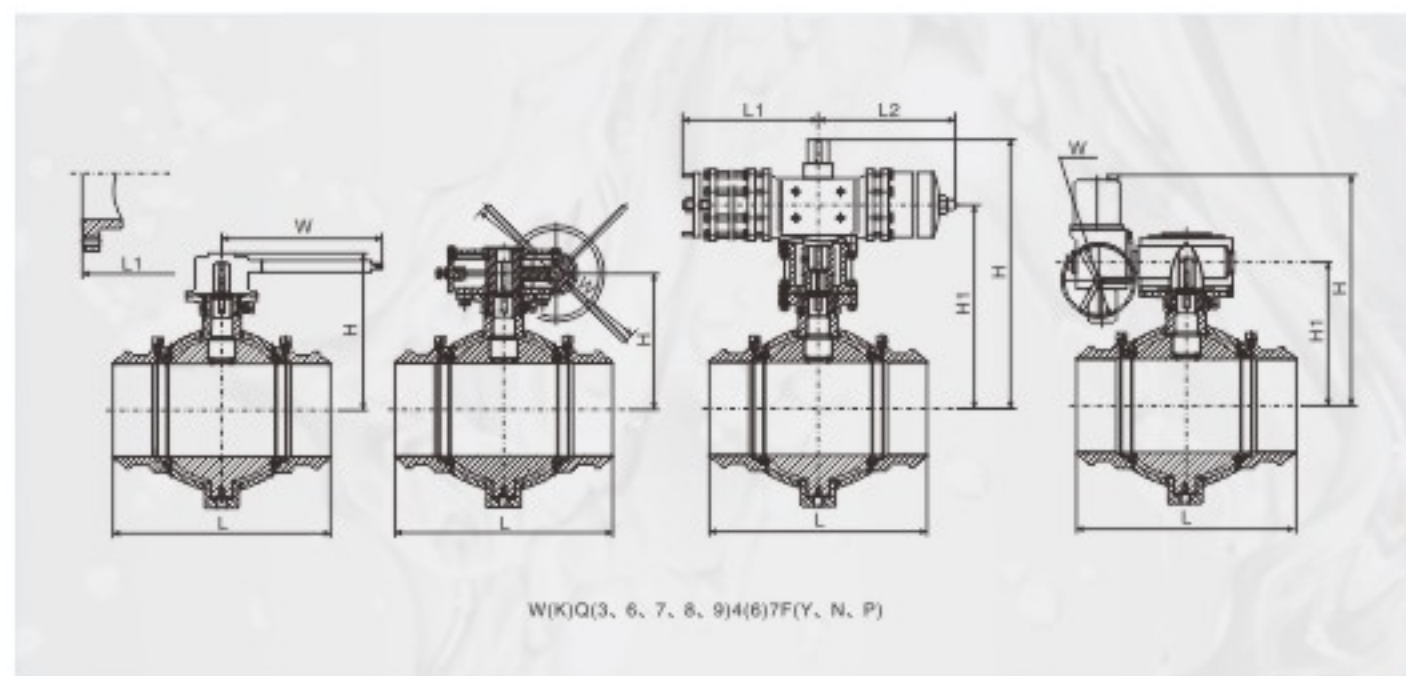
DN	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900	1000	1050	1200	1400	1500
NPS	in	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	42	48	56	60
Flange	L	216	241	283	305	381	457	521	559	635	762	838	914	991	1143	1346	1524	1727	2083	2050	2180	2300	2400
Butt Welding	L1	216	241	283	305	381	403	502	568	648	762	838	914	991	1143	1346	1524	1727	2083	1960	2020	2250	2400
Hand-Operated	H	107	125	152	178	300	330	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	W	230	400	400	600	750	800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	kg	32	48	65	75	82	91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Worm Gear Operated	H	-	-	-	-	-	-	278	375	460	465	510	538	660	830	880	930	990	1070	1260	1370	1480	1550
	W	-	-	-	-	-	-	600	600	800	800	800	800	800	800	800	800	800	800	800	800	800	800
	kg	-	-	-	-	-	-	152	242	376	489	708	950	1247	2066	3101	4374	6050	8185	9500	13413	14200	17500
Air-Operating	H	269	379	452	579	595	595	736	942	994	1188	1280	1480	1554	1380	1430	1599	1790	1850	-	-	-	-
	H1	209	248	295	322	386	386	527	698	750	883	975	1080	1154	930	980	1149	1190	1250	-	-	-	-
	L1	148	148	287	287	378	378	378	530	530	680	680	680	1455	1455	1665	1665	1960	1960	-	-	-	-
	L2	181	257	287	287	378	378	378	530	530	680	680	680	1455	1455	1665	1665	1960	1960	-	-	-	-
	kg	49	64	70	82	112	145	220	310	395	510	752	1000	1320	2200	3200	4520	6500	9100	-	-	-	-
Electric Driving	H	-	-	-	-	-	434	480	432	641	611	670	761	763	903	998	1108	1565	1655	2105	2245	2395	2470
	H1	-	-	-	-	-	217	263	315	360	360	420	510	590	670	725	835	880	970	1420	1560	1710	1785
	W	-	-	-	-	-	200	200	200	280	280	280	305	305	305	400	460	460	460	600	600	600	600
	kg	-	-	-	-	-	170	290	330	415	525	780	1200	1380	2400	3500	4630	6850	10500	11000	14000	15200	18100



Form Main Types and Connecting Dimension

PN6.4MPa CLASS 400

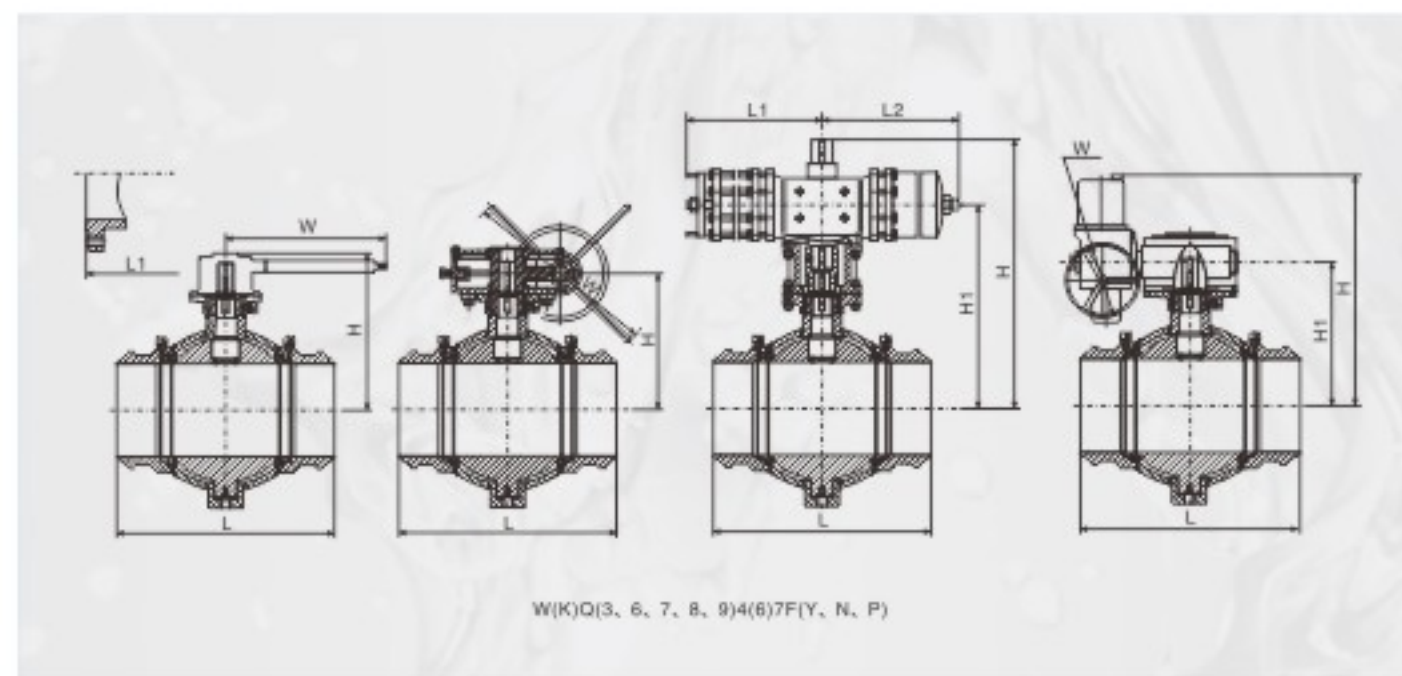
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	700	800	900	1000	1050	1200	1400	1500
NPS	in	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24	28	32	36	40	42	48	56	60
Flange	L	292	330	356	406	495	597	673	762	826	902	978	1054	1232	1397	1651	1880	2300	2057	2400	2400	2700
Butt Welding	L1	292	330	356	406	495	597	673	762	826	902	978	1054	1232	1397	1651	1880	2300	2050	2180	2300	2400
Hand-Operated	H	108	155	197	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	W	230	400	400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	kg	38	52	72	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Worm Gear Operated	H	-	-	-	115	180	254	325	392	390	455	590	-	759	836	915	987	1212	1260	1370	1480	1550
	W	-	-	-	600	600	800	800	800	800	800	800	800	800	800	800	800	800	1000	1000	1000	1000
	kg	-	-	-	88	105	169	260	420	525	820	1120	1400	2400	3400	4800	7200	9600	11500	16000	18000	22000
Air-Operating	H	269	-	519	636	728	839	1014	1120	1225	1675	-	1675	1945	1945	-	-	-	-	-	-	-
	H1	209	-	295	322	386	527	698	750	883	1080	-	1080	980	980	-	-	-	-	-	-	-
	L1	148	-	287	287	378	378	530	530	680	680	-	680	1665	1665	-	-	-	-	-	-	-
	L2	257	-	287	287	378	378	530	530	680	680	-	680	1665	1665	-	-	-	-	-	-	-
	kg	55	-	85	96	142	200	315	425	580	820	-	1450	2520	3800	-	-	-	-	-	-	-
Electric Driving	H	-	-	-	-	434	480	432	640	611	671	761	763	903	998	1108	1260	1505	1954	2064	2174	2244
	H1	-	-	-	-	217	262	360	400	434	472	510	590	630	725	835	960	1205	1230	1340	1450	1520
	W	-	-	-	-	200	200	200	280	280	280	305	305	305	400	400	600	600	600	600	600	600
	kg	-	-	-	-	172	235	340	465	600	850	1200	1500	2600	4200	5200	7900	9500	12500	17500	19000	23500



Form Main Types and Connecting Dimension

PN10.0MPa CLASS 600

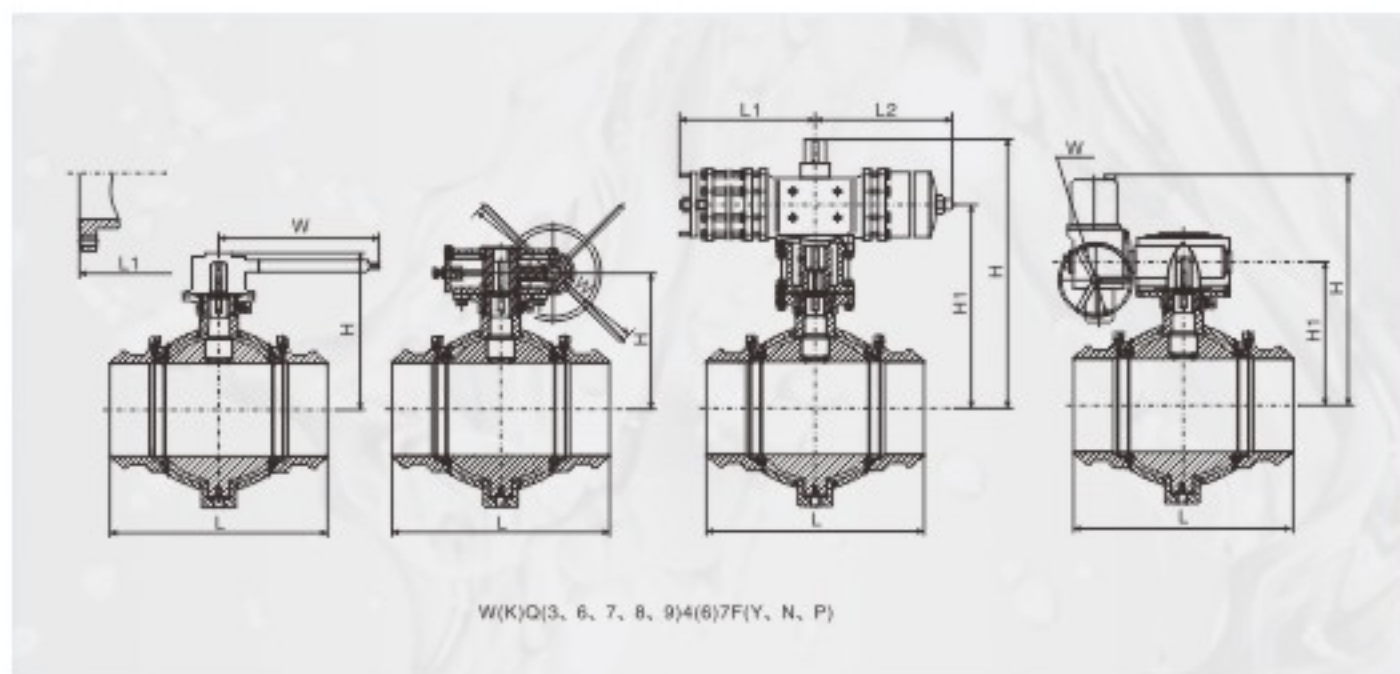
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	700	800	900	1000	1050	1200	1400	1500
NPS	in	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24	28	32	36	40	42	48	56	60
Flange	L	292	330	356	432	559	660	787	838	889	991	1092	1194	1397	1549	1778	2083	2337	2100	2400	2400	2700
Butt Welding	L1	292	330	356	432	559	660	787	838	889	991	1092	1194	1397	1549	1778	2083	2337	2050	2180	2300	2400
Hand-Operated	H	108	155	197	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	W	500	650	650	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	kg	45	60	80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Worm Gear Operated	H	-	-	-	115	180	254	325	392	390	455	590	630	830	960	1030	1171	1250	1260	1370	1480	1550
	W	-	-	-	600	600	800	800	800	800	800	800	800	800	800	800	800	800	1000	1000	1000	1000
	kg	-	-	-	95	116	189	296	466	597	860	1154	1568	2613	3841	5508	7597	10370	12500	17136	21000	23400
Air-Operating	H	269	-	519	636	728	839	1014	1120	1224	1374	-	1490	1615	1760	-	-	-	-	-	-	-
	H1	209	-	295	479	519	595	770	815	1004	1154	-	1210	1335	1410	-	-	-	-	-	-	-
	L1	148	-	287	287	378	530	530	680	1455	1455	-	1665	1665	1960	-	-	-	-	-	-	-
	L2	257	-	287	287	378	530	530	680	1455	1455	-	1665	1665	1960	-	-	-	-	-	-	-
	kg	60	-	105	112	160	220	320	470	610	890	-	1600	2700	4000	-	-	-	-	-	-	-
Electric Driving	H	-	-	-	-	480	532	641	651	670	761	783	943	998	1108	1238	1350	1400	1954	2064	2174	2244
	H1	-	-	-	-	262	360	400	474	472	510	610	670	725	835	915	1050	1100	1230	1340	1450	1520
	W	-	-	-	-	200	200	280	280	280	305	305	305	400	400	600	600	600	600	600	600	600
	kg	-	-	-	-	175	240	350	495	625	920	1200	1820	2900	4350	5800	8200	11200	14100	19000	23000	24000



Form Main Types and Connecting Dimension

PN15.0MPa CLASS 900

DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	800	900	1000	1050	1200
NPS	in	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24	32	36	40	42	48
Flange	L	368	419	381	457	610	737	838	965	1029	1130	1219	1321	1549	1780	2050	2050	2180	2600
Butt Welding	L1	368	419	381	457	610	737	838	965	1029	1130	1219	1321	1549	1700	1780	1960	2100	2376
Hand-Operated	H	217	241	259	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	W	650	650	650	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	kg	58	76	96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Worm Gear Operated	H	-	-	-	177	244	274	382	452	515	602	706	714	736	1050	1090	1150	1230	1350
	W	-	-	-	600	800	800	800	800	800	800	800	800	800	800	1000	1000	1000	1000
	kg	-	-	-	115	125	225	377	559	776	1124	1503	2049	3351	6008	7147	9908	11500	19000
Air-Operating	H	519	-	728	842	1014	1120	1224	1374	1490	1615	1760	1760	1760	-	-	-	-	-
	H1	295	-	519	595	770	815	1004	1154	1210	1335	1410	1410	1410	-	-	-	-	-
	L1	287	-	378	530	530	680	1455	1455	1665	1665	1960	1960	1960	-	-	-	-	-
	L2	287	-	378	530	530	680	1455	1455	1665	1665	1960	1960	1960	-	-	-	-	-
	kg	70	-	115	125	165	240	390	620	790	1240	1700	2250	3420	-	-	-	-	-
Electric Driving	H	-	-	-	480	641	651	711	811	783	963	1058	1148	1238	1744	1784	1844	1924	2044
	H1	-	-	-	262	400	474	512	550	610	690	785	875	915	1020	1060	1120	1200	1320
	W	-	-	-	200	280	280	280	305	305	305	400	400	600	600	600	600	600	600
	kg	-	-	-	128	175	265	395	635	812	1320	1750	2350	3560	4200	8100	11800	12500	20000



Form Main Types and Connecting Dimension

PN25.0MPa CLASS 1500

DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600
NPS	in	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24
Flange	L	368	419	470	546	705	832	991	1130	1257	1384	1537	1664	2043
Butt Welding	L1	368	419	470	546	705	832	991	1130	1257	1384	1537	1664	2043
Hand-Operated	H	217	241	259	-	-	-	-	-	-	-	-	-	-
	W	650	650	650	-	-	-	-	-	-	-	-	-	-
	kg	75	82	105	-	-	-	-	-	-	-	-	-	-
Worm Gear Operated	H	137	161	169	177	244	355	458	576	601	671	740	770	860
	W	600	600	600	600	800	800	800	800	800	800	800	800	800
	kg	85	98	115	125	145	240	395	610	820	1250	1680	2400	3580
Air-Operating	H	519	728	842	1014	1120	1224	1374	1490	1615	1760	1760	1760	-
	H1	295	519	595	770	815	1004	1154	1210	1335	1410	1410	1410	-
	L1	287	378	530	530	680	1455	1455	1665	1665	1960	1960	1960	-
	L2	287	378	530	530	680	1455	1455	1665	1665	1960	1960	1960	-
	kg	95	115	120	145	180	290	420	700	8890	1300	1820	2610	-
Electric Driving	H	-	-	542	641	651	711	801	823	965	1058	1168	1238	-
	H1	-	-	370	400	474	512	550	650	690	785	895	915	-
	W	-	-	200	280	280	280	305	305	305	400	400	600	-
	kg	-	-	142	160	196	320	452	850	910	1420	1960	2820	-

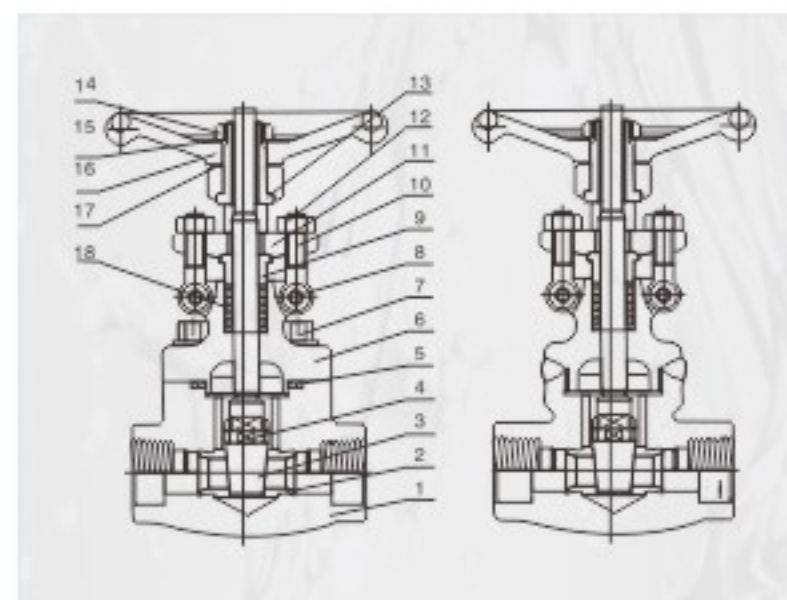
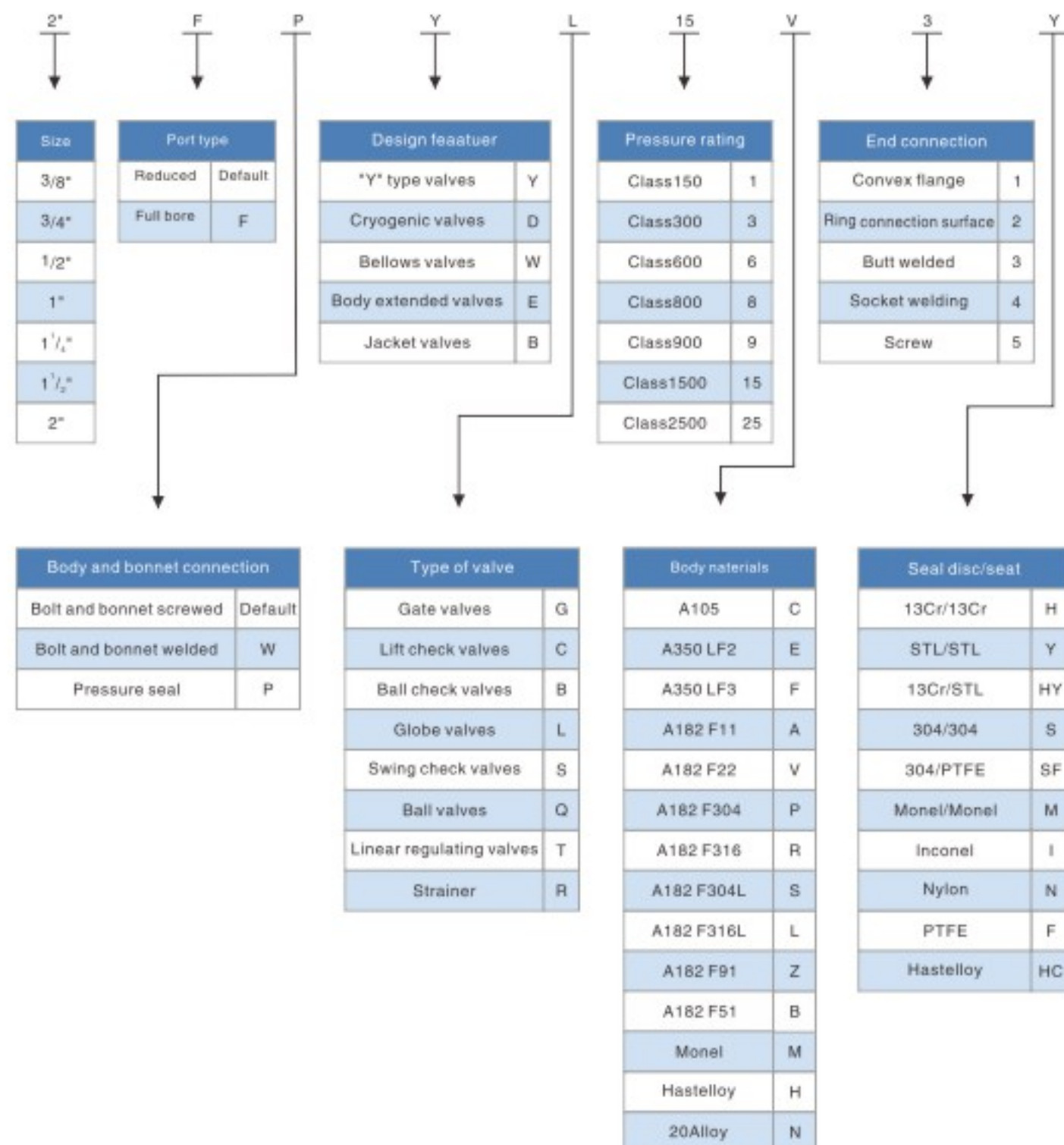
FORGED STEEL SMALL DIAMETER VALVE SERIES





A familiarity with our figure number system is not necessary when specifying or ordering our valves. Providing a full description of the valves is given, our Sales Office will translate this into a figure number. A full description of the valves would begin with the kind of valves, and would then go on to give size, pressure rating, end connection, seat-seal material etc.

We give an example below in order to illustrate a typical figure number, but if a fuller explanation is required, please consult us.



Carbon steel temperature-pressure rate

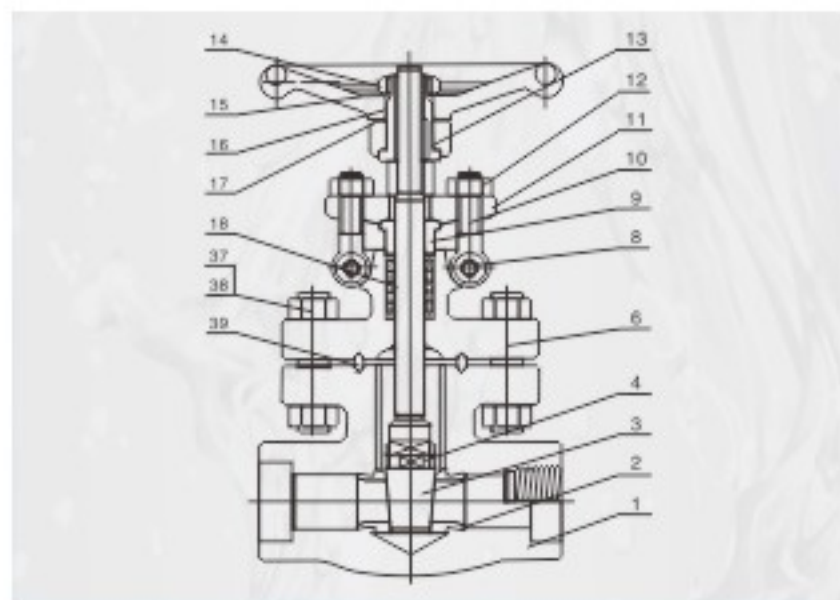
CL150-285 P.S.I @ 100°F CL300-740 P.S.I @ 100°F CL600-1480 P.S.I @ 100°F
CL800-1975 P.S.I @ 100°F CL1500-3705 P.S.I @ 100°F

Main part materials list

NO.	Part name	A105/F6a	A105/F6aHFS	LF2/304	L11/F6aHF	F304(L)/304(L)	F316(L)/316(L)	F51/F51
1	Body	A105	A105	LF2	F11	F304(L)	F316(L)	F51
2	Seat	410	410HF	304	410HF	304(L)	316(L)	F51
3	Wedge	F6a	F6a	F304	F6aHF	F304(L)	F316(L)	F51
4	Stem	410	410	304	410	304(L)	316(L)	F51
5	Gasket	304+ Flexible graphite	304+ Flexible graphite	304+ Flexible graphite	304+ Flexible graphite	304+ Flexible graphite	304+ Flexible graphite	304+ Flexible graphite
6	Bonnet	A105	A105	LF2	F11	F304(L)	F316(L)	F51
7	Bolt	B7	B7	L7	B16	B8(M)	B8(M)	B8(M)
8	Pin	410	410	410	410	304	304	304
9	Gland	410	410	304	410	304	316	F51
10	Gland eyebolt	B7	B7	L7	B16	B8(M)	B8(M)	B8(M)
11	Gland flange	A105	A105	LF2	F11	F304	F304	F304
12	Hex nut	2H	2H	2H	2H	8(M)	8(M)	8(M)
13	Stem nut	410	410	410	410	410	410	410
14	Locking nut	35	35	35	35	35	35	35
15	Nameplate	AL	AL	AL	AL	AL	AL	AL
16	Handwheel	A197	A197	A197	A197	A197	A197	A197
17	Lubricating gasket	410	410	410	410	410	410	410
18	Packing	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite

Application standards

- Design and manufacture conform to:
API 602, BS5352, ANSI B16.34;
- Connection ends conform to:
(1) Socket welded dimension conform to
ANSI B16.11; JB/T1751
(2) Screw ends dimension conform to
ANSI B1.20.1; JB/T7306
(3) Butt-welded conform to ANSI B16.25;
JB/T12224
(4) Flanged ends conform to ANSI B16.5; JB79
- Test and inspection conform to:
API 598; GB/T13927; JB/T9092
- Structure features:
Bolted bonnet, outside screw and yoke
Welded bonnet, outside screw and yoke
- Materials conform to ANSI/ASTM.
- Main materials:
A105; LF2; F5; F11; F22; 304(L); 316(L);
F347; F321; F51; Monel; 20Alloy.



■ Application standards

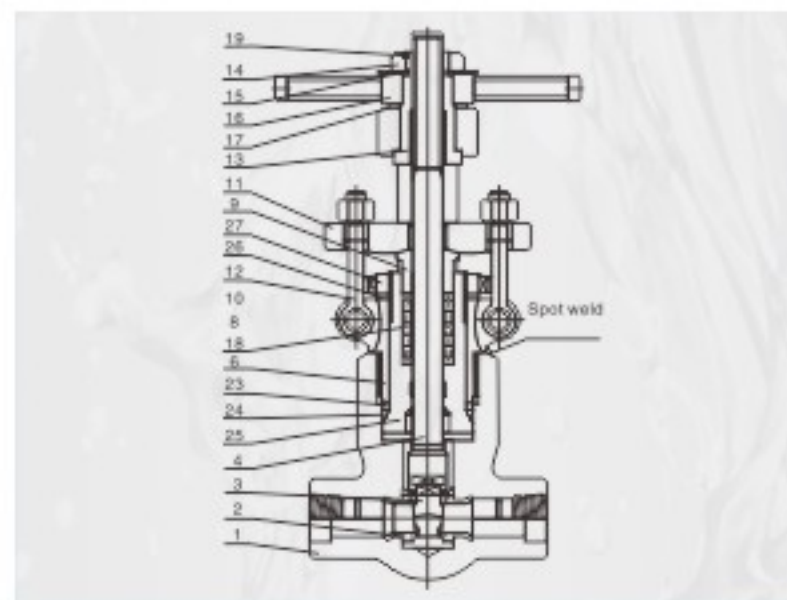
- Design and manufacture conform to:
API 602, BS5352, ANSI B16.34;
- Connection ends conform to:
(1) Socket welded dimension conform to ANSI B16.11; JB/T1751
(2) Screw ends dimension conform to ANSI B1.20.1; JB/T7306
(3) Butt-welded ends conform to ANSI B16.25; JB/T12224
(4) Flanged ends conform to ANSI B16.5; JB79
- Test and inspection conform to:
API 598; GB/T13927; JB/T9092
- Structure features:
Bolted bonnet, outside screw and yoke
Welded bonnet, outside screw and yoke
- Materials conform to ANSI/ASTM.
- Main materials:
A105; LF2; F5; F11; F22; 304(L); 316(L);
F347; F321; F51; Monel; 20Alloy.

■ Carbon steel temperature-pressure rate

CL150-285 P.S.I@100°F CL300-740 P.S.I@100°F CL600-1480 P.S.I@100°F
CL800-1975 P.S.I@100°F CL1500-3705 P.S.I@100°F

■ Main part materials list

NO.	Part name	A105/F6a	A105/F6aHFS	LF2/304	L11/F6aHF	F304(L)/304(L)	F316(L)/316(L)	F51/F51
1	Body	A105	A105	LF2	F11	F304(L)	F316(L)	F51
2	Seat	410	410HF	304	410HF	304(L)	316(L)	F51
3	Wedge	F6a	F6a	F304	F6aHF	F304(L)	F316(L)	F51
4	Stem	410	410	304	410	304(L)	316(L)	F51
6	Bonnet	A105	A105	LF2	F11	F304(L)	F316(L)	F51
8	Pin	410	410	410	410	304	304	304
9	Gland	410	410	304	410	304	316	F51
10	Gland eyebolt	B7	B7	L7	B16	B8(M)	B8(M)	B8(M)
11	Gland flange	A105	A105	LF2	F11	F304	F304	F304
12	Hex nut	2H	2H	2H	2H	8(M)	8(M)	8(M)
13	Stem nut	410	410	410	410	410	410	410
14	Locking nut	35	35	35	35	35	35	35
15	Nameplate	AL	AL	AL	AL	AL	AL	AL
16	Handwheel	A197	A197	A197	A197	A197	A197	A197
17	Lubricating gasket	410	410	410	410	410	410	410
18	Packing	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite
37	Screwed stud	B7	B7	L7	B16	B8(M)	B8(M)	B8(M)
38	Nut	2H	2H	8	8	8(M)	8(M)	8(M)
39	Metal ring	304	304	304	304	304(L)	316(L)	F51



■ Application standards

- Design and manufacture conform to:
API 602, BS5352, ANSI B16.34;
- Connection ends conform to:
(1) Socket welded dimension conform to ANSI B16.11; JB/T1751
(2) Screw ends dimension conform to ANSI B1.20.1; JB/T7306
(3) Butt-welded conform to ANSI B16.25; JB/T12224
(4) Flanged ends conform to ANSI B16.5; JB79
- Test and inspection conform to:
API 598; GB/T13927; JB/T9092
- Structure features:
A threaded and pressure seal bonnet
- Materials conform to ANSI/ASTM.
- Main materials:
A105; LF2; F5; F11; F22; 304(L); 316(L);
F347; F321; F91; Monel; 20Alloy.

■ Carbon steel temperature-pressure rate

CL1500-3705 P.S.I@100°F CL2500-6170 P.S.I@100°F

■ Main part materials list

NO.	Part name	A105/F6a	A105/F6aHFS	LF2/304	L11/F6aHF	F304(L)/304(L)	F316(L)/316(L)	F91/410HF
1	Body	A105	A105	LF2	F11	F304(L)	F316(L)	F91
2	Seat	410	410HF	304	410HF	304(L)	316(L)	410HF
3	Wedge	F6a	F6a	F304	F6aHF	F304(L)	F316(L)	F6aHF
4	Stem	410	410	304	410	304(L)	316(L)	410
6	Bonnet	A105	A105	LF2	F11	F304(L)	F316(L)	F91
8	Pin	410	410	410	410	304	304	410
9	Gland	410	410	304	410	304	316	410
10	Gland eyebolt	B7	B7	L7	B16	B8(M)	B8(M)	B8(M)
11	Gland flange	A105	A105	LF2	F11	F304	F304	F91
12	Hex nut	2H	2H	2H	2H	8(M)	8(M)	8()
13	Stem nut	410	410	410	410	410	410	410
14	Locking nut	35	35	35	35	35	35	35
15	Nameplate	AL	AL	AL	AL	AL	AL	AL
16	Handwheel	A197	A197	A197	A197	A197	A197	A190
17	Lubricating gasket	410	410	410	410	410	410	410
18	Packing	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite
19	Stop nut	35	35	35	35	35	35	35
23	Seal gasket	420	420	304	304	304(L)	316(L)	420
24	P.S.ring	304	304	304	304	304	316	316
25	P.S.seat	420	420	304	304	304(L)	316(L)	F91
26	Nut pad	410	410	410	410	410	410	410
27	Packing nut	Cast steel	Cast steel	Cast steel	Cast steel	Stainless steel	Stainless steel	Cast steel



Bolted bonnet, full port reducing port outside screw and yoke (OS & Y)
Threaded, butt-welded or socket welded ends; design to API 602

CL800

(NPS) Specification	R.P	-	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
(mm) Face to face	L	79	79	92	111	120	120	140	178	180
(mm) Handwheel diameter	W	100	100	100	125	160	160	180	200	220
(mm)Height	H	161	161	163	196	223	251	290	333	370
(mm) Flow port dimension	d	8	10.5	13.5	18	24	29	36.5	45	51
Weight (Kg)		2.22	2.3	2.39	4.24	5.7	7.05	10.9	16.8	24

Welded bonnet, full port reducing port outside screw and yoke (OS & Y)
Threaded, butt-welded or socket welded ends; design to API 602

CL800

(NPS) Specification	R.P	–	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
(mm) Face to face	L	79	79	92	111	120	120	140	178	180
(mm) Handwheel diameter	W	100	100	100	125	160	160	180	200	220
(mm)Height	H	161	161	163	196	223	251	290	333	370
(mm) Flow port dimension	d	8	10.5	13.5	18	24	29	36.5	45	51
Weight (Kg)		1.9	1.9	2.1	3.2	5.2	6.9	10.4	15.8	22

Bolted bonnet, full port reducing port outside screw and yoke (OS & Y)
Threaded, butt-welded or socket welded ends; design to API 602

CL900-CL1500

(NPS) Specification	R.P	-	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
(mm) Face to face	L	92	111	111	120	120	140	178	180	-
(mm) Handwheel diameter	W	100	125	125	160	160	180	200	220	-
(mm)Height	H	191	191	192	219	243	296	316	370	-
(mm) Flow port dimension	d	8	10.5	13.5	18	24	29	36.5	45	-
Weight (Kg)		2.4	4.3	4.4	6	7.2	11.4	16	23	-

Welded bonnet, full port reducing port outside screw and yoke (OS & Y)
Threaded, butt-welded or socket welded ends; design to API 602

CL900-CL1500

(NPS) Specification	R.P	–	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
(mm) Face to face	L	92	111	111	120	120	140	178	180	–
(mm) Handwheel diameter	W	100	125	125	160	160	160	200	220	–
(mm)Height	H	171	207	207	240	258	330	355	370	–
(mm) Flow port dimension	d	8	10.5	13.5	18	24	29	36.5	45	–
Weight (Kg)		2.3	4	4	4.8	7.1	11	16	22.8	–



Welded bonnet, full port outside screw and yoke (OS & Y)
Socket welded ends, design conform to ASME B16.34

CL2500

(NPS) Specification		1/4	3/8	1/2	3/4	1	1 1/4	2	
(mm) Face to face	L		111	120	120	120	140		
(mm) Handwheel diameter	W		125	160	160	180	220		
(mm) Height	H		215	218	220	238	281		
(mm) Flow port dimension	d		14	14	14	19	25		
Weight (Kg)			7	8.5	8.7	11.7	17		

Bolted bonnet, full port outside screw and yoke (OS & Y)
Socket welded ends, design conform to ASME B16.34

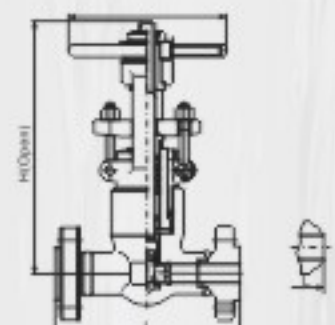
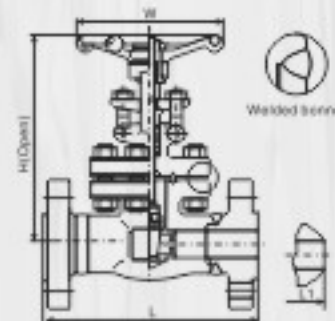
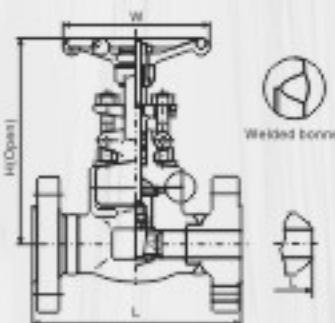
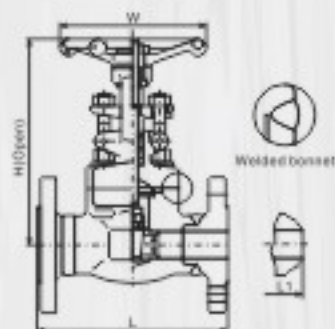
CL1500-CL2500

(NPS) Specification	F.P		1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
(mm) Face to face	L	CL1500	110	150	150		210	235	
		CL2500	150	150	210		235	235	
(mm) Handwheel diameter	W	CL1500	110	130	130		180	250	
		CL2500	130	130	250		300	300	
(mm) Height	H	CL1500	277	300	390		400	435	
		CL2500	293	300	390		435	435	
(mm) Flow port dimension	d	CL1500	14	17	22		35	37	
		CL2500	14	14	14		25	30	
Weight (Kg)		CL1500	5.1	11	12.1		22	37	
		CL2500	11	11.3	22.4		38	38	

Pressure seal bonnet, full port outside screw and yoke (OS & Y)
Socket welded ends, design conform to ASME B16.34

CL1500-CL2500

(NPS) Specification	F.P		3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm) Face to face	L	CL900-1500	140	140	140	140	178	178	216
		CL2500	186	186	186	186	232	232	279
(mm) Handwheel diameter	W	CL900-1500	200	200	200	200	280	280	300
		CL2500	200	200	200	200	280	280	300
(mm) Height	H	CL900-1500	318	318	318	322	467	468	540
		CL2500	325	325	325	327	467	468	540
(mm) Flow port dimension	d	CL900-1500	14	14	14	19	25	30	36.5
		CL2500	14	14	14	19	25	30	36.5
Weight (Kg)		CL900-1500	11.5	11.5	10.8	10.5	19.6	21.0	55.4
		CL2500	10.8	11.6	12.3	12.3	26.0	28.4	60.0



Bolted bonnet, reducing port outside screw and yoke (OS & Y)
CL150-300-600 Flange-welded or butt-welded ends; design to API 602; BS5352

Specification(NPS)			1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
(mm) Face to face	CL150	L(RF) L1(BW)	-	-	108	117	127	140	165	178	190
	CL300		-	-	140	152	165	178	190	216	241
	CL600		-	-	165	190	216	229	241	292	330
(mm) Handwheel diameter		W	-	-	100	100	125	160	160	180	200
(mm) Height	CL150	H	-	-	176	184	217	226	250	290	357
	CL300, CL600		-	-	161	163	196	226	250	290	357
(mm) Flow port dimension		d	-	-	10	13.5	18	24	29	36.5	45
(Kg) Weight	CL150	RF	-	-	3.4	3.98	6.12	7.2	10.4	15.5	24.5
		BW	-	-	2.8	3.3	5.4	6.5	8.2	12.5	20
	CL300	RF	-	-	3.77	4.89	7.23	9.6	12.64	18	26.2
		BW	-	-	3.5	4.4	6.8	8.1	9.2	15.4	22
	CL600	RF	-	-	4.2	5.8	8.8	12.1	15.6	19.5	32
		BW	-	-	4.5	5.1	8.2	10.5	12.4	20.1	28

Flange Integrity Forged Steel Valve enquiry please contact sales department.

Bolted bonnet, full port outside screw and yoke (OS & Y)
CL900-CL1500 Flange-welded or butt-welded ends; design to BS5352

Specification(NPS)		1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm)	L(RF),L1(BW)	–	–	216	229	254	279	305	368
Face to face	L(RTJ)	–	–	216	229	254	279	305	371
(mm) Handwheel diameter	W	–	–	125	125	160	180	200	220
(mm)Height	H	–	–	191	192	219	257	296	316
(mm)Flow port dimension	d	–	–	13.5	18	24	29	36.5	45
Weight (Kg)		–	–	7.2	11.5	15.6	16.2	22.6	28.2

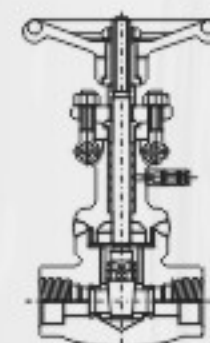
Flange Integrity Forged Steel Valve enquiry please contact sales department.

Bolted bonnet, full port outside screw and yoke (OS & Y)
CL2500 Flange-welded or butt-welded ends; design to ASME B16.34

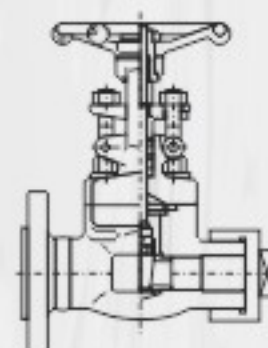
Specification(NPS)		1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm) Face to face	L(RTJ)	-	-	264	273	308	-	384	451
		-	-	264	273	308	-	387	454
(mm) Handwheel diameter	W	-	-	125	160	160	-	200	240
(mm)Height	H	-	-	207	240	258	-	355	370
(mm)Flow port dimension	d	-	-	13.5	13.5	19	-	30	36.5
Weight (Kg)		-	-	19.5	21.5	42	-	65	95

Pressure seal gate valves, full port outside screw and yoke (OS & Y)
CL2500 Flange-welded or butt-welded ends; design to ASME B16.34

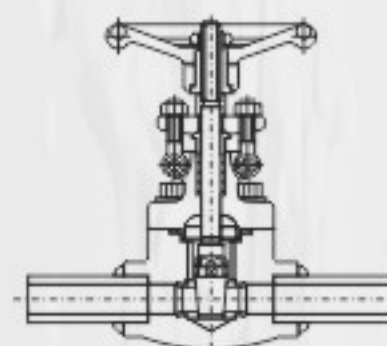
Specification(NPS)		1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm)	L(RF),L1(BW)	-	-	264	273	308	-	384	451
Face to face	L(RTJ)	-	-	264	273	308	-	387	454
(mm) Handwheel diameter	W	-	-	200	200	200	-	280	300
(mm)Height	H	-	-	325	325	327	-	478	540
(mm)Flow port dimension	d	-	-	13.5	13.5	19	-	30	36.5
Weight (Kg)		-	-	14.6	16.8	17.6	-	25	31.9



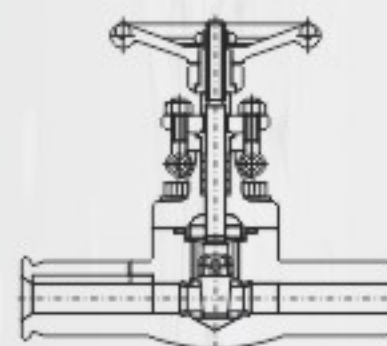
Welded bonnet
OS & Y
Packing
Distance ring
Injector sealing
gum valves
Solid wedge



Bolted bonnet
OS & Y
Cap fitting
connection
Solid wedge



Bolted bonnet
OS & Y
Double end pipe
connection
Solid wedge



Bolted bonnet
OS & Y
Hoop connection
Solid wedge

Vacuum gate valves

CLASS 800 API 602-BS 5352 Reduced port & full port	Temperature- pressure rate	Materials		
		Body/bonnet	Trim	Bolt
	1975 psi @ 100 °F	Cast steel	13Cr	B7

For venting and/or releasing media

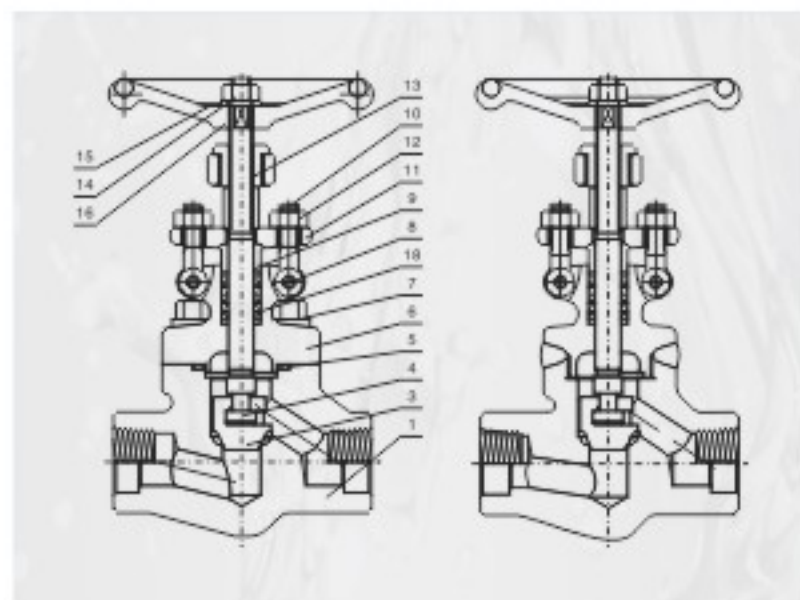
CLASS 800 API 602-BS 5352 Reduced port & full port	Temperature- pressure rate	Materials		
		Body/bonnet	Trim	Bolt
	1975 psi @ 100 °F	Cast steel	13Cr	B7

Coupling pipe valves

CLASS 800 API 602-BS 5352 Reduced port & full port	Temperature- pressure rate	Materials		
		Body/bonnet	Trim	Bolt
	1975 psi @ 100 °F	Cast steel	13Cr	B7

Hoop gate valves

CLASS 800 API 602-BS 5352 Reduced port & full port	Temperature- pressure rate	Materials		
		Body/bonnet	Trim	Bolt
	1975 psi @ 100 °F	Cast steel	13Cr	B7

**Application standards**

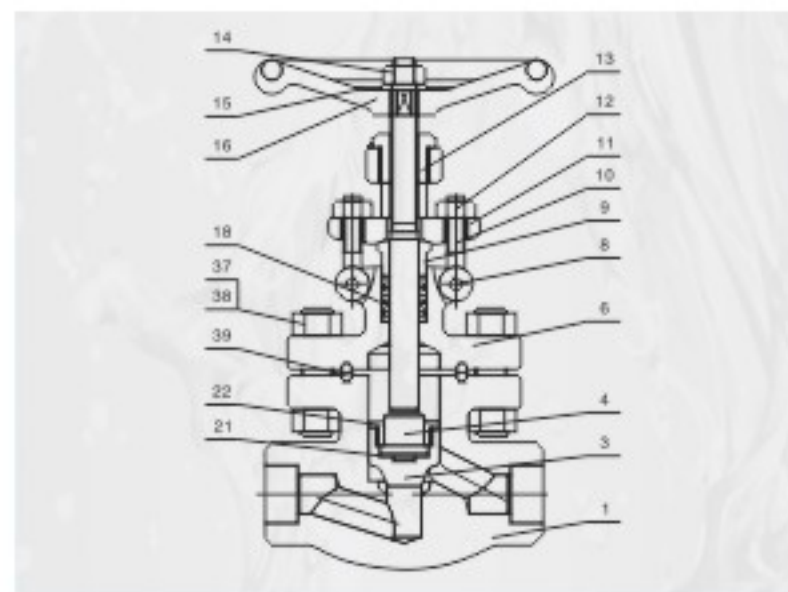
- Design and manufacture conform to BS5352 MSS SP-118;
- Connection ends conform to:
 - Socket welded ends conform to ANSI B16.11; JB/T1751
 - Screw ends conform to ANSI B1.20.1; JB/T7306
 - Butt-welded ends conform to ANSI B16.25; JB/T12224
 - Flanged ends conform to ANSI B16.5; JB79
- Test and inspection conform to: API 598; GB/T13927; JB/T9092
- Structure features:
 - Bolted bonnet, outside screw and yoke
 - Welded bonnet, outside screw and yoke
- Materials conform to ANSI/ASTM.
- Main materials:
 - A105; LF2; F5; F11; F22; 304(L); 316(L); F347; F321; F51; Monel; 20Alloy.

Carbon steel temperature-pressure rate

CL150-285 P.S.I @ 100°F CL300-740 P.S.I @ 100°F CL600-1480 P.S.I @ 100°F
CL800-1975 P.S.I @ 100°F CL1500-3705 P.S.I @ 100°F

Main part materials list

NO.	Part name	A105/F6a	A105/F6aHFS	LF2/304	F11/F6aHF	F304(L)/304(L)	F316(L)/316(L)	F51/F51
1	Body	A105	A105+HF	LF2	F11+HF	F304(L)	F316(L)	F51
3	Disc	F6a	F6a	F304	F6aHF	F304(L)	F316(L)	F51
4	Stem	410	410	304	410	304(L)	316(L)	F51
5	Gasket	304+Flexible graphite	304+Flexible graphite	304+Flexible graphite	304+Flexible graphite	304+Flexible graphite	316+Flexible graphite	316+Flexible graphite
6	Bonnet	A105	A105	LF2	F11	F304(L)	F316(L)	F51
7	Bolt	B7	B7	L7	B16	B8(M)	B8(M)	B8(M)
8	Pin	410	410	410	410	304	304	304
9	Gland	410	410	304	410	304	316	F51
10	Gland eyebolt	B7	B7	L7	B16	B8(M)	B8(M)	B8(M)
11	Gland flange	A105	A105	LF2	F11	F304	F304	F304
12	Hex nut	2H	2H	2H	2H	8(M)	8(M)	8(M)
13	Stem nut	410	410	410	410	410	410	410
14	Locking nut	35	35	35	35	35	35	35
15	Nameplate	AL	AL	AL	AL	AL	AL	AL
16	Handwheel	A197	A197	A197	A197	A197	A197	A197
18	Packing	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite

**Application standards**

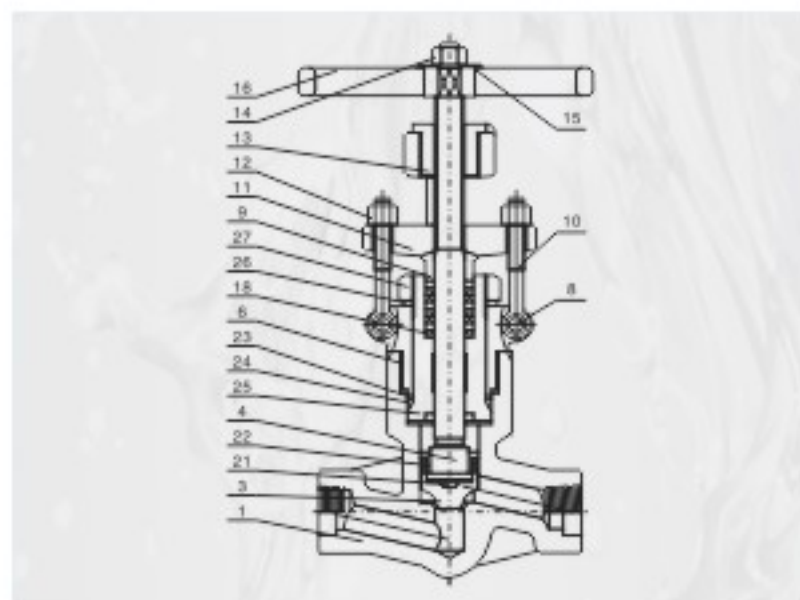
- Design and manufacture conform to BS5352 MSS SP-118;
- Connection ends conform to:
 - Socket welded ends conform to ANSI B16.11; JB/T1751
 - Screw ends conform to ANSI B1.20.1; JB/T7306
 - Butt-welded ends conform to ANSI B16.25; JB/T12224
 - Flanged ends conform to ANSI B16.5; JB79
- Test and inspection conform to: API 598; GB/T13927; JB/T9092
- Structure features:
 - Bolted bonnet, outside screw and yoke
 - Welded bonnet, outside screw and yoke
- Materials conform to ANSI/ASTM.
- Main materials:
 - A105; LF2; F5; F11; F22; 304(L); 316(L); F347; F321; F51; Monel; 20Alloy.

Carbon steel temperature-pressure rate

CL150-285 P.S.I @ 100°F CL300-740 P.S.I @ 100°F CL600-1480 P.S.I @ 100°F
CL800-1975 P.S.I @ 100°F CL1500-3705 P.S.I @ 100°F

Main part materials list

NO.	Part name	A105/F6a	A105/F6aHFS	LF2/304	F11/F6aHF	F304(L)/304(L)	F316(L)/316(L)	F51/F51
1	Body	A105	A105+HF	LF2	F11+HF	F304(L)	F316(L)	F51
3	Disc	F6a	F6a	F304	F6aHF	F304(L)	F316(L)	F51
4	Stem	410	410	304	410	304(L)	316(L)	F51
6	Bonnet	A105	A105	LF2	F11	F304(L)	F316(L)	F51
8	Pin	410	410	410	410	304	304	304
9	Gland	410	410	304	410	304	316	F51
10	Gland eyebolt	B7	B7	L7	B16	B8(M)	B8(M)	B8(M)
11	Gland flange	A105	A105	LF2	F11	F304	F304	F304
12	Hex nut	2H	2H	2H	2H	8(M)	8(M)	8(M)
13	Stem nut	410	410	410	410	410	410	410
14	Locking nut	35	35	35	35	35	35	35
15	Nameplate	AL	AL	AL	AL	AL	AL	AL
16	Handwheel	A197	A197	A197	A197	A197	A197	A197
18	Packing	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite
21	Stem pad	420	420	420	420	316SH	316SH	316SH
22	Disc nut	410	410	410	410	410	410	410
37	Screwed stud	B7	B7	L7	B16	B8(M)	B8(M)	B8(M)
38	Nut	2H	2H	8	8	8(M)	8(M)	8(M)
39	Metal ring	304	304	304	304	304(L)	316(L)	F51



Application standards

- Design and manufacture conform to ASME B16.34
- Connection ends conform to:
 - Socket welded ends conform to ANSI B16.11; JB/T1751
 - Screw ends conform to ANSI B1.20.1; JB/T7306
 - Butt-welded ends conform to ANSI B16.25; JB/T12224
 - Flanged ends conform to ANSI B16.5; JB79
- Test and inspection conform to: API 598; GB/T13927; JB/T9092
- Structure features: A threaded and pressure seal bonnet; Y type and T type
- Materials conform to ANSI/ASTM.

A105; LF2; F5; F11; F22; 304(L); 316(L);

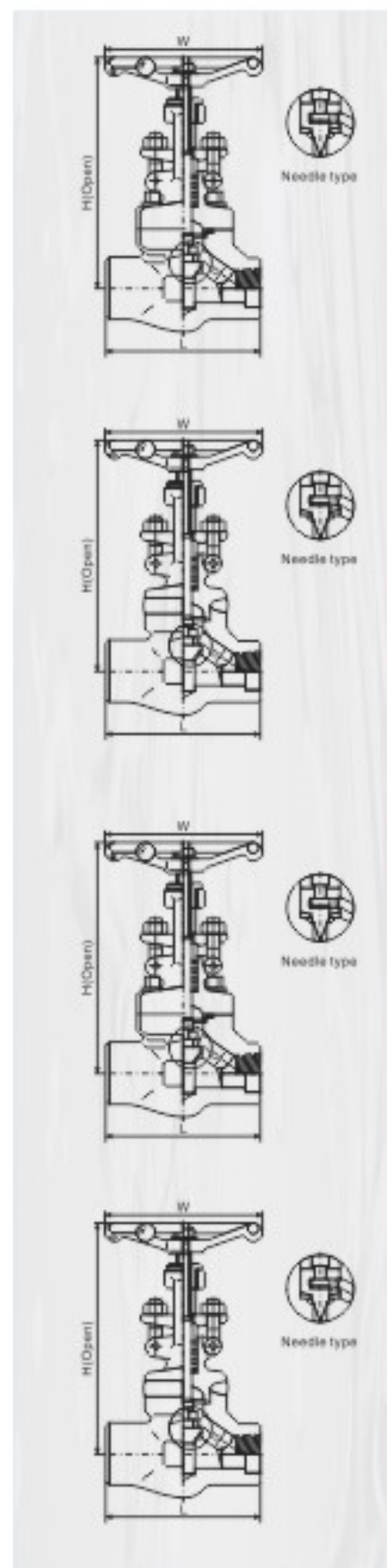
F347; F321; F91; Monel; 20Alloy.

Carbon steel temperature-pressure rate

CL1500-3705 P.S.I@100 °F CL2500-6170 P.S.I@100 °F

Main part materials list

NO.	Part name	A105/F6a	A105/F6aHF	LF2/304	F11/F6aHF	F304(L)/304(L)	F316(L)/316(L)	F91/410HF
1	Body	A105	A105+HF	LF2	F11+HF	F304(L)	F316(L)	F91+HF
3	Disc	410	410	304	410	304(L)	316(L)	410+HF
4	Stem	410	410	304	410	304(L)	316(L)	410
6	Bonnet	A105	A105	LF2	F11	304(L)	F316(L)	F91
8	Pin	410	410	410	410	304	304	410
9	Gland	410	410	304	410	304	316	410
10	Gland eyebolt	B7	B7	L7	B16	B8(M)	B8(M)	B8(M)
11	Gland flange	A105	A105	LF2	F11	F304	F304	F91
12	Hex nut	2H	2H	2H	2H	8(M)	8(M)	8(M)
13	Stem nut	410	410	410	410	410	410	410
14	Locking nut	35	35	35	35	35	35	35
15	Nameplate	AL	AL	AL	AL	AL	AL	AL
16	Handwheel	A197	A197	A197	A197	A197	A197	A197
18	Packing	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite
21	Stem pad	420	420	420	420	316SH	316SH	420
22	Disc nut	410	410	410	410	304(L)	316(L)	410
23	Seal ring gasket	420	420	304	304	304(L)	316(L)	316(L)
24	P.S.ring	304	304	304	304	304	316	304
25	P.S.seat	420	420	304	304	304(L)	316(L)	F91
26	Nut pad	410	410	410	410	410	410	410
27	Packing nut	Cast steel	Cast steel	Cast steel	Cast steel	Stainless steel	Stainless steel	Cast steel



Bolted bonnet, full port&reducing port outside screw and yoke (OS&Y)

Threaded, butt-welded or socket welded ends; design to BS5352

CL800

(NPS) Specification	R.P	-	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
(mm)Face to face	L	79	79	92	111	120	152	172	200	
(mm) Handwheel diameter	W	100	100	100	125	160	160	180	200	
(mm)Height	H	164	164	164	203	224	260	300	355	
(mm)Flow port dimension	d	7	9	13	17.5	23	30	35	46	
Weight (Kg)		1.9	2.28	2.37	4.3	5.75	7.8	12.5	17.5	

Welded bonnet, full port&reducing port outside screw and yoke (OS&Y)

Threaded, butt-welded or socket welded ends; design to BS5352

CL800

(NPS) Specification	R.P	-	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
(mm)Face to face	L	79	79	92	111	120	152	172	200	
(mm) Handwheel diameter	W	100	100	100	125	160	160	180	200	
(mm)Height	H	164	164	164	203	224	260	300	355	
(mm)Flow port dimension	d	7	9	13	17.5	23	30	35	46	
Weight (Kg)		1.7	1.7	1.9	3.3	5.2	6.8	10.6	13.8	

Bolted bonnet, full port&reducing port outside screw and yoke (OS&Y)

Threaded, butt-welded or socket welded ends; design to BS5352

CL900-CL1500

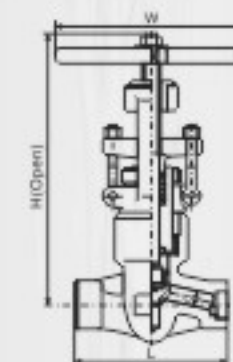
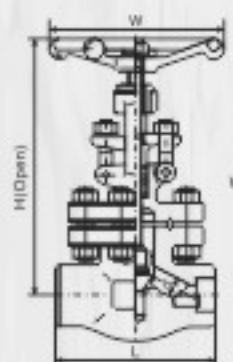
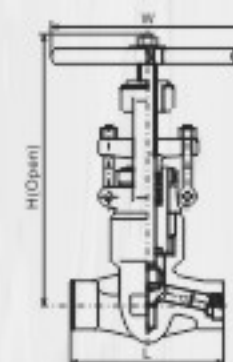
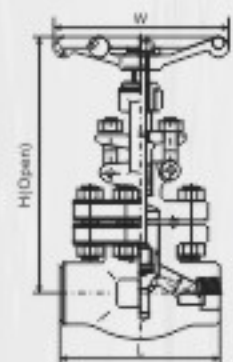
(NPS) Specification	R.P	-	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
(mm)Face to face	L	92	111	111	120	152	172	200	220	
(mm) Handwheel diameter	W	100	125	125	160	160	180	200	240	-
(mm)Height	H	171	207	207	240	258	330	355	370	-
(mm)Flow port dimension	d	7	12	15	20	28	32	40	45	-
Weight (Kg)		2.3	3.6	3.7	6.8	7.6	11.6	15	21.9	-

Welded bonnet, full port&reducing port outside screw and yoke (OS&Y)

Threaded, butt-welded or socket welded ends; design to BS5352

CL900-CL1500

(NPS) Specification	R.P	-	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
(mm)Face to face	L	92	111	111	120	152	172	200	220	-
(mm) Handwheel diameter	W	100	125	125	160	160	180	200	240	-
(mm)Height	H	171	207	207	240	258	330	355	370	-
(mm)Flow port dimension	d		12	15	20	28	32	40	45	-
Weight (Kg)		2.2	3.3	3.4	5.6	6.0	10.3	14.2	18.0	-



Bolted bonnet, full port outside screw and yoke (OS & Y)
CL900-CL1500 Threaded, butt-welded or socket welded ends; design to BS5352

(NPS)Specification	F.P	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
(mm)Face to face	L	110	110	150	150		210	235
(mm) Handwheel diameter	W	110	110	130	180		210	250
(mm)Height	H	227	227	300	307		400	448
(mm)Flow port dimension	d	9	12	15	20		32	40
Weight (Kg)		5	5	10	11.5		22	37

Pressure seal bonnet, full port outside screw and yoke (OS & Y)
CL900-CL1500 Threaded, butt-welded or socket welded ends; design to BS5352

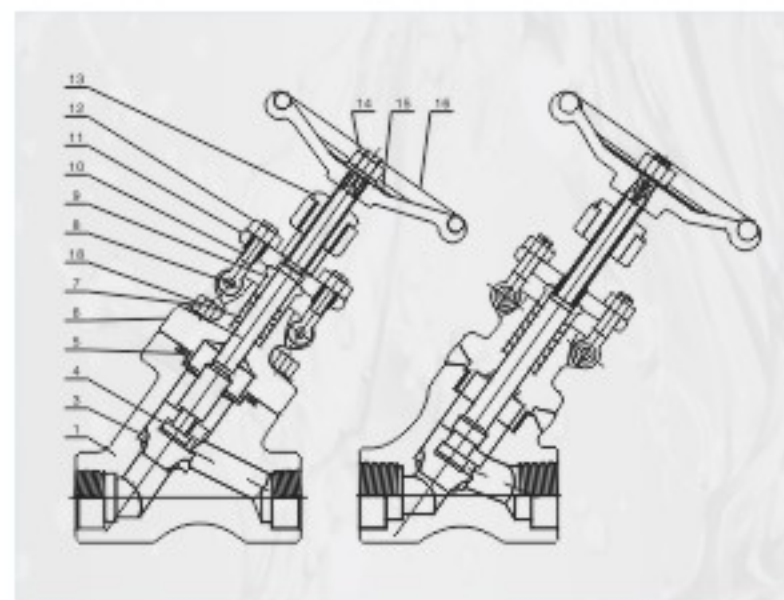
(NPS)Specification	F.P	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
(mm)Face to face	L	140	140	140	178	178	216	
(mm) Handwheel diameter	W	200	200	200	280	280	300	
(mm)Height	H	320	320	320	440	440	490	
(mm)Flow port dimension	d	12	15	20	28	32	40	
Weight (Kg)		10.8	10.5	11.5	19.6	21.1	55.4	

Bolted bonnet, full port outside screw and yoke (OS & Y)
CL2500 Socket welded ends; design conform to ASME B16.34

(NPS)Specification	F.P	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
(mm)Face to face	L	150	150	210		235	235	
(mm) Handwheel diameter	W	130	130	250		300	300	
(mm)Height	H	293	300	390		435	435	
(mm)Flow port dimension	d	11	14	19		28	35	
Weight (Kg)		10	10.3	22.4		38	38	

Pressure seal bonnet, full port outside screw and yoke (OS & Y)
CL2500 Socket welded ends; design conform to ASME B16.34

(NPS)Specification	F.P	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
(mm)Face to face	L	186	186	186	232	232	279	
(mm) Handwheel diameter	W	200	200	200	280	280	300	
(mm)Height	H	375	378	380	490	490	540	
(mm)Flow port dimension	d	11	14	19	25	28	35	
Weight (Kg)		10.8	11.6	12.3	26.0	28.4	60	



Carbon steel temperature-pressure rate

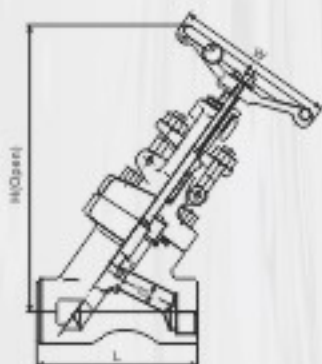
CL150-285 P.S.I @ 100°F CL300-740 P.S.I @ 100°F CL600-1480 P.S.I @ 100°F
CL800-1975 P.S.I @ 100°F CL1500-3705 P.S.I @ 100°F

Main part materials list

NO.	Part name	A105/F6a	A105/F6aHFS	LF2/304	L11/F6aHF	F304(L)/304(L)	F316(L)/316(L)	F51/F51
1	Body	A105	A105+HF	LF2	F11+HF	F304(L)	F316(L)	F51
3	Disc	F6a	F6a	F304	F6aHF	F304(L)	F316(L)	F51
4	Stem	410	410	304	410	304(L)	316(L)	F51
5	Gasket	304 + Flexible graphite	304 + Flexible graphite	304 + Flexible graphite	304 + Flexible graphite	304 + Flexible graphite	304 + Flexible graphite	304 + Flexible graphite
6	Bonnet	A105	A105	LF2	F11	F304(L)	F316(L)	F51
7	Bolt	B7	B7	L7	B16	B8(M)	B8(M)	B8(M)
8	Pin	410	410	410	410	304	304	304
9	Gland	410	410	304	410	304	316	F51
10	Gland eyebolt	B7	B7	L7	B16	B8(M)	B8(M)	B8(M)
11	Gland flange	A105	A105	LF2	F11	F304	F304	F304
12	Hex nut	2H	2H	2H	2H	8(M)	8(M)	8(M)
13	Stem nut	410	410	410	410	410	410	410
14	Locking nut	35	35	35	35	35	35	35
15	Nameplate	AL	AL	AL	AL	AL	AL	AL
16	Handwheel	A197	A197	A197	A197	A197	A197	A197
18	Packing	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite

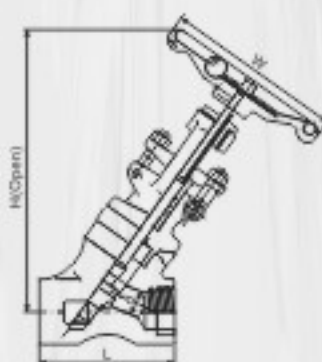
Application standards

- Design and manufacture conform to BS5352 MSS SP-118;
- Connection ends conform to:
 - Socket welded ends conform to ANSI B16.11; JB/T1751
 - Screw ends conform to ANSI B1.20.1; JB/T7306
 - Butt-welded ends conform to ANSI B16.25; JB/T12224
 - Flanged ends conform to ANSI B16.5; JB79
- Test and inspection conform to: API 598, GB/T13927, JB/T9092
- Structure features:
 - Bolted bonnet, outside screw and yoke
 - Welded bonnet, outside screw and yoke
- Materials conform to ANSI/ASTM.
- Main materials:
 - A105; LF2; F5; F11; F22; 304(L); 316(L); F347; F321; F51; Monel; 20Alloy; Hastelloy.



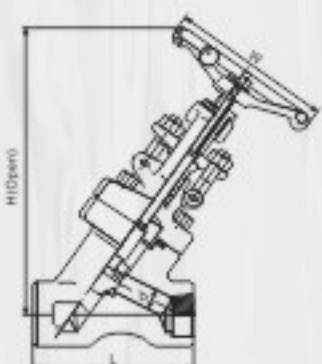
Welded bonnet, full port & reducing port outside screw and yoke (OS & Y)
Threaded, butt-welded or socket welded ends; design to BS5352

(NPS) Specification	R.P									
		1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	
(mm) Face to face	L	98	98	98	111	140	140	155	170	
(mm) Handwheel diameter	W	100	100	100	125	160	160	180	200	
(mm) Height	H	180	180	180	188	280	280	295	350	
(mm) Flow port dimension	d	7	9	13	17.5	23	30	35	46	
Weight (Kg)		2.6	2.6	3.8	4.6	9.3	9.3	14	19.6	



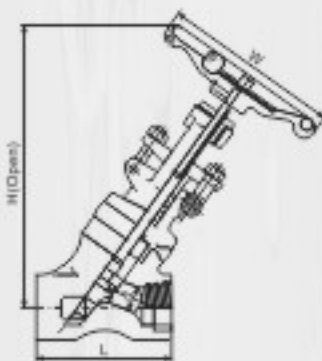
Welded bonnet, full port & reducing port outside screw and yoke (OS & Y)
Threaded, butt-welded or socket welded ends; design to BS5352

(NPS) Specification	R.P									
		1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	
(mm) Face to face	L	79	79	92	100	140	140	155	170	
(mm) Handwheel diameter	W	100	100	100	125	160	160	180	200	
(mm) Height	H	198	198	198	207	280	280	295	350	
(mm) Flow port dimension	d	7	9	13	17.5	23	30	35	46	
Weight (Kg)		1.8	1.8	2.0	3.5	8.0	8.0	12	16	



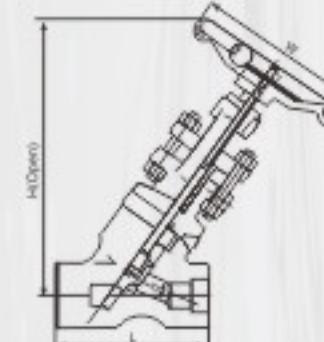
Bolted bonnet, full port & outside screw and yoke (OS & Y)
Threaded, butt-welded or socket welded ends; design to BS5352

(NPS) Specification	F.P									
		3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	
(mm) Face to face	L	98	111	111	140	140	155	170		
(mm) Handwheel diameter	W	100	125	125	160	160	180	200		
(mm) Height	H	175	175	215	215	254	305	305		
(mm) Flow port dimension	d	9	12	15	20	28	32	40		
Weight (Kg)		2.8	4.6	4.6	9.3	9.3	14	19.6		



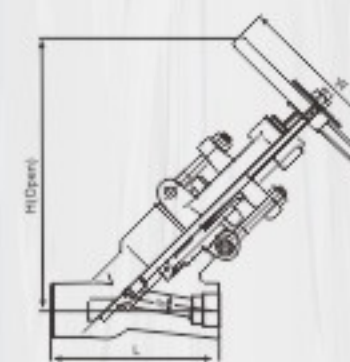
Bolted bonnet, full port outside screw and yoke (OS & Y)
Threaded, butt-welded or socket welded ends; design to BS5352

(NPS) Specification	F.P									
		3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	
(mm) Face to face	L	92	100	100	140	140	155	170		
(mm) Handwheel diameter	W	100	125	125	160	160	180	200		
(mm) Height	H	175	207	207	280	280	295	350		
(mm) Flow port dimension	d	9	12	15	20	28	32	40		
Weight (Kg)		1.8	3.5	3.5	8.0	8.0	12	16		



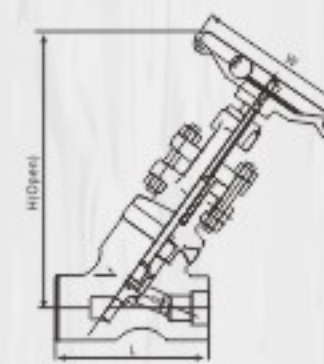
Welded bonnet, full port outside screw and yoke (OS & Y)
Socket welded, design conform to ASME 16.34

(NPS) Specification	F.P								
		3/8	1/2	3/4	1	1 1/4	1 1/2	2	
(mm) Face to face	L	186	186	186	186	232	232	310	
(mm) Handwheel diameter	W	200	200	200	200	280	280	300	
(mm) Height	H	329	329	329	329	350	350	383	
(mm) Flow port dimension	d	9	11	14	19	25	28	35	
Weight (Kg)		10.8	11.6	12.3	12.3	28.0	26.4	43.8	



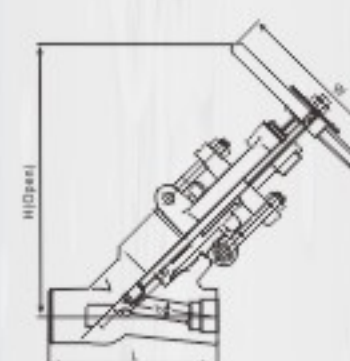
Pressure seal bonnet, full port outside screw and yoke (OS & Y)
Socket welded, design conform to ASME 16.34

(NPS) Specification	F.P								
		3/8	1/2	3/4	1	1 1/4	1 1/2	2	
(mm) Face to face	L	186	186	186	186	232	232	310	
(mm) Handwheel diameter	W	200	200	200	200	280	280	300	
(mm) Height	H	333	333	333	333	406	406	524	
(mm) Flow port dimension	d	9	11	14	19	25	28	35	
Weight (Kg)		10.8	11.6	12.3	12.3	28.0	26.4	43.8	



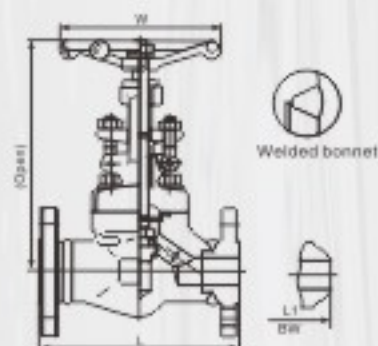
Welded seal bonnet, full port outside screw and yoke (OS & Y)
Socket welded, design conform to ASME 16.34

(NPS) Specification	F.P								
		3/8	1/2	3/4	1	1 1/4	1 1/2	2	
(mm) Face to face	L	155	155	155	155		225	225	
(mm) Handwheel diameter	W	220	220	220	220		300	320	
(mm) Height	H	350	350	350	380		453	453	
(mm) Flow port dimension	d	9	11	11	15		26	28	
Weight (Kg)		9.4	9.6	9.6	10.5		34	36	

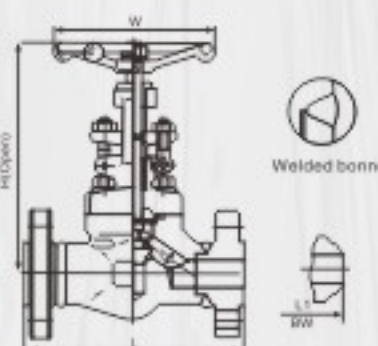


Pressure seal bonnet, full port outside screw and yoke (OS & Y)
Socket welded, design conform to ASME 16.34

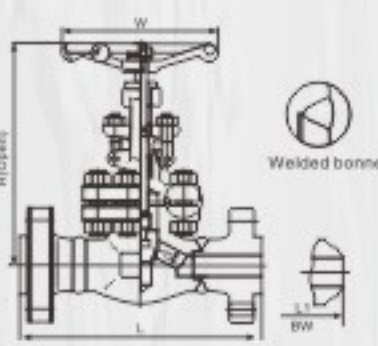
(NPS) Specification	F.P								
		3/8	1/2	3/4	1	1 1/4	1 1/2	2	
(mm) Face to face	L	200	200	200	200	250	250	330	
(mm) Handwheel diameter	W	280	280	280	280	300	300	320	
(mm) Height	H	400	400	400	400	460	460	540	
(mm) Flow port dimension	d	9	11	11	15	20	26	28	
Weight (Kg)		30	30	30	30	30	36	58	



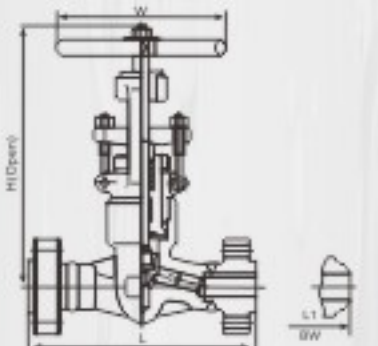
Welded bonnet



Welded bonnet



Welded bonnet



Welded bonnet

Welded bonnet, reducing port outside screw and yoke (OS & Y)

CL150-300-600

Flang or butt-welded design to BS5352

(NPS)Specification	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm) Face to face	L(RF) L1(BW)	-	-	108	117	127	140	165	203
(mm) Handwheel diameter	W	-	-	100	100	125	160	160	180
(mm) Height	H	-	-	180	184	217	224	260	300
(mm) Flow port dimension	d	-	-	9	13	17.5	23	30	35
Weight (Kg)	CL150 R F	-	-	3.45	4.00	6.19	9.6	10.5	17
	CL150 BW	-	-	2.3	3.6	7.8	8.2	12.0	15.0
	CL300 R F	-	-	3.8	5.1	7.2	12	13.5	19.7
	CL300 BW	-	-	2.8	4.0	8.5	9.2	12.6	16.8
	CL600 R F	-	-	5.6	7.8	12.5	17	23.5	38.8
	CL600 BW	-	-	3.4	4.7	9.2	10.5	13.3	18.9

Flange Integrity Forged Steel Valve enquiry please contact sales department.

Welded bonnet, full port outside screw and yoke (OS & Y)

CL900-CL1500

Flang or butt-welded design to BS5352

(NPS)Specification	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm) Face to face	L(RF), L1(BW) L(RTJ)	-	-	216	229	254	279	305	368
(mm) Handwheel diameter	W	-	-	125	125	160	160	180	200
(mm) Height	H	-	-	207	207	230	160	300	355
(mm) Flow port dimension	d	-	-	12	15	20	28	32	40
Weight (Kg)		-	-	11	13.2	17.4	19	24.5	31

Flange Integrity Forged Steel Valve enquiry please contact sales department.

Welded bonnet, full port outside screw and yoke (OS & Y)

CL2500

Welding flange or butt-welded design conform to ASME B16.34

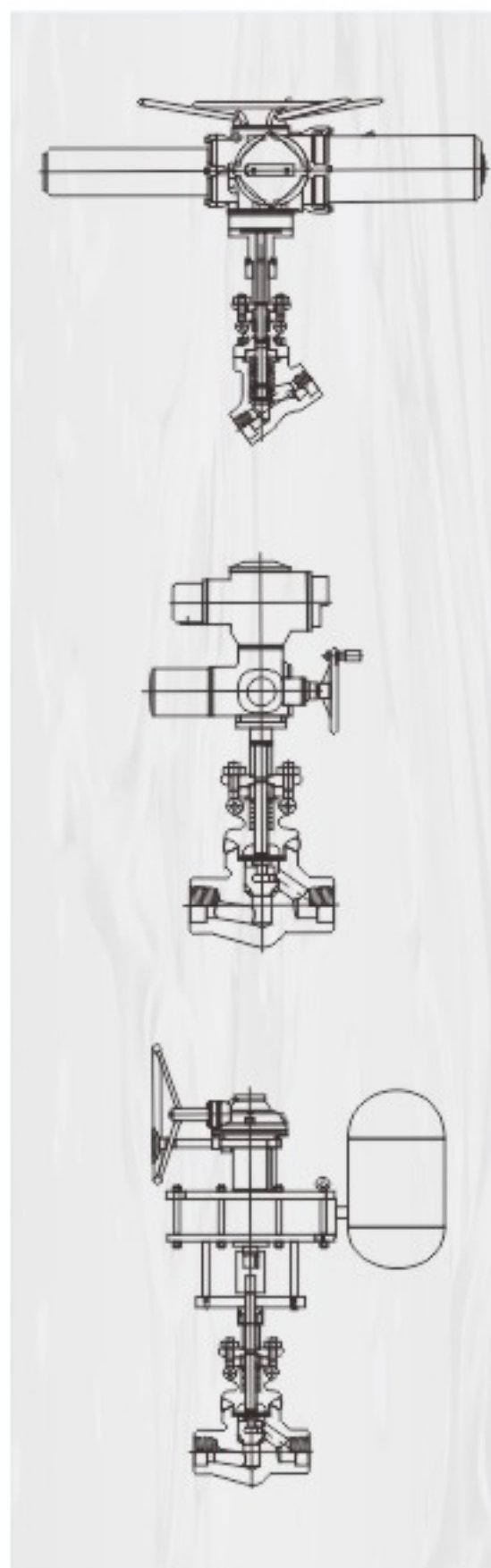
(NPS)Specification	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm) Face to face	L(RF), L1(BW) L(RTJ)	-	-	264	273	308	-	384	451
(mm) Handwheel diameter	W	-	-	125	160	200	-	250	240
(mm) Height	H	-	-	207	240	258	-	355	300
(mm) Flow port dimension	d	-	-	11	14	19	-	28	35
Weight (Kg)		-	-	19.5	21.5	42	-	65	95

Pressure seal bonnet, full port outside screw and yoke (OS & Y)

CL2500

Welding flange or butt-welded design conform to ASME B16.34

(NPS)Specification	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm) Face to face	L(RF), L1(BW) L(RTJ)	-	-	264	273	308	349	384	451
(mm) Handwheel diameter	W	-	-	200	200	280	280	280	300
(mm) Height	H	-	-	320	320	320	440	440	490
(mm) Flow port dimension	d	-	-	11	14	19	25	28	35
Weight (Kg)		-	-	21.5	24.7	30.4	48.1	58.1	130



Electric actuator

CLASS	Materials
150-2500	Carbon steel Stainless steel



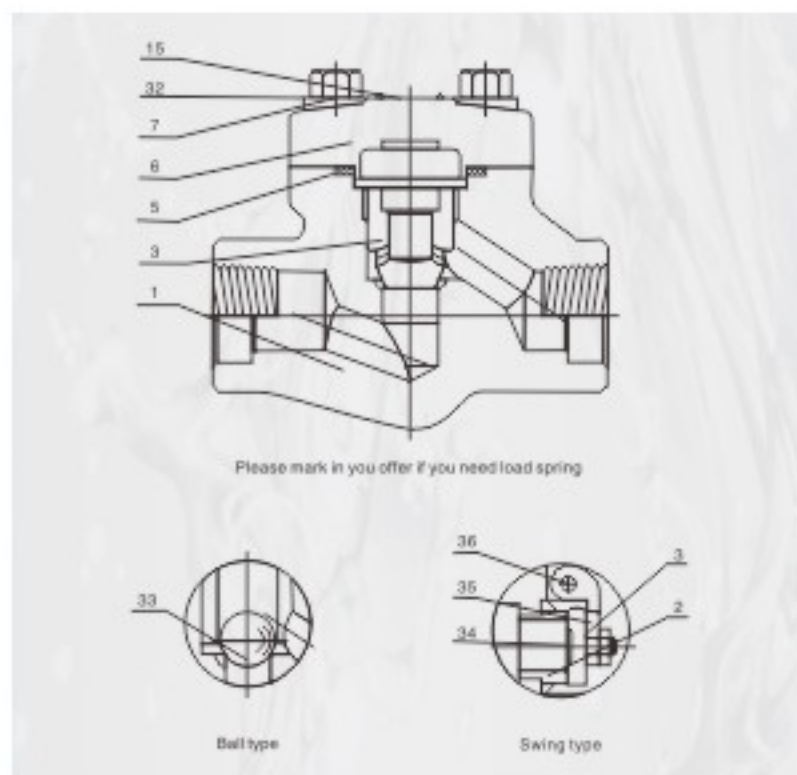
Electric actuator

CLASS	Materials
150-2500	Carbon steel Stainless steel



Pneumatic actuator

CLASS	Materials
150-2500	Carbon steel Stainless steel



Application standards

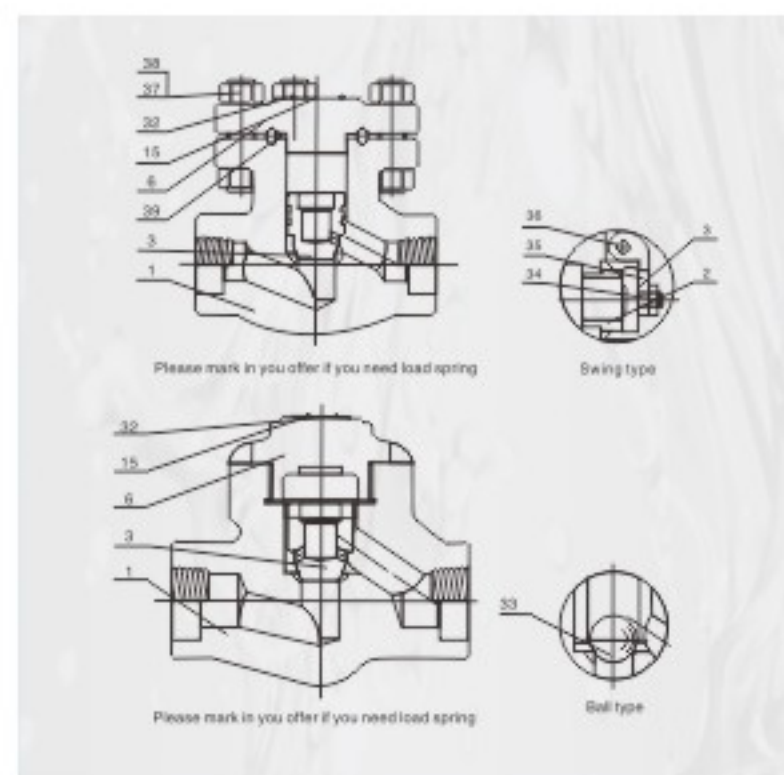
- Design and manufacture conform to BS5352 MSS SP-118
- Connection ends conform to
 - Socket welded ends conform to ANSI B16.11; JB/T175
 - Screw ends conform to ANSI B1.20.1; B/T7306
 - Butt-welded ends conform to ANSI B16.25; JB/T12224
 - Flanged ends conform to ANSI B16.5; JB79
- Test and inspection conform to: API 598; GB/T13927; JB/T9092
- Structure features: (B, B) Bolted bonnet
- Materials conform to ANSI/ASTM
- Main materials: A105; LF2; F5; F11; F22; 304(L); 316(L); F347; F321; F51; Monel; 20Alloy.

Carbon steel temperature-pressure rate

CL150-285 P.S.I @ 100°F CL300-740 P.S.I @ 100°F CL600-1480 P.S.I @ 100°F
CL800-1975 P.S.I @ 100°F CL1500-3705 P.S.I @ 100°F

Main part materials list

NO.	Part name	A105/F6a	A105/F6aHFS	LF2/304	L11/F6aHF	F304(L)/304(L)	F316(L)/316(L)	F51/F51
1	Body	A105	A105	LF2	F11	F304(L)	F316(L)	F51
2	Seat ring	410	410HF	304	410HF	304(L)	316(L)	F51
3	Disc	F6a	F6a	F304	F6aHF	F304(L)	F316(L)	F51
5	Gasket	304 + Flexible graphite	304 + Flexible graphite	304 + Flexible graphite	304 + Flexible graphite	304 + Flexible graphite	316 + Flexible graphite	316 + Flexible graphite
6	Bonnet	A105	A105	LF2	F11	F304(L)	F316(L)	F51
7	Bolt	B7	B7	L7	B16	B8(M)	B8(M)	B8(M)
15	Nameplate	AL	AL	AL	AL	AL	AL	AL
32	Revit	AL	AL	AL	AL	AL	AL	AL
33	Steel ball	430	430	304	STL	316(L)	316(L)	STL
34	Disc nut	2H	2H	8	8	8(M)	8(M)	8(M)
35	Hinge	410	410	304	410	316(L)	316(L)	F51
36	Pin	410	410	304	410	304(L)	316(L)	F51



Application standards

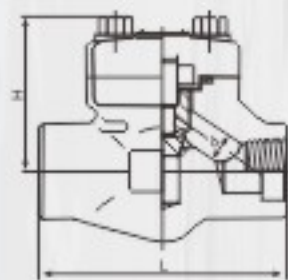
- Design and manufacture conform to BS5352 MSS SP-118;
- Connection ends conform to
 - Socket welded ends conform to ANSI B16.11; JB/T1751
 - Screw ends conform to ANSI B1.20.1; B/T7306
 - Butt-welded ends conform to ANSI B16.25; JB/T12224
 - Flanged ends conform to ANSI B16.5; JB79
- Test and inspection conform to: API 598; GB/T13927; JB/T9092
- Structure features: Gasket for bonnet connect adopt metal ring. Bolted bonnet, Welded bonnet
- Materials conform to ANSI/ASTM
- Main materials: A105; LF2; F5; F11; F22; 304(L); 316(L); F347; F321; F51; Monel; 20Alloy.

Carbon steel temperature-pressure rate

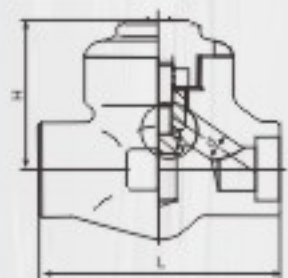
CL150-285 P.S.I @ 100°F CL300-740 P.S.I @ 100°F CL600-1480 P.S.I @ 100°F CL800-1975 P.S.I @ 100°F
CL1500-3705 P.S.I @ 100°F CL2500-6170 P.S.I @ 100°F

Main part materials list

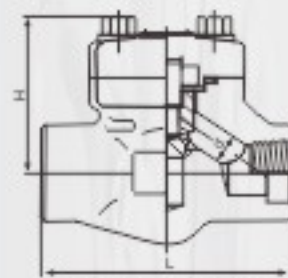
NO.	Part name	A105/F6a	A105/F6aHFS	LF2/304	L11/F6aHF	F304(L)/304(L)	F316(L)/316(L)	F51/F51
1	Body	A105	A105	LF2	F11	F304(L)	F316(L)	F51
2	Seat ring	410	410HF	304	410HF	304(L)	316(L)	F51
3	Disc	F6a	F6a	F304	F6aHF	F304(L)	F316(L)	F51
6	Bonnet	A105	A105	LF2	F11	F304(L)	F316(L)	F51
15	Nameplate	AL	AL	AL	AL	AL	AL	AL
32	Revit	AL	AL	AL	AL	AL	AL	AL
33	Steel ball	430	430	304	STL	316(L)	316(L)	STL
34	Disc nut	2H	2H	8	8	8(M)	8(M)	8(M)
35	Hinge	410	410	304	410	316(L)	316(L)	F51
36	Pin	410	410	304	410	304(L)	316(L)	F51
37	Screwed stud	B7	B7	L7	B16	B8(M)	B8(M)	B8(M)
38	Nut	2H	2H	8	8	8(M)	8(M)	8(M)
39	Metal ring	304	304	304	304	304(L)	316(L)	F51



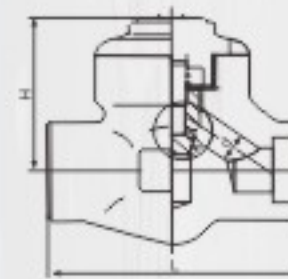
Please mark in you offer if you need load spring



Please mark in you offer if you need load spring



Please mark in you offer if you need load spring



Please mark in you offer if you need load spring

CL800

Bolted bonnet, full port and reducing port
Threaded, butt-welded or socket welded ends; design to BS5352

(NPS) Specification	R.P	F.P								
			1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm) Face to face	L	Lift	79	79	92	111	120	152	172	200
		Swing	79	79	92	111	120	120	140	178
(mm) Height	H	Lift	61	61	61	78	84	84	118	132
		Swing	61	61	61	78	84	84	120	133
(mm) Flow port dimension	d	Lift	7	9	13	17.5	23	30	35	46
		Swing	8	10.5	13.5	18	24	29	36.5	45
Weight (Kg)		Lift	1.2	1.5	1.7	3.3	4.2	4.2	10.5	12.5
		Swing	1.4	1.5	1.7	3.3	4.2	4.2	8.5	10.9

CL800

Welded bonnet, full port and reducing port
Threaded, butt-welded or socket welded ends; design to BS5352

(NPS) Specification	R.P	F.P								
			1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2 1/2
(mm) Face to face	L		79	79	92	111	120	152	172	200
(mm) Height	H		61	61	61	78	84	103	118	132
(mm) Flow port dimension	d		7	9	13	17.5	23	30	35	46
Weight (Kg)			1.2	1.3	1.5	3.0	3.9	6.0	10	12

CL900-CL1500

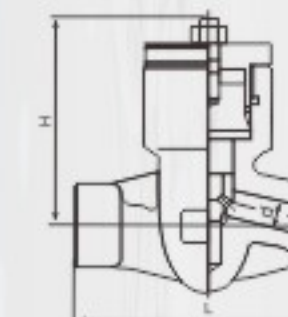
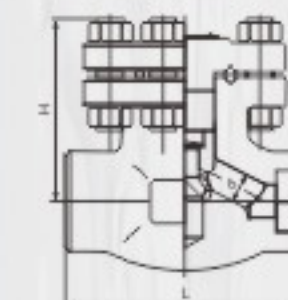
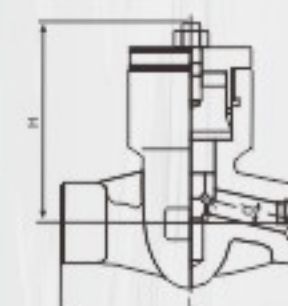
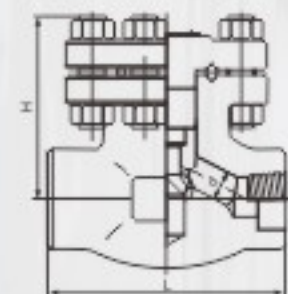
Bolted bonnet, full port and reducing port
Threaded, butt-welded or socket welded ends; design to BS5352

(NPS) Specification	R.P	F.P								
			1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm) Face to face	L	Lift	92	111	111	120	152	172	200	
		Swing	92	111	111	120	120	140	178	
(mm) Height	H	Lift	61	78	78	84	103	118	132	
		Swing	61	78	78	84	101	120	133	
(mm) Flow port dimension	d	Lift	7	12	15	20	28	32	40	
		Swing	8	10.5	13.5	18	24	29	45	
Weight (Kg)		Lift	1.5	3.4	3.3	4.2	8.3	10.5	12.5	
		Swing	1.5	3.3	3.4	4.2	5.0	8.5	10.9	

CL900-CL1500

Welded bonnet, full port and reducing port
Threaded, butt-welded or socket welded ends; design to BS5352

(NPS) Specification	R.P	F.P								
			1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2 1/2
(mm) Face to face	L		92	111	111	120	152	172	200	
(mm) Height	H		61	78	78	84	103	118	132	
(mm) Flow port dimension	d		7	12	15	20	28	32	40	
Weight (Kg)			1.3	3.1	3.1	3.9	5.8	10.0	11.5	



CL900-CL1500

Bolted bonnet, full port and reducing port
Threaded, butt-welded or socket welded ends; design to BS5352

(NPS) Specification	F.P								
		1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm) Face to face	L	110	110	110	110	150	150	210	235
(mm) Height	H	166	166	171	207	240	258	330	355
(mm) Flow port dimension	d	Lift	9	10	12	15	20	28	32
		Swing	8	10.5	13.5	18	24	29	36.5
Weight (Kg)		Lift	2	2.1	1.9	4	5.1	7.2	12.1
		Swing	1.9	2.3	2.3	4.35	5.25	7.8	12.5

CL900-CL1500

Pressure seal bonnet, full port and reducing port
Threaded, butt-welded or socket welded ends; design to BS5352

(NPS) Specification	R.P	F.P								
			1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2 1/2
(mm) Face to face	L		140	140	140	178	216	216		
(mm) Height	H		117	117	117	152	195	195		
(mm) Flow port dimension	d		12	15	20	28	32	40		
Weight (Kg)			6.8	7.0	7.5	18.5	20.3	22		

CL2500

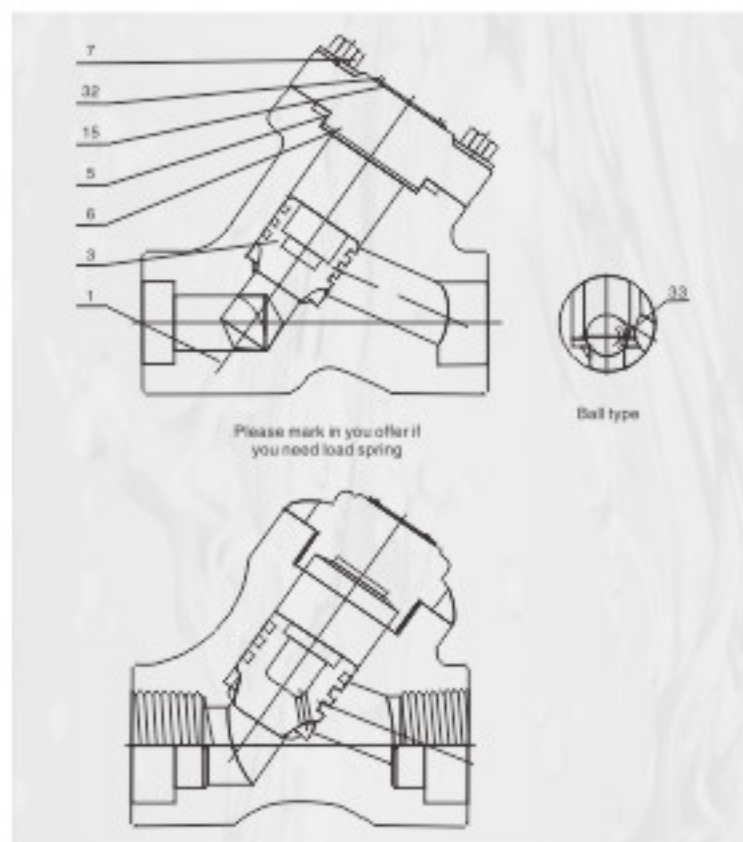
Bolted bonnet, full port
Threaded, butt-welded or socket welded ends; design to ASME B16.34

(NPS) Specification	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm) Face to face	L	150	150	150	150	210	235	235	235
(mm) Height	H	166	166	171	207	240	258	330	355
(mm) Flow port dimension	d	7.5	10.5	11	14	19	25	28	35
Weight (Kg)		11.9	12.3	17	46	62	73	58	85

CL2500

Pressure seal bonnet, full port
Threaded, butt-welded or socket welded ends; design to ASME B16.34

(NPS) Specification	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm) Face to face	L			186	186	186	232	232	279
(mm) Height	H			117	117	117	152	152	195
(mm) Flow port dimension	d			11	14	19	25	28	35
Weight (Kg)				10.5	11	11.8	23	26.4	39

**Application standards**

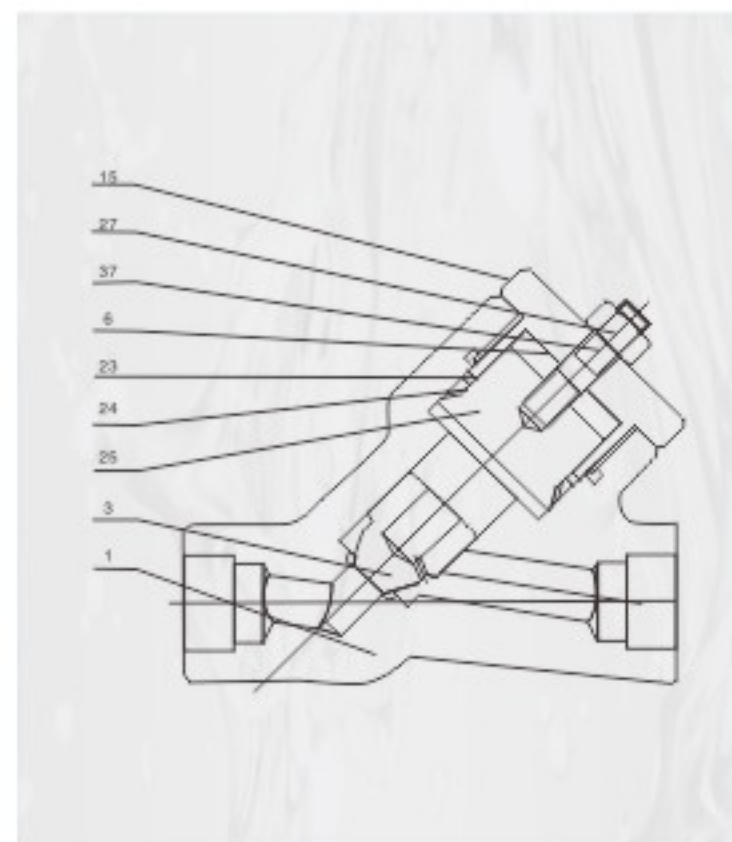
- Design and manufacture conform to BS5352 MSS SP-118
- Connection ends conform to
 - (1) Socket welded ends conform to ANSI B16.11; JB/T1751
 - (2) Screw ends conform to ANSI B1.20.1; JB/T7306
 - (3) Butt-welded ends conform to ANSI B16.25; JB/T12224
 - (4) Flanged ends conform to ANSI B16.5; JB79
- Test and inspection conform to: API 598; GB/T13927; JB/T9092
- Structure features: Bolted bonnet, Welded bonnet
- Materials conform to ANSI/ASTM
- Main materials: A105; LF2; F5; F11; F22; 304(L); 316(L); F347; F321; F51; Monel; 20Alloy.

Carbon steel temperature-pressure rate

CL1500-3705 P.S.I@100 °F CL2500-6170 P.S.I@100 °F CL4500-1111 P.S.I@100 °F

Main part materials list

NO.	Part name	A105/F6a	A105/F6aHFS	LF2/304	L11/F6aHF	F304(L)/304(L)	F316(L)/316(L)	F51/F51
1	Body	A105	A105	LF2	F11	F304(L)	F316(L)	F51
3	Disc	410	410HF	304	410HF	304(L)	316(L)	F51
5	Gasket	304+Flexible graphite	304+Flexible graphite	304+Flexible graphite	304+Flexible graphite	304+Flexible graphite	316+Flexible graphite	316+Flexible graphite
6	Bonnet	A105	A105	LF2	F11	F304(L)	F316(L)	F51
7	Bolt	B7	B7	L7	B16	B8(M)	B8(M)	B8(M)
15	Nameplate	AL	AL	AL	AL	AL	AL	AL
32	Revit	AL	AL	AL	AL	AL	AL	AL
33	Steel ball	430	430	304	STL	316(L)	316(L)	STL

**Application standards**

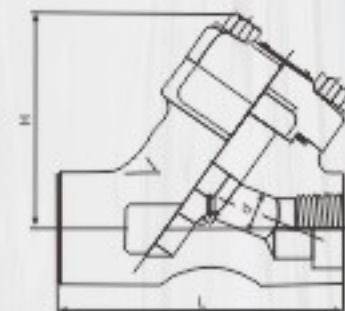
- Design and manufacture conform to BS5352 MSS SP-118
- Connection ends conform to
 - (1) Socket welded ends conform to ANSI B16.11; JB/T175
 - (2) Screw ends conform to ANSI B1.20.1; JB/T7306
 - (3) Butt-welded ends conform to ANSI B16.25; JB/T12224
 - (4) Flanged ends conform to ANSI B16.5; JB79
- Test and inspection conform to: API 598; GB/T13927; JB/T9092
- Structure features: A threaded and pressure seal bonnet; Y type and T type.
- Materials conform to ANSI/ASTM
- Main materials: A105; LF2; F5; F11; F22; 304(L); 316(L); F347; F321; F51; Monel; 20Alloy.

Carbon steel temperature-pressure rate

CL1500-3705 P.S.I@100 °F CL2500-6170 P.S.I@100 °F CL4500-1111 P.S.I@100 °F

Main part materials list

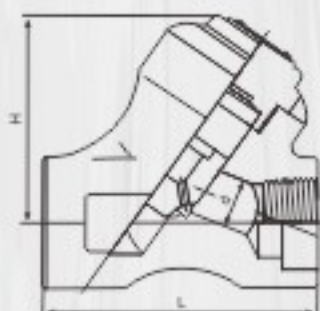
NO.	Part name	A105/F6a	A105/F6aHFS	LF2/304	L11/F6aHF	F304(L)/304(L)	F316(L)/316(L)	F51/F51
1	Body	A105	A105+HF	LF2	F11+HF	F304(L)	F316(L)	F51
3	Disc	F6a	F6a	F304	F6aHF	F304(L)	F316(L)	F51
6	Bonnet	A105	A105	LF2	F11	F304(L)	F316(L)	F51
15	Nameplate	AL	AL	AL	AL	AL	AL	AL
23	Seal ring gasket	420	420	304	304	304(L)	316(L)	410
24	P.S.ring	304	304	304	304	316L	316L	316L
25	P.S.seat	F410	F410	F304	F410	F304	F316	F51
27	Lift nut	2H	2H	8	8	8(M)	8(M)	8(M)
37	Lift stud	B7	B7	L7	B16	B8(M)	B8(M)	B8(M)



CL800

Bolted bonnet, full port and reducing port
Threaded, butt-welded or socket welded ends; design to BS5352

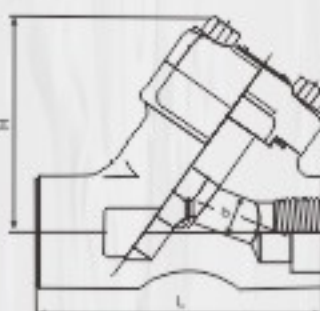
(NPS) Specification	R.P		1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
(mm)Face to face	L	98	98	98	111	140	140	155	170	
(mm)Height	H	70	70	70	100	110	120	120	150	
(mm)Flow port dimension	d	7	10	13	17.5	23	30	35	46	
Weight (Kg)		2.1	2.2	2.2	4.2	8.9	9	10	18.6	



CL800

Welded bonnet, full port and reducing port
Threaded, butt-welded or socket welded ends; design to BS5352

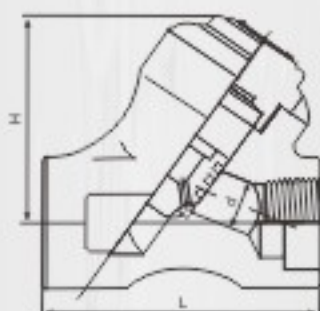
(NPS) Specification	R.P		1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
(mm)Face to face	L	79	79	92	100	140	140	155	170	
(mm)Height	H	65	65	65	95	105	110	110	140	
(mm)Flow port dimension	d	7	10	13	17.5	23	30	35	46	
Weight (Kg)		1.8	1.8	2.0	3.5	8.0	8.0	12	16	



CL900-CL1500

Bolted bonnet, full port
Threaded, butt-welded or socket welded ends; design to BS5352

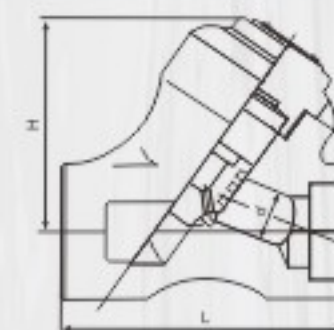
(NPS) Specification	F.P	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm)Face to face	L	98	111	111	140	140	155	170
(mm)Height	H	70	70	100	110	110	120	150
(mm)Flow port dimension	d	9	12	15	20	28	32	40
Weight (Kg)		2.1	4.2	8.9	9	10	18.6	20



CL900-CL1500

Welded bonnet, full port
Threaded, butt-welded or socket welded ends; design to BS5352

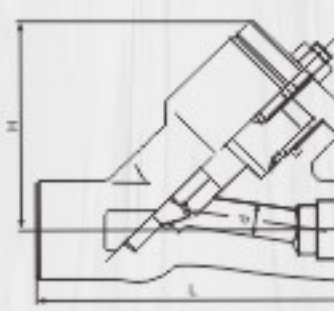
(NPS) Specification	F.P	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm)Face to face	L	92	100	100	140	140	155	170
(mm)Height	H	65	65	65	105	110	110	140
(mm)Flow port dimension	d	9	12	15	20	32	28	40
Weight (Kg)		2.0	3.5	3.5	8.0	12	12	18



CL2500

Welded bonnet, full port
Threaded, butt-welded or socket welded ends; design to ASME B16.34

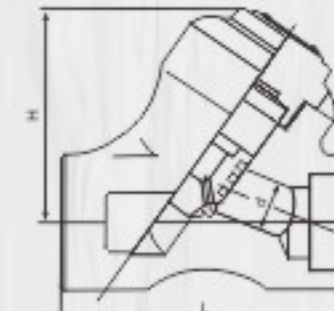
(NPS) Specification	F.P	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm)Face to face	L	186	186	186	186	232	232	310
(mm)Height	H	115	115	120	150	150	150	160
(mm)Flow port dimension	d	9	11	14	19	25	28	35
Weight (Kg)		10.6	10.8	11.2	11.5	25	22	39



CL2500

Pressure seal, bolted bonnet, full port
Threaded, butt-welded or socket welded ends; design to ASME B16.34

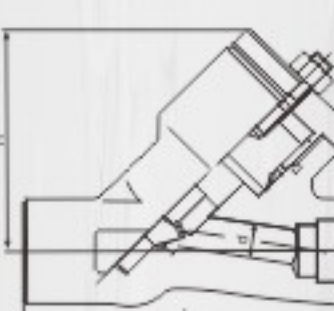
(NPS) Specification	F.P	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm)Face to face	L	186	186	186	186	232	232	310
(mm)Height	H	233	233	233	233	256	256	330
(mm)Flow port dimension	d	9	11	14	19	25	28	35
Weight (Kg)		10.6	10.8	11.2	11.5	25	22	39



CL4500

Welded bonnet, full port
Threaded, butt-welded or socket welded ends; design to ASME B16.34

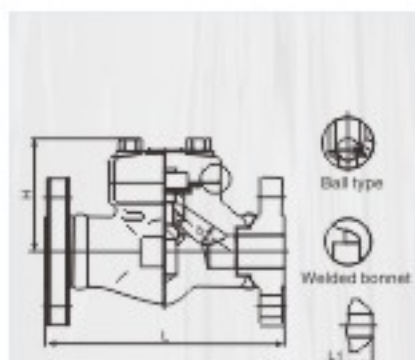
(NPS) Specification	F.P	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm)Face to face	L	155	155	155	155		225	225
(mm)Height	H	120	120	120	145		160	160
(mm)Flow port dimension	d	9	11	11	15		26	28
Weight (Kg)		8	8.7	8.7	8.7		16.5	16



CL4500

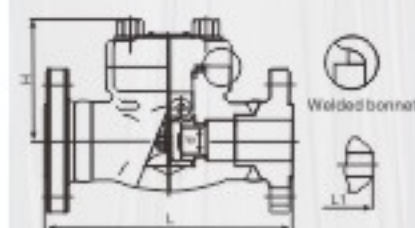
Pressure seal, bolted bonnet, full port
Threaded, butt-welded or socket welded ends; design to ASME B16.34

(NPS) Specification	F.P	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm)Face to face	L	200	200	200	200	250	250	330
(mm)Height	H	140	140	140	140	160	160	180
(mm)Flow port dimension	d	9	11	11	15	20	26	28
Weight (Kg)		20	20	20	20	28	28	45



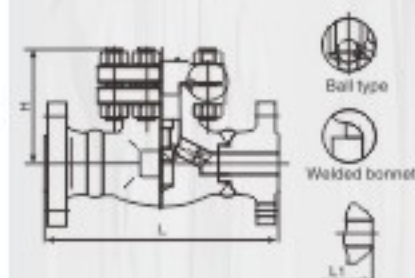
Bolted bonnet, reducing port
CL150-300-600 Flang-welded or butt-welded ends;design to BS5352

(NPS)Specification	R.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm) Face to face	L(RF) L1(BW)	-	-	108	118	127	140	165	203
(mm)Height	H	-	-	77	81	93	95	103	118
(mm)Flow port dimension	d	-	-	10	13	17.5	23	30	35
(Kg) Weight	CL150 R F	-	-	3.6	4.6	8.5	9.2	12.5	14.8
	CL150 BW	-	-	3.0	3.6	7.6	8.5	11.3	13.6
	CL300 R F	-	-	3.7	4.8	8.8	9.6	13.7	17.8
	CL300 BW	-	-	3.2	4.3	8.0	8.6	12.7	16.2
	CL600 R F	-	-	4.0	5.8	9.5	10.4	15.6	24.5
	CL600 BW	-	-	3.4	5.1	8.8	9.2	14.8	22.5



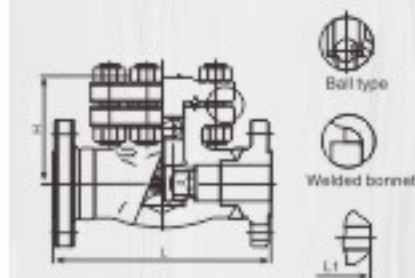
Bolted bonnet, reducing port
CL150-300-600 Flang-welded or butt-welded ends;design to BS5352

(NPS)Specification	R.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm) Face to face	L(RF) L1(BW)	-	-	108	118	127	140	165	203
(mm)Height	H	-	-	77	81	93	95	103	118
(mm)Flow port dimension	d	-	-	10	13	17.5	23	30	35
(Kg) Weight	CL150 R F	-	-	3.6	4.6	8.5	9.2	12.5	14.8
	CL150 BW	-	-	3.0	3.6	7.6	8.5	11.3	13.6
	CL300 R F	-	-	3.7	4.8	8.8	9.6	13.7	17.8
	CL300 BW	-	-	3.2	4.3	8.0	8.6	12.7	16.2
	CL600 R F	-	-	4.0	5.8	9.5	10.4	15.6	24.5
	CL600 BW	-	-	3.4	5.1	8.8	9.2	14.8	22.5



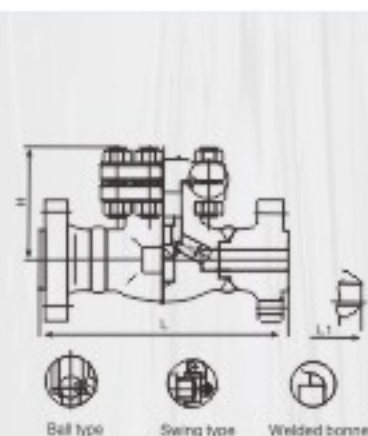
Bolted bonnet, reducing port
CL150-300-600 Flang-welded or butt-welded ends;design to BS5352

(NPS)Specification	R.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm) Face to face	L(RF) L1(BW)	-	-	108	118	127	140	165	203
(mm)Height	H	-	-	77	81	93	95	103	118
(mm)Flow port dimension	d	-	-	10	13	17.5	23	30	35
(Kg) Weight	CL150 R F	-	-	3.2	3.5	4.6	5.2	7.0	16
	CL150 BW	-	-	2.8	3.0	4.0	4.6	6.3	15
	CL300 R F	-	-	4.6	6.1	9.1	12	16	21
	CL300 BW	-	-	4.1	5.7	8.4	11.2	14.5	19.5
	CL600 R F	-	-	4.8	6.3	9.3	13	16.5	22
	CL600 BW	-	-	4.4	5.9	8.7	12.1	15.8	20.8



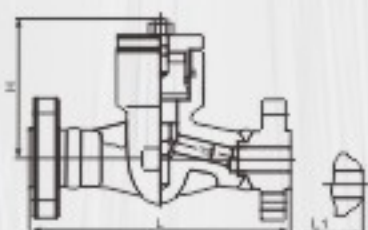
Bolted bonnet, reducing port
CL150-300-600 Flang-welded or butt-welded ends;design to BS5352

(NPS)Specification	R.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm) Face to face	L(RF) L1(BW)	-	-	108	118	127	140	165	203
(mm)Height	H	-	-	77	81	93	95	103	118
(mm)Flow port dimension	d	-	-	10	13	17.5	23	30	35
(Kg) Weight	CL150 R F	-	-	3.6	4.6	8.5	9.2	12.5	14.8
	CL150 BW	-	-	3.0	3.6	7.6	8.5	11.3	13.6
	CL300 R F	-	-	3.7	4.8	8.8	9.6	13.7	17.8
	CL300 BW	-	-	3.2	4.3	8.0	8.6	12.7	16.2
	CL600 R F	-	-	4.0	5.8	9.5	10.4	15.6	24.5
	CL600 BW	-	-	3.4	5.1	8.8	9.2	14.8	22.5



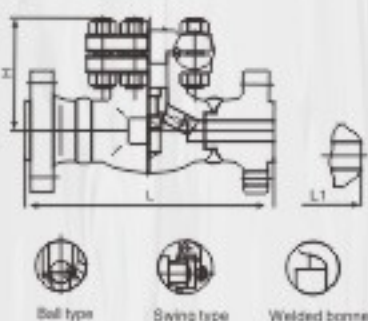
Bolted bonnet, full port
CL900-CL1500 Flang-welded or butt-welded ends;design to BS5352

(NPS)Specification	R.P	1/2	3/4	1	1 1/4	1 1/2	2
(mm)Face to face	L(RF) L1(BW)	216	229	254	280	305	371
(mm)Height	H	81	93	95	101	118	130
(mm) Flow port dimension	d	Lift	12	15	20	28	40
	Swing	13.5	18	24	29	36.5	45
Weight (Kg)	Lift	5.2	6.8	10.5	28	18	24
	Swing	5.0	6.1	10.8	29	17.6	27



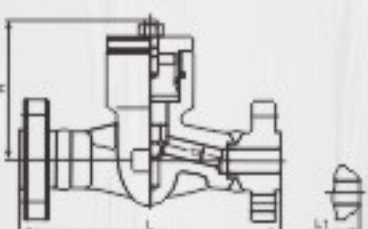
Pressure seal, bolted bonnet, full port and reducing port
CL900-CL1500 Flang-welded or butt-welded ends;design to BS5352

(NPS)Specification	R.P	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm) Face to face	L(RF), L1(BW)		216	229	254	280	305	268
	L(RTJ)		216	229	254	280	305	371
(mm)Height	H		117	117	117	152	152	195
(mm) Flow port dimension	d		12	15	20	28	32	40
	Weight (Kg)		10.5	11.9	13.9	19.9	26.9	32.5



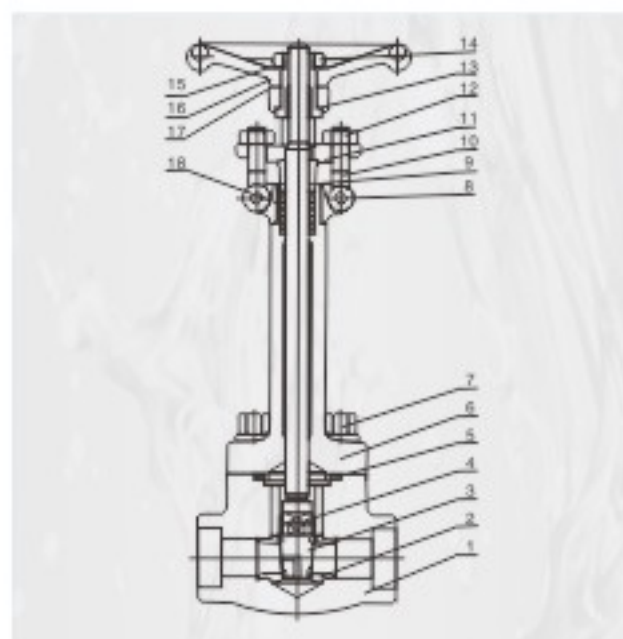
Bolted bonnet, full port
CL2500 Flang-welded or butt-welded ends;design to ASME B16.34

(NPS)Specification	R.P	1/2	3/4	1	1 1/4	1 1/2	2
(mm) Face to face	L(RF), L1(BW)	264	273	308	349	384	450
	L(RTJ)	264	273	308	352	387	454
(mm)Height	H	81	93	95	101	118	130
(mm) Flow port dimension	d	Lift	12	15	20	28	40
	Swing	10.5	13.5	18	24	29	36.5
Weight (Kg)	Lift	17	21	28	14.5	58	85
	Swing	5.0	6.1	10.8	11.2	17.6	27



Pressure seal, bolted bonnet, full port
CL2500 Flang-welded or butt-welded ends;design to ASME B16.34

(NPS)Specification	R.P	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm) Face to face	L(RF), L1(BW)		264	273	308	349	384	450
	L(RTJ)		264	273	308	352	387	454
(mm)Height	H		117	117	117	152	152	195
(mm) Flow port dimension	d		12	15	20	28	32	40
	Weight (Kg)		12.6	14.9	16.5	24.8	30	35



Application standards

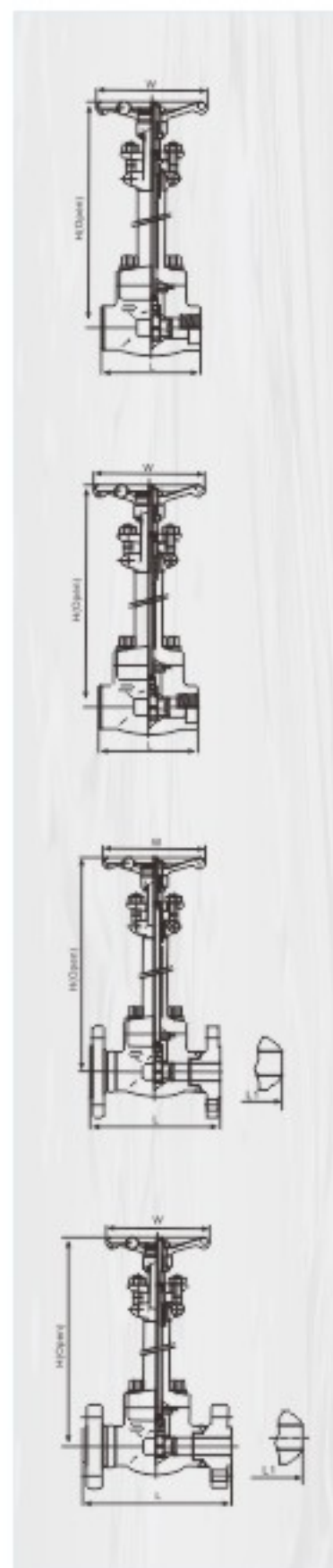
- Design and manufacture conform to API 602 Bs5352 ANSI B16.34
- Connection ends conform to:
 - Socket welded ends conform to ANSI B16.11; JB/T1751
 - Screw ends conform to ANSI B1.20.1 JB/T7306
 - Butt-welded ends conform to ANSI B16.25; J B/T12224
 - Flanged ends conform to ANSI B1 6.5; JB79
- Test and inspection conform to: API 598; GB/T13927; JB/T9092
- Structure features:
 - Bolted bonnet, outside screw and yoke
 - Welded bonnet, outside screw and yoke
- Materials conform to ANSI/ASTM
- Main materials:
 - LI2: LF3; 304(L); 316(L); F347; F321; F51.

Carbon steel temperature-pressure rate

CL150-285 P.S.I@100°F CL300-740 P.S.I@100°F CL600-1480 P.S.I@100°F CL800-1975 P.S.I@100°F CL1500-3705 P.S.I@100°F

Main part materials list

NO.	Part name	A105/F6a	A105/F6aHFS	LF2/304	LF3/304	F304(L)/304(L)	F316(L)/316(L)	F51/F51
1	Body	-	-	LF2	LF3	F304(L)	F316(L)	F51
2	Seat ring	-	-	304	304	304(L)	316(L)	F51
3	Wedge disc	-	-	F304	F304	F304(L)	F316(L)	F51
4	Stem	-	-	304	F304	304(L)	316(L)	F51
5	Gasket	-	-	304+Flexible graphite	304+Flexible graphite	304+Flexible graphite	316+Flexible graphite	316+Flexible graphite
6	Bonnet	-	-	LF2	LF3	F304(L)	F316(L)	F51
7	Bolt	-	-	L7	L7	B8	B8	B8
8	Pin	-	-	410	410	304	304	304
9	Gland	-	-	304	304	304	316	F51
10	Gland eyebolt	-	-	L7	L7	B8(M)	B8(M)	B8(M)
11	Gland flange	-	-	LF2	LF3	F304	F304	F304
12	Hex nut	-	-	2H	2H	8(M)	8(M)	8(M)
13	Stem nut	-	-	410	410	410	410	410
14	Locking nut	-	-	35	35	35	35	35
15	Nameplate	-	-	AL	AL	AL	AL	AL
16	Handwheel	-	-	A197	A197	A197	A197	A197
17	Lubricating gasket	-	-	410	410	410	410	410
18	Packing	-	-	Graphite	Graphite	Graphite	Graphite	Graphite



Bolted bonnet cryogenic extended bonnet full port & reduced port, OS&Y

Threaded, butt-welded or socket welded ends; design to API 602

CL800

Specification(NPS)	R.P	-	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
		F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm)Face to face	L		79	79	92	111	120	120	140	178
(mm)Handwheel diameter	W		100	100	100	125	160	160	180	220
(mm)Height	H	-196	291	291	293	340	375	400	450	490
		-46	255	255	258	290	325	265	395	440
(mm)Flow port dimension	d		7.5	10.5	13.5	18	24	29	36.5	45
Weight (Kg)			3.5	3.5	4.3	6.7	10.9	12	14.8	28

Bolted bonnet cryogenic extended bonnet full port & reduced port, OS&Y

Threaded, butt-welded or socket welded ends; design to API 602

CL1500

Specification(NPS)	R.P	-	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
		F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm)Face to face	L		79	111	111	120	120	140	178	180
(mm)Handwheel diameter	W		100	125	125	160	160	180	200	220
(mm)Height	H	-196	321	321	322	359	399	446	480	550
		-46	285	285	287	309	343	396	420	480
(mm)Flow port dimension	d		7.5	10.5	13.5	18	24	29	36.5	45
Weight (Kg)			3.5	6.7	6.7	11	12.3	15.8	28	45

Bolted bonnet cryogenic extended bonnet, reduced port, OS & Y

Flanged or butt welded ends; design to API 602

CL150-300-600

Specification(NPS)			1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm)Face to face	CL150	L(RF)	-	-	108	118	127	-	165	178
	CL300	L1(BW)	-	-	140	153	165	-	191	216
	CL600		-	-	165	191	216	-	241	292
(mm)Handwheel diameter	W		-	-	100	100	125	160	160	180
(mm)Height	H	-196	-	-	321	322	359	399	446	480
		-46	-	-	285	287	309	343	396	420
(mm)Flow port dimension	d		-	-	10.5	13.5	18	24	29	36.5
Weight (Kg)	CL150	R F	-	-	5.0	5.5	8.8	13.5	15	20.3
		BW	-	-	-	-	-	-	-	-
	CL300	R F	-	-	5.8	7.3	9.7	12.5	19.5	22.3
		BW	-	-	-	-	-	-	-	-
	CL600	R F	-	-	6.0	8	11.2	13.5	21.5	24.8
		BW	-	-	-	-	-	-	-	-

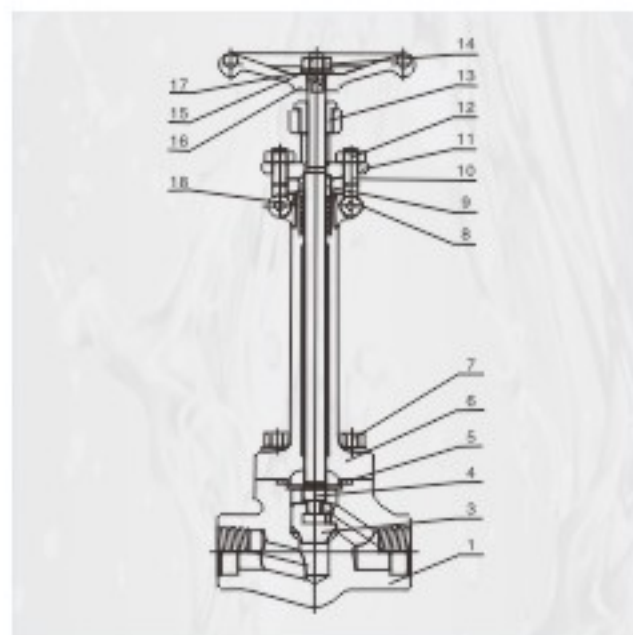
Bolted bonnet cryogenic extended bonnet, full port, OS&Y

Flanged or butt welded ends; design to API 602

CL1500

Specification(NPS)		F.P	-	1/2	3/4	1	1 1/4	1 1/2	2	3
(mm)Face to face	L			216	229	254	279	325	368	
(mm)Handwheel diameter	W			125	125	160	160	180	200	
(mm)Height	H	-196		321	322	359	399	446	480	
		-46		285	287	309	343	396	420	
(mm)Flow port dimension	d			10.5	13.5	18	24	29	36.5	
Weight (Kg)				14	23	25.3	35.7	47	72	

Flange Integrity Forged Steel Valve enquiry please contact sales department.



Application standards

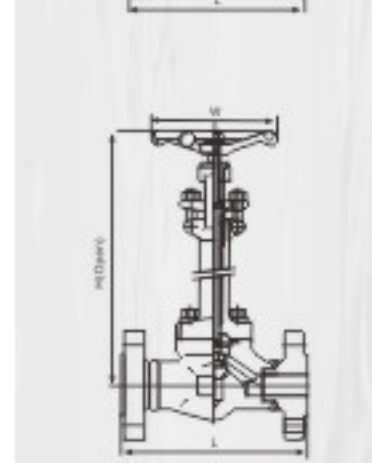
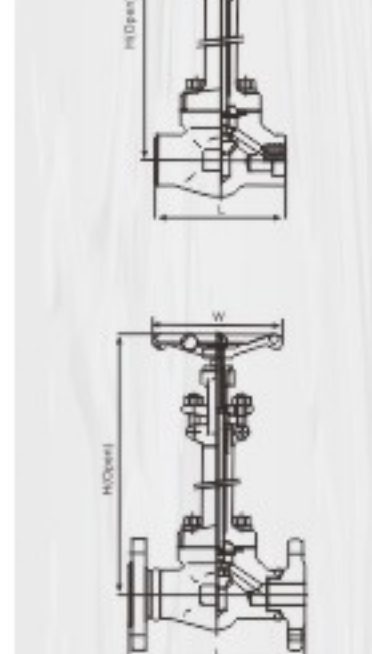
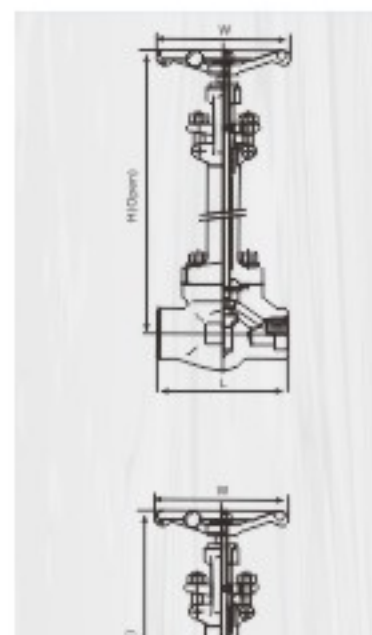
- Design and manufacture conform to API 602 BS5352 ANSI B16.34
- Connection ends conform to:
 - (1)Socket welded ends conform to ANSI B16.11;JB/T1751
 - (2)Screw ends conform to ANSI B1.20.1;JB/T7306
 - (3)Butt-welded ends conform to ANSI B16.25;JB/T12224
 - (4)Flanged ends conform to ANSI B16.5;JB79
- Test and inspection conform to: API 598;GB/T13927;JB/T9092
- Structure features:
 - Bolted bonnet, outside screw and yoke
 - Welded bonnet, outside screw and yoke
- Materials conform to ANSI/ASTM.
- Main materials:
 - LF2; LF3;304(L);316(L); F347;F321;Monel20Alloy.

Carbon steel temperature-pressure rate

CL150-285 P.S.I@100°F CL300-740 P.S.I@100°F CL600-1480 P.S.I@100°F CL800-1975 P.S.I@100°F CL1500-3705 P.S.I@100°F

Main part materials list

NO.	Part name	A105/F6a	A105/F6aHFS	LF2/304	LF3/304	F304(L)/304(L)	F316(L)/316(L)	F51/F51
1	Body	-	-	LF2	LF3	F304(L)	F316(L)	F51
2	Seat ring	-	-	304	304	304(L)	316(L)	F51
3	Wedge disc	-	-	F304	F304	F304(L)	F316(L)	F51
4	Stem	-	-	304	304	304(L)	316(L)	F51
5	Gasket	-	-	304+ Flexible graphite	304+ Flexible graphite	304+ Flexible graphite	316+ Flexible graphite	316+ Flexible graphite
6	Bonnet	-	-	LF2	LF3	F304(L)	F316(L)	F51
7	Bolt	-	-	L7	L7	B8	B8	B8
8	Pin	-	-	410	410	304	304	304
9	Gland	-	-	304	304	304	316	F51
10	Gland eyebolt	-	-	L7	L7	B8(M)	B8(M)	B8(M)
11	Gland flange	-	-	LF2	LF3	F304	F304	F304
12	Hex nut	-	-	2H	2H	8(M)	8(M)	8(M)
13	Stem nut	-	-	410	410	410	410	410
14	Locking nut	-	-	35	35	35	35	35
15	Nameplate	-	-	AL	AL	AL	AL	AL
16	Handwheel	-	-	A197	A197	A197	A197	A197
17	Lubricating gasket	-	-	410	410	410	410	410
18	Packing	-	-	Graphite	Graphite	Graphite	Graphite	Graphite



Bolted bonnet cryogenic extended bonnet, full port&reduced port, OS&Y
Threaded or socket welded ends; design to BS5352

CL800

Specification(NPS)	R.P	-	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm)Face to face	L	79	79	92	111	120	152	172	200
(mm)Handwheel diameter	W	100	100	100	125	160	160	180	200
(mm)Height	H	-196℃ -101℃	390	390	415	430	460	490	505
		-46℃	350	350	400	410	425	450	480
(mm)Flow port dimension	d	7.0	9.0	13	17.5	23	30	35	46
Weight (Kg)		7.2	7.2	7.2	9.5	10.8	13.5	19.8	29

Bolted bonnet cryogenic extended bonnet, full port&reduced port, OS&Y
Threaded or socket welded ends; design to BS5352

CL1500

Specification(NPS)	R.P	-	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm)Face to face	L	92	111	111	120	152	172	200	-
(mm)Handwheel diameter	W	100	125	125	160	160	180	200	-
(mm)Height	H	-196℃ -101℃	370	370	370	410	410	474	546
		-46℃	350	350	400	410	425	450	480
(mm)Flow port dimension	d	9	12	15	20	28	32	40	-
Weight (Kg)		7.2	9.5	9.5	10.8	13.5	19.8	29	-

Bolted bonnet cryogenic extended bonnet, reduced port, OS&Y
Flanged or butt welded ends; design to BS5352

CL150-300-600

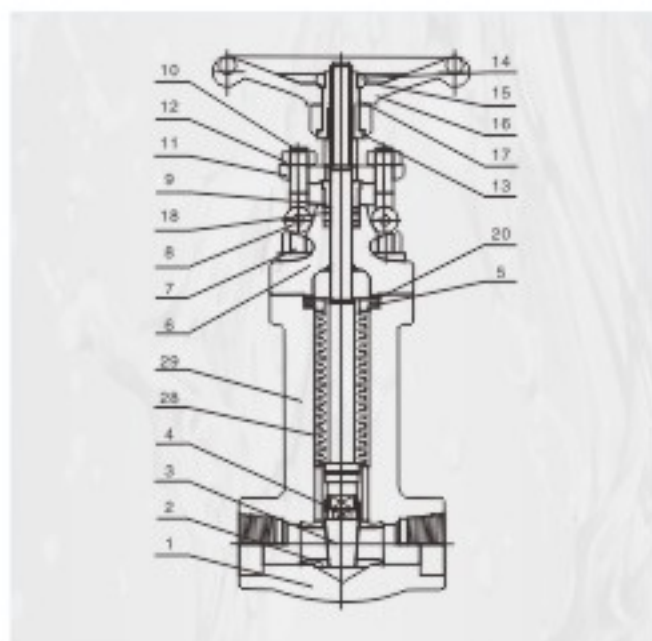
Specification(NPS)		R.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm)Face to face	L(RF), L1(BW)	CL150	-	-	108	118	127	-	165	203
		CL300	-	-	153	178	203	-	229	267
		CL600	-	-	165	191	216	-	241	292
(mm)Handwheel diameter	W	-	-	-	100	100	125	-	160	180
(mm)Height	H	-196℃ -101℃	-	-	390	415	430	-	490	505
		-46℃	-	-	350	400	410	-	450	480
(mm)Flow port dimension	d	-	-	-	9.0	13	17.5	-	30	35
Weight (Kg)		CL150	-	-	5	5.8	8.6	-	13.8	24.3
		CL300	-	-	5.8	6.8	10.3	-	19.3	25.8
		CL600	-	-	6.3	7.3	10.6	-	20.3	26.8

Bolted bonnet cryogenic extended bonnet, full port, OS&Y
Flanged or butt welded ends; design to BS5352

CL1500

Specification(NPS)	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm)Face to face	L(RF)	-	-	216	229	254	280	305	368
(mm)Handwheel diameter	W	-	-	125	125	160	160	180	200
(mm)Height	H	-196℃ -101℃	-	-	370	370	410	410	474
		-46℃	-	-	350	400	410	425	450
(mm)Flow port dimension	d	-	-	12	15	20	28	32	40

Flange Integrity Forged Steel Valve enquiry please contact sales department.



Application standards

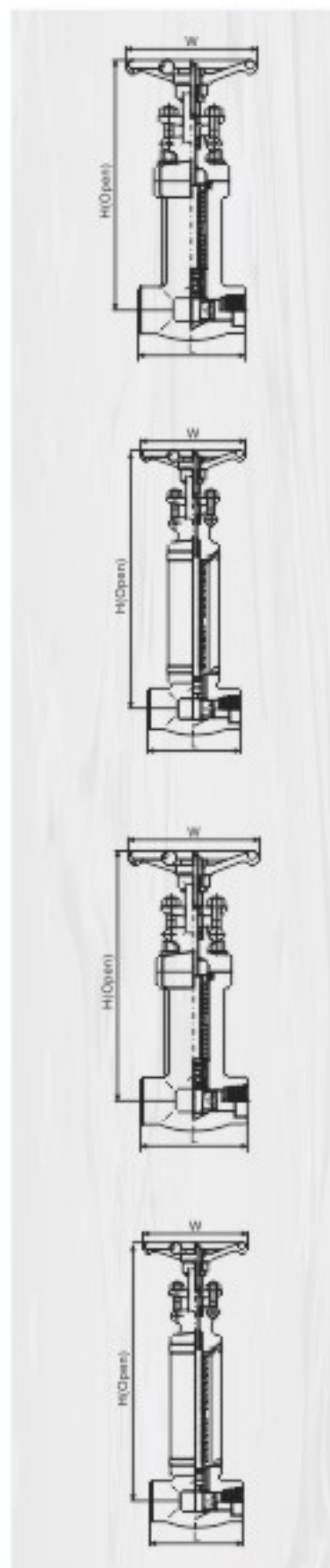
1. Design and manufacture conform to API 602; MSS-SP-117
2. Connection ends conform to:
 - (1)Socket welded ends conform to ANSI B16.11;JB/T1751
 - (2)Screw ends conform to ANSI B1.20.1;JB/T7306
 - (3)Butt-welded ends conform to ANSI B16.25;JB/T12224
 - (4)Flanged ends conform to ANSI B16.5;JB79
3. Test and inspection conform to:API 598;GB/T13927;JB/T9092
4. Structure features:
 - Bolted bonnet, outside screw and yoke
 - Welded bonnet, outside screw and yoke
5. Materials conform to ANSI/ASTM.
6. Main materials: A105;304(L);316(L); F347;F321
7. Bellow materials: 304;321;316;Inconel 625;Hastelloy C 276;Monel.

Carbon steel temperature-pressure rate

CL150-285 P.S.I@100°F CL300-740 P.S.I@100°F CL600-1480 P.S.I@100°F CL800-1975 P.S.I@100°F CL1500-3705 P.S.I@100°F

Main part materials list

NO.	Part name	A105/F6a	A105/Fa6HFS	A105/F6aHF	F304(L)/304(L)	F316(L)/316(L)
1	Body	A105	A105	A105	F304(L)	F316(L)
2	Seat	410	410HF	410HF	304(L)	316(L)
3	Wedge disc	F6a	F6a	F6aHF	F304(L)	F316(L)
4	Stem	410	410	410	304(L)	316(L)
5	Gasket	304+ Flexible graphite	304+ Flexible graphite	304+ Flexible graphite	304+ Flexible graphite	304+ Flexible graphite
6	Bonnet	A105	A105	A105	F304(L)	F316(L)
7	Bolt	B7	B7	B7	B8	B8
8	Pin	410	410	410	304	304
9	Gland	410	410	410	304	316
10	Gland eyebolt	B7	B7	B7	B8(M)	B8(M)
11	Gland flange	A105	A105	A105	F304	F304
12	Hex nut	2H	2H	2H	8(M)	8(M)
13	Stem nut	410	410	410	410	410
14	Locking nut	35	35	35	35	35
15	Nameplate	AL	AL	AL	AL	AL
16	Handwheel	A197	A197	A197	A197	A197
17	Lubricating gasket	410	410	410	410	410
18	Packing	Graphite	Graphite	Graphite	Graphite	Graphite
20	Gasket	304+ Flexible graphite	304+ Flexible graphite	304+ Flexible graphite	304+ Flexible graphite	304+ Flexible graphite
28	Bellow	F321	F321	F321	F316L	F316L



Bolted bonnet, full port & reducing port outside screw and yoke(OS & Y)

CL800 Threaded,butt-welded or socket welded ends;design to API 602, MSS-SP-117

Specification(NPS)	R.P	-	1/2	3/4	1	1 1/4	1 1/2	2
	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2
(mm)Face to face	L	79	79	92	111	120	120	140
(mm)Handwheel diameter	W	100	100	100	125	160	160	180
(mm)Height	H	255	255	285	345	445	545	594
(mm)Flow port dimension	d	7.5	10.5	13.5	18	24	29	36.5
Weight (Kg)		3.0	3.0	3.3	5.9	8.7	10.2	16.2

Welded bonnet, full port & reducing port outside screw and yoke(OS & Y)

CL800 Threaded,butt-welded or socket welded ends;design to API 602, MSS-SP-117

Specification(NPS)	R.P	-	1/2	3/4	1	1 1/4	1 1/2	2
	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2
(mm)Face to face	L	79	79	92	111	120	120	140
(mm)Handwheel diameter	W	100	100	100	125	160	160	180
(mm)Height	H	248	548	777	335	437	537	585
(mm)Flow port dimension	d	7.5	10.5	13.5	18	24	29	36.5
Weight (Kg)		2.9	2.9	3.2	4.6	7.2	8.9	15.5

Bolted bonnet, full port & reducing port outside screw and yoke(OS & Y)

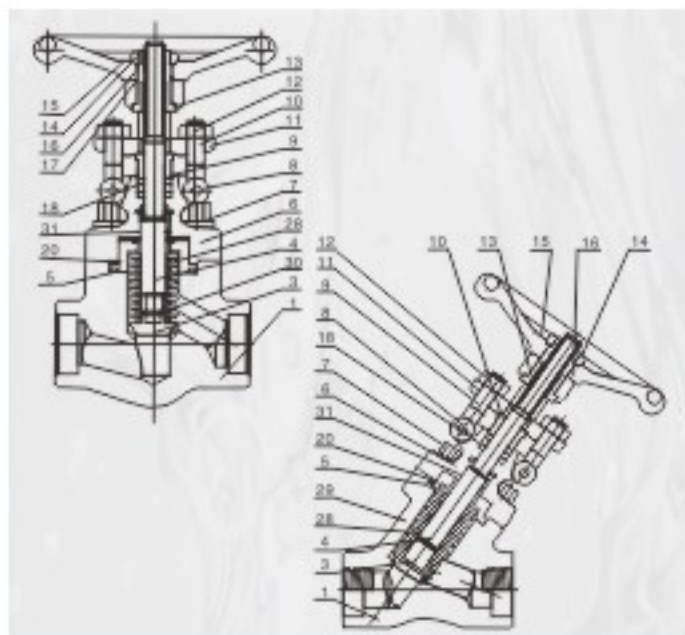
CL1500 Threaded,butt-welded or socket welded ends;design to API 602, MSS-SP-117

Specification(NPS)	R.P	-	1/2	3/4	1	1 1/4	1 1/2	2
	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2
(mm)Face to face	L	79	111	111	120	120	140	178
(mm)Handwheel diameter	W	100	125	125	160	160	180	180
(mm)Height	H	294	264	320	379	478	607	636
(mm)Flow port dimension	d	7.5	10.5	13.5	18	24	29	36.5
Weight (Kg)		3.1	5.1	5.1	9.0	10.5	16.7	21

Welded bonnet, full port & reducing port outside screw and yoke(OS & Y).

CL1500 Threaded,butt-welded or socket welded ends;design to API 602, MSS-SP-117

Specification(NPS)	R.P	-	1/2	3/4	1	1 1/4	1 1/2	2
	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2
(mm)Face to face	L	79	111	111	120	120	140	178
(mm)Handwheel diameter	W	100	125	125	160	160	180	180
(mm)Height	H	287	287	312	368	465	595	627
(mm)Flow port dimension	d	7.5	10.5	13.5	18	24	29	36.5
Weight (Kg)		2.9	4.7	4.7	5.7	7.4	16	19



Application standards

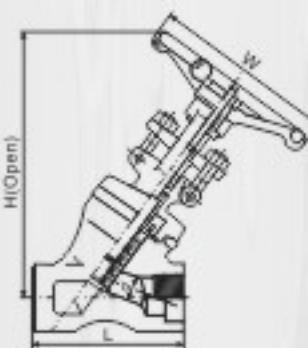
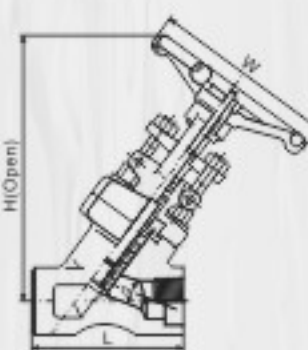
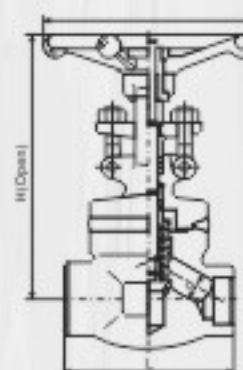
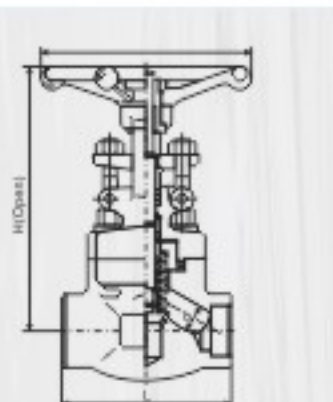
- Design and manufacture conform to BS5352; MSS-SP-117
- Connection ends conform to:
 - Socket welded ends conform to ANSI B16.11, JB/T1751
 - Screw ends conform to ANSI B1.20.1; JB/T7306
 - Butt-welded ends conform to ANSI B16.25; JB/T12224
 - Flanged ends conform to ANSI B16.5; JB79
- Test and inspection conform to: API 598; GB/T13927; JB/T9092
- Structure features:
 - Bolted bonnet, outside screw and yoke
 - Welded bonnet, outside screw and yoke
- Materials conform to ANSI/ASTM.
- Main materials:
 - A105; LF2; F5; F11; F22; 304(L); 316(L); F347; F321; F51; Monel; 20 Alloy.
- Bellow materials: 304; 321; 316; Inconel 625; Hastelloy C 276; Monel.

Carbon steel temperature-pressure rate

CL150-285 P.S.I@100°F CL300-740 P.S.I@100°F
CL600-1480 P.S.I@100°F CL800-1975 P.S.I@100°F CL1500-3705 P.S.I@100°F

Main part materials list

NO.	Part name	A105/F6a	A105/Fa6HFS	A105/F6aHF	F304(L)/304(L)	F316(L)/316(L)
1	Body	A105	A105+HF	A105+HF	F304(L)	F316(L)
3	Disc	F6a	F6a	F6aHF	F304(L)	F316(L)
4	Stem	410	410	410	304(L)	316(L)
5	Gasket	304+ Flexible graphite	304+ Flexible graphite	304+ Flexible graphite	304+ Flexible graphite	316+ Flexible graphite
6	Bonnet	A105	A105	A105	F304(L)	F316(L)
7	Bolt	B7	B7	B7	B8(M)	B8(M)
8	Pin	410	410	410	304	304
9	Packing bushing	410	410	410	304	316
10	Eyelet bolt	B7	B7	B7	B8(M)	B8(M)
11	Packing gland	A105	A105	A105	F304	F304
12	Hex nut	2H	2H	2H	8(M)	8(M)
13	Stem nut	410	410	410	410	410
14	Locking nut	35	35	35	35	35
15	Nameplate	AL	AL	AL	AL	AL
16	Handwheel	A197	A197	A197	A197	A197
17	Lubricating gasket	410	410	410	410	410
18	Packing	Graphite	Graphite	Graphite	Graphite	Graphite
20	Gasket	304+ Flexible graphite	304+ Flexible graphite	304+ Flexible graphite	304+ Flexible graphite	304+ Flexible graphite
28	Bellow	F321	F321	F321	F321/304L	F316/316L
30	Steel wire	304	304	304	304	316
31	Pin	304	304	304	304	316



Bolted bonnet, full port & reducing port outside screw and yoke(OS & Y)

CL800 Threaded, butt-welded or socket welded ends; design to BS5352, MSS-SP-117

Specification(NPS)	R.P	-	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
(mm) Face to face	L	79	79	92	111	120	152	172	200	
(mm) Handwheel diameter	W	100	100	100	125	160	160	180	200	
(mm) Height	H	162	162	164	200	220	257	295	350	
(mm) Flow port dimension	d	7.0	9.0	13	17.5	23	30	35	46	
Weight (Kg)		2.3	2.4	2.5	4.35	5.75	7.8	12.5	17.5	

Welded bonnet, full port & reducing port outside screw and yoke(OS & Y)

CL800 Threaded, butt-welded or socket welded ends; design to BS5352, MSS-SP-117

Specification(NPS)	R.P	-	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
(mm) Face to face	L	79	79	92	111	120	152	172	200	
(mm) Handwheel diameter	W	100	100	100	125	160	160	180	200	
(mm) Height	H	162	162	164	200	220	257	295	350	
(mm) Flow port dimension	d	7.0	9.0	13	17.5	23	30	35	46	
Weight (Kg)		1.7	1.8	1.9	3.3	5.2	6.8	10.6	13.8	

Bolted bonnet, full port & reducing port outside screw and yoke(OS & Y)

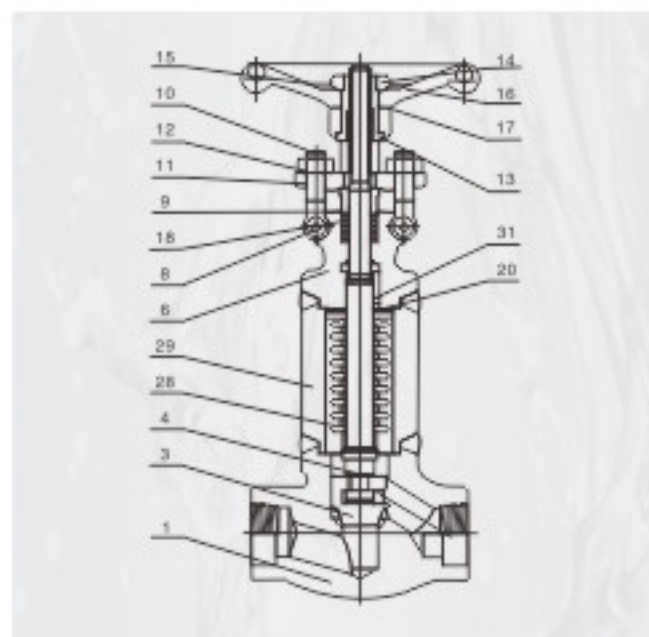
CL800 Threaded, butt-welded or socket welded ends; design to BS5352, MSS-SP-117

Specification(NPS)	R.P	-	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
(mm) Face to face	L	98	98	98	111	140	140	155	170	
(mm) Handwheel diameter	W	100	100	100	125	160	160	180	200	
(mm) Height	H	180	180	180	188	280	280	295	350	
(mm) Flow port dimension	d	7	9	13	17.5	23	30	35	46	
Weight (Kg)		2.6	2.6	3.8	4.6	9.3	9.3	14	19.6	

Welded bonnet, full port & reducing port outside screw and yoke(OS & Y)

CL800 Threaded, butt-welded or socket welded ends; design to BS5352, MSS-SP-117

Specification(NPS)	R.P	-	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
(mm) Face to face	L	79	79	92	100	140	140	155	170	
(mm) Handwheel diameter	W	100	100	100	125	160	160	180	200	
(mm) Height	H	198	198	198	207	280	280	295	350	
(mm) Flow port dimension	d	7	9	13	17.5	23	30	35	46	
Weight (Kg)		1.8	1.8	2.0	3.5	8.0	8.0	12	16	



Application standards

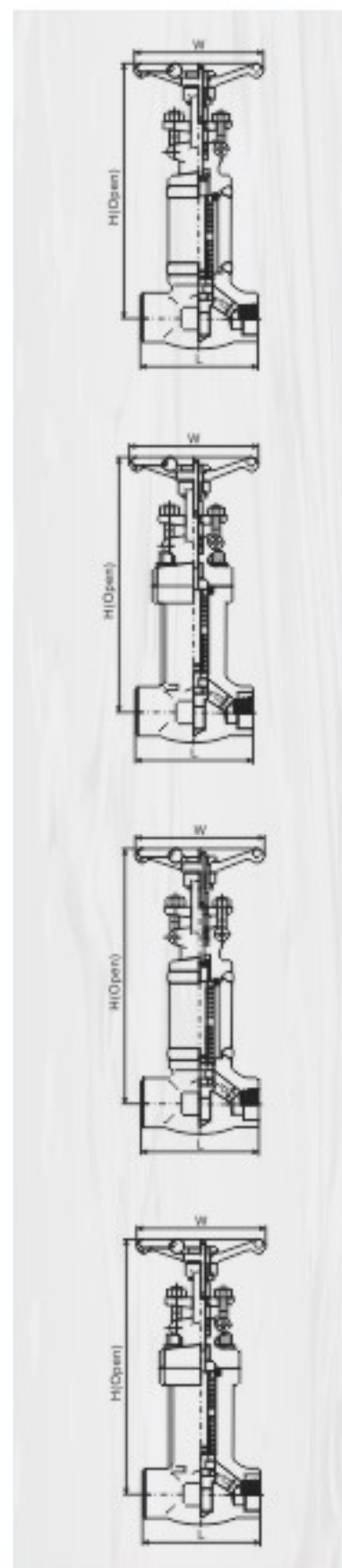
- Design and manufacture conform to BS5352; MSS-SP-117
- Connection ends conform to:
 - (1)Socket welded ends conform to ANSI B16.11;JB/T1751
 - (2)Screw ends conform to ANSI B1.20.1;JB/T7306
 - (3)Butt-welded ends conform to ANSI B16.25;JB/T12224
 - (4)Flanged ends conform to ANSI B16.5;JB79
- Test and inspection conform to:
 - API 598;GB/T13927;JB/T9092
- Structure features:
 - Bolted bonnet, outside screw and yoke
 - Welded bonnet, outside screw and yoke
- Materials conform to ANSI/ASTM.
- Main materials:A105; 304(L);F347;F321;
- Bellow materials: 304;321;316;Inconel 625; Hastelloy C 276;Monel.

Carbon steel temperature-pressure rate

CL150-285 P.S.I@100°F CL300-740 P.S.I@100°F CL600-1480 P.S.I@100°F
CL800-1975 P.S.I@100°F CL1500-3705 P.S.I@100°F

Main part materials list

NO.	Part name	A105/F6a	A105/Fa6HFS	A105/F6aHF	F304(L)/304(L)	F316(L)/316(L)
1	Body	A105	A105+HF	A105+HF	F304(L)	F316(L)
3	Disc	F6a	F6a	F6aHF	F304(L)	F316(L)
4	Stem	410	410	410	304(L)	316(L)
6	Bonnet	A105	A105	A105	F304(L)	F316(L)
8	Pin	410	410	410	304	304
9	Gland	410	410	410	304	316
10	Gland eyebolt	B7	B7	B7	B8(M)	B8(M)
11	Gland flange	A105	A105	A105	F304	F304
12	Hex nut	2H	2H	2H	8(M)	8(M)
13	Stem nut	410	410	410	410	410
14	Locking nut	35	35	35	35	35
15	Nameplate	AL	AL	AL	AL	AL
16	Handwheel	A197	A197	A197	A197	A197
17	Lubricating gasket	410	410	410	410	410
18	Packing	Graphite	Graphite	Graphite	Graphite	Graphite
28	Bellow	F321	F321	F321	F316	F316L
29	Coupling pipe	A105	A105	A105	A304(L)	A316(L)
31	Pin	304	304	304	304	316



Welded bonnet, full port & reducing port outside screw and yoke(OS & Y)

CL800 Threaded,butt-welded or socket welded ends;design to BS5352、MSS-SP-117

Specification(NPS)	R.P	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm) Face to face	L	79	79	92	111	120	152	172	200
(mm) Handwheel diameter	W	100	100	100	125	160	160	180	200
(mm) Height	H	237	237	239	270	298	340	395	470
(mm) Flow port dimension	d	7.0	9.0	13	17.5	23	30	35	46
Weight (Kg)		2.5	2.6	2.7	4.4	6.7	8.8	15	18.8

Bolted bonnet, full port & reducing port outside screw and yoke(OS & Y)

CL800 Threaded,butt-welded or socket welded ends;design to BS5352、MSS-SP-117

Specification(NPS)	R.P	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm) Face to face	L	79	79	92	111	120	152	172	200
(mm) Handwheel diameter	W	100	100	100	125	160	160	180	200
(mm) Height	H	237	237	239	270	298	340	395	470
(mm) Flow port dimension	d	7.0	9.0	13	17.5	23	30	35	46
Weight (Kg)		3.1	3.3	4.2	5.5	7.25	9.8	16	21

Welded bonnet, full port outside screw and yoke(OS & Y)

CL1500 Threaded,butt-welded or socket welded ends;design to BS5352、MSS-SP-117

Specification(NPS)	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm) Face to face	L	92	92	111	111	120	152	172	200
(mm) Handwheel diameter	W	100	100	125	125	160	160	180	200
(mm) Height	H	290	330	380	380	400	450	520	650
(mm) Flow port dimension	d	7	9	12	15	20	28	32	40
Weight (Kg)		3.3	3.5	5	7.5	10	16	27	30

Bolted bonnet, full port outside screw and yoke(OS & Y)

CL1500 Threaded,butt-welded or socket welded ends;design to BS5352、MSS-SP-117

Specification(NPS)	F.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm) Face to face	L	92	92	111	111	120	152	172	200
(mm) Handwheel diameter	W	100	100	125	125	160	160	180	200
(mm) Height	H	290	330	380	380	400	450	520	650
(mm) Flow port dimension	d	7	9	12	15	20	28	32	40
Weight (Kg)		3.3	3.5	5	7.5	10	16	27	30



Welded bonnet, reducing port outside screw and yoke(OS&Y)

CL150-300-600 Flange-welded or butt-welded ends;design to BS5352, MSS-SP-117

(NPS)Specification		R.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm) Face to face	CL150	L(R F) L1(BW)	-	-	108	117	127	140	165	203
	CL300		-	-	152	178	203	216	229	267
	CL600		-	-	165	190	216	229	241	292
(mm)Handwheel diameter		W	-	-	100	100	125	160	160	180
(mm)Height	CL150/CL300	H	-	-	340/350	340/350	360/375	380/400	450/470	540/570
	CL600		-	-	360	360	390	430	500	600
(mm)Flow port dimension		d	-	-	9	13	17.5	23	30	35
Weight (Kg)	CL150	RF/BW	-	-	3.6/3.3	4.3/3.6	6.3/5.7	10.5/9.5	11.5/9.8	19.5/18
	CL300	RF/BW	-	-	4/3.2	4.8/4	7.3/5.7	13/11	14.5/12	22/18
	CL600	RF/BW	-	-	5.8/4.7	8.1/6	12.5/9	18/14	24.5/18	42/36

Flange Integrity Forged Steel Valve enquiry please contact sales department.

Welded bonnet, reducing port outside screw and yoke(OS&Y)

CL150-300-600 Flange-welded or butt-welded ends;design to BS5352, MSS-SP-117

(NPS)Specification		R.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm) Face to face	CL150	L(RF) L1(BW)	-	-	108	117	127	140	165	203
	CL300		-	-	152	178	203	216	229	267
	CL600		-	-	165	190	216	229	241	292
(mm)Handwheel diameter		W	-	-	100	100	125	160	160	180
(mm)Height	CL150/CL300	H	-	-	340/350	340/350	360/375	380/400	450/470	540/570
	CL600		-	-	360	360	390	430	500	600
(mm)Flow port dimension		d	-	-	9	13	17.5	23	30	35
Weight (Kg)	CL150	RF/BW	-	-	4.1/3.5	4.8/4.1	7.7/6.7	12.5/11.5	14/11.5	21.5/18
	CL300	RF/BW	-	-	4.5/3.7	5.2/4.5	8.3/7.7	14.5/12.5	16/13.5	24/20
	CL600	RF/BW	-	-	6.3/5.2	8.6/6.5	13.5/10	19.5/15.5	26/19.5	44/38

Flange Integrity Forged Steel Valve enquiry please contact sales department.

Welded bonnet, full port outside screw and yoke(OS&Y)

CL1500 Flange-welded or butt-welded ends;design to BS5352, MSS-SP-117

(NPS)Specification	R.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm)Face to face	L(RF),L1(BW)	-	-	216	229	254	280	305	368
	L(RTJ)	-	-	216	229	254	280	305	371
(mm)Handwheel diameter	W	-	-	125	125	160	160	180	200
(mm)Height	H	-	-	380	380	400	450	520	650
(mm)Flow port dimension	d	-	-	12	15	20	28	32	40
Weight (Kg)	-	-	-	11.1	11.8	14.1	16.5	23.8	37.5

Flange Integrity Forged Steel Valve enquiry please contact sales department.

Welded bonnet, full port outside screw and yoke(OS&Y)

CL1500 Flange-welded or butt-welded ends;design to BS5352, MSS-SP-117

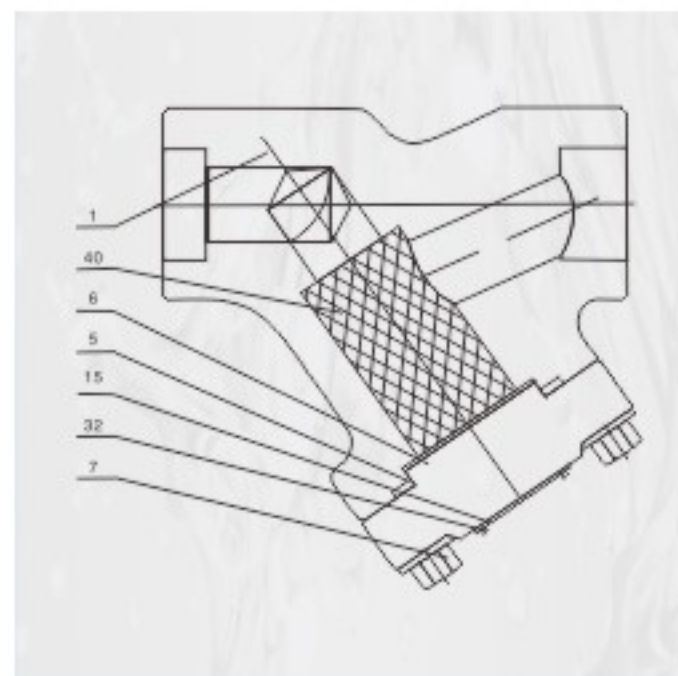
(NPS)Specification	R.P	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm)Face to face	L(RF),L1(BW)	-	-	216	229	254	280	305	368
	L(RTJ)	-	-	216	229	254	280	305	371
(mm)Handwheel diameter	W	-	-	125	125	160	160	180	200
(mm)Height	H	-	-	380	380	400	450	520	650
(mm)Flow port dimension	d	-	-	12	15	20	28	32	40
Weight (Kg)	-	-	-	11.6	12.3	15	17.5	25	38.3

Flange Integrity Forged Steel Valve enquiry please contact sales department.



Application standards

- Design and manufacture conform to BS5352 MSS SP-118;
- Connection ends conform to
 - (1)Socket welded ends conform to ANSI B16.11;JB/T1751
 - (2)Screw ends conform to ANSI B1.20.1;JB/T7306
 - (3)Butt-welded conform to ANSI B16.25;JB/T12224
 - (4)Flanged ends conform to ANSI B16.5;JB79
- Test and inspection conform to:
 - API 598;GB/T13927;JB/T9092
- Structure features:
 - Bolted bonnet or welding bonnet
- Materials conform to ANSI/ASTM,
 - A105;LF2;F5; F11;F22;304(L);316(L);
 - F347;F321;F51;Monel;20.



*Please offer the mesh of strainer

*If you want to equip with, you contract with our sale department

Carbon steel temperature-pressure rate

CL150-285 P.S.I@ 100°F

CL300-740 P.S.I@ 100°F

CL600-1480 P.S.I@ 100°F

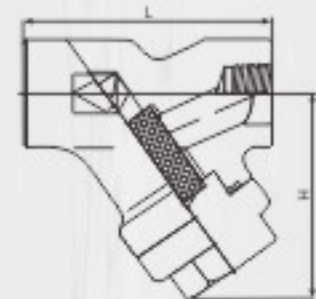
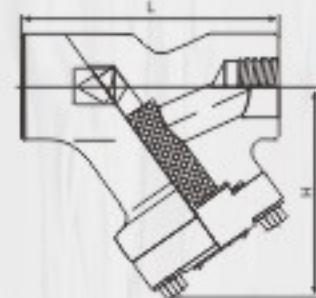
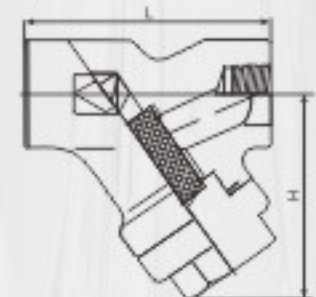
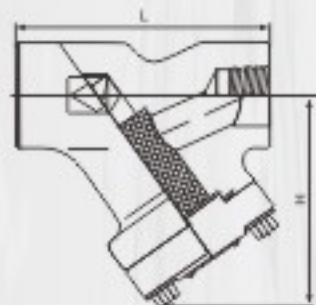
CL800-1975 P.S.I@ 100°F

CL1500-3705 P.S.I@ 100°F

CL2500-6170 P.S.I@ 100°F

Main part materials list

NO.	Part name	A105/F6a	A105/Fa6HFS	LF2/304	A11/F6aHF	F304(L)/304(L)	F316(L)/316(L)	F51/F51
1	Body	A105	A105	LF2	F11	F304(L)	F316(L)	F51
5	Gasket	304+ Flexible graphite	304+ Flexible graphite	304+ Flexible graphite	304+ Flexible graphite	304+ Flexible graphite	304+ Flexible graphite	304+ Flexible graphite
6	Bonnet	A105	A105	LF2	F11	F304(L)	F316(L)	F51
7	Bolt	B7	B7	L7	B16	B8(M)	B8(M)	B8(M)
15	Nameplate	AL	AL	AL	AL	AL	AL	AL
32	Rivet	H62	H62	H62	H62	H62	H62	H62
40	Filter screen	304	304	304	304	304(L)	316(L)	316(L)



Bolted bonnet, full port and reducing port

CL800 Threaded, butt-welded or socket welded ends; design to BS5352

(NPS) Specification	(R.P)		1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
	(F.P)	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
(mm) Face to face	L	98	98	98	111	140	140	155	170	
(mm) Height	H	70	70	70	100	110	120	120	150	
(mm) Flow port dimension	d	7	9	13	17.5	30	30	35	46	
(Kg)Weight		2.2	2.2	2.1	4.2	8.9	8.9	10	18.6	

Bolted bonnet, full port and reducing port

CL800 Threaded, butt-welded or socket welded ends; design to BS5352

(NPS) Specification	(R.P)		1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
	(F.P)	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
(mm) Face to face	L	79	79	92	100	140	140	155	170	
(mm) Height	H	65	65	65	95	105	110	110	140	
(mm) Flow port dimension	d	7	9	13	17.5	23	30	35	46	
(Kg)Weight		1.8	1.8	2.0	3.5	9	8.0	12	16	

Bolted bonnet, full port

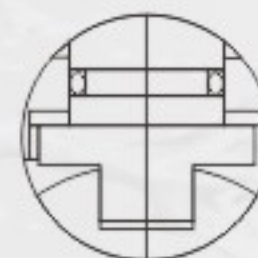
CL900-CL1500 Threaded, butt-welded or socket welded ends; design to BS5352

(NPS) Specification	(F.P)		3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm) Face to face	L		98	111	111	140	140	155	170
(mm) Height	H		70	70	100	110	120	120	150
(mm) Flow port dimension	d		9	12	15	20	28	32	40
(Kg)Weight			2.1	4.2	9	8.9	10	18.6	20

Bolted bonnet, full port

CL900-CL1500 Threaded, butt-welded or socket welded ends; design to BS5352

(NPS) Specification	(F.P)		3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm) Face to face	L		92	100	100	140	140	155	170
(mm) Height	H		65	65	95	105	110	110	140
(mm) Flow port dimension	d		9	12	15	20	28	32	40
(Kg)Weight			2.0	3.5	8.0	8.0	12	16	18

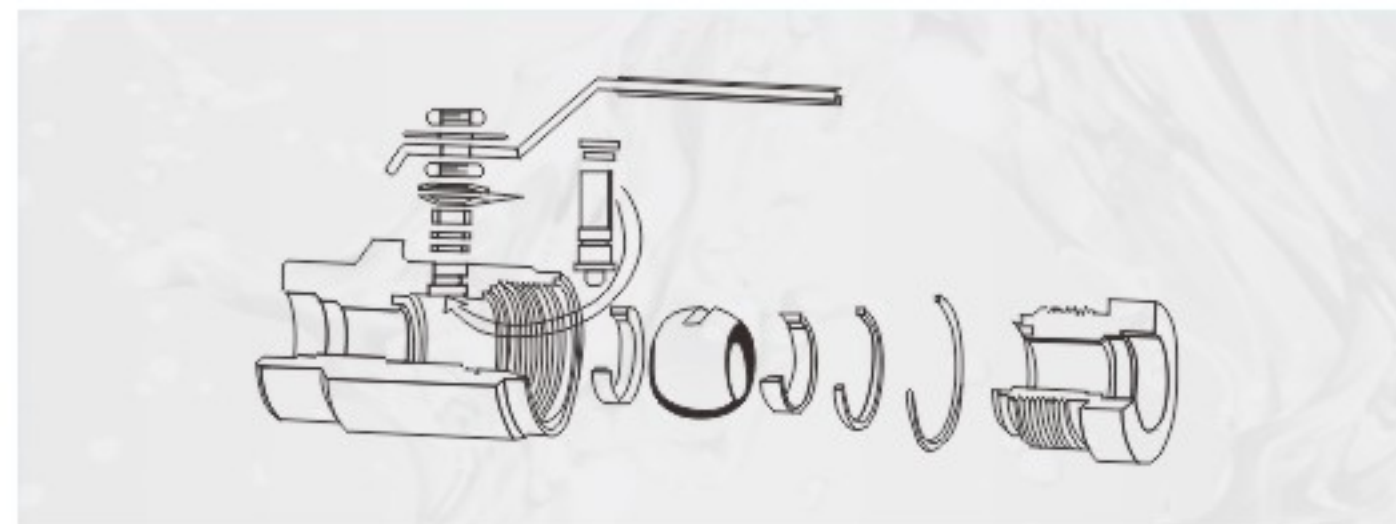


SINOVAL Bcompact ball valves are trusted by many customers because of its reasonable structures small space-occupation and good sealing performance

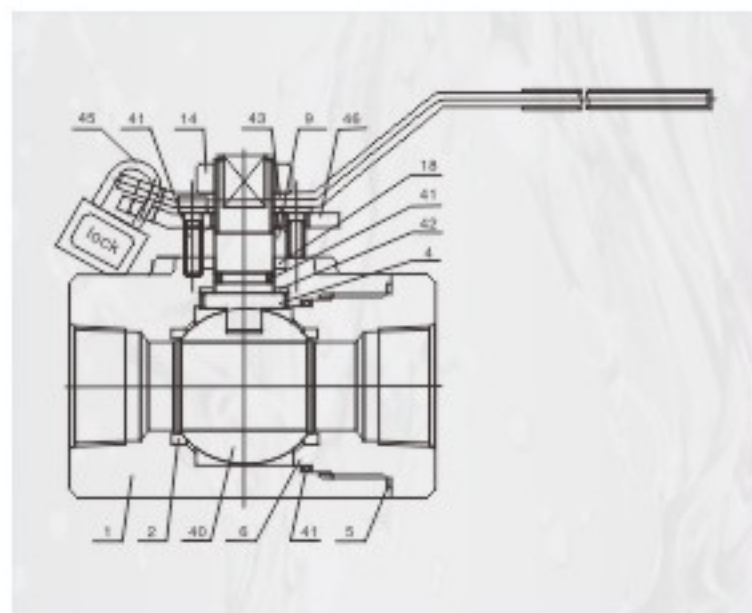
Design structure

Seat is made of PTFE reinforced with 25% glass fibre or PEEK. PTFE with 25% glass fibre can gain better performances normally used for class 800 ball valves. PEEK can gain better performances under high pressure and high temperature normally used for class 1500 ball valves.

Anti static/ fire safe/ blow out proof stem

**Flow coefficient Cv**

NPS	Cv	
	Full port	Reduced port
1/4	8	
3/8	8	
1/2	12	8
3/4	33	12
1	48	33
1 1/4	83	48
1 1/2	120	83
2	250	120



Application standards

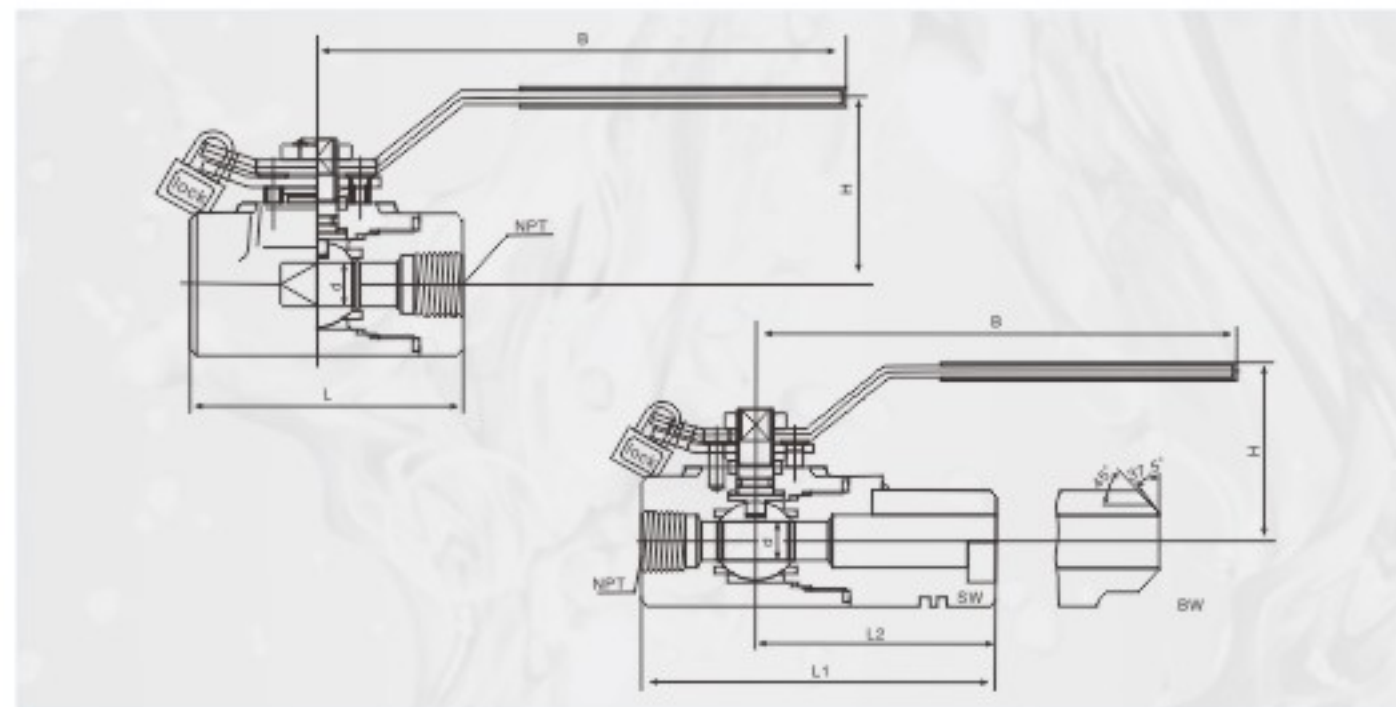
- Design and manufacture conform to BS5351 MSS SP-118
- Connection ends conform to:
 - (1)Socket welded ends conform to ANSI B16.11;JB/T1751
 - (2)Screw ends conform to ANSI B1.20.1;JB/T7306
 - (3)Butt-welded conform to ANSI B16.25;JB/T12224
 - (4)Flanged ends conform to ANSI B16.5;JB79
- Test and inspection conform to: API 598;GB/T13927;JB/T9092
- Structure features:
Bolted bonnet, two-piece,
- Materials conform to ANSI/ASTM.
- Main materials:
A105;LF2;304(L); 316(L);F347;F321;
F51;Monel20.

Carbon steel temperature-pressure rate

CL150-285 P.S.I@ 100°F CL300-740 P.S.I@100°F CL600-1480 P.S.I@ 100°F CL800-1975P.S.I@ 100°F CL1500-3705 P.S.I@ 100°F

Main part materials list

NO.	Part name	A105/F6a	LF2/304	F304(L)/304(L)	F316(L)/316(L)	F51/F51
1	Body	A105	LF2	F304(L)	F316(L)	F51
2	Seat	RPTFE Or PEEK	RPTFE Or PEEK	RPTFE Or PEEK	RPTFE Or PEEK	RPTFE Or PEEK
4	Stem	410	304	304(L)	316(L)	F51
5	Gasket	PTFE	PTFE	PTFE	PTFE	PTFE
6	Bonnet	A105	LF2	F304	F316	F51
9	Gland	410	304	304(L)	316(L)	F51
11	Gland flange	A105	LF2	F304	F316	F51
14	Flat nut	8	8	8	8(M)	8(M)
18	Packing	PTFE	PTFE	PTFE	PTFE	PTFE
40	Ball	F6	F304	F304(L)	F316(L)	F51
41	O-ring	VITON	VITON	VITON	VITON	VITON
42	Back seat gasket	RPTFE or PEEK	RPTFE or PEEK	RPTFE or PEEK	RPTFE or PEEK	RPTFE or PEEK
43	Wrench	ANSI 1025	ANSI 1025	ANSI 1025	ANSI 1025	ANSI 1025
44	Screw	B8	B8	B8	B8(M)	B8(M)
45	Lock	Finished Product	Finished Product	Finished Product	Finished Product	Finished Product
46	Locator	ANSI 1025	ANSI 1025	ANSI 1025	ANSI 1025	ANSI 1025



CL800

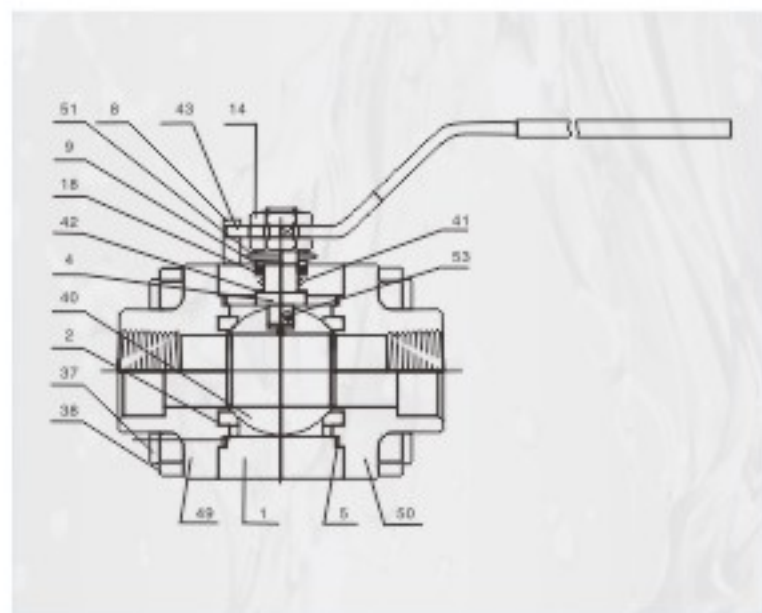
One end is welded pipe (butt-welding or socket welding) and the other is thread, design conform to BS5351

(NPS) Specification	(R.P)		1/2	3/4	1	1 1/4	1 1/2	2		
	(F.P)	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
(mm)Face to face	L1	70	70	80	95	115	125	135	155	
(mm)Coupling pipe end to center	L2	121	121	121	130	136	140	148	160	
(mm)Center to handle end	B	160	160	160	160	170	230	230	280	
(mm)Height	H	60	60	60	65	85	105	105	125	
(mm)Flow port dimension	d	6	9	12.5	17	24	37	37	49	
(Kg)Weight		1.2	0.9	1.3	2.2	3.5	6.5	6.5	11	

CL1500-CL2500

One end is welded pipe (butt-welding or socket welding) and the other is thread, design conform to API6D

(NPS) Specification	(F.P)		1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm) Face to face	L1	CL1500	80	80	95	115	125	135	155	155
		CL2500			125	135	155		155	
(mm) Coupling pipe end to center	L2	CL1500	121	121	130	136	140	148	160	175
		CL2500			136	140	148		175	
(mm) Center to handle end	B	CL1500	160	160	160	170	230	230	280	280
		CL2500			230	230	280		280	130
(mm)Height	H	CL1500	60	60	65	85	105	105	125	
		CL2500			90	110	125			
(mm) Flow port dimension	d	CL1500	6	9	13	19	25	32	38	49
		CL2500	6	9	13	19	25		38	42
(Kg)Weight		CL1500	1.2	1.5	2.5	3.7	5.8		11.5	13.7
		CL2500	1.5	1.9	2.7	4.1	6.3		12	15



Application standards

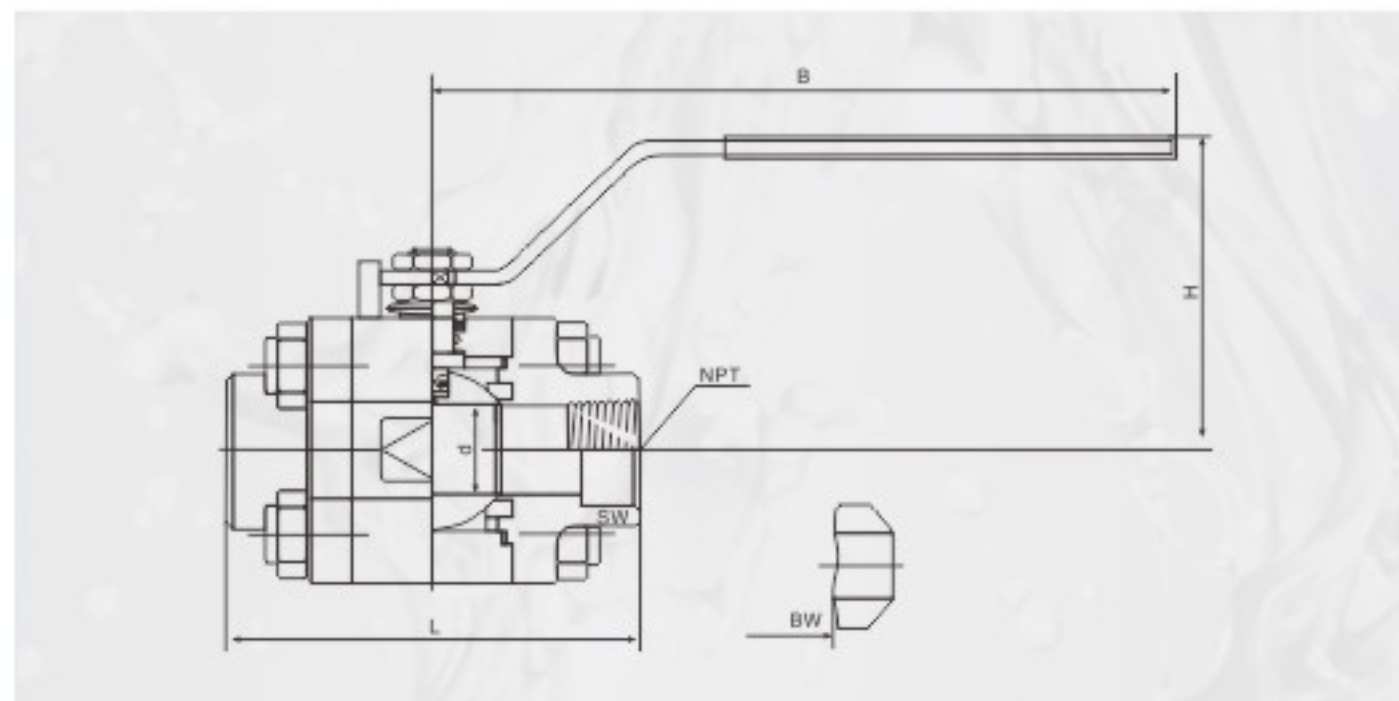
- Design and manufacture conform to BS5351 MSS SP-118;
- Connection ends conform to:
 - (1)Socket welded ends conform to ANSI B16.11;JB/T1751
 - (2)Screw ends conform to ANSI B1.20.1;JB/T7306
 - (3)Butt-welded ends conform to ANSI B16.25;JB/T12224
 - (4)Flanged ends conform to ANSI B16.5;JB79
- Test and inspection conform to: API 598;GB/T13927;JB/T9092
- Structure features:
Bolted bonnet, three-piece;
- Materials conform to ANSI/ASTM.
- Main materials:
A105;LF2;F5;F11;F2,304(L); 316(L);
F347;F321;F51;Monel;20.

Carbon steel temperature-pressure rate

CL150-285 P.S.I@ 100°F CL300-740 P.S.I@100°F CL600-1480 P.S.I@ 100°F CL800-1975P.S.I@ 100°F CL1500-3705 P.S.I@ 100°F

Main part materials list

NO.	Part name	A105/F6a	LF2/304	F304(L)/304(L)	F316(L)/316(L)	F51/F51
1	Body	A105	LF2	L304(L)	L316(L)	F51
2	Seat	RPTFE or PEEK	RPTFE or PEEK	RPTFE or PEEK	RPTFE or PEEK	RPTFE or PEEK
4	Stem	410	304	304(L)	316(L)	F51
5	Gasket	PTFE	PTFE	PTFE	PTFE	PTFE
8	Pin	25	304	304	304	304
9	Gland	410	304	304(L)	316(L)	F51
14	Flat nut	8	8	8	8(M)	8(M)
18	Packing	PTFE	PTFE	PTFE	PTFE	PTFE
37	Bolt	B7	B8	B8	B8(M)	B8(M)
38	Nut	2H	8	8	8(M)	8(M)
40	Ball	F6	F304	F304(L)	F316(L)	F51
41	O-ring	VITON	VITON	VITON	VITON	VITON
42	Back seat gasket	RPTFE or PEEK	RPTFE or PEEK	RPTFE or PEEK	RPTFE or PEEK	RPTFE or PEEK
43	Wrench	ANSI 1025	ANSI 1025	ANSI 1025	ANSI 1025	ANSI 1025
49	Left bonnet	A105	LF2	F304	F316	F51
50	Right bonnet	A105	LF2	F304	F316	F51
51	Butterfly spring	65Mn	65Mn	304	304	304
52	Elastic washer	65Mn	65Mn	304	304	304
53	Anti-static spring	304	304	304	316L	316L



CL800-CL1500

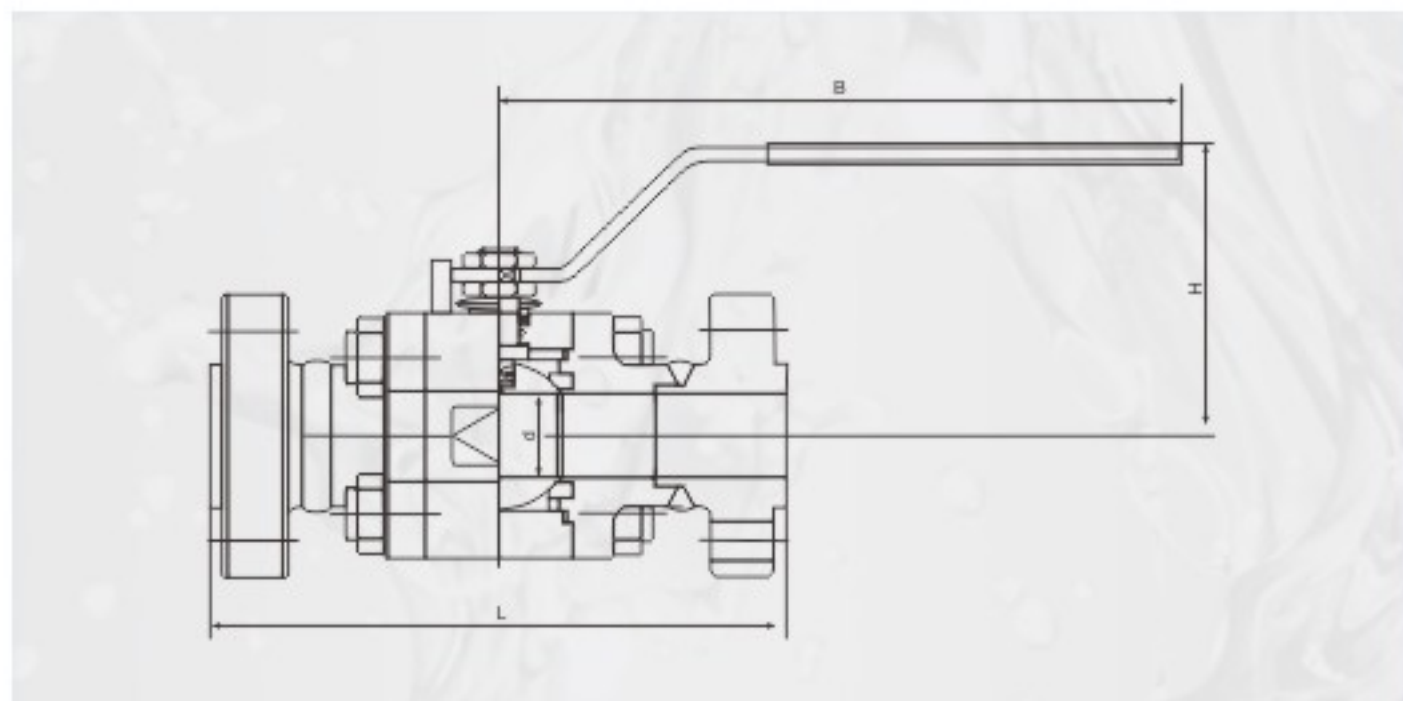
Connection ends may be pipe-welded (butt-welding or socket welding)and/or threaded, design to BS5351

(NPS) Specification	(F.P)		1/4	3/8	1/2	3/4	1	1¼	1½	2
(mm) Face to face	L1		92	92	92	111	127	140	152	152
(mm) Center to handle end	B		108	108	108	146	178	178	200	200
(mm)Height	H		51	51	51	108	81	85	105	105
(mm) Flow port dimension	d	CL800	6	9	13	18	23	28	35	49
		CL1500	6	9	13	19	25	32	38	49
(Kg)Weight			2.5	2.4	2.3	3.4	5.4	6.4	11	13
			2.5	2.4	2.3	3.7	5.8	6.8	11.5	13.7

CL2500

Connection ends may be pipe-welded (butt-welding or socket welding)and/or threaded, design to BS5351

(NPS) Specification	(F.P)	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm) Face to face	L			110	125	135		160	
(mm) Center to handle end	B			170	230	230		310	
(mm)Height	H			95	110	125			
(mm) Flow port dimension	d			13	19	25		38	
(Kg)Weight				2.7	4.1	6.3		12	



CL1500-CL2500

Flanged or butt-welded ends; design to API 6D Face to face conforms to manufacture standard

(NPS) Specification	(F.P)		1/2	3/4	1	1 1/4	1 1/2	2
(mm) Face to face	L	CL1500	216	229	256	279	305	368
		CL2500	264	273	308	349	384	451
(mm) Center to handle end	B	CL1500	230	230	350	280	400	400
		CL2500	280	280	95	350	400	400
(mm)Height	H	CL1500	75	85	85	105	110	130
		CL2500	75	85	95	105	110	130
(mm) Flow port dimension	d	CL1500	13	19	25	32	38	49
		CL2500	13	19	25	32	38	42
(Kg)Weight		CL1500	2.5	5.8	5.8	6.8	11.5	13.7
		CL2500	2.7	6.3	6.3	6.8	12	15



Body and bonnet materials

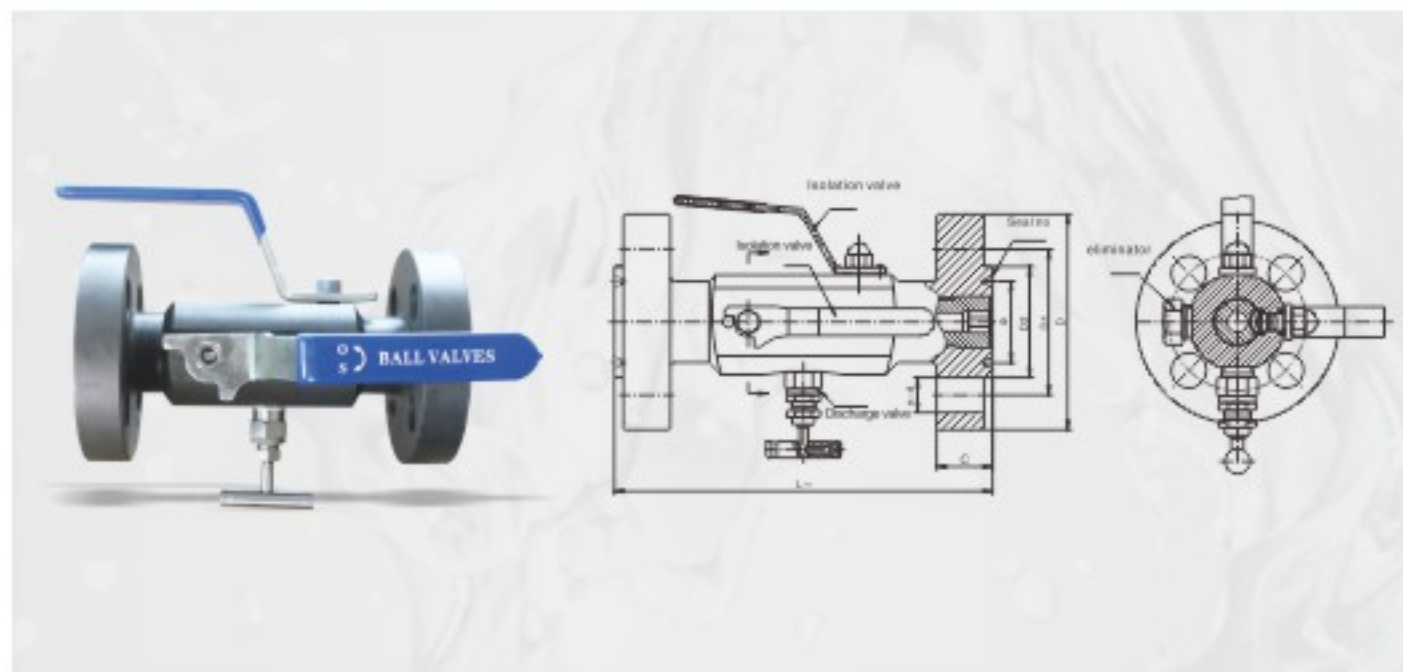
Chemical composition	Carbon steel	Cryogenic		Alloy steel				ASTM-A182 Austenite stainless steel ASTM-A182						Duplex stainless steels
	A105	LF2	LF3	F5	F91	F11 Class2	F22 Class3	F304	F304H	F304L	F316	F316L	F347H	F51
C	0.35	0.35	0.20	0.15	0.08-0.12	0.10-0.20	0.05-0.15	0.08	0.04-0.10	0.035	0.08	0.035	0.04-0.1	0.030
Mn	0.60-1.05	0.60-1.35	0.90	0.30-0.60	0.30-0.60	0.30-0.60	0.30-0.60	2.00	2.00	2.00	2.00	2.00	2.00	2.00
P	0.035	0.035	0.035	0.030	0.020	0.040	0.040	0.045	0.045	0.045	0.045	0.045	0.045	0.030
S	0.040	0.040	0.040	0.030	0.010	0.040	0.040	0.030	0.030	0.030	0.030	0.030	0.030	0.20
Si	0.10-0.35	0.15-0.30	0.20-0.35	0.50	0.20-0.50	0.50-1.00	0.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ni	0.40	0.40	3.3-3.7	0.50	0.40	-	-	8.0-11.0	8.0-11.0	8.0-13.0	10.0-14.0	10.0-15.0	9.0-13.0	4.5-6.5
Cr	0.30	0.30	0.30	4.0-6.0	8-9.5	1.00-1.50	2.00-2.50	18.0-20.0	18.0-20.0	18.0-20.0	16.0-18.0	16.0-18.0	17.0-20.0	2.1-2.3
Mo	0.12	0.12	0.12	0.44-0.65	0.85-1.05	0.44-0.65	0.87-1.13	-	-	-	2.00-3.00	2.00-3.00	-	2.5-3.5

Mechanical property	ASTM A105	LF2	LF3	F5	F91	F11Class2	F22Class3	F304	F304H	F304L	F316	F316L	F347H	F51
Tensile strength	70	70-95	70-95	70	85	70	75	75	75	70	75	70	75	90
Yield strength	36	36	37.5	40	60	40	45	30	30	25	30	25	30	65
Elongation at Rupture	22	22	22	20	20	20	20	30	30	30	30	30	30	25
Shrinkage of R.A.	30	30	35	35	40	30	30	50	50	50	50	50	50	45
Brinell hardness	187(2)	197	197	143-217	≤248	143-207	156-207	-	-	-	-	-	-	-

Trim and bolt materials

Chemical composition	Trim materials					Bolt materials				
	AISI 410	AISI 416	AISI 420	ASTM B164 Monel	Stellite Gr.6	ASTM A193		AISI 430	ASTM A194	
						B7	B8		2H	G8
C	0.15max.	0.15max.	0.15max.	0.3max.	1.00	0.37-0.49	0.08max.	0.12max.	0.40min.	0.08max.
Mn	1.00max.	1.25max.	1.00max.	2.0max.	1.00max.	0.65-1.10	2.0max.	1.00max.	1.00max.	2.00max.
P	0.040	0.060max.	0.040	-	-	0.035	0.045	0.040	0.040max.	0.045
S	0.030	0.15max.	0.030	0.024	-	0.04	0.030	0.030	0.050max.	0.030
Si	1.00max.	1.00max.	1.00max.	0.5max.	1.00	0.15-0.35	1.00max.	1.00max.	0.40max.	1.00max.
Cr	11.50-13.50	12.0-14.0	12.0-14.0	-	28.00	0.75-1.20	18.0-20.0	14.0-18.0	-	18.0-20.0
Ni	-	-	-	63.0min.	3.0max.	-	8.0-11.0	-	-	8.00-11.0
Mo	-	0.600max.	-	-	-	0.15-0.25	-	-	-	-
Cu	-	-	-	28.0-34.0	-	-	-	-	-	-
Other element	-	-	-	Fe:2.5max. W:4.0 Co:balance	-	-	-	-	-	-

Mechanical property	410	416	420	ASTM A164	Gr.6	B7	B8	430	2H	G8
Tensile strength	99/85 70/130	85/170 85/170	149/298 105/210	70(2) 49.2	-	125 87.8	75 52.7	75.4 53	-	-
Yield strength	59/170 42/120	59/128 42/90	119/199 84/140	25(2) 17.6	-	105 73.8	30 21	40 28	-	-
Elongation at Rupture	(15)(1)	(10)(1)	(8)(1)	(35)(2)	-	16	30	28	-	-
Shrinkage of R.A.	50/75	8/60	5/40	-	-	50	50	65	-	-
Brinell hardness	180-375	180/375	300-600	-	HRCmin.37	-	-	160	248-352	126-300



Main connection

3/4"DBBQ41RC-10CL600-2500HRJ

Class	D	D1	D2	φ (RF)	φ (RJ)-(R)	C	n-d
CL600	210	115	82.6	43		22.9	4-18
CL600	210	115	82.6	63.5	42.88	R13	22.9 4-18
CL900	240	130	88.9	66.5	44.45	R14	32.5 4-22
CL1500	240	130	88.9	66.5	44.45	R14	32.5 4-22
CL2500	270	140	95.2	73.0	50.80	R16	38.8 4-22

Main connection

1"ZDBBQ41RC-14CL600-2500HRJ

Class	L=	D	D1	D2	D3	φ (RJ)-(R)	C	n-d
CL600	245	125	89.0	51	54		24.5	4-18
CL600	245	125	89.0	70	54	82.5	R16	24.5 4-18
CL900	265	150	101.6	71.5	52	95.25	R16	35.6 4-26
CL1500	265	150	101.6	71.5	52	95.25	R16	35.6 4-26
CL2500	280	160	108.0	82.5	57	101.6	R18	42.0 4-26

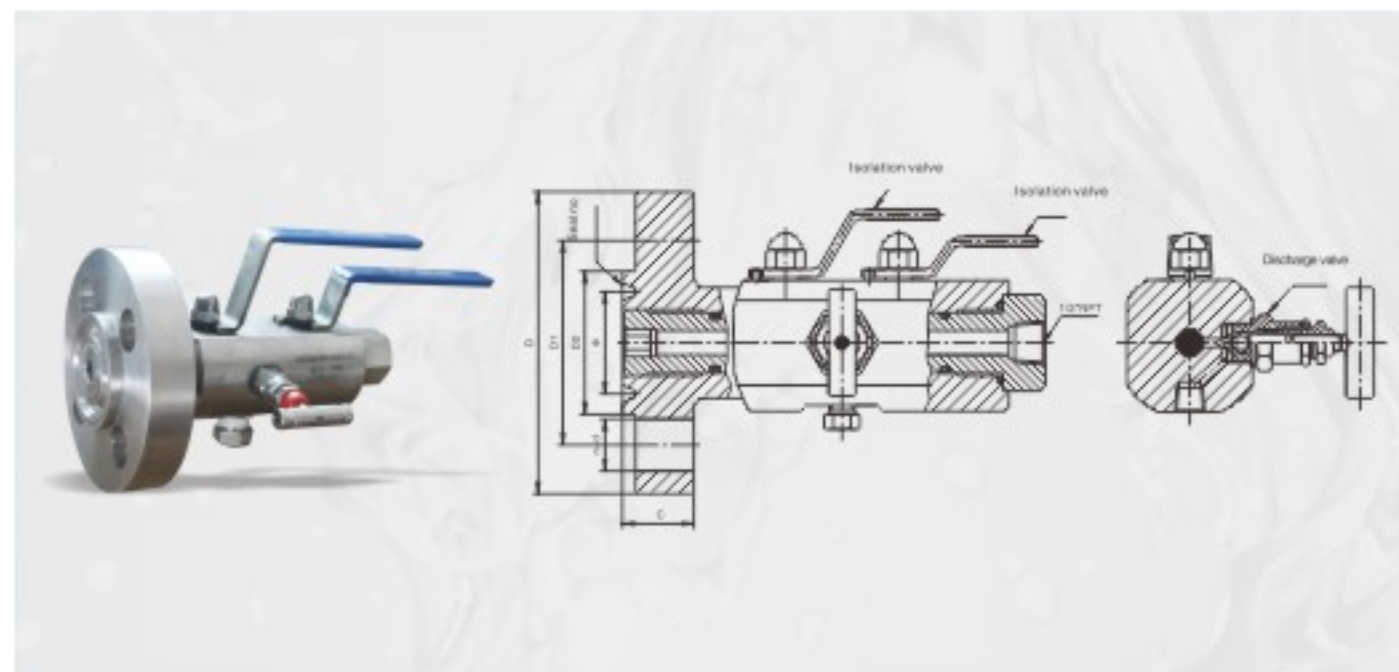
Technical Specification For Design And Manufacture

1. The design and manufacture of valves shall be carried out according to the standard requirements of JB/T7747-2006.
2. The inspection and acceptance of valves shall be carried out according to the standard requirements of API598.
3. Flange connection size ASME B16.5 HG/T20615 standard requirements.
4. The strength test of the valve is done at 1.5 times the nominal pressure.
5. The sealing test of the valve is carried out by 1.1 times the nominal pressure.
6. The gas seal test of the valve is carried out according to the nominal pressure of 0.6MPa for gas seal test.

Main connection

2"ZDBBQ41RC-14CL600-2500HRJ

Class	L=	D	D1	D2	φ (RJ)-(R)	C	n-d
CL600	263	165	127	92		32.7	8-19
CL600	263	165	127	108	82.5	R23	32.7 8-19
CL900	290	215	165.1	124	95.25	R24	45.1 8-25
CL1500	290	215	165.1	124	95.25	R24	45.1 8-25
CL2500	320	235	171.4	133	101.6	R26	58.0 8-29



Main connection

1"DBBQ4RP-12CL600-2500HRJ/1/2NPTF

Class	D	D1	D2	φ (RF)	φ (RJ)-(R)	C	n-d
CL600	125			51		24.5	4-18
CL600	125	88.9	50.8		70	R16	24.5 4-18
CL900	150	88.9	50.8		71.5	R16	35.5 4-26
CL1500	150	101.6	50.8		71.5	R16	35.5 4-26
CL2500	160	101.6	60.3		82.5	R18	41.5 4-26

Technical Specification For Design And Manufacture

1. The design and manufacture of valves shall be carried out according to the standard requirements of JB/T7747-2006.
2. The inspection and acceptance of valves shall be carried out according to the standard requirements of API598.
3. Flange connection size ASME B16.5 HG/T20615 standard requirements.
4. The strength test of the valve is done at 1.5 times the nominal pressure.
5. The sealing test of the valve is carried out by 1.1 times the nominal pressure.
6. The gas seal test of the valve is carried out according to the nominal pressure of 0.6MPa for gas seal test.



Temperature-pressure rate(Psig)-F

Class150/300/600/800/900/1500/2500

Materials	A105&A350-LF2							F5							F11						
Class	150	300	600	800	900	1500	2500	150	300	600	800	900	1500	2500	150	300	600	800	900	1500	2500
-20 to 100	285	740	1480	1975	2220	3705	6170	290	750	1500	2000	2250	3750	6250	290	750	1500	2000	2250	3750	6250
200	260	675	1350	1800	2025	3375	5625	260	745	1490	2000	2235	3725	6205	260	750	1500	1900	2250	3750	6250
300	230	655	1315	1750	1970	3280	5470	230	715	1430	1940	2150	3580	5965	230	720	1445	1795	2165	3610	6015
400	200	635	1270	1690	1900	3170	5280	200	705	1410	1880	2115	3530	5880	200	695	1385	1755	2080	3465	5775
500	170	600	1200	1595	1795	2995	4990	170	665	1330	1775	1995	3325	5540	170	665	1330	1710	1995	3325	5540
600	140	550	1095	1460	1640	2735	4560	140	605	1210	1615	1815	3025	5040	140	605	1210	1615	1815	3025	5040
650	125	535	1075	1430	1610	2685	4475	125	590	1175	1570	1765	2940	4905	125	590	1175	1570	1765	2940	4905
700	110	535	1065	1420	1600	2665	4440	110	570	1135	1515	1705	2840	4730	110	570	1135	1515	1705	2840	4730
750	95	505	1010	1345	1510	2520	4200	95	530	1055	1420	1585	2640	4400	95	530	1065	1420	1595	2660	4430
800	80	410	825	1100	1235	2060	3430	80	510	1015	1325	1525	2540	4230	80	510	1015	1355	1525	2540	4230
850	65	270	535	715	805	1340	2230	65	485	965	1170	1450	2415	4030	65	485	975	1300	1460	2435	4060
900	50	170	345	460	515	860	1430	50	370	740	940	1110	1850	3085	50	450	900	1200	1350	2245	3745
950								35	275	550	695	825	1370	2285	35	320	640	1005	9550	1595	2655
1000								20	200	400	510	595	995	1655	20	215	430	595	650	1080	1800
1050									145	290	375	430	720	1200		145	290	365	430	720	1200
1100									100	200	275	300	495	830		95	190	225	290	480	800
1150									60	125	185	185	310	515		60	125	140	185	310	515
1200									35	70	120	105	170	285		40	75	95	115	190	315
1250																					
1300																					

Temperature-pressure rate(Psig)-F

Class150/300/600/800/900/1500/2500

Materials	F22							F91							F304 F304H						
Class	150	300	600	800	900	1500	2500	150	300	600	800	900	1500	2500	150	300	600	800	900	1500	2500
-20 to 100	290	750	1500	2000	2250	3750	6250	290	750	1500	2000	2250	3750	6250	275	720	1440	1920	2160	3600	6000
200	260	750	1500	1910	2250	3750	6250	260	750	1500	2000	2250	3750	6250	230	600	1200	1600	1800	3000	5000
300	230	730	1455	1805	2185	3640	6070	230	730	1455	1940	2185	3640	6070	205	540	1080	1410	1620	2700	4500
400	200	705	1410	1730	2115	3530	5880	200	705	1410	1880	2115	3530	5880	190	495	995	1255	1490	2485	4140
500	170	665	1330	1705	1995	3325	5540	170	665	1330	1775	1995	3325	5540	170	465	930	1165	1395	2330	3880
600	140	605	1210	1615	1815	3025	5040	140	605	1210	1615	1815	3025	5040	140	435	875	1105	1310	2185	3640
650	125	590	1175	1570	1765	2940	4905	125	590	1175	1570	1765	2940	4905	125	430	860	1090	1290	2150	3580
700	110	570	1135	1515	1705	2840	4730	110	570	1135	1515	1705	2840	4730	110	425	850	1075	1275	2125	3540
750	95	530	1065	1420	1595	2660	4430	95	530	1065	1420	1595	2660	4430	950	415	830	1060	1245	2075	3460
800	80	510	1015	1355	1525	2540	4230	80	510	1015	1355	1525	2540	4230	80	105	805	1050	1210	2015	3360
850	65	485	975	1300	1460	2435	4060	65	485	975	1300	1460	2435	4060	65	395	790	1035	1190	1980	3300
900	50	450	900	1200	1350	2245	3745	50	450	900	1200	1350	2245	3745	50	390	780	1025	1165	1945	3240
950	35	375	755	1005	1130	1885	3145	35	385	775	1030	1160	1930	3220	35	380	765	1000	1145	1910	3180
1000	20	260	520	715	780	1305	2170	20	365	725	970	1090	1820	3030	20	320	640	860	965	1605	2675
1050		175	350	530	525	875	1455	20	360	720	960	1080	1800	3000		310	615	825	925	1545	2570
1100		110	220	300	330	550	915	20	300	605	805	905	1510	2515		255	515	685	770	1285	2145
1150		70	135	275	205	345	570	20	225	445	595	670	1115	1855		200	400	520	595	995	1655
1200		40	80	145	125	205	345	20	145	290	385	430	720	1200		155	310	415	465	770	1285
1250																115	225	295	340	565	945
1300																85	170	220	255	430	715



Butt-welded standard ASME B16.25

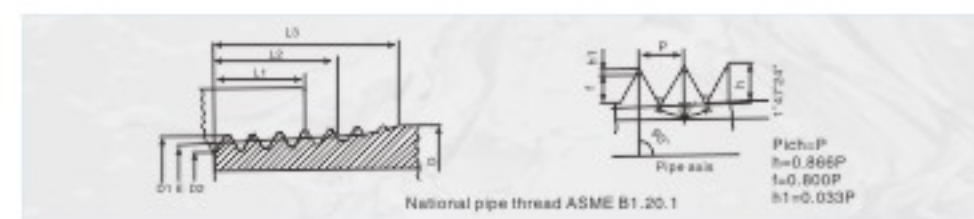
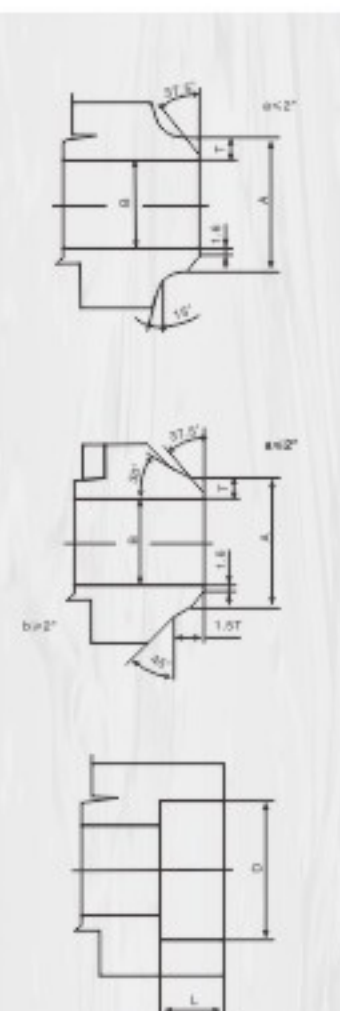
Unit:mm

Normal diameter	SCH.40			SCH.80			SCH.160			SCH.XXS		
	A	B	T	A	B	T	A	B	T	A	B	T
1/2	21.3	15.8	2.77	21.3	13.8	3.73	21.3	11.7	4.78	21.3	6.4	7.47
3/4	26.7	25.0	2.87	26.7	18.9	3.91	26.7	15.6	5.56	26.7	11.1	7.82
1	33.4	26.6	3.38	33.4	24.3	4.55	33.4	20.7	6.35	33.4	15.2	9.09
1 1/4	42.2	35.1	3.55	42.2	32.5	4.85	42.2	29.5	6.35	42.2	22.8	9.70
1 1/2	48.3	41.0	3.68	48.3	38.1	5.08	48.3	33.5	7.41	48.3	28.0	10.15
2	60.3	52.5	3.91	60.3	49.2	5.54	60.3	42.9	8.74	60.3	38.2	11.07
2 1/2	73.0	62.7	5.15	73.0	59.0	7.01	73.0	54.0	9.53	73.0	45.0	14.02
3	88.9	78.0	5.48	88.9	73.7	7.62	88.9	66.6	11.13	88.9	58.4	15.24
4	114.3	102.3	6.02	114.3	97.2	8.56	114.3	85.3	13.49	114.3	80.1	17.12

Foreign socket welded standard JB-ANSI-JIS

Unit:mm

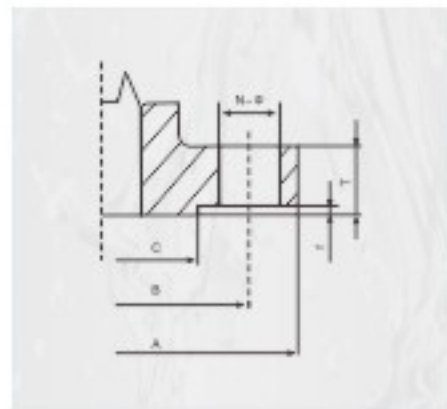
Normal diameter	JB		ANSI		JIS	
	D	L	D	L	D	L
1/4	14.5	10.0	14.1	9.6	14.3	9.6
3/8	18.0	10.0	17.6	9.6	17.9	9.6
1/2	22.5	10.0	21.8	9.6	22.2	9.6
3/4	28.5	11.0	27.1	12.7	27.7	12.7
1	34.5	12.0	33.8	12.7	34.5	12.7
1 1/4	43.0	14	42.6	12.7	43.2	12.7
1 1/2	49.0	15	48.7	12.7	49.1	12.7
2	61.2	16	61.2	15.9	61.2	15.9



Thread standard ASME B 1.20.1

Unit:mm

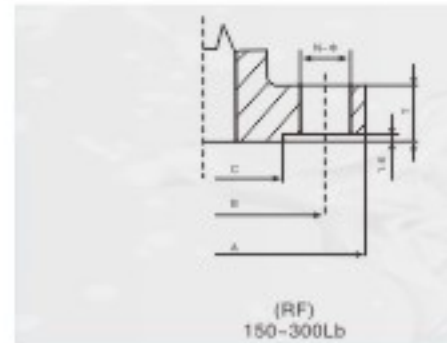
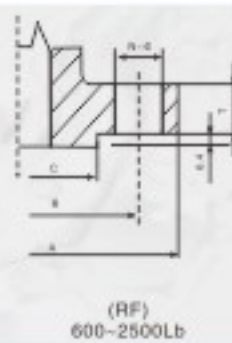
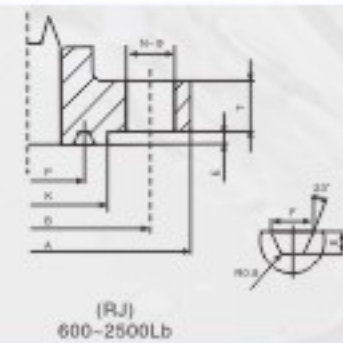
Normal diameter		O.D.OF Pipe	Threads sep in.	Pitch of thread	O.D.AT Beginning of thread	Pitch dia.at beginning of ext.thread	Root dia.at beginning of ext.thread	Handtight engagement	Effective thread ext.length	Overall length ext.thread
		D	N	P	D1	E	D2	L1	L2	L3
1/8	inch mm	0.41 10.29	1.06 27	0.04 0.940	0.39 9.982	0.36 9.233	0.26 6.484	0.18 4.572	0.26 6.703	0.39 9.967
1/4	inch mm	0.54 13.72	0.71 18	0.06 1.412	0.52 13.259	0.48 12.126	0.43 10.998	0.20 5.080	0.40 10.206	0.59 15.103
3/8	inch mm	0.67 17.14	0.71 18	0.06 1.412	0.66 16.662	0.61 15.545	0.57 14.427	0.24 6.096	0.41 10.358	0.60 15.255
1/2	inch mm	0.84 21.34	0.55 14	0.07 1.814	0.82 20.726	0.76 19.263	0.70 17.805	0.32 8.128	0.53 13.556	0.78 19.850
3/4	inch mm	1.05 26.67	0.55 14	0.07 1.814	1.03 26.035	0.97 24.580	0.91 23.139	0.34 8.611	0.55 13.861	0.79 20.155
1	inch mm	1.31 33.40	0.45 11.1/2	0.09 2.210	1.28 32.588	1.21 30.825	1.14 29.058	0.40 10.160	0.68 17.343	0.98 25.008
1 1/4	inch mm	1.66 42.16	0.45 11.1/2	0.09 2.210	1.63 41.326	1.56 39.550	1.49 37.795	0.42 10.688	0.71 17.953	1.01 25.616
1 1/2	inch mm	1.90 48.26	0.45 11.1/2	0.09 2.210	1.87 47.396	1.80 45.621	1.73 43.866	0.42 10.668	0.72 18.377	1.03 26.040
2	inch mm	2.37 60.32	0.45 11.1/2	0.09 2.210	2.34 59.411	2.27 57.633	2.20 55.855	0.44 11.074	0.76 19.215	1.06 26.878



DIN flange-2544-45-46

mm

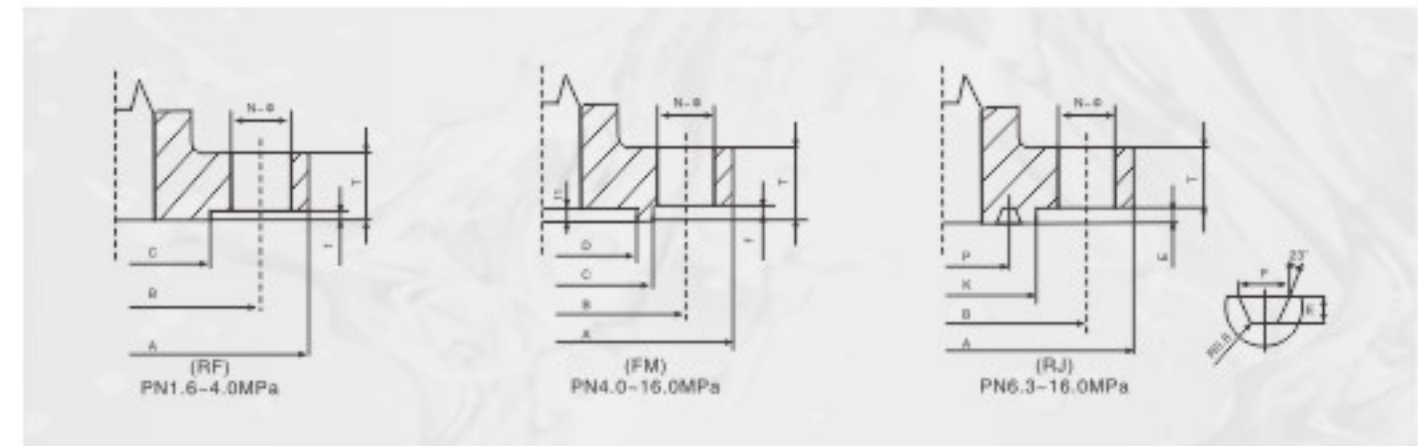
PN	DN	NPS	A	B	C	T	f	Bolt hole	
								N	Φ
25 40	15	1/2	95	65	45	16	2	4	14
	20	3/4	105	75	58	18	2	4	14
	25	1	115	85	68	18	2	4	14
	32	1 1/4	140	100	78	18	2	4	18
	40	1 1/2	150	110	88	18	3	4	18
64	50	2	165	125	102	20	3	4	18
	15	1/2	105	75	45	20	2	4	14
	20	3/4	130	90	58	22	2	4	18
	25	1	140	100	65	24	2	4	18
	32	1 1/4	155	110	75	24	2	4	22
	40	1 1/2	170	125	88	26	3	4	22
	50	2	180	135	95	26	3	4	22

(RF)
150~300Lb(RF)
600~2500Lb(RJ)
600~2500Lb

Flange Dimensions

ASME B16.5 :mm

CLASS	NPS	A	B	C	T	Bolt hole		Ring type joint				Ring No
						N	Φ	K	P	F	E	
150	1/2	89	60.3	34.9	11.5	4	16	-	-	-	-	-
	3/4	98	69.8	42.9	13.0	4	16	-	-	-	-	-
	1	108	79.4	50.8	14.5	4	16	63.5	47.62	8.74	6.4	R15
	1 1/4	117	88.9	63.5	16.0	4	16	73.0	57.15	8.74	6.4	R17
	1 1/2	127	98.4	73.0	17.5	4	16	82.5	65.07	8.74	6.4	R19
	2	152	120.6	92.1	19.5	4	20	102.0	82.55	8.74	6.4	R22
300	1/2	95	66.7	34.9	14.5	4	16	51.0	34.14	7.14	5.6	R11
	3/4	117	82.5	42.9	16.0	4	20	63.5	42.88	8.74	6.4	R13
	1	124	88.9	50.8	17.5	4	20	70.0	50.80	8.74	6.4	R16
	1 1/4	133	98.4	63.5	19.5	4	20	79.5	60.32	8.74	6.4	R18
	1 1/2	156	114.3	73.0	21.0	4	23	90.5	68.28	8.74	6.4	R20
	2	165	127.0	92.1	22.5	8	20	108.0	82.55	11.91	8.0	R23
600	1/2	95	66.7	34.9	14.5	4	16	51.0	34.14	7.14	5.6	R11
	3/4	117	82.5	42.9	16.0	4	20	63.5	42.88	8.74	6.4	R13
	1	124	88.9	50.8	17.5	4	20	70.0	50.80	8.74	6.4	R16
	1 1/4	133	98.4	63.5	21.0	4	20	79.5	60.32	8.74	6.4	R18
	1 1/2	156	114.3	73.0	22.5	4	23	90.5	68.28	8.74	6.4	R20
	2	165	127.0	92.1	25.5	8	20	108.0	82.55	11.91	8.0	R23
900 1500	1/2	121	82.5	34.9	22.5	4	23	60.5	39.67	8.74	6.4	R12
	3/4	130	88.9	42.9	25.5	4	23	66.5	44.45	8.74	6.4	R14
	1	149	101.6	50.8	29.0	4	26	71.5	50.80	8.74	6.4	R16
	1 1/4	159	111.1	63.5	29.0	4	26	81.0	60.32	8.74	6.4	R18
	1 1/2	178	123.8	73.0	32.0	4	29	92.0	68.28	8.74	6.4	R20
	2	216	165.1	92.1	38.5	8	26	124.0	92.25	11.91	8.0	R24
2500	1/2	133	88.9	34.9	30.5	4	23	65.0	42.88	8.74	6.4	R13
	3/4	140	95.2	42.9	32.0	4	23	73.0	50.80	8.74	6.4	R16
	1	159	107.9	50.8	35.0	4	26	82.5	60.32	8.74	6.4	R18
	1 1/4	184	130.2	63.5	38.5	4	29	101.5	72.24	11.91	6.4	R21
	1 1/2	203	146	73.0	44.5	4	32	114.5	82.55	11.91	6.4	R23
	2	235	171.4	92.1	51.0	8	29	133.5	101.60	11.91	8.0	R26



Flange Dimensions

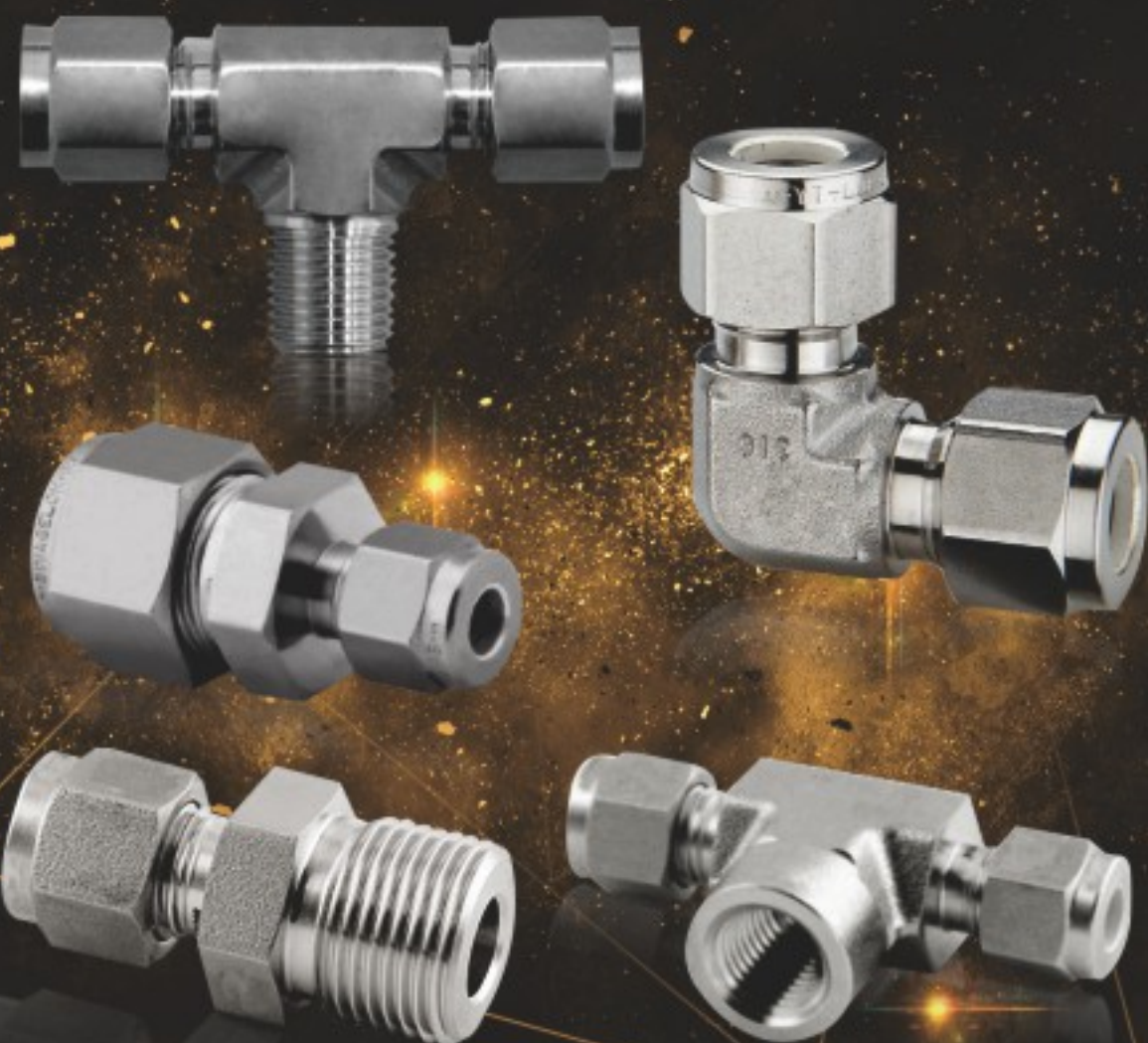
JB/T79.1 4-94; JB/T82.1 4-94 :mm

PN (MPa)	DN	A	B	C	D	T	f	f1	Bolt hole		Ring type joint			
									N	Φ	K	P	F	E
1.6	10	90	60	40	-	14	2	-	4	14	-	-	-	-
	15	95	65	45	-	14	2	-	4	14	-	-	-	-
	20	105	75	55	-	14	2	-	4	14	-	-	-	-
	25	115	85	65	-	14	2	-	4	14	-	-	-	-
	32	135	100	78	-	16	2	-	4	18	-	-	-	-
	40	145	110	85	-	16	3	-	4	18	-	-	-	-
2.5 4.0	50	160	125	100	-	16	3	-	4	18	-	-	-	-
	10	90	60	40	35	16	2	4	4	14	-	-	-	-
	15	95	65	45	40	16	2	4	4	14	-	-	-	-
	20	105	75	55	51	16	2	4	4	14	-	-	-	-
	25	115	85	65	58	16	2	4	4	14	-	-	-	-
	32	135	100	78	66	18	2	4	4	18	-	-	-	-
6.3	40	145	110	85	76	18	3	4	4	18	-	-	-	-
	50	160	125	100	88	20	3	4	4	18	-	-	-	-
	10	100	70	50	35	18	2	4	4	14	50	35	9	6.5
	15	105	75	55	40	18	2	4	4	14	55	35	9	6.5
	20	125	90	68	51	20	2	4	4	18	68	45	9	6.5
	25	135	100	78	58	22	2	4	4	18	78	50	9	6.5
10.0	32	150	110	82	66	24	2	4	4	23	82	65	9	6.5
	40	165	125	95	76	24	3	4	4	23	95	75	9	6.5
	50	175	135	105	88	26	3	4	4	23	105	85	12	8
	10	100	70	50	35	18	2	4	4	14	50	35	9	6.5
	15	105	75	55	40	20	2	4	4	14	55	35	9	6.5
	20	125	90	68	51	22	2	4	4	18	68	45	9	6.5
16.0	25	135	100	78	58	24	2	4	4	18	78	50	9	6.5
	32	150	110	82	66	24	2	4	4	23	82	65	9	6.5
	40	165	125	95	76	26	3	4	4	23	95	75	9	6.5
	50	195	145	112	88	28	3	4	4	25	112	85	12	8
	15	110	75	55	40	24	2	4	4	18	52	35	9	6.5
	20	130	90	62	51	26	2	4	4	23	62	45	9	6.5
	25	140	100	72	58	28	2	4	4	23	72	50	9	6.5
	32	165	115	85	66	30	2	4	4	25	85	65	9	6.5
	40	175	125	92	76	32	3	4	4	27	92	75	9	6.5
	50	215	165	132	88	36	3	4	8	25	132	95	12	8

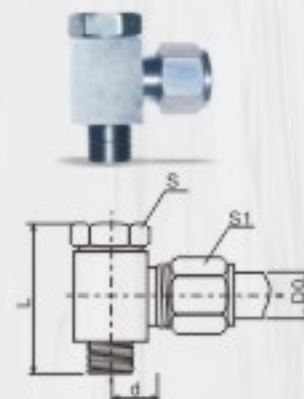
Note: 1, therefore or fm thickness(T) include bulge height f1, RJF thickness(T) not include height E.

2, When PN < 100, flange sealing type normal is rf, if user need RJ flange, please contact with our sell personnel and mark in contract.

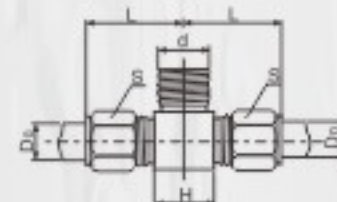
STEEL CARD SLEEVE JOINT SERIES



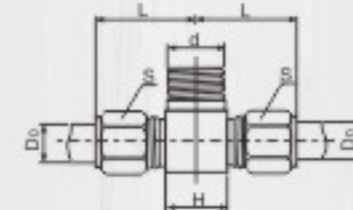
The connector deals with contact
According to standard: GB3750.1-83
The performance is standard: Q/ZB.1051



The direct shipping links terminal deals with contact
According to standard: GB3741.1-83
The performance is standard: Q/ZB.1030.1



The direct shipping links terminal
awl tube deals with contact
According to standard: GB3741.1-83
The performance is standard: Q/ZB.1030.2



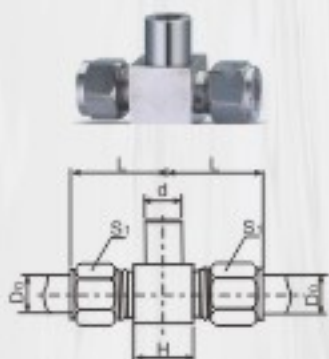
NO	D ₀	d	L	S
1	φ4	M10×1	31	14
2	φ6	G1/8	31	17
3	φ8	G1/4	36	17
4	φ10	M14×1.5	42	19
5	φ12	M16×1.5	44	24
6	φ12	G3/8	48	24
7	φ14	M20×1.5	46	24
8	φ14	G1/2	48	24
9	φ14	M24×1.5	48	24
10	φ16	G3/4	59	30
11	φ18	M36×2	59	32

NO	D ₀	d	L	S
1	φ3	G1/8	21	10
2	φ4	M10×1	23	10
3	φ6	M12×1.25	27	12
4	φ8	G1/4	30	14
5	φ10	G3/8	33	17
6	φ12	M18×1.5	34	19
7	φ14	G1/2	35	22
8	φ16	M20×1.5	37	22
9	φ18	G1/2	37	24
10	φ22	G3/4	42	30
11	φ28	G1	46	36
12	φ34	G1 1/2	56	41
13	φ42	G1 1/2	61	50

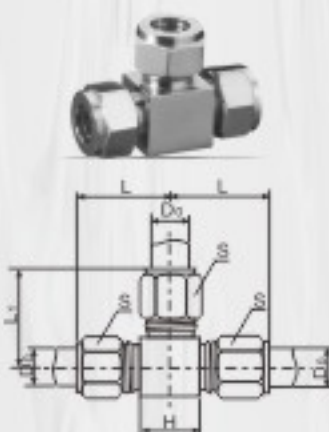
NO	D ₀	d	L	S
1	φ3	ZG1/8"	21	10
2	φ4	ZG1/8"	23	10
3	φ6	ZG1/4"	27	12
4	φ8	ZG1/4"	30	14
5	φ10	ZG1/4"	33	17
6	φ12	ZG3/8"	34	19
7	φ14	ZG3/8"	35	22
8	φ16	ZG1/2"	37	22
9	φ18	ZG1/2"	37	24
10	φ22	ZG3/4"	42	30
11	φ28	ZG1"	46	36
12	φ34	ZG1 1/2"	56	41
13	φ42	ZG1 1/2"	61	50



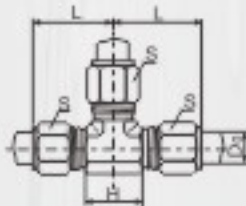
The direct shipping links combination deals with contact
According to standard: GB3753.1-83
The performance is standard: Q/ZB.1073



The direct shipping links deals with contact in the center
According to standard: GB3745.1-83
The performance is standard: Q/ZB.1032



The direct shipping links different path deals with contact
According to standard: GB3745.1-83
The performance is standard: Q/ZB.1035



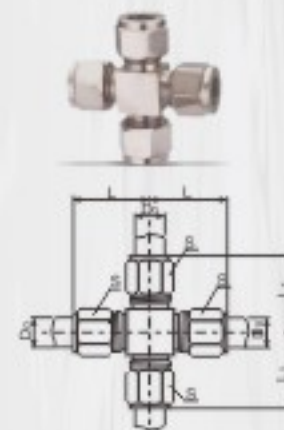
NO	D ₀	d	L	S1
1	φ4	φ4	23	10
2	φ6	φ6	27	12
3	φ8	φ8	30	14
4	φ10	φ10	33	17
5	φ12	φ12	34	19
6	φ14	φ14	35	22
7	φ16	φ16	37	22
8	φ18	φ18	37	24
9	φ22	φ22	42	30
10	φ28	φ28	46	36
11	φ34	φ34	56	41
12	φ42	φ42	61	50

NO	D ₀	L	L ₁	S
1	φ3	21	21	10
2	φ4	23	23	10
3	φ6	27	27	12
4	φ8	30	30	14
5	φ10	33	33	17
6	φ12	34	34	19
7	φ14	35	35	22
8	φ16	37	37	22
9	φ18	37	37	24
10	φ22	45	45	30
11	φ28	49	49	36
12	φ34	56	56	41
13	φ42	61	61	50

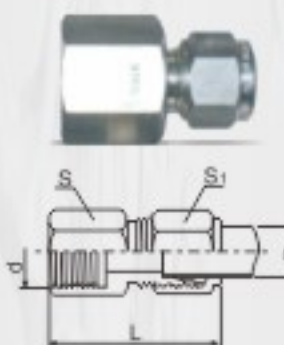
NO	D ₀	L	L ₁	S
1	φ3	21	21	10
2	φ4	23	23	10
3	φ6	27	27	12
4	φ8	30	30	14
5	φ10	33	33	17
6	φ12	34	34	19
7	φ14	35	35	22
8	φ16	37	37	22
9	φ18	37	37	24
10	φ22	45	45	30
11	φ28	49	49	36
12	φ34	56	56	41
13	φ42	61	61	50



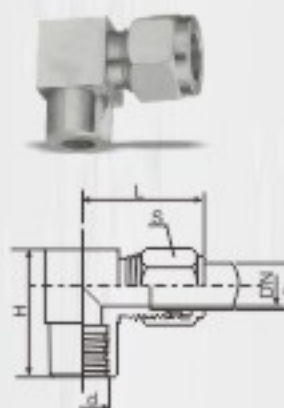
4 deal with contact in the center
According to standard: GB3746.1-83
The performance is standard: Q/ZB.1042



Manometer keeps to deal with contact
According to standard: GB3751.1-83
The performance is standard: Q/ZB.1013



Manometer bends to deal with contact
According to standard: K12-4
The performance is standard: Q/ZB.1023



NO	D ₀	L	L ₁	S
1	φ3	21	21	10
2	φ4	23	23	10
3	φ6	27	27	12
4	φ8	30	30	14
5	φ10	33	33	17
6	φ12	34	34	19
7	φ14	35	35	22
8	φ16	37	37	22
9	φ18	37	37	24
10	φ22	42	42	30
11	φ28	46	46	36
12	φ34	56	56	41
13	φ42	61	61	50

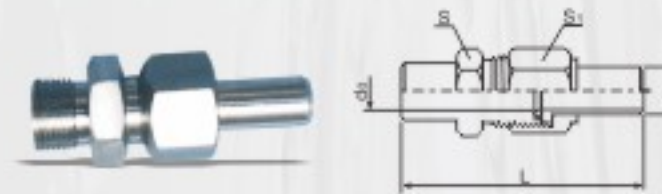
NO	D ₀	d	L	S
1	φ6	M10×1	37	17
2	φ6	M14×1.5	39	19
3	φ6	M20×1.5	40	27
4	φ14	M20×1.5	41	27

NO	D ₀	d	L	H
1	φ6	M10×1	27	20
2	φ6	M14×1.5	30	21
3	φ6	M20×1.5	32	28
4	φ14	M20×1.5	37	30

WELDING TYPE PRESSURE PAD SEAL PIPE JOINTB SERIES

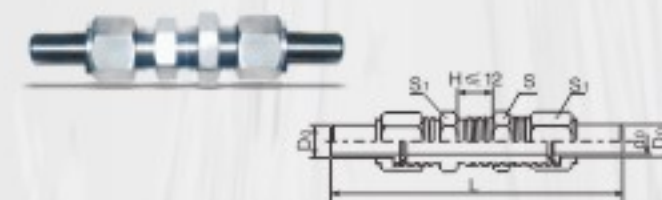


Keep to deal with contact in the center
According to standard: JB970-77
The performance is standard: Q/ZB.1212



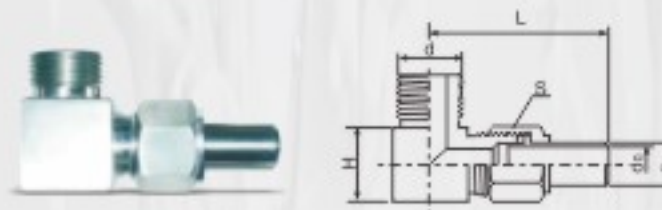
NO	D ₀	L	S	S ₁
1	φ6	44	14	17
2	φ10	49	19	17
3	φ14	60	27	22
4	φ18	66	32	27
5	φ22	69	36	30
6	φ28	75	41	36
7	φ34	87	50	46
8	φ42	97	60	55
9	φ50	106	70	65

Keeping wears plank to deal with contact
According to standard: JB974-77
The performance is standard: Q/ZB.1214



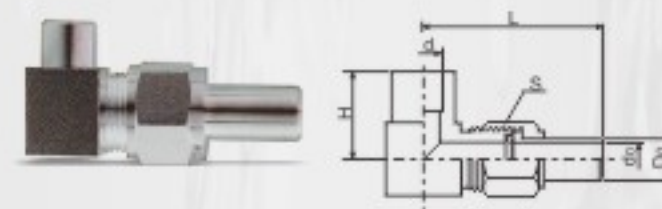
NO	D ₀	L	S	S ₂
1	φ6	91	17	17
2	φ10	103	22	22
3	φ14	116	30	27
4	φ18	126	36	32
5	φ22	132	41	36
6	φ28	144	50	41
7	φ34	158	55	50
8	φ42	172	65	60
9	φ50	188	75	70

The curved head terminal deals with contact
According to standard: K12-22
The performance is standard: Q/ZB.1220.1



NO	D ₀	d	L	S
1	φ14	M18×1.5	50	27
2	φ14	M20×1.5	50	27
3	φ14	G 1/2"	50	27
4	φ18	M18×1.5	51	30
5	φ18	M20×1.5	51	30
6	φ18	G 1/2"	51	30

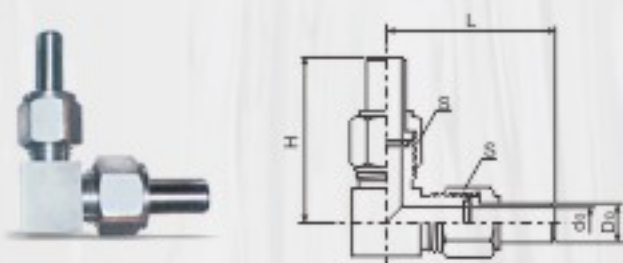
The curved deals with contact in the center
According to standard: JB971-77
The performance is standard: Q/ZB.1222.1



NO	D ₀	L	H	S
1	φ6	38	15	17
2	φ10	45	19	22
3	φ14	54	26	27
4	φ18	60	27	30
5	φ22	64	32	36
6	φ28	72	36	41
7	φ34	83	45	46
8	φ42	92	55	55
9	φ50	104	65	70

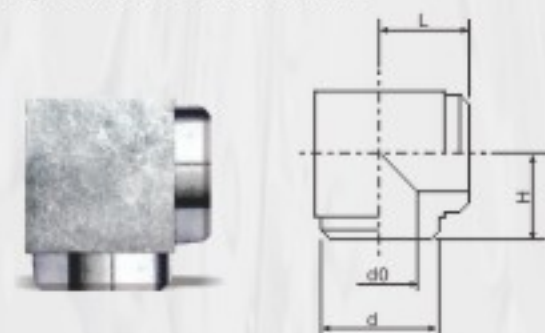


The curved head deals with contact in the center
The performance is standard: Q/ZB.1222.2



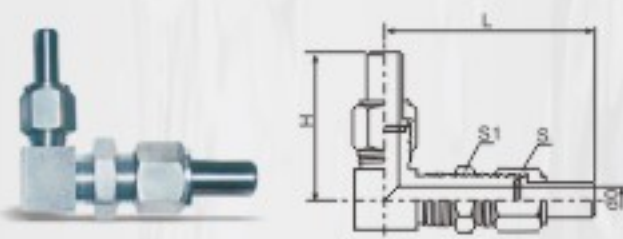
NO	D ₀	L	H	S
1	φ6	38	38	14
2	φ10	45	45	19
3	φ14	54	54	27
4	φ18	60	60	32
5	φ22	64	64	36
6	φ28	72	72	41
7	φ34	83	83	50
8	φ42	92	92	60
9	φ50	104	104	65

The curved welds a connector
According to standard: JB979-77
The performance is standard: Q/ZB.1264



NO	D ₀	d ₀	L	H
1	φ6	φ3	9	9
2	φ10	φ6	12	12
3	φ14	φ10	15	15
4	φ18	φ12	19	19
5	φ22	φ15	21	21
6	φ28	φ20	25	25
7	φ34	φ25	30	30
8	φ42	φ32	35	35
9	φ50	φ36	40	40

The curved wears plank to deal with contact
According to standard: JB975-77
The performance is standard: Q/ZB.1224



NO	D ₀	L	H	S
1	φ6	68	43	17
2	φ10	76	51	22
3	φ14	88	59	27
4	φ18	95	67	32
5	φ22	105	71	36
6	φ28	111	79	41
7	φ34	122	90	50
8	φ42	137	100	60
9	φ50	150	110	65

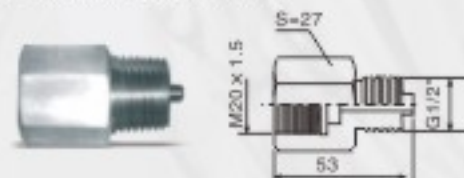
AUTOMATIC CONTROL INSTRUMENT PIPELINE ACCESSORIES SERIES



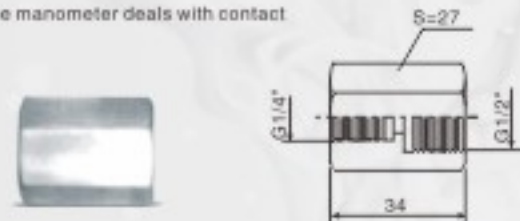
Connecting the watch valve deals with contact



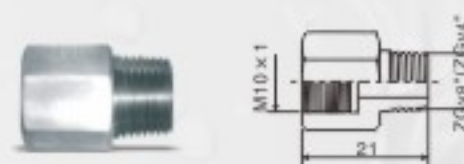
The manometer deals with contact



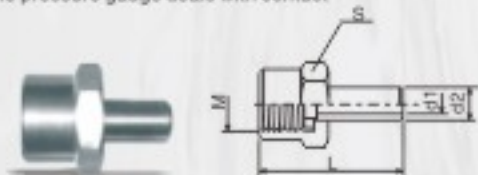
The manometer deals with contact



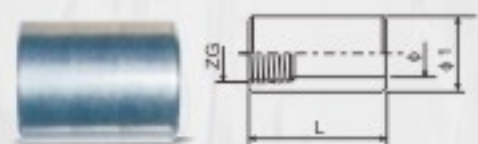
The manometer deals with contact



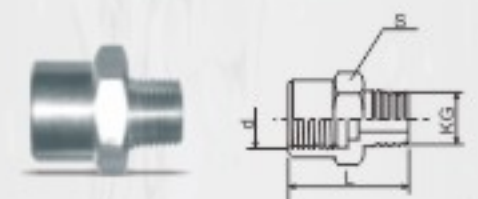
The pressure gauge deals with contact



The pressure tube is heavy to control at first



The manometer combination deals with contact



NO	M	S	d ₂	L
1	M20 × 1.5	27	φ 12	55.5
2	M14 × 1.5	19	φ 7	48.5

NO	ZG	L	ϕ	ϕ_1
1	ZG ¹ / ₂ [*]	120	18	30
2	ZG ¹ / ₂ [*]	120	35	23
3	ZG1 [*]	120	44	29
4	ZG ³ / ₂ [*]	120	65	43

NO	D	KG	S	L
1	M10×1	ZG $\frac{1}{8}$ "	14	26
2	M12×1.25	ZG $\frac{1}{8}$ "	17	17
3	M14×1.5	ZG $\frac{1}{8}$ "	19	28
4	M20×1.5	ZG $\frac{1}{8}$ "	27	32
5	G $\frac{1}{2}$ "	ZG $\frac{1}{8}$ "	27	32
6	M10×1	ZG $\frac{1}{2}$ "	17	26
7	M12×1.25	ZG $\frac{1}{2}$ "	17	29
8	M14×1.5	ZG $\frac{1}{2}$ "	19	30
9	M20×1.5	ZG $\frac{1}{2}$ "	27	34
10	G $\frac{1}{2}$ "	ZG $\frac{1}{2}$ "	27	34



Inside the stalk line metals soft tube deal with contact



Outside stalk line the metals soft tube deals with contact



Concealed container



Concealed container



Separate container



NO	d	d ₀	S	L
1	ZG ¹ / ₂ [*]	φ 13	27	53
2	ZG ¹ / ₂ [*]	φ 17	27	53
3	ZG _v [*]	φ 21	27	53
4	ZG ² / ₄ [*]	φ 21	36	57
5	ZG1 [*]	φ 31	42	76
6	ZG ¹ / ₂ [*]	φ 46	55	84

NO	d	D ₀	S	L
1	M16×5	17	24	49
2	M20×1.5	19.5	27	56
3	M33×2	31	39	71
4	G ^{3/4} _s *	19.5	30	58
5	G1*	25	36	69
6	ZG ^{1/2} _g	19.5	27	60
7	ZG ^{3/4} _s *	19.5	30	62

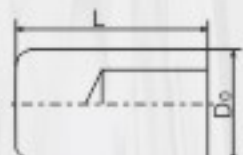
NO	Mpa	DN	5 1	5 2
1	6.4	100	6	15
2	1.6	100	10	15

NO	Mpa	DN	δ 1	δ 2
1	6,4	100	6	15
2	1,6	100	10	15

NO	Mpa	DN	8 1	8 2
1	6,4	100	6	15
2	1,6	100	10	15



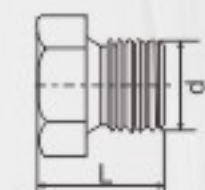
Card mode head



Card mode head



Outside thread head



Inside thread head



Siphon turn



NO	1	2	3	4	5	6	7	8	9	10	11	12
D ₀	φ4	φ6	φ8	φ10	φ12	φ14	φ16	φ18	φ22	φ28	φ34	φ42
L	22	25	25	28	28	28	28	30	36	40	44	46

NO	1	2	3	4	5	6	7	8	9	10	11	12
16MPa												
D ₀	φ4	φ6	φ8	φ10	φ12	φ14	φ16	φ18	φ22	φ28	φ34	φ42
L	25	25.2	29.5	31	32	33	35	35	38	41	47	47
32MPa												
D ₀	6	8	10	12	14	18	22	28	34	42		
L	30	30.5	34	36	36	37	42	47	53	57		

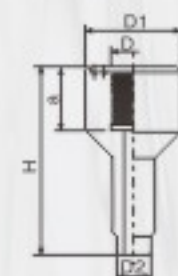
NO	1	2	3	4	5	6
d	G ¹ / ₄ "	G ³ / ₈ "	G ¹ / ₂ "	G ³ / ₄ "	M20×1.5	M27×2
L	20	23	29	24	28	34

NO	1	2	3	4	5	6
d	ZG ¹ / ₄ "	ZG ³ / ₈ "	ZG ¹ / ₂ "	ZG ³ / ₄ "	ZG1"	ZG1 1/2"
L	22	24	29	33	38	45

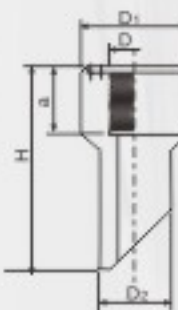
NO	L	d	d ₁	PN	APPLICABLE TEMPERATURE
1	228	G3/8"	G3/8"	≤20MPa	t≤350℃
2	232	G1/2"	G1/2"	≤20MPa	t≤350℃
3	228	G3/8"	ZG3/8"	≤20MPa	t≤350℃
4	232	G1/2"	ZG1/2"	≤20MPa	t≤350℃



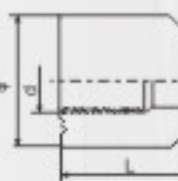
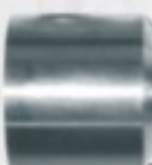
Keeping the form connects to deal with contact
According to standard: HK01-001



The cape form connects to deal with contact
According to standard: HK01-002



The thermometer socket



The double metals thermometer takes care of a mouth



NO	D	D ₁	D ₂	H
1	M12×1.5	φ32	φ12	60
2	M20×1.5	φ40	φ14	60
3	M27×2	φ47	φ22	80
4	M33×2	φ55	φ30	80
5	G1/2	φ39	φ21	60
6	G3/4	φ47	φ25	80
7	G1	φ55	φ35	120

NO	D	D ₁	D ₂	H
1	M27×2	φ47	φ28	90
2	M33×2	φ55	φ36	150
3	G1/2	φ39	φ27	90
4	G3/4	φ47	φ31	90
5	G1	φ55	φ41	150

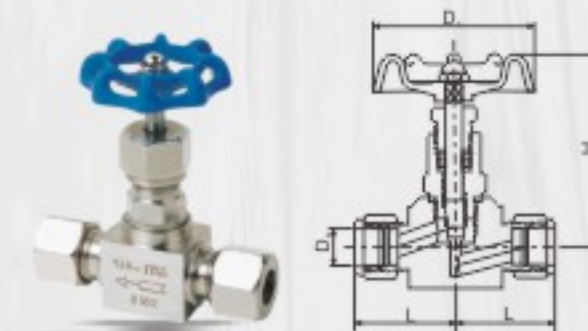
NO	d	L	φ
1	G1"	30	50
2	G ³ / ₄ "	40	40
3	G1"	50	50
4	M27×2	40	40

d	D	D ₁	d ₀	L
M27×2	φ50	φ35	φ12	100

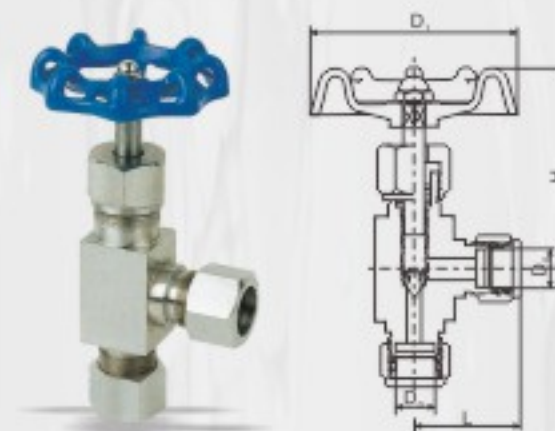
MEASURING LINE STOP VALVE SERIES



J91^W_H The card set closes valve



J94^W_H The card set cape type closes valve



- Design manufacture according:
GB/T 12224-1989
JB/T 7747-1995

- Link a form:
Card mode

- Structure characteristic:
The awl noodles seals completely; Movable valve petal

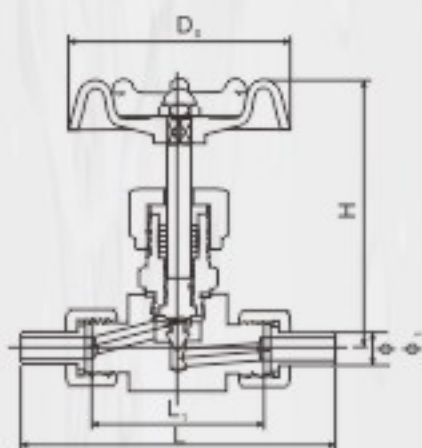
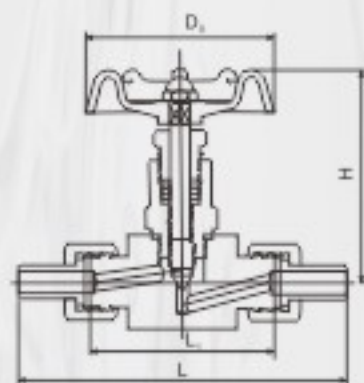
- The valve examines with experiment:
GB/T 13927-1992

Unit: MPa

Test Itme	Pressure Valve
Nominal Pressure	6.4
Shell Test	9.6
Test	7.0
Air Pressure Test	0.9
Suitable Temperature	≤180℃
Suitable Medium	Water, Steam, Oil goods

Type	Body	Tie-In	Valve Handle	Screw Nut	Packing
J91H-64	20#	20#	2Cr13	20#	Lesible graphite
J91W-64P	304SS	304SS	304SS	304SS	Lesible graphite
J91W-64R	316SS	316SS	316SS	316SS	Lesible graphite

D0	D1	L	H
φ8	φ70	38	92
φ10	φ70	38	92
φ12	φ70	39	92
φ14	φ70	40	94
φ18	φ80	42	100

J23^{1W}_{3H} The outside thread closes valve

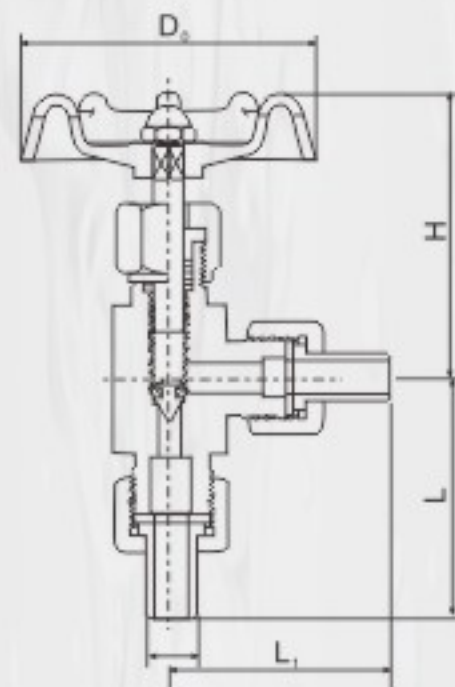
- Design manufacture according:
GB/T 12224-1989
JB/T 7747-1995
- Link a form:
Outside the thread butt welding type
- Structure characteristic:
The awl noodles seals completely; Movable valve petal
- The valve examines with experiment:
GB/T 13927-1992
GB/T 13927-1992

Unit: MPa

Test Itme	Pressure Valve
Nominal Pressure	16
Shell Test	24
Test	17.6
Air Pressure Test	0.9
Suitable Temperature	≤425℃
Suitable Medium	Water, Steam, Oil goods

Type	Body	Tie-In	Valve Handle	Screw Nut	Packing
J23H-160	20#	20#	2Cr13	20#	Lesible graphite
J23W-160P	304SS	304SS	304SS	304SS	Lesible graphite
J23W-160R	316SS	316SS	316SS	316SS	Lesible graphite

Specif-ication	φ	φ1	L1	L2	L	H	D0	D0
DN6	φ14	φ12	60	60	122	88	60	70
DN10	φ18	φ14	60	70	122	88	60	80
DN15	φ22	φ17	62	80	134	88	70	80
DN20	φ28	φ19	67	90	142	110	80	110
DN25	φ34	φ22	77	100	159	110	80	130

J24^{1W}_{4H} The outside thread cape type closes valve

- Design manufacture according:
GB/T 12224-1989
JB/T 7747-1995
- Link a form:
Outside the thread butt welding type
- Structure characteristic:
The awl noodles seals completely;
Movable valve petal Right angle type passage
- The valve examines with experiment:
GB/T 13927-1992

Unit: MPa

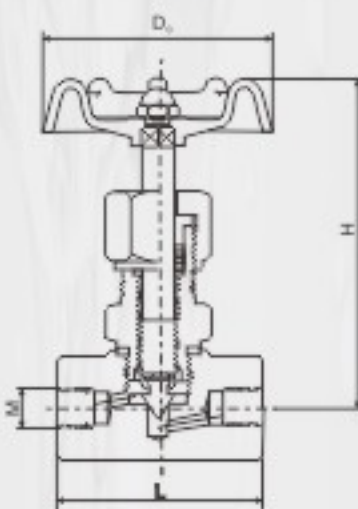
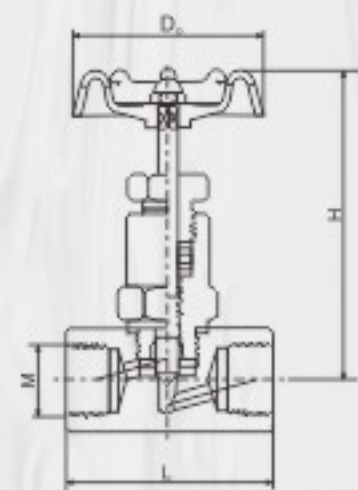
Test Itme	Pressure Valve
Nominal Pressure	16
Shell Test	24
Test	17.6
Air Pressure Test	0.9
Suitable Temperature	≤250℃
Suitable Medium	Water, Steam, Oil goods

Type	Body	Tie-In	Valve Handle	Screw Nut	Packing
J24H-64	20#	20#	2Cr13	20#	Lesible graphite
J24W-64P	304SS	304SS	304SS	304SS	Lesible graphite
J24W-64R	316SS	316SS	316SS	316SS	Lesible graphite

Specif-ication	φ	φ	L	L1	H	D0	D0
DN6	φ12	φ14	66	60	76	70	60
DN10	φ14	φ18	66	60	76	80	60
DN15	φ17	φ22	71	65	81	80	70
DN20	φ19	φ28	73	67	87	110	80
DN25	φ22	φ34	79	73	81	130	100



W
J13H Inside the thread closes valve



Design manufacture according:

GB/T 12224-1989

JB/T 7747-1995

Link a form:

Inside the thread link

Structure characteristic:

The awl noodles seals completely; Movable valve petal

The valve examines with experiment:

The valve examines with experiment:

GB/T 13927-1992

Unit: MPa

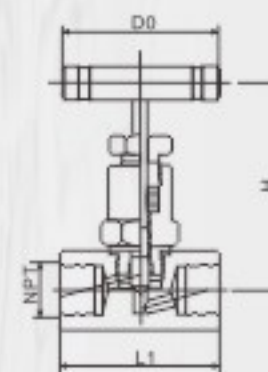
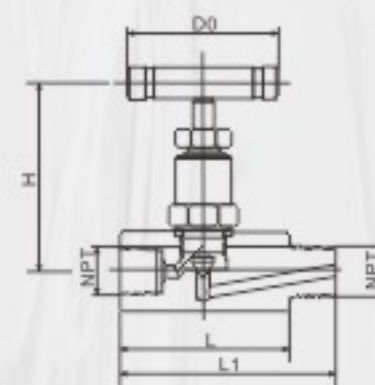
Test Item	Pressure Valve
Nominal Pressure	16
Shell Test	24
Test	17.6
Air Pressure Test	0.9
Suitable Temperature	≤250℃
Suitable Medium	Water, Steam, Oil goods

Type	Body	Tie-In	Valve Handle	Screw Nut	Packing
J13H-160	20#	20#	2Cr13	20#	Lesible graphite
J13W-160P	304SS	304SS	304SS	304SS	Lesible graphite
J13W-160R	316SS	316SS	316SS	316SS	Lesible graphite

Specif-ication	M	L	H	D0	D0
DN6	G1/4	58	85	60	60
DN10	G3/8	58	87	60	60
DN15	G1/2	60	87	65	70
DN20	G3/4	70	100	70	80
DN25	ZG1	78	110	80	100
DN32	G1 1/4	102	130	100	110



W
J11 Inside the outside thread closes valve



Design manufacture according:

ANSI B 16.34-1996

Link a form:

NPT(M.F)

NPT(M.F)inside outside the thread link

Structure characteristic:

The awl noodles seals completely

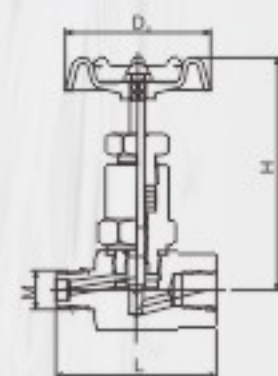
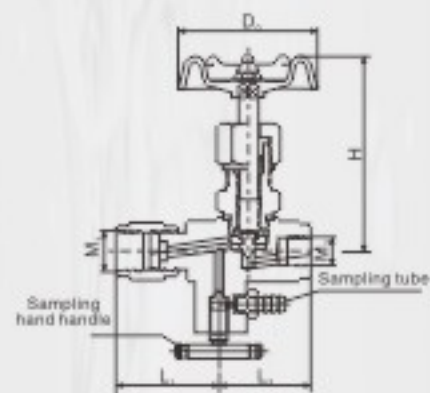
The valve examines with experiment:

API STD 598-1996

Unit: MPa

Test Item	Pressure Valve
Nominal Pressure	6000PSI
Shell Test	6000PSI
Test	6000PSI
Air Pressure Test	24
Suitable Temperature	≤250℃
Suitable Medium	Water, Steam, Oil goods

Specif-ication	NPT	L	L1	H	D0
DN6	1/4NPT	58	75	75	60
DN10	3/8NPT	58	78	75	60
DN15	1/2NPT	68	86	77	60

J21^W_H The manometer closes valveCj123^W_H I am multi-function to closes valve

- Design manufacture according:
GB/T 12224-1989
JB/T 7747-1995
- Link a form:
Inside outside the thread link
- Structure characteristic:
The awl noodles seals completely; Movable valve petal
- The valve examines with experiment:
GB/T 13927-1992

Unit: MPa

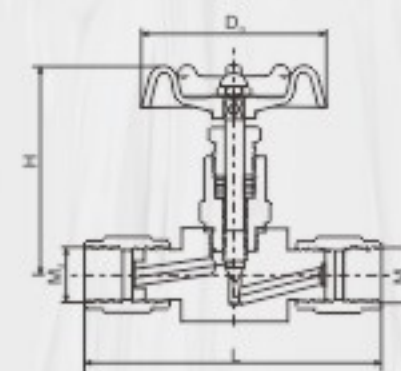
Test Itme	Pressure Valve
Nominal Pressure	16
Shell Test	24
Test	17.6
Air Pressure Test	0.9
Suitable Temperatue	≤250℃
Suitable Medium	Water, Steam, Oil goods

Specif-ication	D0	M	L	H
DN6	60	G1/4	65	85
DN10	60	G1/2	68	87
DN15	70	ZG3/4	86	87
DN20	80	ZG1	100	100

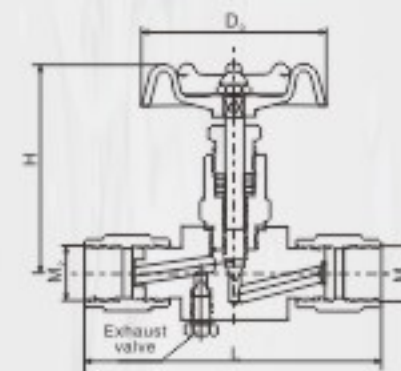
Specif-ication	M1	M2	L1	L2	H	D0
DN6	M20 × 1.5	G1/2	54	46	93	60



JJ•M1 The manometer closes valve



JJ•M8 The reduce expenses type closes valve



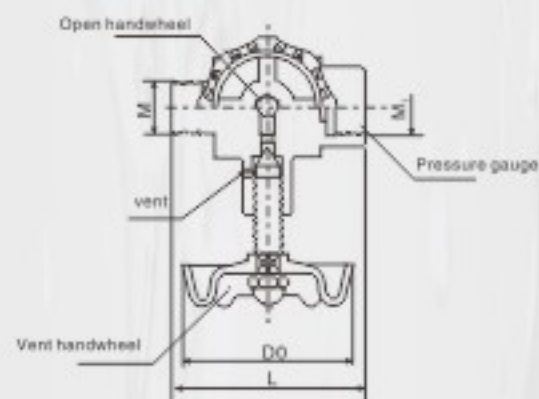
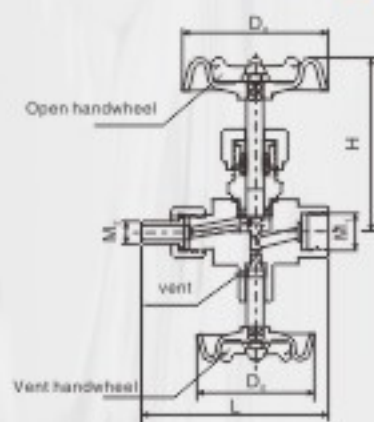
- Design manufacture according:
GB/T 12224-1989
JB/T 7747-1995
- Link a form:
The tube deals with contact inside screw link
- Structure characteristic:
The awl noodles seals completely; Movable valve petal
- The valve examines with experiment:
GB/T 13927-1992

Specif-ication	M1	M2	L	H	D0
DN5	M20 × 1.5	M20 × 1.5(left)	112	84	70
DN5	M20 × 1.5	G1/2	112	84	70

Unit: MPa

Test Itme	Pressure Valve
Nominal Pressure	6.4
Shell Test	9.6
Test	7.0
Air Pressure Test	0.9
Suitable Temperatue	≤180℃
Suitable Medium	Water, Steam, Oil goods

Specif-ication	M1	M2	L	H	D0
DN5	M20 × 1.5	M20 × 1.5(left)	112	84	70
DN5	M20 × 1.5	G1/2	112	84	70

J19^W_H Manometer direct shipping links valve

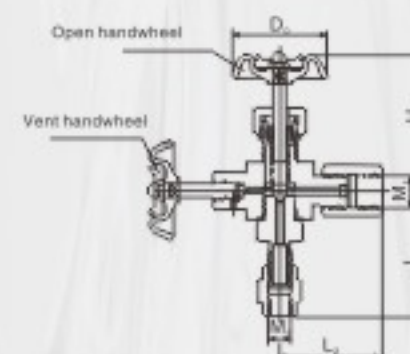
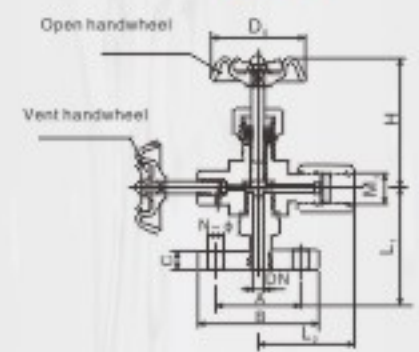
- Design manufacture according:
GB/T 12224-1989
JB/T 7747-1995
- Link a form:
Butt welding type the tube deals with contact; inside screw
- Structure characteristic:
The awl noodles seals completely; Movable valve petal
- The valve examines with experiment:
GB/T 13927-1992

Unit: MPa

Test Itme	Pressure Valve
Nominal Pressure	10
Shell Test	15
Test	11
Air Pressure Test	0.6
Suitable Temperatue	≤180℃
Suitable Medium	Water, Steam, Oil goods

Type	Body	Tie-In	Valve Handle	Screw Nut	Packing
J19H-100	20#	20#	2Cr13	20#	Lesible graphite
J19W-100P	304SS	304SS	304SS	304SS	Lesible graphite
J19W-100R	316SS	316SS	316SS	316SS	Lesible graphite

Specif-ication	M	M1	φ	L	H	D0	L1
DN4	M20×1.5	M20×1.5	φ14	115	93	60	95

J29^W_H The pressure gauge closes valveJ49^W_H The pressure gauge closes valve

- Design manufacture according:
GB/T 12224-1989
JB/T 7747-1995
- Link a form:
J29: The tube deals with contact inside screw link;
J49: Flange link
- Structure characteristic:
The awl noodles seals completely; Movable valve petal
- The valve examines with experiment:
GB/T 13927-1992

J29 Main dimension

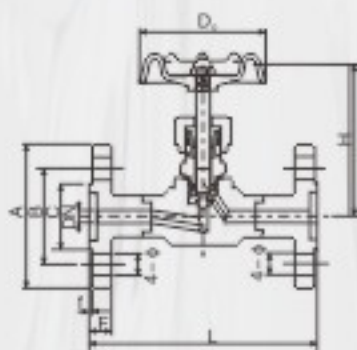
Specif-ication	M1	M2	L	L2	H	D0
DN3	M20×1.5	M14×1.5	60	56	86	70

Unit: MPa

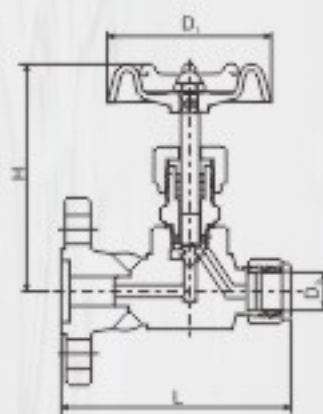
Test Itme	Pressure Valve
Nominal Pressure	32
Shell Test	48
Test	35
Air Pressure Test	0.9
Suitable Temperatue	≤450℃
Suitable Medium	Water, Steam, Oil goods

J49 Main dimension

Specif-ication	M1	B	L1	L2	H	D0
DN6	M20×1.5	70	62	60	86	60

J43^W_H The method orchid closes valve

JJ-BY1 The manometer closes valve



- Design manufacture according:
GB/T 12224-1989
GB/T 12235-1989
- Link a form:
Flange link
- Structure characteristic:
The awl noodles seals completely;
Last thread valve pole
- The valve examines with experiment:
GB/T 13927-1992

Unit: MPa

Test Item	Pressure Valve
Nominal Pressure	2.5
Shell Test	3.7
Test	2.75
Air Pressure Test	0.9
Suitable Temperature	≤180°C
Suitable Medium	Water, Steam, Oil goods

Type	Body	Tie-In	Valve Handle	Screw Nut	Packing
J48H-25	20#	20#	2Cr13	20#	Lesible g aphite
J48W-25P	304SS	304SS	304SS	304SS	Lesible graphite
J48W-25R	316SS	316SS	316SS	316SS	Lesible graphite

Specifi- cation	A	L	H	D ₀
DN10	90	130	90	60
DN15	92	122	90	60
DN20	105	150	105	80
DN25	115	150	120	100

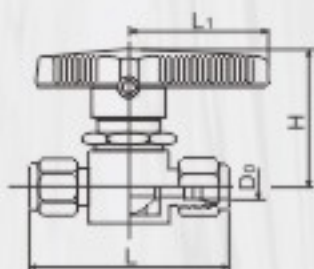
Specifi- cation	D ₀	D ₁	L	H
DN6	φ 12	60	105	87
DN6	φ 14	70	110	90

PNEUMATIC LINE BALL VALVE SERIES

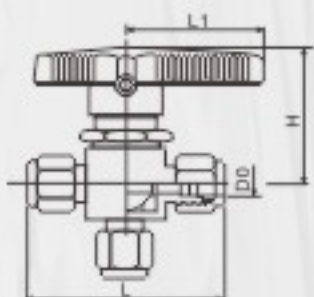




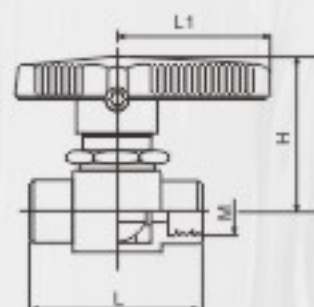
Q91SAF-64
Card mode ball valve



Q94SAF-64
Card mode ball valve



Q11SAF-64
Inside thread ball valve



Apply to lie quality: Air, Oil article, Water

Make material: 304SS 316SS 20#

Link a form: The card set links

Specifi- cation	D0	L	L1	H
DN3	Φ6	60	38	32
DN6	Φ8	65	38	42
DN10	Φ14	75	38	50

Apply to lie quality: Air, Oil article, Water

Make material: 304SS 316SS 20#

Link a form: The card set links

Specifi- cation	D0	L	L1	H
DN3	Φ6	60	38	32
DN6	Φ8	65	38	42
DN10	Φ14	75	38	50

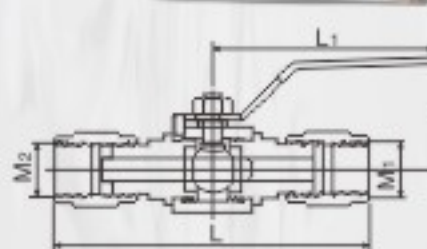
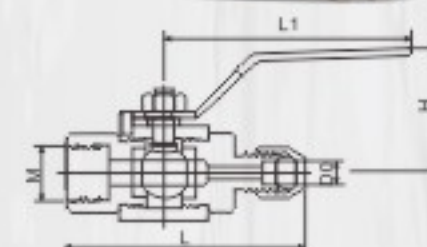
Apply to lie quality: Air, Oil article, Water

Make material: 304SS 316SS 20#

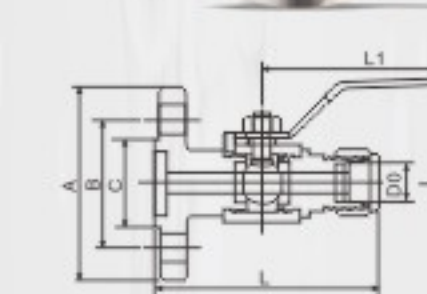
Link a form: Inside the thread link

Specifi- cation	L	L1	M	H
DN3	40	30	M12 × 1.25	32
DN3	40	30	ZG1/8	32
DN6	50	38	ZG1/4	42

QG · QY1
Annoy a source ball valve



QG · AY1
Take to press a ball valve



Apply to lie quality: Air

Make material: 304SS 316SS 20#

Link a form: Inside the thread link

Specifi- cation	D0	L	L1	M	H	Nominal Pressure
DN4	Φ6	90	110	G1/2	44	≤6.4MPa
DN6	Φ8	90	110	G1/2	44	≤6.4MPa
DN8	Φ10	95	110	G1/2	44	≤6.4MPa

Apply to lie quality: Air, Oil article, Water

Make material: 304SS 316SS 20#

Link a form: Inside the thread link

NO	M1	M2	L	L1	H
1	M20 × 1.5	M20 × 1.5left	145	110	44
2	G1/2	M20 × 1.5left	145	110	44

Apply to lie quality: Air, Oil article, Water

Make material: 304SS 316SS 20#

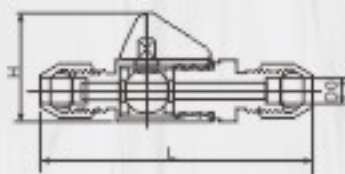
Link a form: The card set links

Specifi- cation	D0	L	H	L1	A
DN3	Φ10	105	44	110	90
DN6	Φ12	106	44	110	90
DN10	Φ14	108	44	110	90



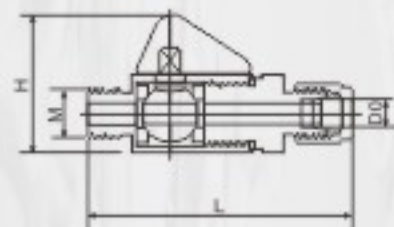
QY-1

The spirit moves the tube road ball valve



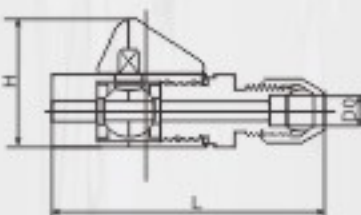
QY-2

Card mode ball valve



QY-3

The spirit moves the tube road ball valve



Apply to lie quality: Air

Make material: 304SS 316SS 20#

Link a form: The card hoop links

Specif-ication	D0	L	H	Nominal Pressure
DN3	Φ6	86	≈40	≤1MPa
DN6	Φ8	90	≈40	≤1MPa
DN10	Φ10	95	≈40	≤1MPa

Apply to lie quality: Air, Oil article, Water

Make material: 304SS 316SS 20#

Link a form: The card hoop links

Specif-ication	D0	L	H	M	Nominal Pressure
DN3	Φ6	80	≈40	G1/8	≤1MPa
DN6	Φ8	84	≈40	ZG1/4	≤1MPa
DN10	Φ10	90	≈40	ZG3/8	≤1MPa

Apply to lie quality: Air

Make material: 304SS 316SS 20#

Link a form: The card hoop links

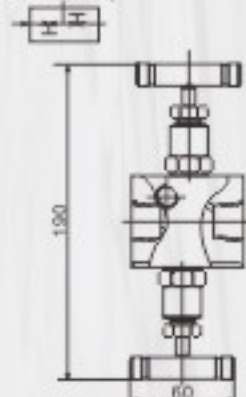
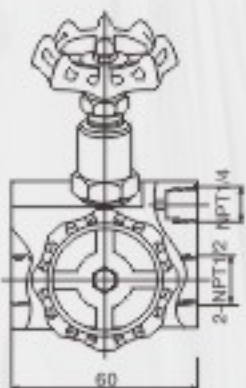
Specif-ication	D0	L	H	Nominal Pressure
Dn3	Φ6	80	≈40	≤1MPa
DN6	Φ8	82	≈40	≤1MPa
DN10	Φ10	84	≈40	≤1MPa

INSTRUMENT VALVE SERIES

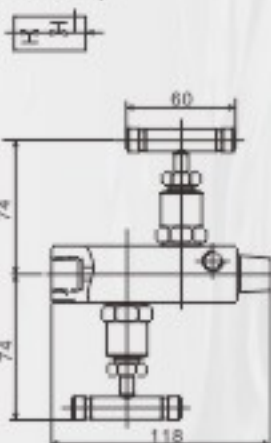


SINOVAL2051-3
Two series valves

Sketch map

SINOVAL2051-4
Two series valvesSINOVAL2051-5
Two series valves

Sketch map



Apply to lie quality: Oil, Water, Air

Apply temperature: -70~240℃ -20~440℃

No	Nominal Pressure	DN	Import	Export	Body Material
1	20MPa	6	NPT1/2	NPT1/2	20#
2	-	6	NPT1/2	NPT1/2	304SS
3	32MPa	6	NPT1/2	NPT1/2	20#
4	-	6	NPT1/2	NPT1/2	1Cr18Ni9Ti

Apply to lie quality: Oil, Water, Air

Apply temperature: -70~240℃ -20~440℃

No	Nominal Pressure	DN	Import	Export	Body Material
1	16MPa	6	NPT1/2	NPT1/2	20#
2	-	6	-	-	304SS
3	32MPa	6	-	-	20#
4	-	6	-	-	1Cr18Ni9Ti

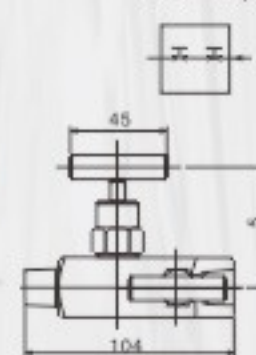
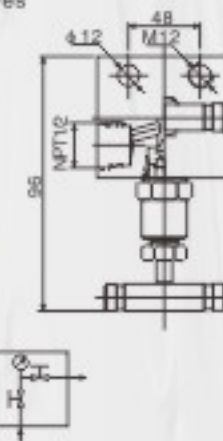
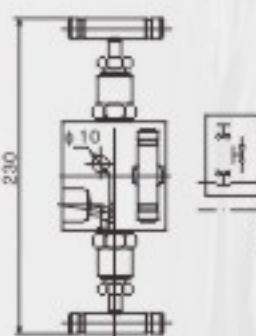
Apply to lie quality: Oil, Water, Air

Apply temperature: -70~240℃ -20~440℃

No	Nominal Pressure	DN	Import	Export	Body Material
1	20MPa	6	NPT1/2 outside	NPT1/2 inside	20#
2	-	6	NPT1/2 outside	NPT1/2 inside	304SS
3	32MPa	6	NPT1/2 outside	NPT1/2 inside	20#
4	-	6	NPT1/2 outside	NPT1/2 inside	1Cr18Ni9Ti

SINOVAL2051-6
Two series valves

Sketch map

SINOVAL2051-7
Inside thread two series valvesSINOVAL-M2F8
Inside thread three series valves

Apply to lie quality: Oil, Water, Air

Apply temperature: -70~240℃ -20~440℃

No	Nominal Pressure	DN	Import	Export	Body Material
1	20MPa	6	NPT1/2 outside	NPT1/2 inside	20#
2	-	6	NPT1/2 outside	NPT1/2 inside	304SS
3	32MPa	6	NPT1/2 outside	NPT1/2 inside	20#
4	-	6	NPT1/2 outside	NPT1/2 inside	1Cr18Ni9Ti

Apply to lie quality: Oil, Water, Air

Apply temperature: -70~240℃ -20~440℃

No	Nominal Pressure	DN	Import	Export	Body Material
1	16MPa	6	NPT1/2 inside	NPT1/2 inside	20#
2	32MPa	6	R1/2 inside	R1/2 inside	304SS

Apply to lie quality: Oil, Water, Air

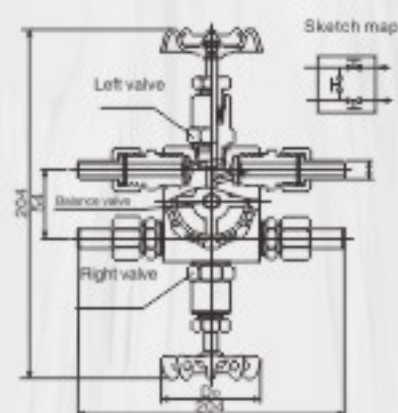
Apply temperature: -70~240℃ -20~440℃

No	Nominal Pressure	DN	Import	Export	Body Material
1	20MPa	6	G1/2 inside	G1/2 inside	20#
2	-	6	ZG1/2 inside	ZG1/2 inside	304SS
3	32MPa	6	NPT1/2 inside	NPT1/2 inside	20#
4	-	6	R1/2 inside	R1/2 inside	1Cr18Ni9Ti



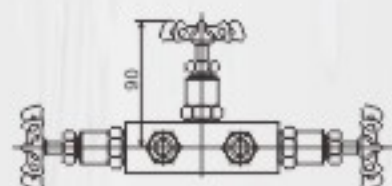
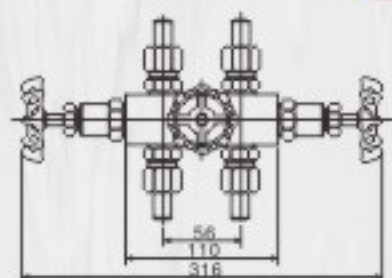
SINOVALQFF3-320P

Three series valves



SINOVALJ23SA-320P

Three series valves



- Design manufacture according:
GB/T 12224-1989
JB/T 8473-1996
- Link a form:
Butt welding type The tube deals with contact
- Structure characteristic:
The awl noodles seals completely
- The valve examines with experiment:
GB/T 13927-1992
- Material:
Carbon steel:GB/T 12228-1989
Stainless steel:GB/T 1220-1989

Unit:MPa

Test Item	Pressure Valve
Pressure	16
Test	24
Test	17.6
Air Pressure Test	9.6
Suitable Temperature	≤425℃
Suitable Medium	Water,Steam,Oil goods

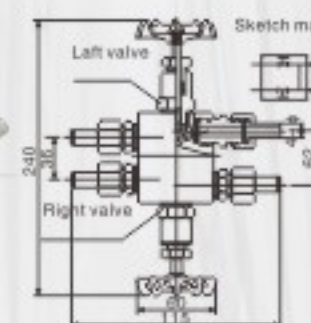
Type	Body	Tie-In	Valve Handle	Screw Nut	Packing
LXQFF3-320P	20#	20#	2Cr13	20#	Lesible graphite
LXJ23SA-320P	SS304	SS304	SS304	SS304	Lesible graphite

Specification	4-φ	A	L1	L2	D0	Weight(kg)
DN6	4-φ14	54	204	240	60	2.9



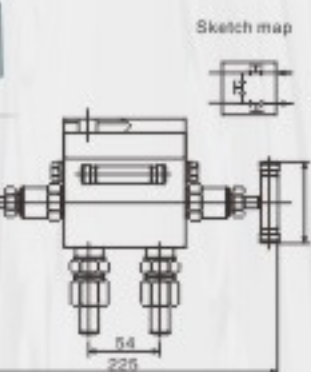
SINOVALQF-05

Equilibrium valve



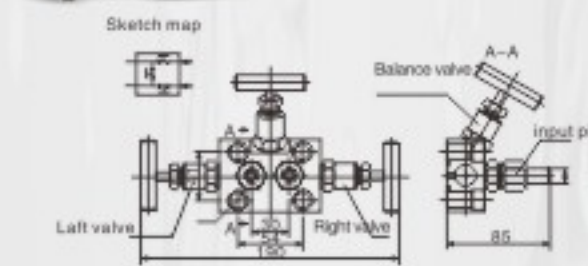
SINOVAL1151-320P

Three series valves



SINOVAL3051H-320P

Integrative three series valves



Apply to lie quality:Oil,Water,Air

Apply temperature:-70-240℃ -20-440℃

No	Nominal Pressure	DN	Import	Export	Body Material
1	20MPa	6	Weld a tube	Weld a tube	35#
2	-	6	Weld a tube	Weld a tube	1Cr18Ni9Ti
3	40MPa	6	Weld a tube	Weld a tube	35#
4	-	6	Weld a tube	Weld a tube	1Cr18Ni9Ti

Apply to lie quality:Oil,Water,Air

Apply temperature:-70-240℃ -20-450℃

No	Nominal Pressure	DN	Import	Export	Body Material
1	32MPa	6	Method orchid	Method orchid	20#
2	32MPa	6	Method orchid	Method orchid	1Cr18Ni9Ti
3	32MPa	6	Method orchid	Method orchid	304SS

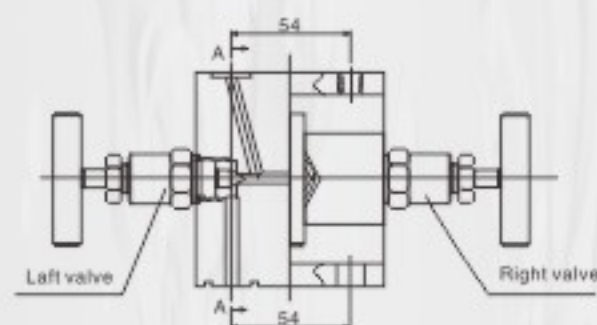
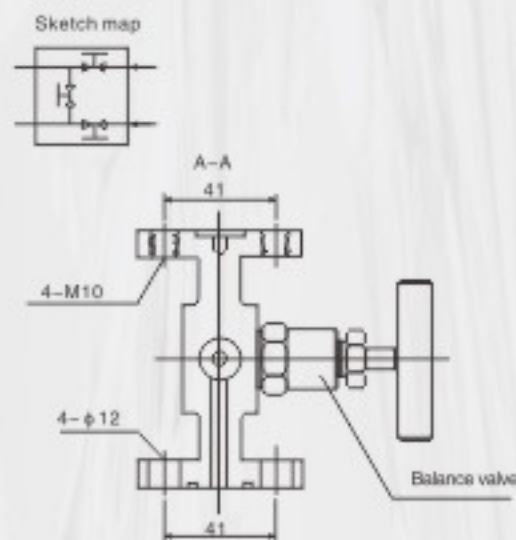
Apply to lie quality:Oil,Water,Air

Apply temperature:-70-240℃ -20-450℃

No	Nominal Pressure	DN	Import	Export	Body Material
1	32MPa	6	Method orchid	Method orchid	20#
2	32MPa	6	Method orchid	Method orchid	1Cr18Ni9Ti
3	32MPa	6	Method orchid	Method orchid	304SS



SINOVAL3051C-320P
Method orchid type three series valves



- Design manufacture according:
GB/T 12224-1989
JB/T 8473-1996
- Link a form:
Flange link,NPT inside screw;
Bolt welding type The tube deals with contact
- Structure characteristic:
The awl noodles seals completely;Movable valve petal
- The valve examines with experiment:
GB/T 13927-1992
- Material:
Carbon steel:GB/T 12226-1989
Stainless steel:GB/T 12220-1989

Unit:MPa

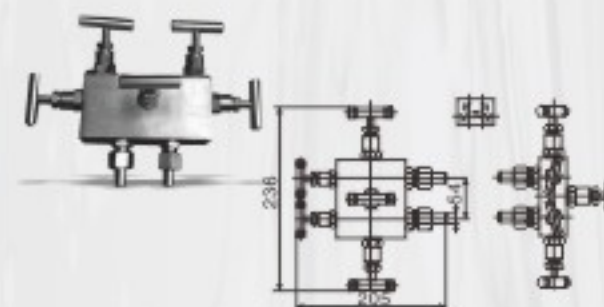
Test Itme	Pressure Valve
Nominal Pressure	16
Shell Test	24
Test	17.6
Air Pressure Test	9.6
Suitable Temperature	≤180℃
Suitable Medium	Water,Steam,Oil goods

Type	Body	Tie-In	Valve Handle	Screw Nut	Packing
3051-320	20#	20#	2Cr13	20#	Lesible graphite
3051C-320P	1Cr18Ni9Ti	1Cr18Ni9Ti	1Cr18Ni9Ti	1Cr18Ni9Ti	Lesible graphite
3051C-320P	1Cr18Ni9Ti	1Cr18Ni9Ti	1Cr18Ni9Ti	1Cr18Ni9Ti	Lesible graphite

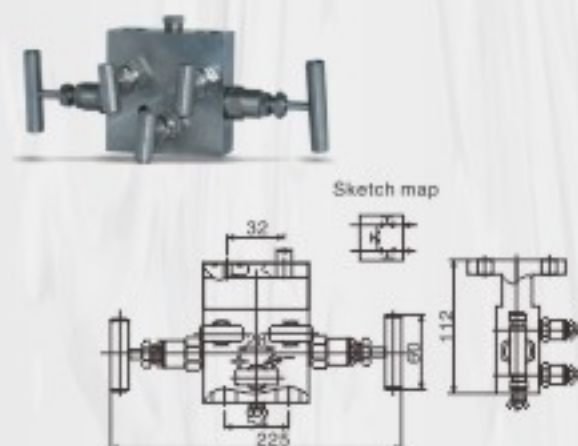
Specification	A	A ₁	B	B ₁	N-φ	N-M	WEIG-HT(kg)
DN6	54	54	41	41	4-φ12	4-M10	2.2



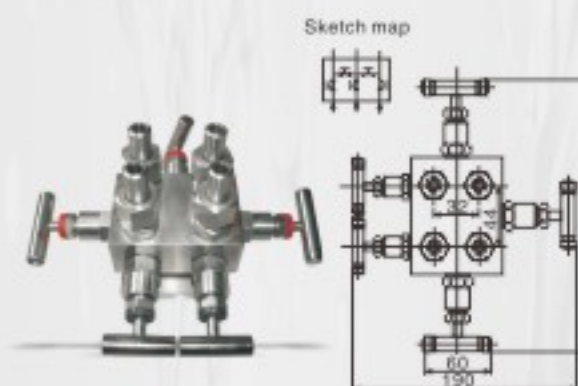
SINOVALWF1/2
Five series valves



SINOVAL5051-320P
Method orchid type five series valves



SINOVAL1151-320P
Five series valves



Apply to lie quality:Oil,Water,Air

Apply temperature:-70-240℃ -20-440℃

No	Nominal Pressure	DN	Import	Export	Body Material
1	32MPa	6	Weld a tube	Weld a tube	20#
2	25MPa	6	Weld a tube	Weld a tube	1Cr18Ni9Ti

Apply to lie quality:Oil,Water,Air

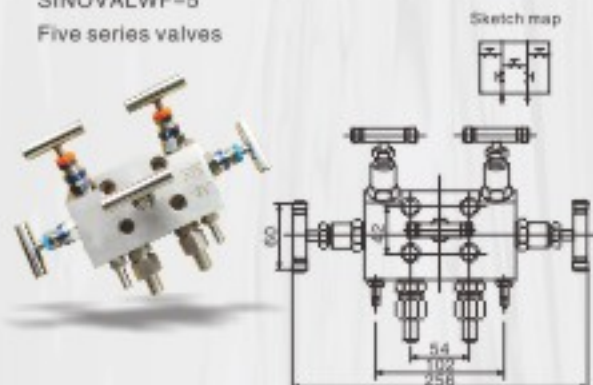
Apply temperature:-70-240℃ -20-440℃

No	Nominal Pressure	DN	Import	Export	Body Material
1	20MPa	6	NPT1/2	Method orchid	35#
2	-	6	-	-	304SS
3	32MPa	6	NPT1/2	Method orchid	35#
4	-	6	-	-	1Cr18Ni9Ti

Apply to lie quality:Oil,Water,Air

Apply temperature:-70-240℃ -20-440℃

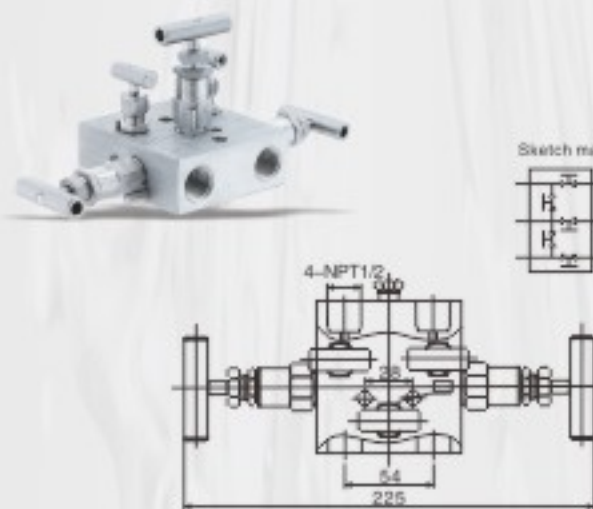
No	Nominal Pressure	DN	Import	Export	Body Material
1	20MPa	6	The plank type installs	Weld a tube	35#
2	-	6	The plank type installs	Weld a tube	304SS
3	32MPa	6	The plank type installs	Weld a tube	35#
4	-	6	The plank type installs	Weld a tube	1Cr18Ni9Ti

SINOVALWF-5
Five series valves

Apply to lie quality: Oil, Water, Air

Apply temperature: -70~240°C -20~440°C

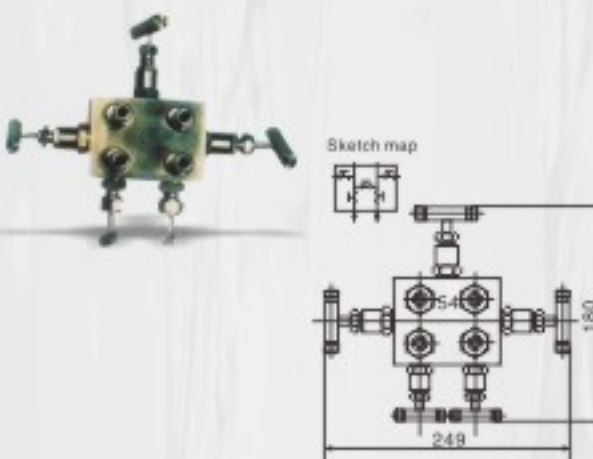
No	Nominal Pressure	DN	Import	Export	Body Material
1	20MPa	6	Method orchid	Weld a tube	20#
2	-	6	Method orchid	Weld a tube	1Cr18Ni9Ti
3	32MPa	6	Method orchid	Weld a tube	20#

SINOVAL5151-320P
Five series valves

Apply to lie quality: Oil, Water, Air

Apply temperature: -70~240°C -20~440°C

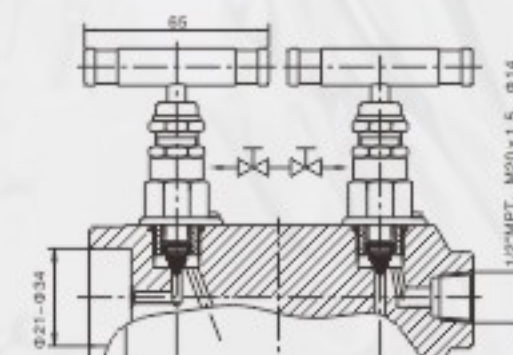
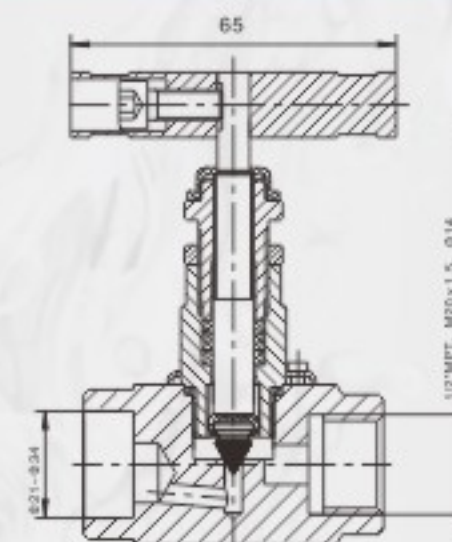
No	Nominal Pressure	DN	Import	Export	Body Material
1	20MPa	6	NPT1/2	Method orchid	35#
2	-	6	-	Method orchid	1Cr18Ni9Ti
3	32MPa	6	NPT1/2	Method orchid	35#

SINOVAL5851-320P
Five series valves

Apply to lie quality: Oil, Water, Air

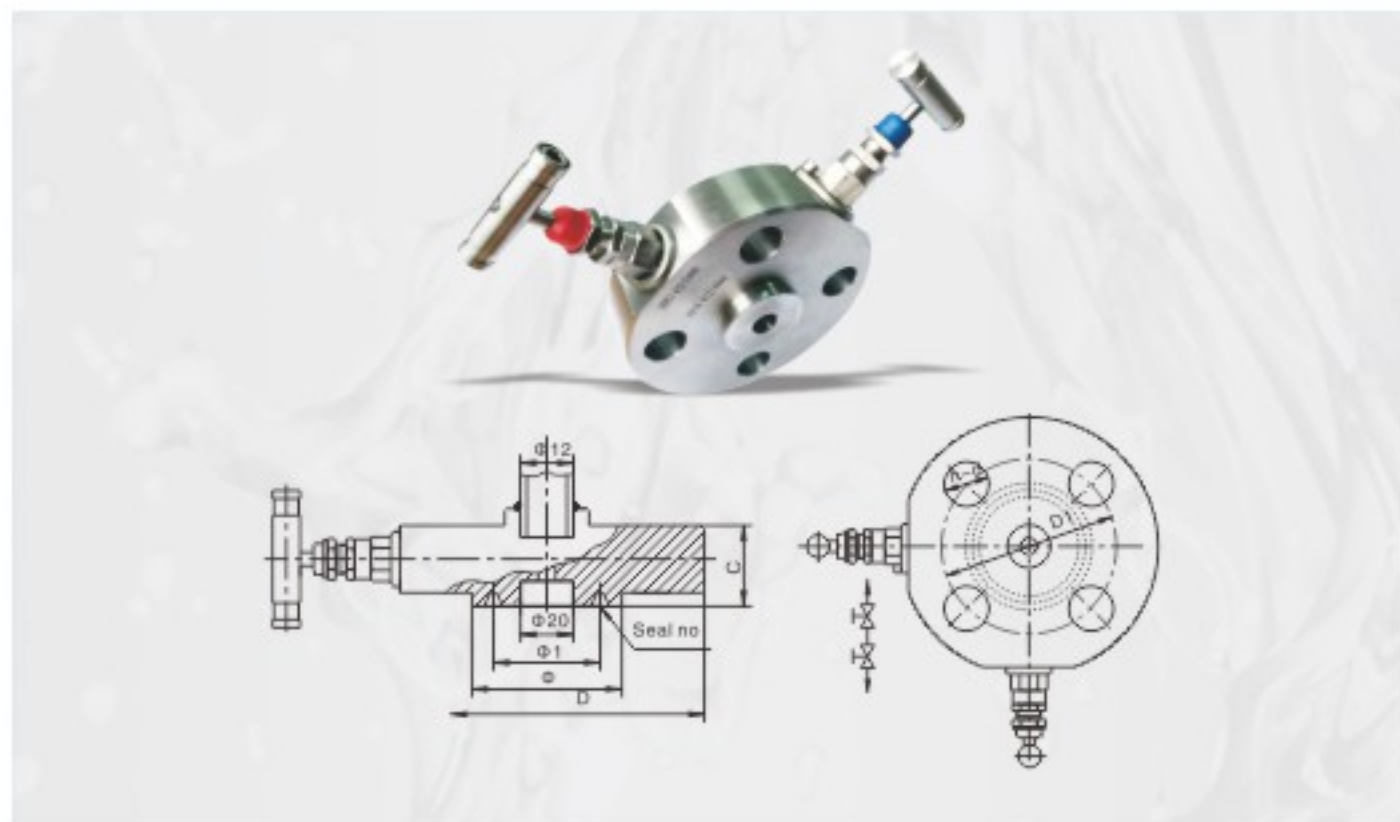
Apply temperature: -70~240°C -20~440°C

No	Nominal Pressure	DN	Import	Export	Body Material
1	20MPa	6	The plank type installs	Weld a tube	35#
2	-	6	The plank type installs	Weld a tube	304SS
3	32MPa	6	The plank type installs	Weld a tube	35#
4	-	6	The plank type installs	Weld a tube	1Cr18Ni9Ti

Double isolation valve for socket welding
SINOVAL2J61Y-CL150-2500P $\phi 34/\phi 14$
SINOVAL2J61Y-CL150-2500P $\phi 21/\phi 14$ Socket welding double partition stop valve
SINOVAL2J16Y-CL150-CL2500Socket welding single partition stop valve
SINOVALJ61Y-CL150-CL2500

■ Design and manufacturing specifications

1. The valves are designed and manufactured in accordance with the standard requirements of JB/T7747-2006.
2. The valves are inspected and accepted in accordance with the standard requirements of API598.
3. Dimensions of socket welding holes are in accordance with ANSI B16.11 and JB/T1751 standards.
4. The strength test of the valves is hydrostatically tested at 1.5 times the nominal pressure.
5. The valve seal test is hydrostatically tested at 1.1 times the nominal pressure.
6. The airtight test is conducted at a nominal pressure of 0.6 MPa.

**Design and manufacturing specifications**

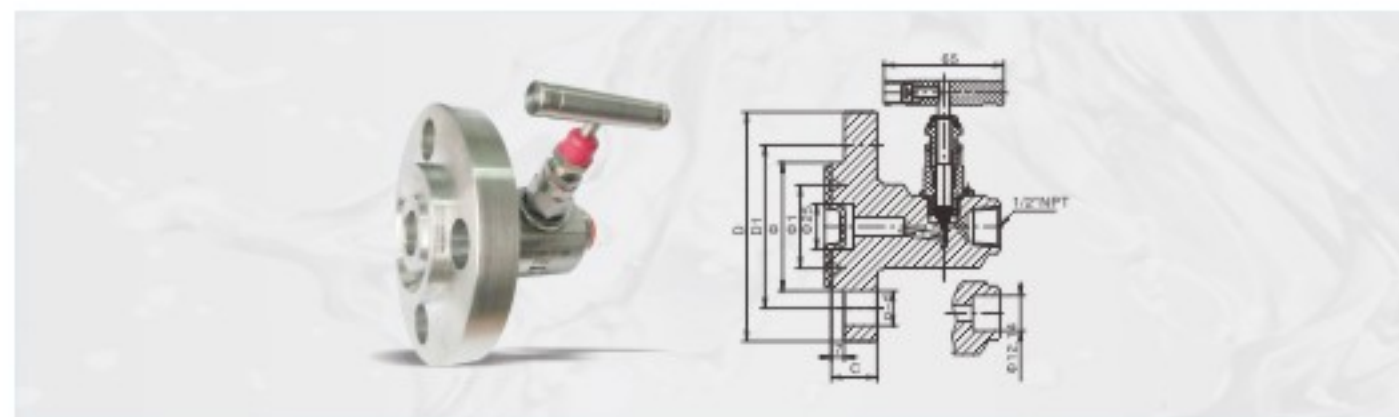
1. The valves are designed and manufactured in accordance with the standard requirements of JB/T7747-2006.
2. The valves are inspected and accepted in accordance with the standard requirements of API598.
3. Dimensions of socket welding holes are in accordance with ANSI B16.5 HG /T20615 standards.
4. The strength test of the valves is hydrostatically tested at 1.5 times the nominal pressure.
5. The valve seal test is hydrostatically tested at 1.1 times the nominal pressure.
6. The airtight test is conducted at a nominal pressure of 0.6 MPa.

Main connection size. SINOVAL2J43Y-PF20-CL150-CL2500P RF, RJ

Class	D	D1	φ1	φ(RF)	φ(RJ)-(R)	C	n-d
CL150	100	79.9		43		11	4-15
CL300	115	82.6	42.8	43	64	R13	4-19
CL600	115	82.6	42.8	43	64	R13	22.9 4-19
CL900	130	88.9	44.5	43	66.5	R14	32.4 4-22
CL1500	130	88.9	44.5	43	66.5	R14	32.4 4-22
CL2500	140	95.2	73	43	82.5	R16	38.8 4-22

Main connection size. SINOVAL2J43Y-PF25-CL150-CL2500P RF, RJ

Class	D	D1	φ1	φ(RF)	φ(RJ)-(R)	C	n-d
CL150	110	79.5		51		11.6	4-15
CL300	125	88.9	50.8	51	70	R16	17.9 4-19
CL600	125	88.9	50.8	51	70	R16	24.5 4-19
CL900	150	101.6	50.8	51	71.5	R16	35.6 4-25
CL1500	150	101.6	50.8	51	71.5	R16	35.6 4-25
CL2500	160	108	60.3	51	82.5	R18	42.0 4-25

**Design and manufacturing specifications**

1. The valves are designed and manufactured in accordance with the standard requirements of JB/T7747-2006.
2. The valves are inspected and accepted in accordance with the standard requirements of API598.
3. Dimensions of socket welding holes are in accordance with ANSI B16.5 HG /T20615 standards.
4. The strength test of the valves is hydrostatically tested at 1.5 times the nominal pressure.
5. The valve seal test is hydrostatically tested at 1.1 times the nominal pressure.
6. The airtight test is conducted at a nominal pressure of 0.6 MPa.

Main connection size.

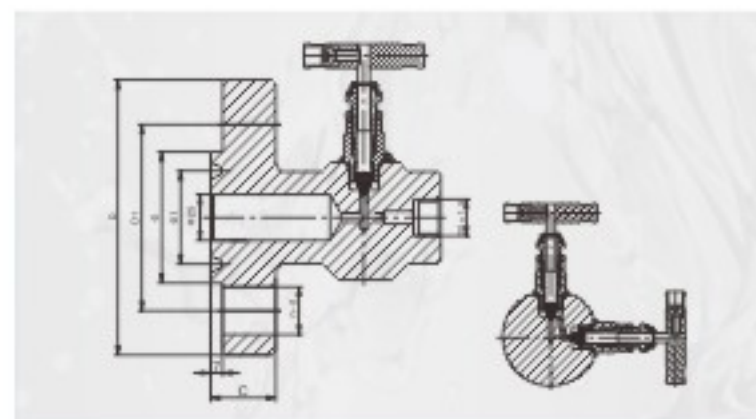
SINOVALJ43Y-ZF20-CL150-CL2500P RF, RJ

Class	D	D1	φ1	φ(RF)	φ(RJ)-(R)	C	n-d
CL150	100	79.9		43		11	4-15
CL300	115	82.6	42.8	43	64	R13	16.3 4-19
CL600	115	82.6	42.8	43	64	R13	22.9 4-19
CL900	130	88.9	44.5	43	66.5	R14	32.4 4-22
CL1500	130	88.9	44.5	43	66.5	R14	32.4 4-22
CL2500	140	95.2	73	43	82.5	R16	38.8 4-22

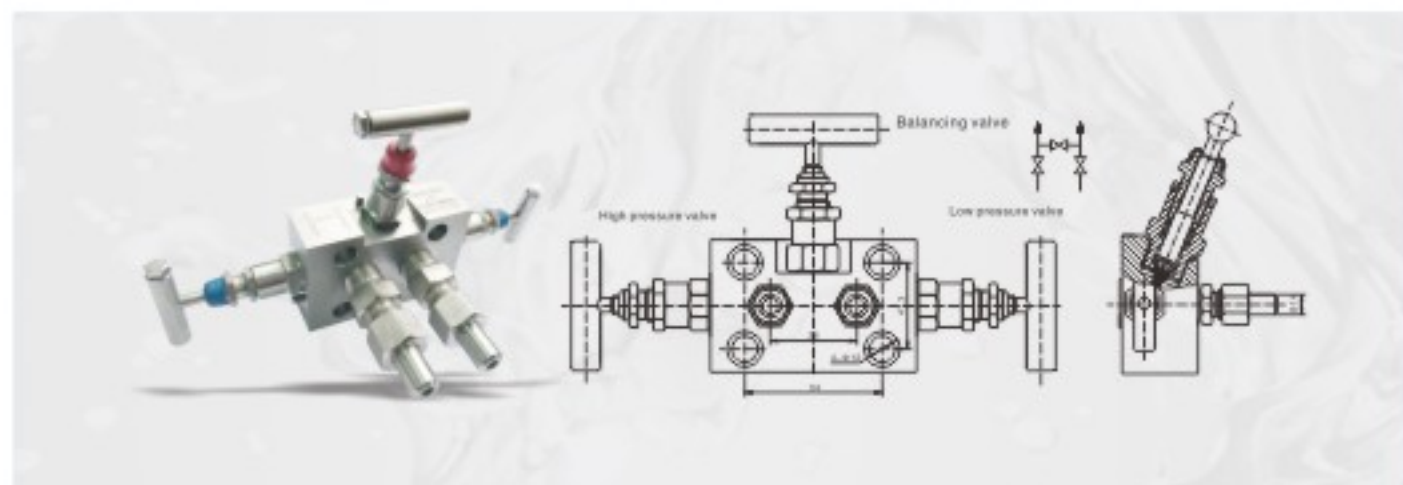
Main connection size.

SINOVALJ43Y-ZF25-CL150-CL2500P RF, RJ

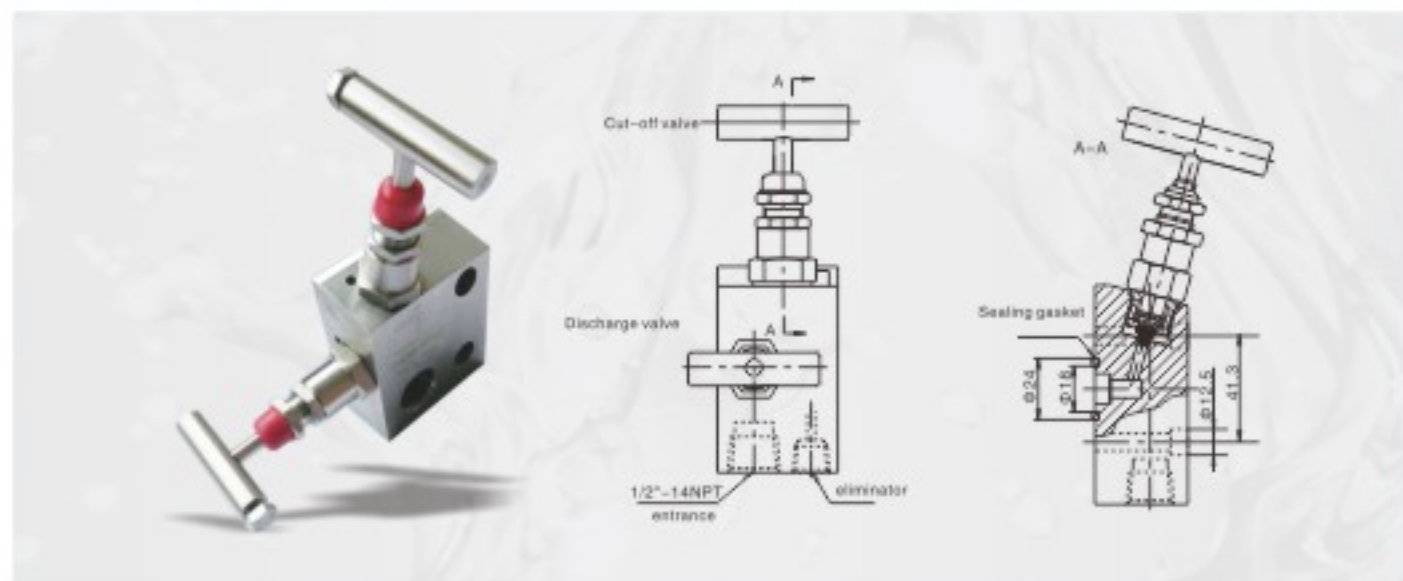
Class	D	D1	φ1	φ(RF)	φ(RJ)-(R)	C	n-d
CL150	110	79.0		51		11.6	4-15
CL300	125	88.9	50.8	51	70	R16	17.9 4-19
CL600	125	88.9	50.8	51	70	R16	24.5 4-19
CL900	150	101.6	50.8	51	71.5	R16	35.6 4-25
CL1500	150	101.6	50.8	51	71.5	R16	35.6 4-25
CL2500	160	108	60.3	51	82.5	R18	42.0 4-25

**Design and manufacturing specifications**

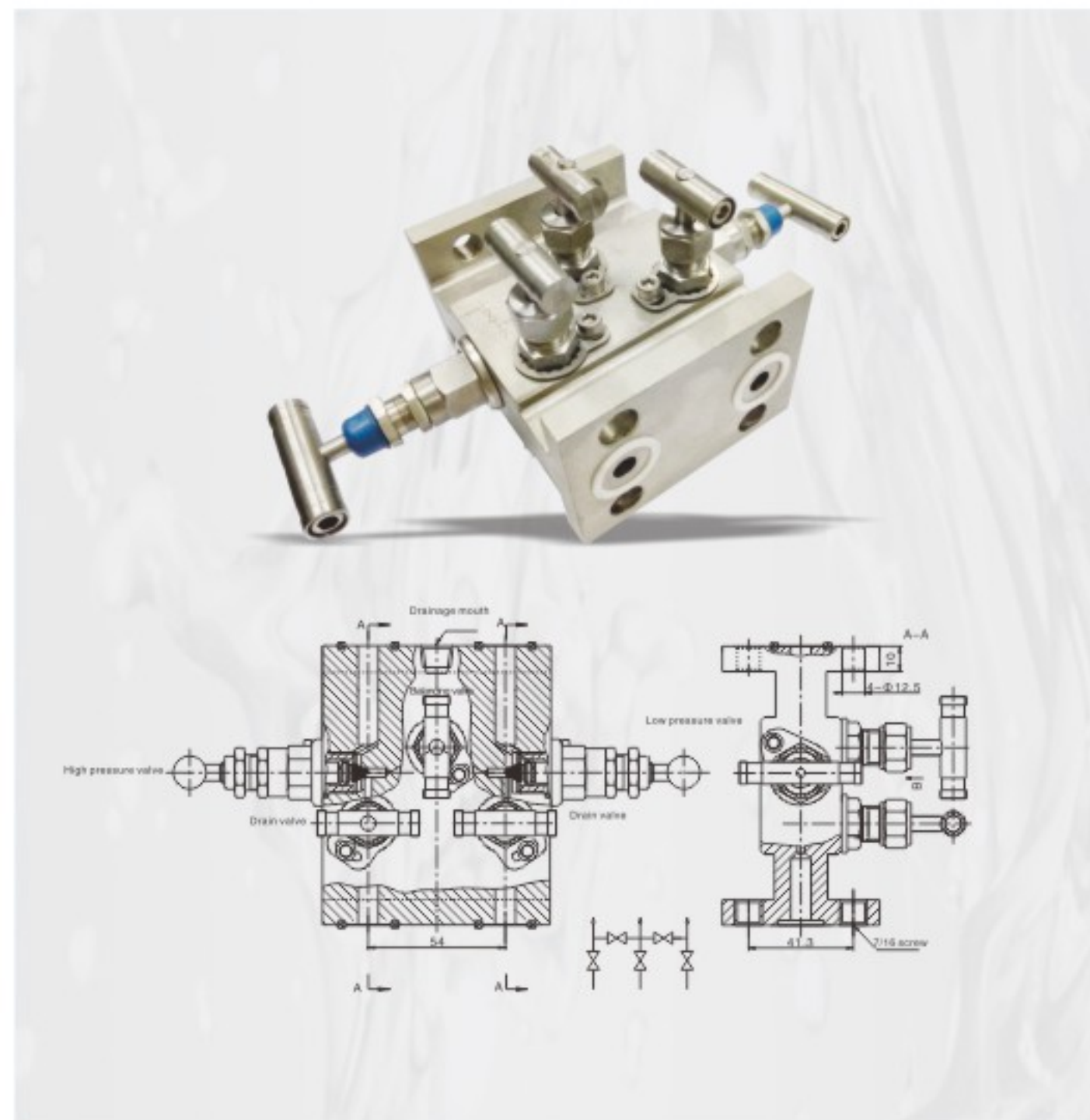
1. The valves are designed and manufactured in accordance with the standard requirements of JB/T7747-2006.
2. The valves are inspected and accepted in accordance with the standard requirements of API598.
3. Dimensions of socket welding holes are in accordance with ANSI B16.5 HG /T20615 standards.
4. The strength test of the valves is hydrostatically tested at 1.5 times the nominal pressure.
5. The valve seal test is hydrostatically tested at 1.1 times the nominal pressure.
6. The airtight test is conducted at a nominal pressure of 0.6 MPa.

**SINOVAL3051A-320P Integrated tri-valve manifold principle and use**

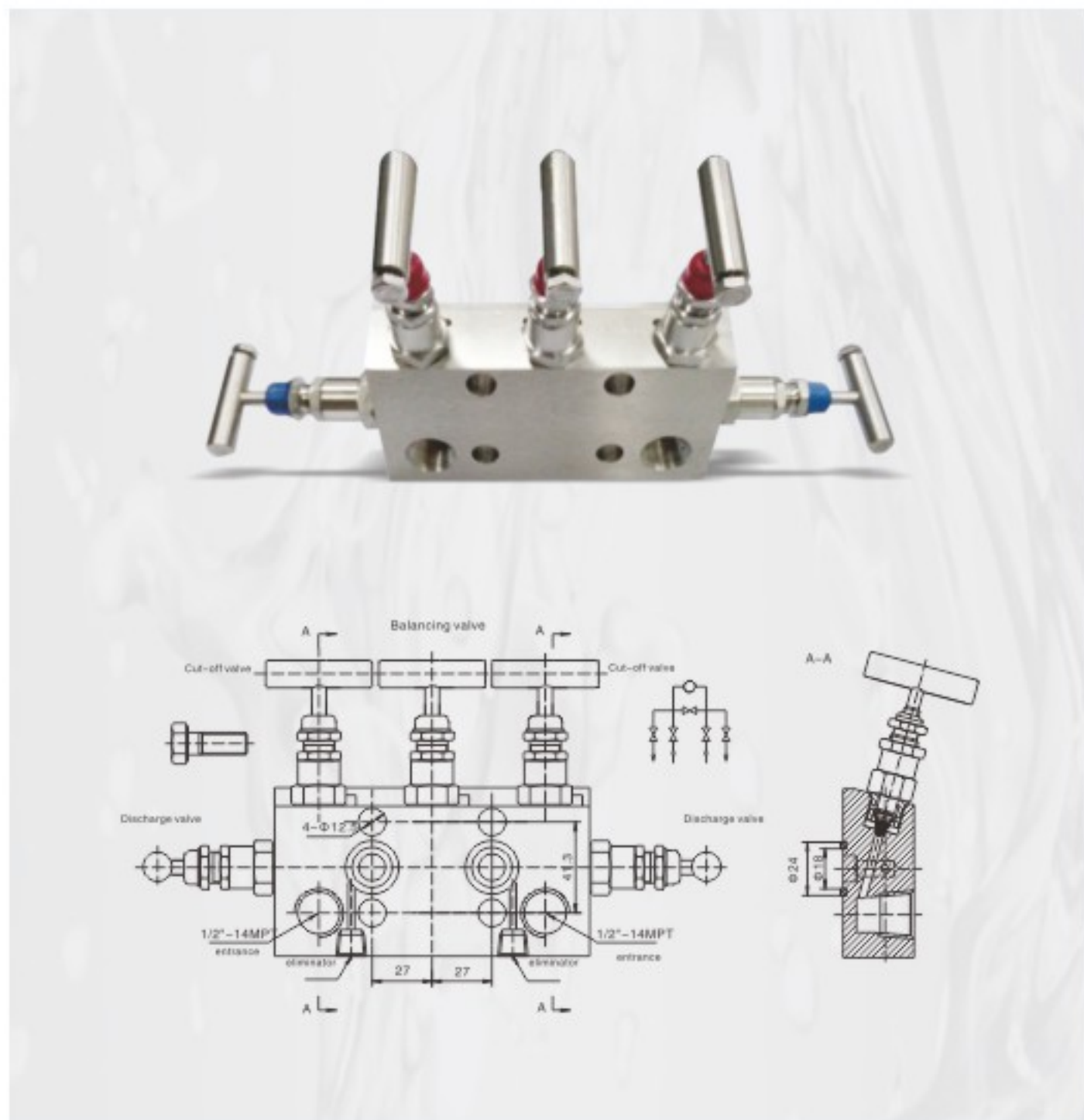
SINOVAL3051A It can be installed directly by long bolts with coplanar flanges and a differential pressure transmitter. The center distance of the meter ports (outlets) of the flange tri-valve set is 54mm x 41.3mm, and it is directly connected to the high and low pressure ports of the differential pressure transmitter. The sealing ring is used to compress the seal by bolts. Two globe valves connected to the process end are used to shut off the link between the process fluid and the meter. A balance valve is located in the middle of the two globe valves to balance the high and low pressure chambers so as to facilitate zeroing the differential pressure transmitter. The two vent plugs (optional) between the meter ports and the two globe valves are used for draining and calibration. Tri-valve set principle: high-pressure valve on the left, low-pressure valve on the right, balance valve in the middle. When the high and low valves are closed and the balance valve is opened, the positive and negative pressure measurement chamber shows balanced pressure. When the high and low pressure valves are opened and the balance valve is closed, the input pressure is high and low pressure respectively. When the meter is to be zeroed for maintenance, close the positive and negative pressure valves.

**Coplanar integrated two-valve manifold (1/2NPT) SINOVAL2051B-320P**

SINOVAL2051B-320P Two-valve manifold is designed for direct mounting with a conventional flanged absolute pressure or gauge pressure transmitter. They can also be mounted directly via long bolts and 3051CG or 3051CA with coplanar flanges. The process connection of the coplanar flange two-valve manifold is 1/2"-14NPT internal threads, and conventional flanges with 41.3 mm center distance of the fixing bolts. Connect directly to the transmitter's traditional flanges and seal with a gasket using bolts. The drain valve connected to the meter can both drain and verify the meter through the drain/test hole.

**SINOVAL5151A-320P The principle and use of I-type five-valve manifold**

SINOVAL5151A It can be installed directly by long bolts with coplanar flanges and a differential pressure transmitter. The center distance of the flange five-valve manifold meter ports (outlets) is 54mm x 41.3mm, which is directly connected with the high-low pressure port of the differential pressure transmitter. The sealing ring is used to seal by bolts. The five-valve manifold is composed of high, low pressure valves, a balance valve and two calibration (drain) valves. When the differential pressure transmitter is calibrated at the site, only cut off the high and low pressure valves, open the balance valve and the two calibration valves, and then close the balance valve, so that the differential pressure transmitter can be calibrated at the site. It has an advantage over the tri-valve manifold: is able to inspect, calibrate, demarcate, drain and rinse the meter online (ie, on-site) at any time.



■ SINOVAL5051A-320P The principle and use of I-type five-valve manifold

SINOVAL5051A It can be installed directly by long bolts with coplanar flanges and a differential pressure transmitter. The center distance of the flange five-valve manifold meter ports (outlets) is 54mm x 41.3mm, which is directly connected with the high-low pressure port of the differential pressure transmitter. The sealing ring is used to seal by bolts. The five-valve manifold is composed of high, low pressure valves, a balance valve and two calibration (drain) valves. When the differential pressure transmitter is calibrated at the site, only cut off the high and low pressure valves, open the balance valve and the two calibration valves, and then close the balance valve, so that the differential pressure transmitter can be calibrated at the site. It has an advantage over the tri-valve manifold: is able to inspect, calibrate, demarcate, drain and rinse the meter online (ie, on-site) at any time.

SOCKET WELDED PIPE FITTING SERVICES





The english system control series	The metric system control series
ANSI B16.11 JIS B2316 GB/T14383(A SERIES) Medium petrochemical SH3410 Chemical engineering department HG21634	GB/T14383A(B SERIES) Chemical engineering department HG21634

Pressure grade of socket welded pipe and tube wall thickness gauge

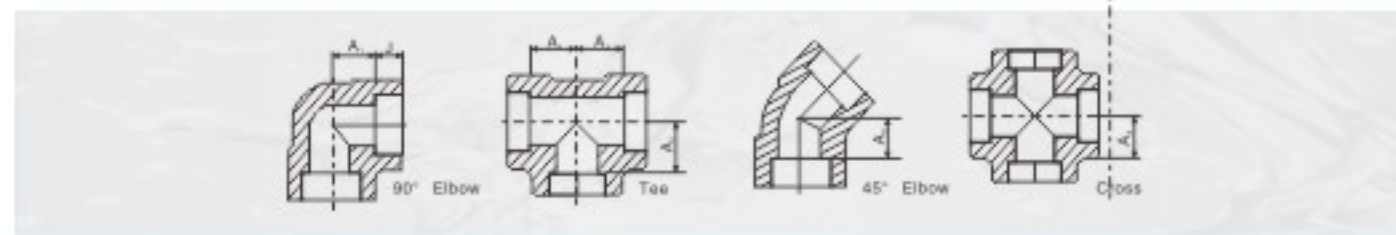
Pressure grade	The pipe wall thick form number	
3000Lb	Sch80	XS
6000Lb	Sch160	-
9000Lb	-	XXS

Small diameter pipe wall thickness

DN	NPS	The pipe wall thick form number		
mm	in	Sch80	Sch160	XXS
6	1/8	2.41	3.15	4.83
8	1/4	3.02	3.60	6.05
10	3/8	3.20	4.10	6.40

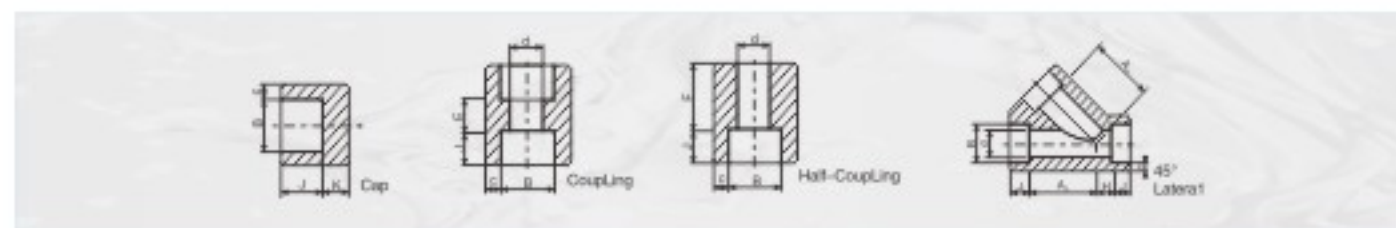
Socket we 1 ding end dimension

(NPS) DN		jmin	outside diameter of pipe	Bmin	ANSI B16.11 Sh3410 GB/T1438(A)JIS B2316						GB/T1438(B) HG21634			
					Dmn 14383			Cmin			outside diameter of pipe	Bmin	D	
					3000Lb	6000Lb	9000Lb	3000Lb	6000Lb	9000Lb			3000Lb	6000Lb
mm	in				Sch80	Sch160	XXS	Sch80	Sch160	XXS			Sch80	Sch160
6	1/8	10	10.3	10.7	6.1	3.2	—	3.2	3.5	—	10	10.5	5	4
8	1/4	10	13.9	14.1	8.5	5.6	—	3.3	4.0	—	12	12.5	6	5
10	3/8	10	17.1	17.5	11.8	8.4	—	3.5	4.4	—	14	14.5	8	6
15	1/2	10	21.3	21.8	15	11.0	5.6	4.1	5.2	8.2	18	18.6	11	9
20	3/4	13	26.9	27.4	20.2	14.8	10.3	4.3	6.1	8.6	25	25.6	17	14
25	1	13	33.7	34.2	25.9	19.9	14.5	5.0	7.0	10.0	32	32.6	23	20
(32)	1 1/4	13	42.4	42.9	34.3	28.7	22	5.3	7.0	10.6	38	38.6	28	26
40	1 1/2	13	48.3	48.8	40.1	33.2	27.2	5.6	7.8	11.2	45	45.6	35	31
50	2	16	60.3	61.1	51.7	42.1	37.4	6.1	9.5	12.2	57	57.8	46	40
(65)	2 1/2	16	76.1	76.9	61.2	56.1	—	7.7	12.5	—	76	76.8	62	56
80	3	16	88.9	89.8	76.4	66.9	—	8.3	13.8	—	89	89.9	73	67
100	4	16	114.3	115.5	100.7	—	—	9.4	—	—	108	109.2	91	—



Socket we 1 ding end fitting

(NPS) DN		jmin	A1			A2			A3		A4	
mm	in		3000Lb	6000Lb	9000Lb	3000Lb	6000Lb	9000Lb	3000Lb	6000Lb	3000Lb	6000Lb
			Sch80	Sch160	XXS	Sch80	Sch160	XXS	Sch80	Sch160	Sch80	Sch160
6	1/8	10	11	11	-	8	8	-	-	-	-	-
8	1/4	10	11	15	-	8	8	-	-	-	-	-
10	3/8	10	13	15	-	8	12	-	-	-	-	-
15	1/2	10	16	19	25	11	13	16	41	51	11	13
20	3/4	13	19	22	28	13	14	18	51	60	13	14
25	1	13	22	27	32	14	18	22	60	71	14	18
(32)	1 1/4	13	27	32	35	18	21	22	71	81	18	21
40	1 1/2	13	32	38	38	21	25	25	81	98	21	25
50	2	16	38	41	41	25	29	29	98	120	25	29
(65)	2 1/2	16	41	57	-	29	32	-	-	-	-	-
80	3	16	57	64	-	32	35	-	-	-	-	-
100	4	19	66	-	-	42	-	-	-	-	-	-



Socket we 1 ding end fitting

Socket we 1 ding reducing fitting

(NPS) DN		J	E	F	K			(NPS) DN		(NPS) DN	
mm	in				3000Lb	6000Lb	9000Lb	mm	in	mm	in
					Sch80	Sch160	XXS				
6	1/8	10	6	16	5	6.5	-	20 x 15	3/4 x 1/2	50 x 40	2 x 1 1/2
8	1/4	10	6	16	5	6.5	-	25 x 20	1 x 3/4	50 x 32	2 x 1 1/2
10	3/8	10	6	17.5	5	6.5	-	25 x 15	1 x 1/2	50 x 25	2 x 1
15	1/2	10	10	22.5	6.5	8	11	32 x 25	1 1/4 x 1	65 x 50	2 1/2 x 2
20	3/4	13	10	23.5	6.5	8	12.5	32 x 20	1 1/4 x 3/4	65 x 40	2 1/2 x 1 1/2
25	1	13	13	29	9.5	11	14	32 x 15	1 1/4 x 1/2	65 x 32	2 1/2 x 1 1/4
(32)	1 1/4	13	13	30	9.5	11	14	40 x 32	1 1/2 x 1 1/4	80 x 65	3 x 2 1/2
40	1 1/2	13	13	32	11	12.5	16	40 x 25	1 1/2 x 1	80 x 50	3 x 2
50	2	16	19	41	12	16	19	40 x 20	1 1/2 x 3/4	80 x 40	3 x 1 1/2
(65)	2 1/2	16	19	42.5	16	19	-				
80	3	16	19	44.5	19	22	-				
100	4	19	19	47.5	22	28.5	-				