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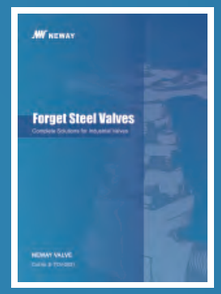
Cat.no.:E-GGC

Cat.no.:E-CSS



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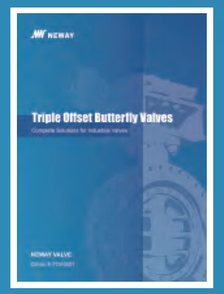

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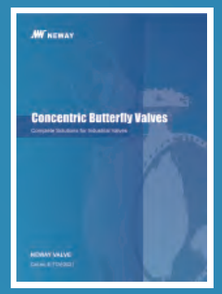

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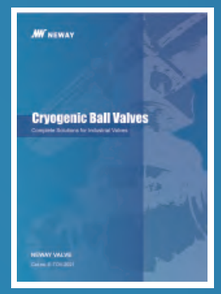

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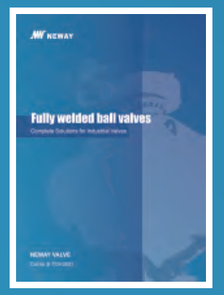

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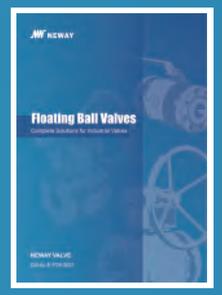

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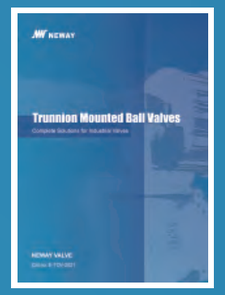

Cat.no.:E-TMBV

Cat.no.:E-MSBV

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Cat.no.:E-CGGC-2022

NEWAY

Cryogenic
Gate, Globe & Check Valves

Complete Solutions for Industrial Valves

NEWAY VALVE

Cat.no.:E-CGGC-2022

Table of Contents

Complete Solutions for Industrial Valves

As a global leader of valve manufacturing, Neway (SSE:603699) is dedicated to the production, research, and development of industrial valves. Neway is committed to providing complete valve solutions to all industries through advanced engineering and innovation.

Neway's product line includes Ball, Butterfly, Gate, Globe, Check, Nuclear, Control, Subsea, Safety valves. Our high quality standards and innovative ability are recognized by many global end users and EPCs. Neway valves are utilized in a wide variety of industries and working conditions such as Refining, Chemical, Coal Chemical, Offshore(including subsea), Air Separation, LNG, Nuclear Power, Power Generation, and Pipeline Transmission applications.

Facilities & Service

Neway has developed a sophisticated multi-plant management system operating one valve assembly plant, one API6A valve plant, three foundries, and one R&D center. Our largest assembly plant was expanded in 2013, and it now covers 230,000 square meters.

Advanced software (ANSYS, FE-Safe, CF-Design, Siemens PLM and NX) is applied here at Neway for the Research & Development of products. We use SAP to control the traceability and status of all products during the manufacturing process. In order to ensure the safety, eco-friendliness, and reliability of our products, we use the most advanced fire-safe, cryogenic, high pressure, and fugitive emission test equipment.

As part of Neway's global strategy, to provide better service to our customers, we have established our overseas subsidiaries in USA, Netherlands, Italy, Singapore, and Dubai along with over 80 agents and distributors worldwide.

Quality Assurance

Neway is dedicated to continuous improvement. We maintain a quality management system that encompasses our entire operation from order entry to final inspection. Through continuous efforts, Neway's products have successfully obtained industry certifications, including ASME UV & NB, NBBI, KGS, CE, CCS, and BV approvals.

Quality Commitment

Neway recognizes the importance of valve quality for the safety and protection of personnel heath and property. It is our quality commitment to focus our resources to provide our customers with first class products at a competitive price,that are designed, manufactured, inspected and tested in accordance with our customer's specifications and that comply with all international standards.

With respect to the facts that the current industrial standards do not always take into consideration the likelihood and consequences of possible deterioration in service, related to specific service fluids or the external environment in which they operate. Our customers are requested to keep an open line of communication with our engineering department to identify and implement standards, that will provide valves with the possibility of deterioration in service, so as to ensure safety over the valves expected lifetime.

Quality Control & Advanced Manufacturing

The latest computer technology has been extensively applied in NEWAY manufacturing, which includes a large number of numeric control machines (machining center, CNC horizontal and vertical lathe, and CNC drilling machine) and ERP management system.Additionally, the data through all factories has been connected and shared. These facilitate resource integration, boost productivity, evidently enhancing machining quality and tightening process control.


CNC

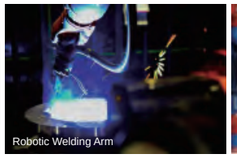

Neway Large Bore Ball Polish CNC

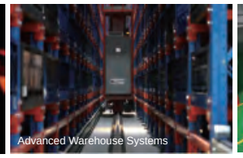

Hot-wire TIG Automatic Cladding System


High Velocity Oxygen Fuel Coating


Robotic Painting Arm


Butt Welding


Robotic Welding Arm


Advanced Warehouse Systems


Clean Room

NEWAY developed comprehensive and advanced inspection and test facilities to control the quality from rough castings or forgings to final products, which enable us to perform ultrasonic testing, radiographic test, liquid penetrant test, magnetic-particle test, spectrum analysis, Material Positive Identification (MPI), impact test, tensile test, hardness test, fire safe test, cryogenic test, vacuum test, low fugitive emission test, high pressure gas test and hydrostatic test.


3D Coordinate Measuring Machine


SEM & EDS Scanning Electron Microscope & Energy Dispersive Spectrometer


Corrosion Test Equipment


Oil Concentration Analyzer


Chlorine Determination Device


Impact Test (Min. Test Temp:-196°C)


Chemical Analysis before Pouring


NITRO Analyzer

Product Range

Cryogenic Gate Valve

Size(IN)	Pressure Range(CLASS)	End Connection	Temperature Range	Operation	Structural Style
2”- 42”	150 - 2500	BW, RF, RTJ, etc.	-196°C - 400°C	Manual/Pneumatic/Hydraulic	Flexible Wedge

- Extended bonnet and extended stuffing box to protect packing effectively;
- Use PCTFE shaft sleeve at the middle of stem to keep stem stable;
- Cryogenic Gate valve use welded seat;
- Harding facing with Stellite on sealing surface of both sides.

Cryogenic Globe Valve

Size(IN)	Pressure Range(CLASS)	End Connection	Temperature Range	Operation	Structural Style
2”- 28”	150 - 2500	BW, RF, RTJ, etc.	-196°C - 400°C	Manual/Pneumatic/Hydraulic	Lifting Type

- Extended bonnet and extended stuffing box to protect packing effectively;
- Use PCTFE shaft sleeve at the middle of stem to keep stem stable;
- Cryogenic Globe valve use integrated seat;
- Harding facing with Stellite on sealing surface of both sides.

Cryogenic Check Valve (Swing Type)

Size(IN)	Pressure Range(CLASS)	End Connection	Temperature Range	Operation	Structural Style
2”- 32”	150 - 2500	BW, RF, RTJ, etc.	-196°C - 400°C	-	Swing Type

- Ball-like pin can achieve self-alignment, which makes it easier to seal at low temperature;
- Ensure the optimal flow design & the maximum flow capacity by fluid analysis software calculation;
- Metal-seat structure, with sealing surface subject to hard-alloy weld overlay, which performs well in scouring & particle resistance and improves service life;
- Dedicated accurate and match grinding to guarantee the sealing performance in low temperature;
- Internally assembled hinge pin design.

Product Range

Cryogenic Check Valve (Axial Flow Type)

Size(IN)	Pressure Range(CLASS)	End Connection	Temperature Range	Operation	Structural Style
2”- 42”	150 - 900	BW, RF, RTJ, etc.	-196°C - 150°C	-	Axial Flow Type

- Venturi streamline design, low flow resistance, without impact;
- Dual sealing (Lipseal + Graphite) between body and seat;
- One-piece body, without external leaking point;
- Ensure minimum flow resistance and best dynamic characteristics by fluid analysis software calculation;
- Specialized machining & grinding process to achieve good sealing performance.

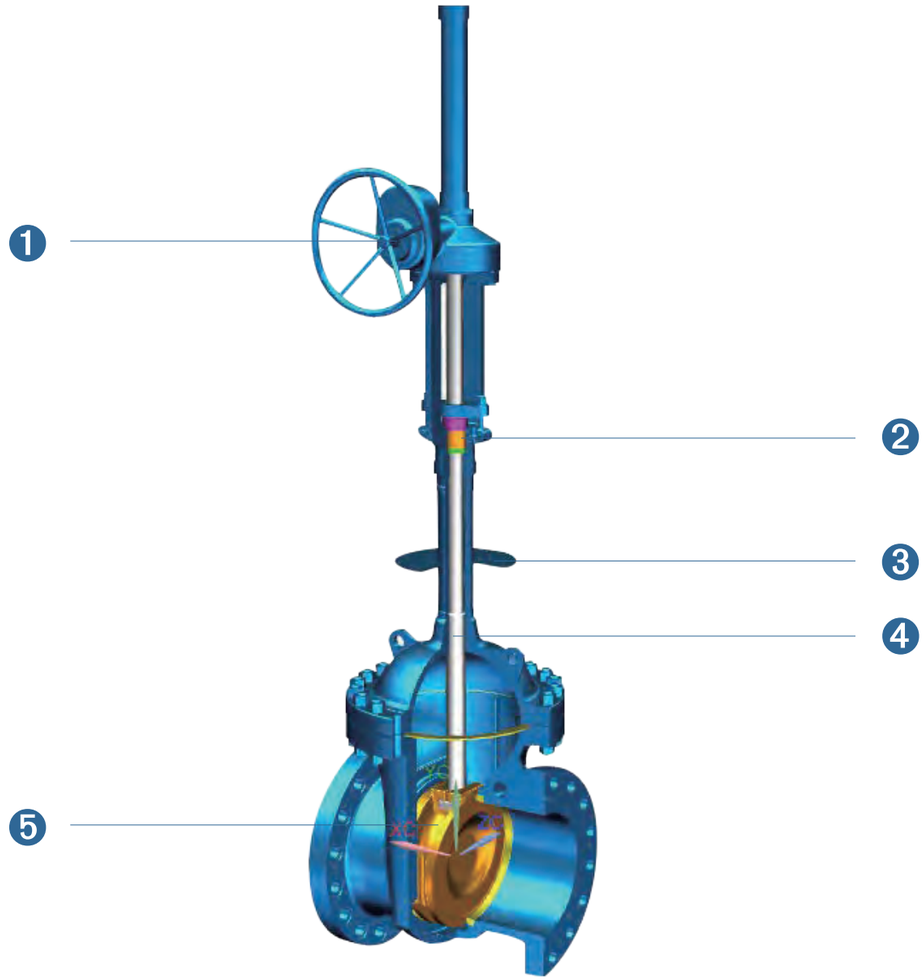
Cryogenic Check Valve (Dual-plate Type)

Size(IN)	Pressure Range(CLASS)	End Connection	Temperature Range	Operation	Structural Style
2”- 36”	150 - 1500	BW, RF, RTJ, etc.	-196°C - 400°C	-	Dual-plate Type

- Short length, light weight and compact structure;
- Low flow resistance with desirable flow capacity, without water hammer;
- One-piece body, without external leaking point;
- Ensure superior sealing capability via specialized production process.

Design Feature

Cast Steel Cryogenic Gate Valve



1. Operating force 350N control for better operation.
2. Stuffing box extension to maintain the packing area at room temperature to ensure stem sealing performance.
   Fugitive emission packing for optimize sealing performance.
   Backseat design extension to ensure the safety of bonnet cavity.
3. Drip plate effectively prevents condensate from flowing into the insulation layer.
4. Cold extrusion on stem sealing area, smoother and harder surface contribute to superior sealing.
5. Cavity relief hole on wedge upstream side to balance body cavity pressure.

Class 150 Cast Steel Cryogenic Gate Valve

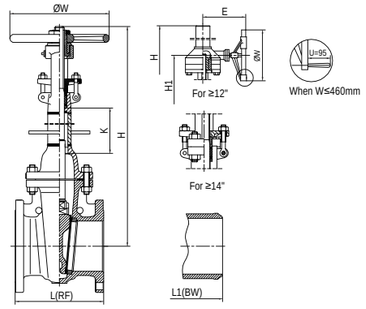


Figure NO.:
GG1R / GG1B

For valves with a lower design temperature between -50 °C and -110 °C.

NPS	in	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"
DN	mm	50	80	100	150	200	250	300	350	400	450	500	600
L(RF)	in	7.0	8.0	9.0	10.5	11.5	13.0	14.0	15.0	16.0	17.0	18.0	20.0
	mm	178	203	229	267	292	330	356	381	406	432	457	508
L1(BW)	in	8.5	11.1	12.0	15.9	16.5	18.0	19.8	22.5	24.0	26.0	28.0	32.0
	mm	216	283	305	403	419	457	502	572	610	660	711	813
W	in	9.8	11.8	11.8	15.7	17.7	21.7	18.1	18.1	18.1	24.0	24.0	24.0
	mm	250	300	300	400	450	550	460	460	460	610	610	610
H	in	18.9	22.0	25.2	33.7	43.7	49.8	77.4	85.8	92.5	103.2	118.1	140.2
	mm	480	560	640	855	1110	1265	1965	2180	2350	2622	3000	3560
H1	in	NA	NA	NA	NA	NA	NA	57.2	63.8	70.1	78.5	87.5	100.7
	mm	NA	NA	NA	NA	NA	NA	1453	1620	1780	1995	2222	2557
K	in	4.9	5.9	5.9	9.8	11.8	13.8	15.7	17.7	17.7	19.7	19.7	19.7
	mm	125	150	150	250	300	350	400	450	450	500	500	500
E	in	NA	NA	NA	NA	NA	NA	10.2	10.2	15.2	13.1	19.6	19.6
	mm	NA	NA	NA	NA	NA	NA	260	260	386	332	497	497
WT (RF)	KG	24	40	57	96	143	213	316	416	550	716	866	1257
WT (BW)	KG	22	35	47	90	133	193	292	380	542	695	830	1291

For valves with a lower design temperature between -110 °C and -196 °C.

NPS	in	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"
DN	mm	50	80	100	150	200	250	300	350	400	450	500	600
L(RF)	in	7.0	8.0	9.0	10.5	11.5	13.0	14.0	15.0	16.0	17.0	18.0	20.0
	mm	178	203	229	267	292	330	356	381	406	432	457	508
L1(BW)	in	8.5	11.1	12.0	15.9	16.5	18.0	19.8	22.5	24.0	26.0	28.0	32.0
	mm	216	283	305	403	419	457	502	572	610	660	711	813
W	in	9.8	11.8	11.8	15.7	17.7	21.7	18.1	18.1	18.1	24.0	24.0	24.0
	mm	250	300	300	400	450	550	460	460	460	610	610	610
H	in	23.8	28.0	31.1	37.6	43.7	51.8	77.4	85.8	92.5	103.2	118.1	140.2
	mm	605	710	790	955	1110	1315	1965	2180	2350	2622	3000	3560
H1	in	NA	NA	NA	NA	NA	NA	57.2	63.8	70.1	78.5	87.5	100.7
	mm	NA	NA	NA	NA	NA	NA	1453	1620	1780	1995	2222	2557
K	in	9.8	11.8	11.8	13.8	13.8	15.7	15.7	17.7	17.7	19.7	19.7	19.7
	mm	250	300	300	350	350	400	400	450	450	500	500	500
E	in	NA	NA	NA	NA	NA	NA	10.2	10.2	15.2	13.1	19.6	19.6
	mm	NA	NA	NA	NA	NA	NA	260	260	386	332	497	497
WT (RF)	KG	26	42	60	98	145	215	316	416	550	716	866	1257
WT (BW)	KG	24	37	50	92	135	195	292	380	542	695	830	1291

Class 300 Cast Steel Cryogenic Gate Valve

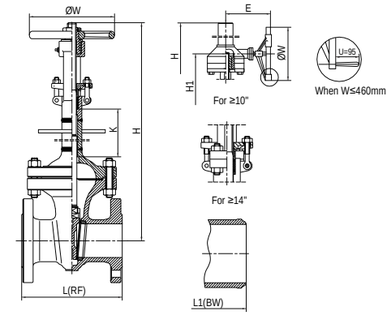


Figure NO.:
GG3R / GG3B

For valves with a lower design temperature between -50 °C and -110 °C.

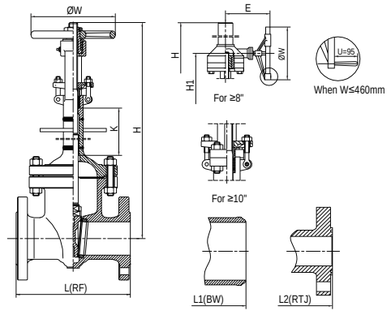
NPS	in	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"
DN	mm	50	80	100	150	200	250	300	350	400	450	500	600
L(RF)	in	8.5	11.1	12.0	15.9	16.5	18.0	19.8	30.0	33.0	36.0	39.0	45.0
	mm	216	283	305	403	419	457	502	762	838	914	991	1143
L1(BW)	in	8.5	11.1	12.0	15.9	16.5	18.0	19.8	30.0	33.0	36.0	39.0	45.0
	mm	216	283	305	403	419	457	502	762	838	914	991	1143
W	in	9.8	11.8	15.7	17.7	21.7	18.1	18.1	18.1	24.0	24.0	24.0	28.0
	mm	250	300	400	450	550	460	460	460	610	610	610	710
H	in	19.0	22.0	25.2	36.6	41.9	69.1	77.4	86.6	94.9	103.5	117.5	137.9
	mm	482	560	640	930	1065	1755	1965	2200	2410	2628	2985	3502
H1	in	NA	NA	NA	NA	NA	51.1	57.2	64.6	68.9	77.4	87.5	102.7
	mm	NA	NA	NA	NA	NA	1297	1453	1642	1750	1965	2222	2609
K	in	4.9	5.9	5.9	9.8	11.8	13.8	15.7	17.7	17.7	19.7	19.7	19.7
	mm	125	150	150	250	300	350	400	450	450	500	500	500
E	in	NA	NA	NA	NA	NA	15.2	15.2	15.2	19.6	19.6	19.6	26.8
	mm	NA	NA	NA	NA	NA	386	386	386	497	497	497	680
WT (RF)	KG	32	54	80	164	240	393	526	820	1085	1460	1846	2550
WT (BW)	KG	24	44	65	130	189	335	433	685	962	1235	1655	2150

For valves with a lower design temperature between -110 °C and -196 °C.

NPS	in	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"
DN	mm	50	80	100	150	200	250	300	350	400	450	500	600
L(RF)	in	8.5	11.1	12.0	15.9	16.5	18.0	19.8	30.0	33.0	36.0	39.0	45.0
	mm	216	283	305	403	419	457	502	762	838	914	991	1143
L1(BW)	in	8.5	11.1	12.0	15.9	16.5	18.0	19.8	30.0	33.0	36.0	39.0	45.0
	mm	216	283	305	403	419	457	502	762	838	914	991	1143
W	in	9.8	11.8	15.7	17.7	21.7	18.1	18.1	18.1	24.0	24.0	24.0	28.0
	mm	250	300	400	450	550	460	460	460	610	610	610	710
H	in	23.9	28.0	31.1	40.6	43.9	71.1	77.4	86.6	94.9	103.5	117.5	137.9
	mm	607	710	790	1030	1115	1805	1965	2200	2410	2628	2985	3502
H1	in	NA	NA	NA	NA	NA	53.0	57.2	64.6	68.9	77.4	87.5	102.7
	mm	NA	NA	NA	NA	NA	1347	1453	1642	1750	1965	2222	2609
K	in	9.8	11.8	11.8	13.8	13.8	15.7	15.7	17.7	17.7	19.7	19.7	19.7
	mm	250	300	300	350	350	400	400	450	450	500	500	500
E	in	NA	NA	NA	NA	NA	15.2	15.2	15.2	19.6	19.6	19.6	26.8
	mm	NA	NA	NA	NA	NA	386	386	386	497	497	497	680
WT (RF)	KG	34	57	83	166	242	395	526	820	1085	1460	1846	2550
WT (BW)	KG	26	47	67	132	191	337	433	685	962	1235	1655	2150

Class 600 Cast Steel Cryogenic Gate Valve

Figure NO.:
GG6R / GG6B



For valves with a lower design temperature between -50 °C and -110 °C.

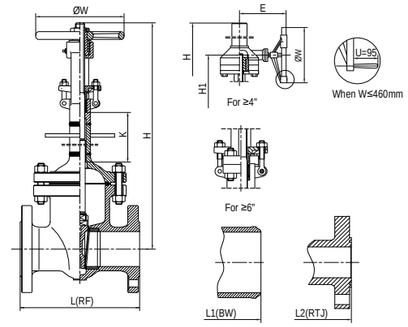
NPS	in	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"
DN	mm	50	80	100	150	200	250	300	350	400	450	500	600
L(RF)	in	11.5	14.0	17.0	22.0	26.0	31.0	33.0	35.0	39.0	43.0	47.0	55.0
	mm	292	356	432	559	660	787	838	889	991	1092	1194	1397
L1(BW)	in	11.5	14.0	17.0	22.0	26.0	31.0	33.0	35.0	39.0	43.0	47.0	55.0
	mm	292	356	432	559	660	787	838	889	991	1092	1194	1397
L2(RTJ)	in	11.6	14.1	17.1	22.1	26.1	31.1	33.1	35.1	39.1	43.1	47.2	55.4
	mm	295	359	435	562	663	790	841	892	994	1095	1200	1407
W	in	11.8	11.8	15.7	23.6	18.1	24.0	24.0	24.0	28.0	31.5	31.5	31.5
	mm	300	300	400	600	460	610	610	610	710	800	800	800
H	in	19.0	22.3	27.0	39.6	60.9	72.9	82.4	91.3	100.5	103.5	116.1	124.4
	mm	482	566	686	1006	1548	1851	2092	2318	2552	2629	2950	3160
H1	in	NA	NA	NA	NA	44.8	52.7	60.2	65.2	71.2	76.2	85.3	101.3
	mm	NA	NA	NA	NA	1139	1338	1529	1655	1809	1936	2166	2574
K	in	4.9	5.9	5.9	13.8	13.8	15.7	15.7	17.7	17.7	19.7	19.7	19.7
	mm	125	150	150	350	350	400	400	450	450	500	500	500
E	in	NA	NA	NA	NA	15.2	19.6	19.6	19.6	26.8	26.8	29.1	29.1
	mm	NA	NA	NA	NA	386	497	497	497	680	680	739	739
WT (RF)	KG	46	70	125	275	445	790	983	1280	1725	2188	2935	4406
WT (BW)	KG	40	58	102	220	360	665	820	1100	1540	1890	2480	3850

For valves with a lower design temperature between -110 °C and -196 °C.

NPS	in	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"
DN	mm	50	80	100	150	200	250	300	350	400	450	500	600
L(RF)	in	11.5	14.0	17.0	22.0	26.0	31.0	33.0	35.0	39.0	43.0	47.0	55.0
	mm	292	356	432	559	660	787	838	889	991	1092	1194	1397
L1(BW)	in	11.5	14.0	17.0	22.0	26.0	31.0	33.0	35.0	39.0	43.0	47.0	55.0
	mm	292	356	432	559	660	787	838	889	991	1092	1194	1397
L2(RTJ)	in	11.6	14.1	17.1	22.1	26.1	31.1	33.1	35.1	39.1	43.1	47.2	55.4
	mm	295	359	435	562	663	790	841	892	994	1095	1200	1407
W	in	11.8	11.8	15.7	23.6	18.1	24.0	24.0	24.0	28.0	31.5	31.5	31.5
	mm	300	300	400	600	460	610	610	610	710	800	800	800
H	in	23.9	28.2	32.9	39.6	60.9	72.9	82.4	91.3	100.5	103.5	116.1	124.4
	mm	607	716	836	1006	1548	1851	2092	2318	2552	2629	2950	3160
H1	in	NA	NA	NA	NA	44.8	52.7	60.2	65.2	71.2	76.2	85.3	101.3
	mm	NA	NA	NA	NA	1139	1338	1529	1655	1809	1936	2166	2574
K	in	9.8	11.8	11.8	13.8	13.8	15.7	15.7	17.7	17.7	19.7	19.7	19.7
	mm	250	300	300	350	350	400	400	450	450	500	500	500
E	in	NA	NA	NA	NA	15.2	19.6	19.6	19.6	26.8	26.8	29.1	29.1
	mm	NA	NA	NA	NA	386	497	497	497	680	680	739	739
WT (RF)	KG	48	72	128	275	445	790	983	1280	1725	2188	2935	4406
WT (BW)	KG	42	60	105	220	360	665	820	1100	1540	1890	2480	3850

Class 900 Cast Steel Cryogenic Gate Valve

Figure NO.:
GG9R / GG9B



For valves with a lower design temperature between -50 °C and -110 °C.

NPS	in	2"	3"	4"	6"	8"	10"	12"	14"	16"
DN	mm	50	80	100	150	200	250	300	350	400
L(RF)	in	14.5	15.0	18.0	24.0	29.0	33.0	38.0	40.5	44.5
	mm	368	381	457	610	737	838	965	1029	1130
L1(BW)	in	14.5	15.0	18.0	24.0	29.0	33.0	38.0	40.5	44.5
	mm	368	381	457	610	737	838	965	1029	1130
L2(RTJ)	in	14.6	16.6	18.1	24.1	29.1	33.1	38.1	40.9	44.9
	mm	371	422	460	613	740	841	968	1038	1140
W	in	13.8	15.7	18.1	18.1	18.1	24.0	28.0	24.0	31.5
	mm	350	400	460	460	460	610	710	610	800
H	in	23.3	26.7	40.6	60.2	65.8	74.1	84.0	94.6	104.9
	mm	593	678	1031	1528	1672	1883	2133	2402	2664
H1	in	NA	NA	30.9	48.9	49.6	57.5	62.6	71.3	77.5
	mm	NA	NA	784	1243	1259	1460	1590	1811	1968
K	in	4.9	5.9	5.9	13.8	13.8	15.7	15.7	17.7	17.7
	mm	125	150	150	350	350	400	400	450	450
E	in	NA	NA	9.4	15.2	12.7	22.8	26.8	25.2	29.1
	mm	NA	NA	238	386	322	580	680	639	739
WT (RF)	KG	99	126	220	387	660	1160	1510	1980	2690
WT (BW)	KG	79	106	184	300	550	975	1310	1680	2350

For valves with a lower design temperature between -110 °C and -196 °C.

NPS	in	2"	3"	4"	6"	8"	10"	12"	14"	16"
DN	mm	50	80	100	150	200	250	300	350	400
L(RF)	in	14.5	15.0	18.0	24.0	29.0	33.0	38.0	40.5	44.5
	mm	368	381	457	610	737	838	965	1029	1130
L1(BW)	in	14.5	15.0	18.0	24.0	29.0	33.0	38.0	40.5	44.5
	mm	368	381	457	610	737	838	965	1029	1130
L2(RTJ)	in	14.6	16.6	18.1	24.1	29.1	33.1	38.1	40.9	44.9
	mm	371	422	460	613	740	841	968	1038	1140
W	in	13.8	15.7	18.1	18.1	18.1	24.0	28.0	24.0	31.5
	mm	350	400	460	460	460	610	710	610	800
H	in	28.3	32.6	46.5	60.2	65.8	74.1	84.0	94.6	104.9
	mm	718	828	1181	1528	1672	1883	2133	2402	2664
H1	in	NA	NA	36.8	48.9	49.6	57.5	62.6	71.3	77.5
	mm	NA	NA	934	1243	1259	1460	1590	1811	1968
K	in	9.8	11.8	11.8	13.8	13.8	15.7	15.7	17.7	17.7
	mm	250	300	300	350	350	400	400	450	450
E	in	NA	NA	9.4	15.2	12.7	22.8	26.8	25.2	29.1
	mm	NA	NA	238	386	322	580	680	639	739
WT (RF)	KG	102	130	226	387	660	1160	1510	1980	2690
WT (BW)	KG	82	110	190	300	550	975	1310	1680	2350

Class 1500 Cast Steel Cryogenic Gate Valve

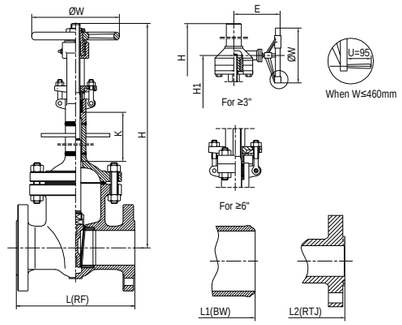


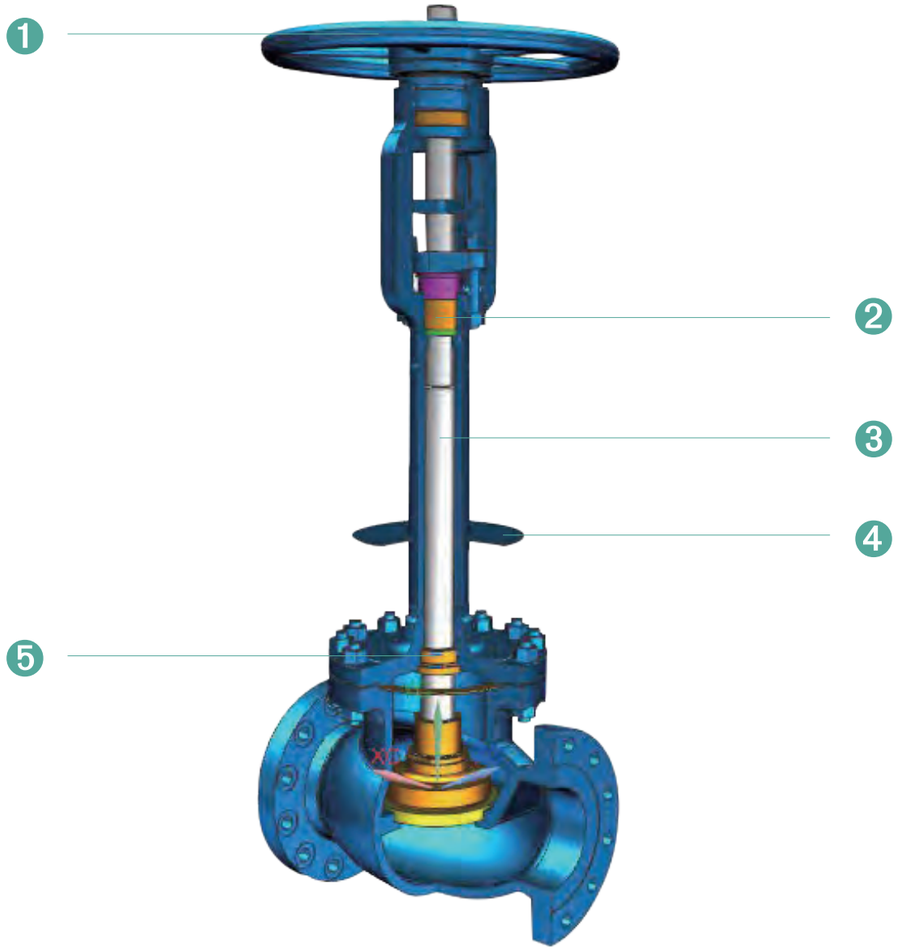
Figure NO.:
GG15R / GG15B

For valves with a lower design temperature between -50 °C and -110 °C.

NPS	in	2"	3"	4"	6"	8"
DN	mm	50	80	100	150	200
L(RF)	in	14.5	18.5	21.5	27.8	32.8
	mm	368	470	546	705	832
L1(BW)	in	14.5	18.5	21.5	27.8	32.8
	mm	368	470	546	705	832
L2(RTJ)	in	14.6	18.6	21.6	28.0	33.1
	mm	371	473	549	711	842
W	in	13.8	12.0	18.1	24.0	24.0
	mm	350	305	460	610	610
H	in	23.3	43.2	45.7	59.8	68.3
	mm	593	1098	1161	1520	1736
H1	in	NA	29.4	29.9	47.5	48.9
	mm	NA	746	759	1207	1243
K	in	4.9	5.9	5.9	13.8	13.8
	mm	125	150	150	350	350
E	in	NA	9.4	9.4	19.6	22.8
	mm	NA	238	238	497	580
WT (RF)	KG	99	188	276	682	1110
WT (BW)	KG	79	148	220	570	920

For valves with a lower design temperature between -110 °C and -196 °C.

NPS	in	2"	3"	4"	6"	8"
DN	mm	50	80	100	150	200
L(RF)	in	14.5	18.5	21.5	27.8	32.8
	mm	368	470	546	705	832
L1(BW)	in	14.5	18.5	21.5	27.8	32.8
	mm	368	470	546	705	832
L2(RTJ)	in	14.6	18.6	21.6	28.0	33.1
	mm	371	473	549	711	842
W	in	13.8	12.0	18.1	24.0	24.0
	mm	350	305	460	610	610
H	in	28.3	49.1	51.6	59.8	68.3
	mm	718	1248	1311	1520	1736
H1	in	NA	35.3	35.8	47.5	48.9
	mm	NA	896	909	1207	1243
K	in	9.8	11.8	11.8	13.8	13.8
	mm	250	300	300	350	350
E	in	NA	9.4	9.4	19.6	22.8
	mm	NA	238	238	497	580
WT (RF)	KG	102	195	276	682	1110
WT (BW)	KG	82	155	220	570	920

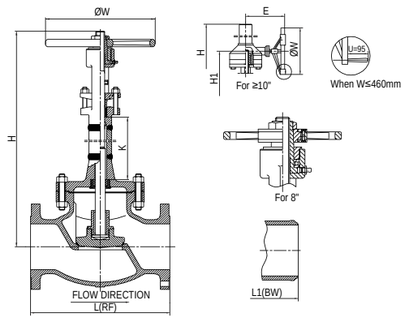


1. Operating force 350N control for better operation.
2. Stuffing box extension to maintain the packing area at room temperature to ensure stem sealing performance.
   Fugitive emission packing for optimize sealing performance.
   Backseat design extension to ensure the safety of bonnet cavity.
3. Drip plate effectively prevents condensate from flowing into the insulation layer.
4. Cold extrusion on stem sealing area, smoother and harder surface contribute to superior sealing.
5. PCTFE bushing is applied in the bottom of the bonnet to guide and support stem to stay stable.

Class 150

Cast Steel Cryogenic Globe Valve

Figure NO.:
GLG1R / GLG1B



For valves with a lower design temperature between -50 °C and -110 °C.

NPS	in	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"
DN	mm	50	80	100	150	200	250	300	350	400	450
L(RF)	in	8.0	9.5	11.5	16.0	19.5	24.5	27.5	31.0	36.0	38.5
	mm	203	241	292	406	495	622	699	787	914	978
L1(BW)	in	8.0	9.5	11.5	16.0	19.5	24.5	27.5	31.0	36.0	38.5
	mm	203	241	292	406	495	622	699	787	914	978
W	in	9.8	11.8	13.8	21.7	17.7	18.1	24.0	24.0	24.0	28.0
	mm	250	300	350	550	450	460	610	610	610	710
H	in	20.9	23.1	27.5	30.5	32.8	40.7	45.9	51.6	55.7	63.6
	mm	530	588	699	775	832	1035	1165	1310	1415	1615
H1	in	NA	NA	NA	NA	NA	34.5	39.6	45.1	48.1	52.4
	mm	NA	NA	NA	NA	NA	876	1007	1145	1222	1332
K	in	4.9	5.9	5.9	6.9	6.9	7.9	7.9	9.8	9.8	11.8
	mm	125	150	150	175	175	200	200	250	250	300
E	in	NA	NA	NA	NA	NA	15.2	19.6	19.6	22.8	26.8
	mm	NA	NA	NA	NA	NA	386	497	497	580	680
WT (RF)	KG	28	43	74	126	183	342	560	665	970	1026
WT (BW)	KG	24	36	62	110	158	310	517	605	890	940

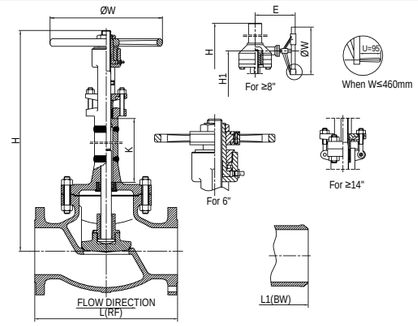
For valves with a lower design temperature between -110 °C and -196 °C.

NPS	in	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"
DN	mm	50	80	100	150	200	250	300	350	400	450
L(RF)	in	8.0	9.5	11.5	16.0	19.5	24.5	27.5	31.0	36.0	38.5
	mm	203	241	292	406	495	622	699	787	914	978
L1(BW)	in	8.0	9.5	11.5	16.0	19.5	24.5	27.5	31.0	36.0	38.5
	mm	203	241	292	406	495	622	699	787	914	978
W	in	9.8	11.8	13.8	21.7	17.7	18.1	24.0	24.0	24.0	28.0
	mm	250	300	350	550	450	460	610	610	610	710
H	in	25.8	29.1	33.4	37.4	39.6	48.6	53.7	59.4	63.6	63.6
	mm	655	738	849	950	1007	1235	1365	1510	1615	1615
H1	in	NA	NA	NA	NA	NA	42.4	47.5	53.0	56.0	60.3
	mm	NA	NA	NA	NA	NA	1076	1207	1345	1422	1532
K	in	9.8	11.8	11.8	13.8	13.8	15.7	15.7	17.7	17.7	19.7
	mm	250	300	300	350	350	400	400	450	450	500
E	in	NA	NA	NA	NA	NA	15.2	19.6	19.6	22.8	26.8
	mm	NA	NA	NA	NA	NA	386	497	497	580	680
WT (RF)	KG	30	45	77	130	188	350	583	685	990	1046
WT (BW)	KG	26	38	65	114	163	318	540	625	910	960

Class 300

Cast Steel Cryogenic Globe Valve

Figure NO.:
GLG3R / GLG3B



For valves with a lower design temperature between -50 °C and -110 °C.

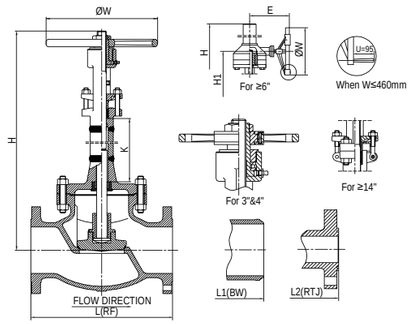
NPS	in	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"
DN	mm	50	80	100	150	200	250	300	350	400	450
L(RF)	in	10.5	12.5	14.0	17.5	22.0	24.5	28.0	33.0	34.0	38.5
	mm	267	318	356	445	559	622	711	838	864	978
L1(BW)	in	10.5	12.5	14.0	17.5	22.0	24.5	28.0	33.0	34.0	38.5
	mm	267	318	356	445	559	622	711	838	864	978
W	in	9.8	13.8	13.8	19.7	24.0	24.0	24.0	31.9	31.9	39.4
	mm	250	350	350	500	610	610	610	810	810	1000
H	in	20.5	23.1	27.4	34.4	41.7	48.8	54.5	57.3	64.4	75.3
	mm	520	588	695	875	1060	1240	1384	1455	1636	1913
H1	in	NA	NA	NA	NA	39.6	41.2	46.8	51.9	56.7	66.9
	mm	NA	NA	NA	NA	1007	1047	1188	1319	1440	1700
K	in	4.9	5.9	5.9	6.9	6.9	7.9	7.9	9.8	9.8	11.8
	mm	125	150	150	175	175	200	200	250	250	300
E	in	NA	NA	NA	NA	19.6	22.8	25.2	29.1	29.1	34.3
	mm	NA	NA	NA	NA	497	580	639	739	739	872
WT (RF)	KG	32	60	92	206	345	545	885	1170	1435	2025
WT (BW)	KG	26	49	69	170	302	478	790	1040	1270	1820

For valves with a lower design temperature between -110 °C and -196 °C.

NPS	in	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"
DN	mm	50	80	100	150	200	250	300	350	400	450
L(RF)	in	10.5	12.5	14.0	17.5	22.0	24.5	28.0	33.0	34.0	38.5
	mm	267	318	356	445	559	622	711	838	864	978
L1(BW)	in	10.5	12.5	14.0	17.5	22.0	24.5	28.0	33.0	34.0	38.5
	mm	267	318	356	445	559	622	711	838	864	978
W	in	9.8	13.8	13.8	19.7	24.0	24.0	24.0	31.9	31.9	39.4
	mm	250	350	350	500	610	610	610	810	810	1000
H	in	25.4	29.1	33.3	41.3	48.6	56.7	62.4	65.2	72.3	83.2
	mm	645	738	845	1050	1235	1440	1584	1655	1836	2113
H1	in	NA	NA	NA	NA	46.5	49.1	54.6	59.8	64.6	74.8
	mm	NA	NA	NA	NA	1182	1247	1388	1519	1640	1900
K	in	9.8	11.8	11.8	13.8	13.8	15.7	15.7	17.7	17.7	19.7
	mm	250	300	300	350	350	400	400	450	450	500
E	in	NA	NA	NA	NA	19.6	22.8	25.2	29.1	29.1	34.3
	mm	NA	NA	NA	NA	497	580	639	739	739	872
WT (RF)	KG	34	63	95	210	355	548	900	1190	1460	2050
WT (BW)	KG	28	52	72	174	312	481	805	1060	1295	1845

Class 600 Cast Steel Cryogenic Globe Valve

Figure NO.:
GLG6R / GLG6B



For valves with a lower design temperature between -50 °C and -110 °C.

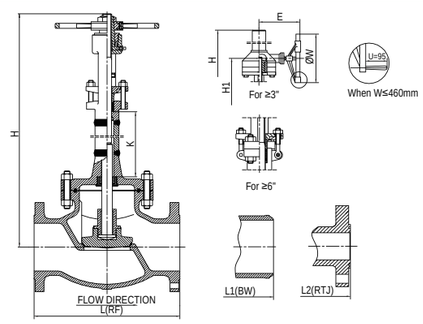
NPS	in	2"	3"	4"	6"	8"	10"	12"	14"	16"
DN	mm	50	80	100	150	200	250	300	350	400
L(RF)	in	11.5	14.0	17.0	22.0	26.0	31.0	33.0	35.0	39.0
	mm	292	356	432	559	660	787	838	889	991
L1(BW)	in	11.5	14.0	17.0	22.0	26.0	31.0	33.0	35.0	39.0
	mm	292	356	432	559	660	787	838	889	991
L2(RTJ)	in	11.6	14.1	17.1	22.1	26.1	31.1	33.1	35.1	39.1
	mm	295	359	435	562	663	790	841	892	994
W	in	13.8	17.7	17.7	24.0	24.0	31.9	31.9	29.5	39.4
	mm	350	450	450	610	610	810	810	750	1000
H	in	21.4	28.5	31.7	37.1	53.3	51.9	60.6	66.9	70.3
	mm	544	724	804	942	1355	1317	1539	1698	1786
H1	in	NA	NA	NA	34.6	41.0	46.5	52.9	60.8	62.3
	mm	NA	NA	NA	880	1042	1181	1343	1545	1583
K	in	4.9	5.9	5.9	6.9	6.9	7.9	7.9	9.8	9.8
	mm	125	150	150	175	175	200	200	250	250
E	in	NA	NA	NA	19.6	25.2	29.1	29.1	34.3	34.3
	mm	NA	NA	NA	497	639	739	739	872	872
WT (RF)	KG	44	79	156	340	656	1130	1325	1785	2375
WT (BW)	KG	34	63	125	286	569	988	1160	1585	2098

For valves with a lower design temperature between -110 °C and -196 °C.

NPS	in	2"	3"	4"	6"	8"	10"	12"	14"	16"
DN	mm	50	80	100	150	200	250	300	350	400
L(RF)	in	11.5	14.0	17.0	22.0	26.0	31.0	33.0	35.0	39.0
	mm	292	356	432	559	660	787	838	889	991
L1(BW)	in	11.5	14.0	17.0	22.0	26.0	31.0	33.0	35.0	39.0
	mm	292	356	432	559	660	787	838	889	991
L2(RTJ)	in	11.6	14.1	17.1	22.1	26.1	31.1	33.1	35.1	39.1
	mm	295	359	435	562	663	790	841	892	994
W	in	13.8	17.7	17.7	24.0	24.0	31.9	31.9	29.5	39.4
	mm	350	450	450	610	610	810	810	750	1000
H	in	26.3	34.4	37.6	44.0	53.3	59.7	68.5	74.7	78.2
	mm	669	874	954	1117	1355	1517	1739	1898	1986
H1	in	NA	NA	NA	41.5	47.9	54.4	60.7	68.7	70.2
	mm	NA	NA	NA	1055	1217	1381	1543	1745	1783
K	in	9.8	11.8	11.8	13.8	13.8	15.7	15.7	17.7	17.7
	mm	250	300	300	350	350	400	400	450	450
E	in	NA	NA	NA	19.6	25.2	29.1	29.1	34.3	34.3
	mm	NA	NA	NA	497	639	739	739	872	872
WT (RF)	KG	46	82	160	350	667	1148	1350	1810	2435
WT (BW)	KG	36	66	129	296	580	1000	1185	1610	2158

Class 900 Cast Steel Cryogenic Globe Valve

Figure NO.:
GLG9R / GLG9B



For valves with a lower design temperature between -50 °C and -110 °C.

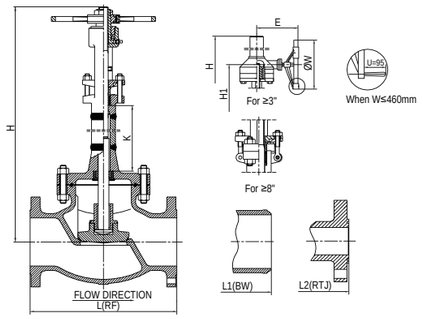
NPS	in	2"	3"	4"	6"	8"	10"	12"
DN	mm	50	80	100	150	200	250	300
L(RF)	in	14.5	15.0	18.0	24.0	29.0	33.0	38.0
	mm	368	381	457	610	737	838	965
L1(BW)	in	14.5	15.0	18.0	24.0	29.0	33.0	38.0
	mm	368	381	457	610	737	838	965
L2(RTJ)	in	14.6	15.1	18.1	24.1	29.1	33.1	38.1
	mm	371	384	460	613	740	841	968
W	in	17.7	18.1	24.0	24.0	31.9	31.9	39.4
	mm	450	460	610	610	810	810	1000
H	in	25.2	28.5	37.1	45.4	51.7	58.4	65.1
	mm	640	725	943	1153	1314	1484	1654
H1	in	NA	26.7	32.7	42.1	45.6	53.1	59.1
	mm	NA	677	830	1070	1158	1348	1501
K	in	4.9	5.9	5.9	6.9	6.9	7.9	7.9
	mm	125	150	150	175	175	200	200
E	in	NA	15.2	19.6	22.8	29.1	29.1	34.3
	mm	NA	386	497	580	739	739	872
WT (RF)	KG	97	148	239	562	942	1227	2039
WT (BW)	KG	77	122	198	482	802	1037	1783

For valves with a lower design temperature between -110 °C and -196 °C.

NPS	in	2"	3"	4"	6"	8"	10"	12"
DN	mm	50	80	100	150	200	250	300
L(RF)	in	14.5	15.0	18.0	24.0	29.0	33.0	38.0
	mm	368	381	457	610	737	838	965
L1(BW)	in	14.5	15.0	18.0	24.0	29.0	33.0	38.0
	mm	368	381	457	610	737	838	965
L2(RTJ)	in	14.6	15.1	18.1	24.1	29.1	33.1	38.1
	mm	371	384	460	613	740	841	968
W	in	17.7	18.1	24.0	24.0	31.9	31.9	39.4
	mm	450	460	610	610	810	810	1000
H	in	30.1	34.4	43.0	52.3	58.6	66.3	73.0
	mm	765	875	1093	1328	1489	1684	1854
H1	in	NA	32.6	38.6	49.0	52.5	60.9	67.0
	mm	NA	827	980	1245	1333	1548	1701
K	in	9.8	11.8	11.8	13.8	13.8	15.7	15.7
	mm	250	300	300	350	350	400	400
E	in	NA	15.2	19.6	22.8	29.1	29.1	34.3
	mm	NA	386	497	580	739	739	872
WT (RF)	KG	100	152	248	576	958	1260	2093
WT (BW)	KG	80	126	207	496	818	1070	1837

Class 1500 Cast Steel Cryogenic Globe Valve

Figure NO.:
GLG15R / GLG15B



For valves with a lower design temperature between -50 °C and -110 °C.

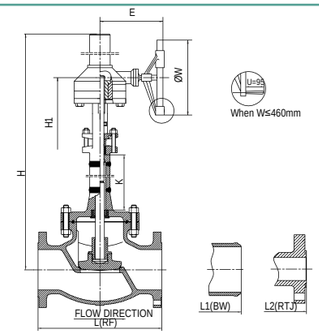
NPS	in	2"	3"	4"	6"	8"	10"
DN	mm	50	80	100	150	200	250
L(RF)	in	14.5	18.5	21.5	27.8	32.8	39.0
	mm	368	470	546	705	832	991
L1(BW)	in	14.5	18.5	21.5	27.8	32.8	39.0
	mm	368	470	546	705	832	991
L2(RTJ)	in	14.6	18.6	21.6	28.0	33.1	39.4
	mm	371	473	549	711	842	1000
W	in	17.7	24.0	24.0	24.0	29.5	29.5
	mm	450	610	610	610	750	750
H	in	27.4	33.0	39.2	51.2	60.4	67.2
	mm	696	838	996	1301	1534	1707
H1	in	NA	30.9	35.9	45.9	55.0	61.2
	mm	NA	785	913	1165	1398	1554
K	in	4.9	5.9	5.9	6.9	6.9	7.9
	mm	125	150	150	175	175	200
E	in	NA	19.6	22.8	25.2	29.1	34.3
	mm	NA	497	580	639	739	872
WT (RF)	KG	91	300	380	927	1550	2237
WT (BW)	KG	72	262	320	800	1292	1907

For valves with a lower design temperature between -110 °C and -196 °C.

NPS	in	2"	3"	4"	6"	8"	10"
DN	mm	50	80	100	150	200	250
L(RF)	in	14.5	18.5	21.5	27.8	32.8	39.0
	mm	368	470	546	705	832	991
L1(BW)	in	14.5	18.5	21.5	27.8	32.8	39.0
	mm	368	470	546	705	832	991
L2(RTJ)	in	14.6	18.6	21.6	28.0	33.1	39.4
	mm	371	473	549	711	842	1000
W	in	17.7	24.0	24.0	24.0	29.5	29.5
	mm	450	610	610	610	750	750
H	in	32.3	38.9	45.1	58.1	67.3	75.1
	mm	821	988	1146	1476	1709	1907
H1	in	NA	36.8	41.9	52.8	61.9	69.1
	mm	NA	935	1063	1340	1573	1754
K	in	9.8	11.8	11.8	13.8	13.8	15.7
	mm	250	300	300	350	350	400
E	in	NA	19.6	22.8	25.2	29.1	34.3
	mm	NA	497	580	639	739	872
WT (RF)	KG	96	308	396	950	1586	2297
WT (BW)	KG	77	270	336	823	1328	1967

Class 2500 Cast Steel Cryogenic Globe Valve

Figure NO.:
GLG25R / GLG25B

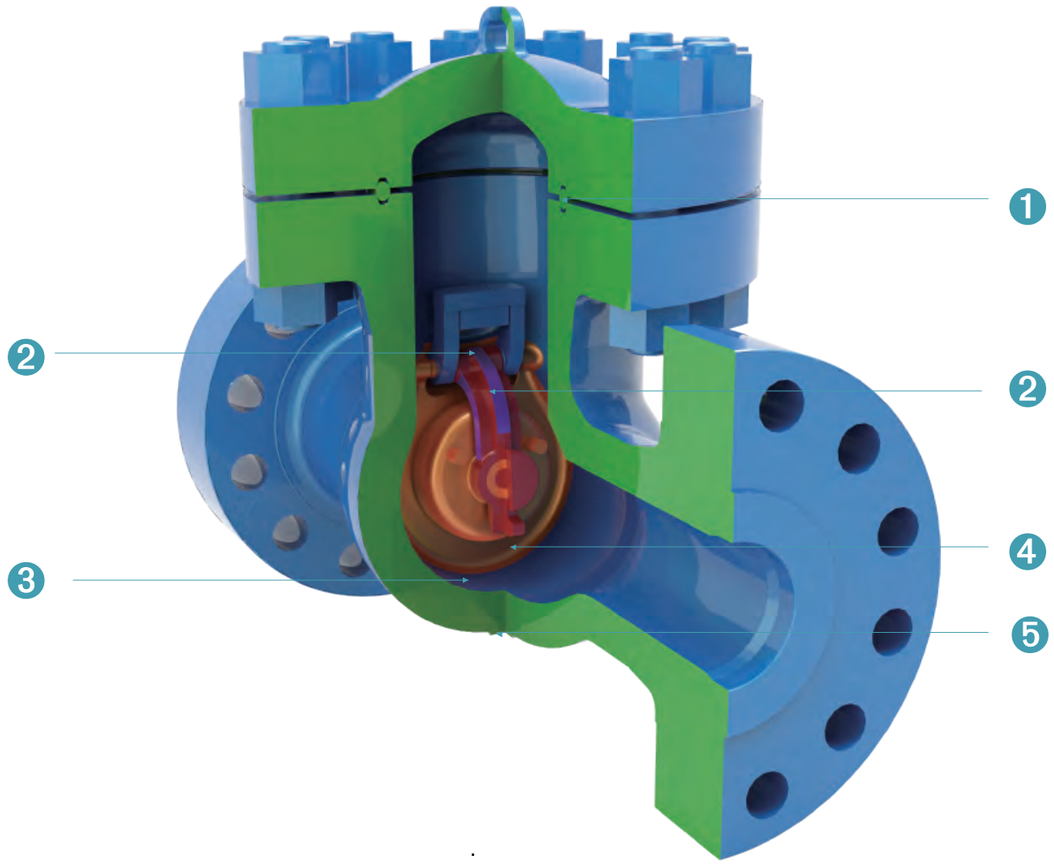


For valves with a lower design temperature between -50 °C and -110 °C.

NPS	in	2"	3"	4"	6"	8"
DN	mm	50	80	100	150	200
L(RF)	in	17.8	22.8	26.5	36.0	40.2
	mm	451	578	673	914	1022
L1(BW)	in	17.8	22.8	26.5	36.0	40.2
	mm	451	578	673	914	1022
L2(RTJ)	in	17.9	23.0	26.9	36.5	40.9
	mm	454	584	683	927	1038
W	in	18.1	24.0	28.0	31.9	31.9
	mm	460	610	710	810	810
H	in	28.7	35.4	40.8	56.7	63.8
	mm	730	898	1037	1440	1621
H1	in	27.1	33.3	37.6	51.3	57.8
	mm	688	845	954	1304	1468
K	in	4.9	5.9	5.9	6.9	6.9
	mm	125	150	150	175	175
E	in	9.4	19.6	26.8	29.1	34.3
	mm	239	497	680	739	872
WT (RF)	KG	158	435	668	1496	2486
WT (BW)	KG	128	363	558	1220	2100

For valves with a lower design temperature between -110 °C and -196 °C.

NPS	in	2"	3"	4"	6"	8"
DN	mm	50	80	100	150	200
L(RF)	in	17.8	22.8	26.5	36.0	40.2
	mm	451	578	673	914	1022
L1(BW)	in	17.8	22.8	26.5	36.0	40.2
	mm	451	578	673	914	1022
L2(RTJ)	in	17.9	23.0	26.9	36.5	40.9
	mm	454	584	683	927	1038
W	in	18.1	24.0	28.0	31.9	31.9
	mm	460	610	710	810	810
H	in	33.7	41.3	46.7	63.6	70.7
	mm	855	1048	1187	1615	1796
H1	in	32.0	39.2	43.5	58.2	64.7
	mm	813	995	1104	1479	1643
K	in	9.8	11.8	11.8	13.8	13.8
	mm	250	300	300	350	350
E	in	9.4	19.6	26.8	29.1	34.3
	mm	239	497	680	739	872
WT (RF)	KG	164	448	685	1526	2539
WT (BW)	KG	130	376	575	1250	2153



1. Spiral wound gasket for Class 150 to Class 600 valves, and ring joint for Class 900 & above valves or as an option for the Class 600 valves on customer request.

2. A hinge and hinge pin provided and mounted so as to permit full movement of the disc.

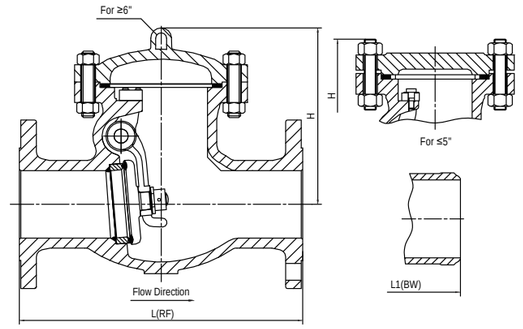
3. Standard renewable seal welded seat with stellite 6 while optional screwed-in seat.

4. Standard swing disc type, used in horizontal position for liquid service application or used in vertical position where liquid flow from botton to top.

5. Provision of standard bosses for a drain tapping at location G at the lower part of body centerline.Additional bosses conform to customer requirements.

Class 150 Cast Steel Cryogenic Check Valve(Swing Type)

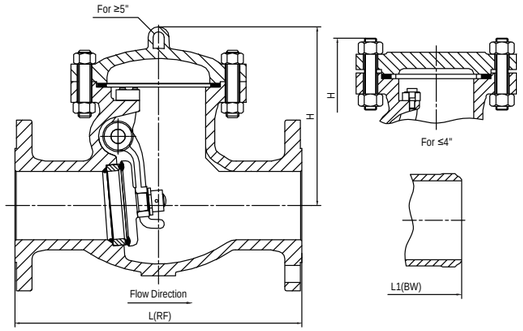
Figure NO.:
SN1R / SN1B



NPS	in	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"
DN	mm	50	80	100	150	200	250	300	350	400	450	500	600
L(RF)	in	8.0	9.5	11.5	14.0	19.5	24.5	27.5	31.0	34.0	38.5	38.5	51.0
	mm	203	241	292	356	495	622	699	787	864	978	978	1295
L1(BW)	in	8.0	9.5	11.5	14.0	19.5	24.5	27.5	31.0	34.0	38.5	38.5	51.0
	mm	203	241	292	356	495	622	699	787.0	864	978	978	1295
H	in	5.7	7.4	7.7	11.2	13.8	15.1	17.5	18.7	20.1	21.8	22.2	27.4
	mm	145	187	195	285	350	384	445	475	510	554	563	697
WT(RF)	KG	16	29	44	79	130	240	316	442	564	679	800	1398
WT(BW)	KG	13	22	33	65	108	180	282	376	464	565	680	1238

Class 300 Cast Steel Cryogenic Check Valve(Swing Type)

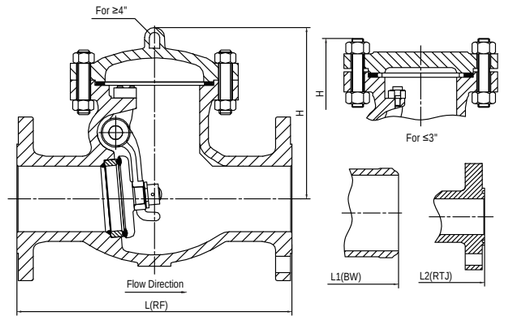
Figure NO.:
SN3R / SN3B



NPS	in	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"
DN	mm	50	80	100	150	200	250	300	350	400	450	500	600
L(RF)	in	10.5	12.5	14.0	17.5	21.0	24.5	28.0	33.0	34.0	38.5	40.0	53.0
	mm	267	318	356	445	533	622	711	838	864	978	1016	1346
L1(BW)	in	10.5	12.5	14.0	17.5	21.0	24.5	28.0	33.0	34.0	38.5	40.0	53.0
	mm	267	318	356	445	533	622	711	838.0	864	978	1016	1346
H	in	6.2	7.7	9.0	12.5	14.8	16.8	19.2	21.5	21.1	26.8	28.3	30.9
	mm	158	195	228	317	375	426	487	546	536	680	719	784
WT(RF)	KG	24	42	68	125	212	312	511	596	800	1140	1320	2050
WT(BW)	KG	18	32	54	98	156	239	377	476	600	933	1069	1670

Class 600 Cast Steel Cryogenic Check Valve(Swing Type)

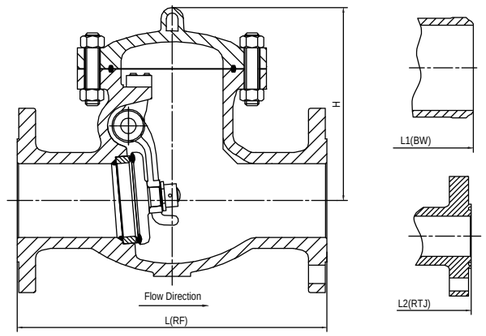
Figure NO.:
SN6R / SN6B



NPS	in	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"
DN	mm	50	80	100	150	200	250	300	350	400	450	500	600
L(RF)	in	11.5	14.0	17.0	22.0	26.0	31.0	33.0	35.0	39.0	43.0	47.0	55.0
	mm	292	356	432	559	660	787	838	889	991	1092	1194	1397
L1(BW)	in	11.5	14.0	17.0	22.0	26.0	31.0	33.0	35.0	39.0	43.0	47.0	55.0
	mm	292	356	432	559	660	787	838	889.0	991	1092	1194	1397
L2(RTJ)	in	11.6	14.1	17.1	22.1	26.1	31.1	33.1	35.1	39.1	43.1	47.2	55.4
	mm	295	359	435	562	663	790	841	892.0	994	1095	1200	1407
H	in	7.0	8.8	12.4	14.7	16.8	18.6	21.7	24.3	27.7	29.3	32.2	39.2
	mm	178	224	315	374	426	472	550	616	704	743	818	996
WT(RF)	KG	30	58	98	228	386	568	742	962	1350	1608	2280	3340
WT(BW)	KG	23	38	76	166	286	442	605	782	1072	1350	1848	2730

Class 900 Cast Steel Cryogenic Check Valve(Swing Type)

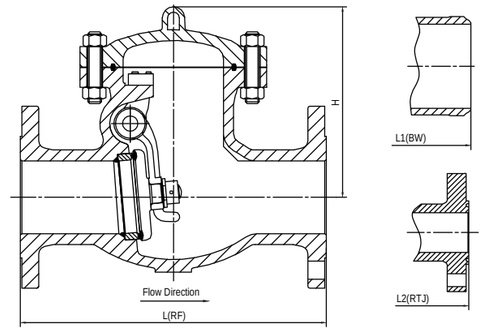
Figure NO.:
SN9R / SN9B



NPS	in	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"
DN	mm	50	80	100	150	200	250	300	350	400	450	500	600
L(RF)	in	14.5	15.0	18.0	24.0	29.0	33.0	38.0	40.5	44.5	48.0	52.0	61.0
	mm	368	381	457	610	737	838	965	1029	1130	1219	1321	1549
L1(BW)	in	14.5	15.0	18.0	24.0	29.0	33.0	38.0	40.5	44.5	48.0	52.0	61.0
	mm	368	381	457	610	737	838	965	1029.0	1130	1219	1321	1549
L2(RTJ)	in	14.6	15.1	18.1	24.1	29.1	33.1	38.1	40.9	44.9	48.5	52.5	61.7
	mm	371	384	460	613	740	841	968	1038.0	1140	1232	1333	1568
H	in	10.1	12.3	13.7	17.4	19.8	22.8	25.8	24.2	28.5	37.6	39.6	44.3
	mm	256	313	348	441	504	579	655	614	723	954	1005	1126
WT(RF)	KG	74	98	148	302	516	815	1115	1386	1872	2920	3790	5500
WT(BW)	KG	52	70	112	215	390	607	912	1096	1528	2438	3176	4370

Class 1500 Cast Steel Cryogenic Check Valve(Swing Type)

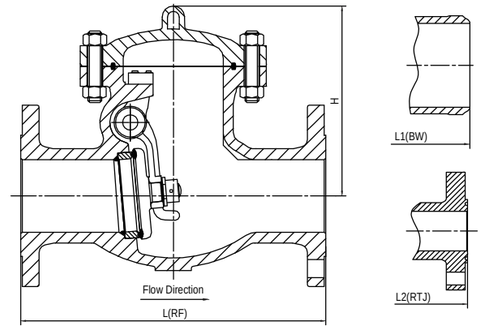
Figure NO.:
SN15R / SN15B



NPS	in	2"	3"	4"	6"	8"	10"	12"	14"
DN	mm	50	80	100	150	200	250	300	350
L(RF)	in	14.5	18.5	21.5	27.8	32.8	39.0	44.5	49.5
	mm	368	470	546	705	832	991	1130	1257
L1(BW)	in	14.5	18.5	21.5	27.8	32.8	39.0	44.5	49.5
	mm	368	470	546	705	832	991	1130	1257.0
L2(RTJ)	in	14.6	18.6	21.6	28.0	33.1	39.4	45.1	50.2
	mm	371	473	549	711	842	1000	1146	1276.0
H	in	10.1	13.9	16.2	20.7	24.2	30.0	32.1	32.4
	mm	256	354	412	525	615	763	816	824
WT(RF)	KG	74	160	225	522	856	1520	2060	2900
WT(BW)	KG	52	122	176	406	662	1214	1600	2260

Class 2500 Cast Steel Cryogenic Check Valve(Swing Type)

Figure NO.:
SN25R / SN25B



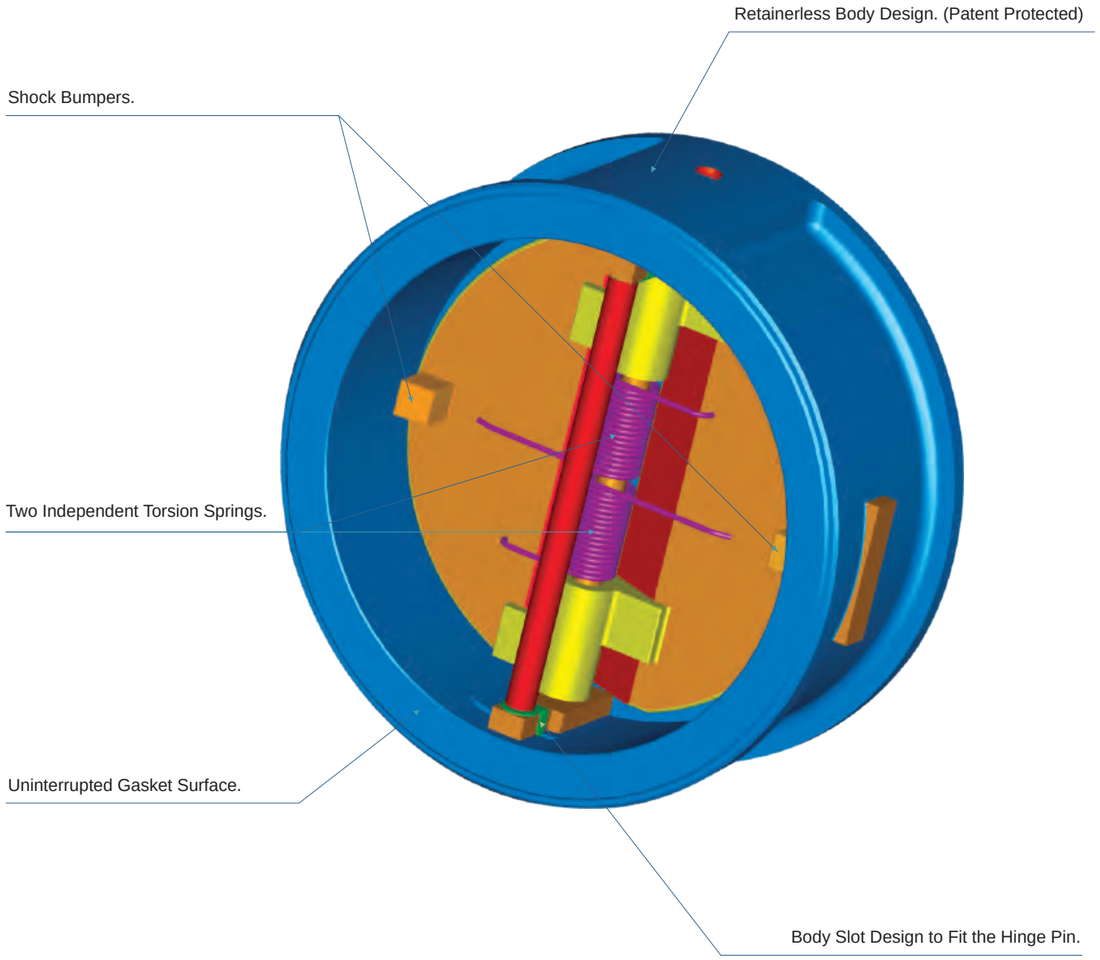
NPS	in	2"	3"	4"	6"	8"	10"	12"
DN	mm	50	80	100	150	200	250	300
L(RF)	in	17.8	22.8	26.5	36.0	40.2	50.0	56.0
	mm	451	578	673	914	1022	1270	1422
L1(BW)	in	17.8	22.8	26.5	36.0	40.2	50.0	56.0
	mm	451	578	673	914	1022	1270	1422
L2(RTJ)	in	17.9	23.0	26.9	36.5	40.9	50.9	56.9
	mm	454	584	683	927	1038	1292	1445
H	in	15.0	17.0	20.4	22.7	28.8	33.0	35.3
	mm	380	433	518	576	732	837	896
WT(RF)	KG	170	255	422	822	1525	2823	3715
WT(BW)	KG	135	170	315	596	1216	2060	2697

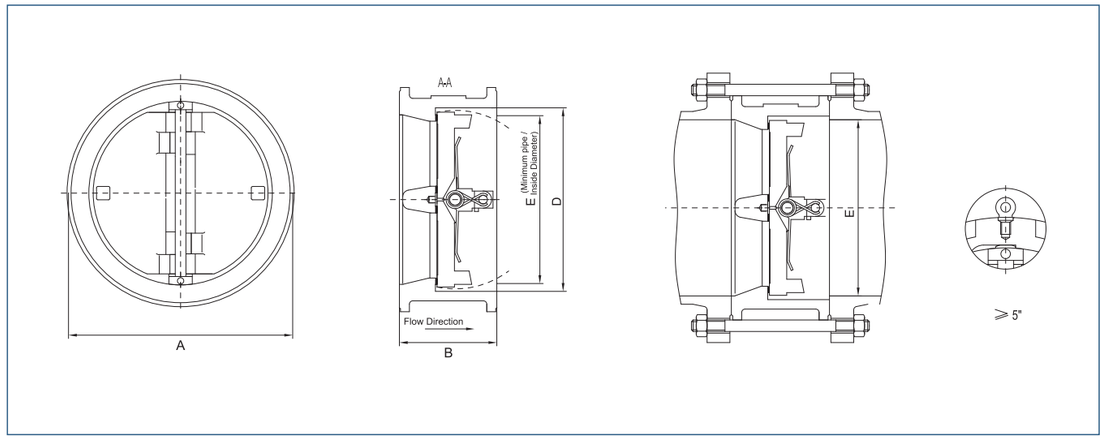
Design Feature

Neway series SBN check valve has a shorter face-to-face dimension and dual plate design, the end connection options include wafer type, lug type and double-flange type, and are available in size from 2" to 60" and in pressure ratings from ASME class 150 through 2500. A wide range of body and trim materials are optional on customer's request.

Compared to conventional swing check valves, NEWAY'S dual plate check valves have the advantage of zero leakage toward outside (nobolted or threaded connections), cost savings, they can be installed in any line orientation, superior seal performance, offer minimal line shock, lower pressure loss and zero seat wear.

This series of valves are widely used in oil & gas production, petroleum refining, petrochemical, pulp & paper, shipbuilding, and other fluid back flow prevention application.

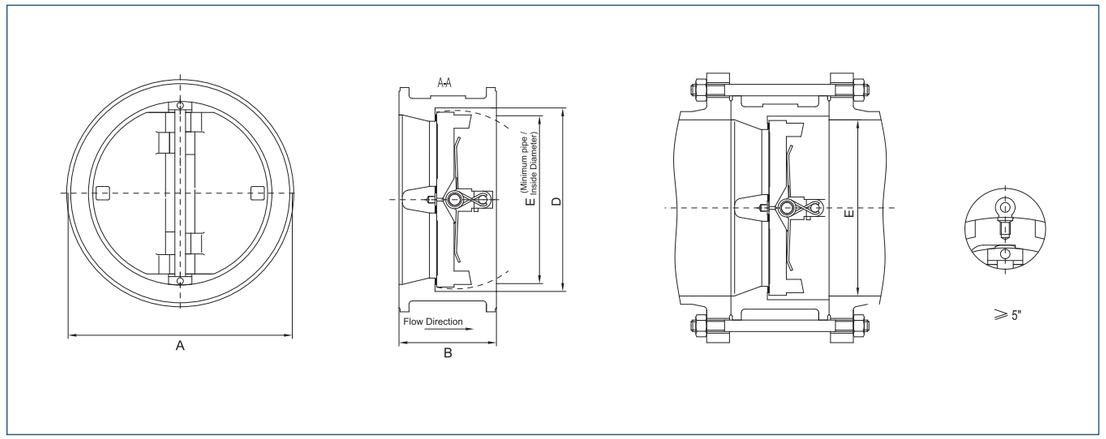




Wafer type

Wafer Type - ASME Class 150

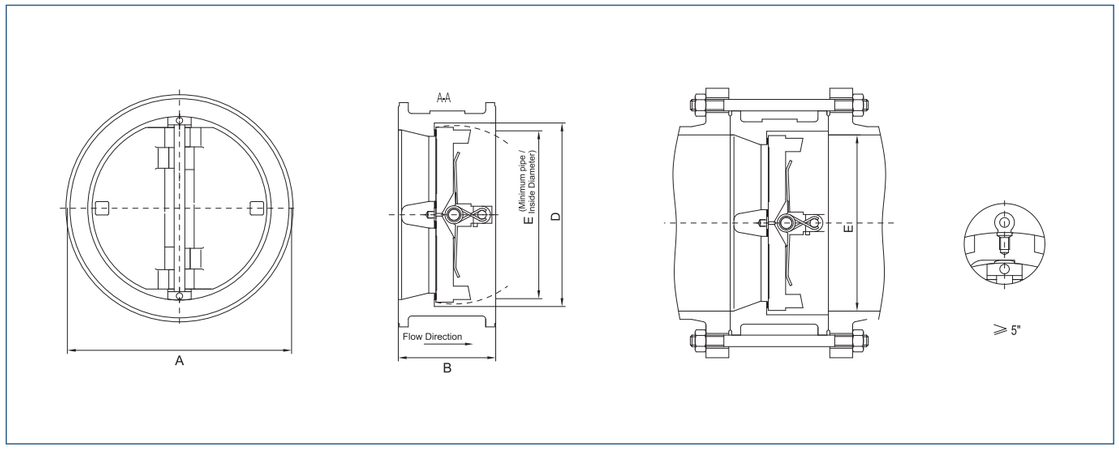
Size		Dimensions								Stud details					End facing	Hook screw hole size		Weight	
		A		B		D		E		No.	Diameter		RF Stud length						
NPS	DN	in	mm	in	mm	in	mm	in	mm		in	mm	in	mm		in	mm	lbs	kg
2”	50	4.09	104	2.38	60	2.36	60	1.34	34	4	0.63	16	5.75	146	RF	-	-	6	3
21/2”	65	4.84	123	2.63	67	2.99	76	2.13	54	4	0.63	16	6.25	159	RF	-	-	11	5
3”	80	5.35	136	2.88	73	3.70	94	2.72	69	4	0.63	16	6.75	171	RF	-	-	11	5
4”	100	6.85	174	2.88	73	4.64	114	3.83	97	8	0.63	16	6.75	171	RF	-	-	18	8
5”	125	7.72	196	3.38	86	5.56	141	4.87	122	8	0.75	19	7.50	191	RF	-	-	28	13
6”	150	8.70	221	3.89	99	6.77	172	5.77	146	8	0.75	19	8.00	203	RF	0.50	13	31	14
8”	200	10.94	278	5.00	127	8.74	222	7.63	194	8	0.75	19	9.50	241	RF	0.50	13	57	26
10”	250	13.35	339	5.75	146	10.83	275	9.56	243	12	0.88	22	10.50	267	RF	0.50	13	98	45
12”	300	16.06	408	7.13	181	12.90	328	11.38	289	12	0.88	22	12.25	311	RF	0.75	19	140	64
14”	350	17.68	449	7.25	184	14.09	358	12.50	318	12	1.00	25	12.75	324	RF	0.75	19	170	77
16”	400	20.12	511	7.48	190	15.98	406	14.57	370	15	1.13	29	13.25	337	RF	1.00	25	230	104
18”	450	21.63	549	8.00	203	18.03	458	16.65	423	16	1.13	29	14.25	362	RF	1.00	25	270	123
20”	500	23.88	606	8.63	219	20.16	512	18.33	466	20	1.25	32	15.25	387	RF	1.00	25	360	163
24”	600	28.25	718	8.75	222	23.10	587	22.63	575	20	1.25	32	16.00	406	RF	1.00	25	480	218
26”	650	30.50	775	8.74	222	24.70	627	23.50	597	24	1.25	32	23.25	591	RF	1.00	25	1000	454
28”	700	32.75	832	12.00	305	27.00	687	25.43	646	28	1.25	32	24.50	622	RF	1.00	25	1200	544
30”	750	34.75	883	12.00	305	29.70	740	28.03	712	28	1.25	32	21.75	552	RF	1.00	25	1000	454
32”	800	37.00	940	14.00	356	31.10	790	29.80	757	28	1.50	38	24.75	629	RF	1.00	25	1400	635
36”	900	41.25	1048	14.50	368	35.50	901	33.43	849	32	1.50	38	26.00	660	RF	1.00	25	1750	794
40”	1000	45.75	1162	17.00	432	40.00	1016	36.02	915	36	1.50	38	28.50	724	RF	1.50	38	2600	1179
42”	1050	48.00	1219	17.00	432	41.16	1046	38.62	981	36	1.50	38	29.00	737	RF	1.50	38	2850	1293
48”	1200	54.50	1384	20.63	524	46.26	1175	43.54	1106	44	1.50	38	31.00	787	RF	1.50	38	4400	1996
54”	1350	61.00	1549	23.25	591	54.00	1372	51.50	1308	44	1.75	44	35.75	908	RF	1.50	38	5500(2)	2495(2)
60”	1500	67.50	1715	26.00	660	58.98	1498	56.00	1422	52	1.75	44	38.75	984	RF	1.50	38	7200(2)	3266(2)



Wafer type

Wafer Type - ASME Class 300

Size		Dimensions								Stud details					End facing	Hook screw hole size		Weight	
		A		B		D		E		No.	Diameter		RF Stud length						
NPS	DN	in	mm	in	mm	in	mm	in	mm		in	mm	in	mm		in	mm	lbs	kg
2”	50	4.37	111	2.38	60	2.36	60	1.34	34	8	0.63	16	6.00	152	RF	-	-	6.5	3
21/2”	65	5.08	129	2.63	67	2.99	76	2.13	54	8	0.75	19	6.75	171	RF	-	-	13	6
3”	80	5.87	149	2.88	73	3.70	94	2.72	69	8	0.75	19	7.25	184	RF	-	-	13	6
4”	100	7.09	180	2.88	73	4.65	118	3.83	97	8	0.75	19	7.50	191	RF	-	-	18	8
5”	125	8.46	215	3.38	86	5.56	141	4.87	122	8	0.75	19	8.25	210	RF	-	-	28	13
6”	150	9.84	250	3.89	99	6.77	172	5.77	146	12	0.75	19	9.00	229	RF	0.50	13	40	18
8”	200	12.13	308	5.00	127	8.74	222	7.63	194	12	0.88	22	10.75	273	RF	0.50	13	68	31
10”	250	14.17	360	5.75	146	10.83	275	9.56	243	16	1.00	25	12.25	311	RF	0.50	13	110	50
12”	300	16.57	421	7.13	181	12.91	328	11.38	289	16	1.13	29	14.25	362	RF	0.75	19	170	77
14”	350	19.06	484	8.75	222	14.09	358	12.50	318	20	1.13	29	16.00	406	RF	0.75	19	290	132
16”	400	21.18	538	9.13	232	15.98	406	14.57	370	20	1.25	32	17.00	432	RF	1.00	25	400	181
18”	450	23.50	597	10.38	264	18.03	458	16.14	410	24	1.25	32	18.50	470	RF	1.00	25	520	236
20”	500	25.75	654	11.50	292	20.20	512	17.94	456	24	1.25	32	20.00	508	RF	1.00	25	700	318
24”	600	30.50	775	12.50	318	23.40	595	21.56	548	24	1.50	38	22.00	559	RF	1.00	25	1050	476
26”	650	32.88	835	12.50	318	25.50	647	23.46	596	28	1.63	41	25.00	635	RF	1.00	25	1250	567
28”	700	35.38	899	14.50	368	27.60	700	26.38	670	28	1.63	41	26.50	673	RF	1.00	25	1500	680
30”	750	37.50	953	14.50	368	29.10	740	27.56	700	28	1.75	44	26.75	679	RF	1.00	25	1650	748
32”	800	39.63	1006	14.50	368	30.80	782	29.21	742	28	1.88	48	29.00	737	RF	1.00	25	2000	907
36”	900	44.00	1118	19.00	483	35.59	904	33.85	860	32	2.00	51	32.75	832	RF	1.00	25	2700	1225
40”	1000	43.88	1114	21.50	546	37.10	942	-	-	32	1.63	41	35.25	895	RF	1.50	38	3400	1542
42”	1050	45.88	1165	22.38	568	38.60	980	35.83	910	32	1.63	41	36.50	927	RF	1.50	38	4200	1905
48”	1200	52.13	1324	24.75	629	43.60	1108	47.00	1194	32	1.88	48	40.50	1029	RF	1.50	38	7350	3334



Wafer type

Wafer Type - ASME Class 600

Size		Dimensions								Stud details						End facing	Hook screw hole size		Weight	
		A		B		D		E		No.	Diameter		RF Stud length		RFJ Stud length					
NPS	DN	in	mm	in	mm	in	mm	in	mm		in	mm	in	mm	in	mm		in	mm	lbs	kg
2”	50	4.38	111	2.38	60	2.38	60	1.34	34	8	0.63	16	6.50	165	7.00	178	RF/RTJ#23	-	-	6.5	3
3”	80	5.83	148	2.88	73	3.70	94	2.72	69	8	0.75	19	7.75	197	8.25	210	RF/RTJ#31	-	-	13	6
4”	100	7.63	194	3.13	79	4.65	118	3.83	97	8	0.88	22	8.75	222	9.25	235	RF/RTJ#37	-	-	24	11
6”	150	10.50	267	5.38	137	6.77	172	5.04	128	12	1.00	25	12.00	305	12.75	324	RF/RTJ#45	0.50	13	69	31
8”	200	12.63	321	6.50	165	8.74	222	7.09	180	12	1.13	29	14.25	362	14.75	375	RF/RTJ#49	0.50	13	116	53
10”	250	15.75	400	8.38	213	10.63	270	8.05	206	16	1.25	32	17.00	432	17.50	445	RF/RTJ#53	0.50	13	210	95
12”	300	18.00	457	9.00	229	12.60	320	10.70	272	20	1.25	32	17.75	451	18.25	464	RF/RTJ#57	0.75	19	300	136
14”	350	19.38	492	10.75	273	13.86	352	11.42	290	20	1.38	35	20.25	514	20.75	527	RF/RTJ#61	0.75	19	430	195
16”	400	22.25	565	12.00	305	16.00	406	13.58	345	20	1.50	38	22.25	565	22.75	578	RF/RTJ#65	1.00	25	650	295
18”	450	24.13	613	14.25	362	18.03	458	14.76	375	20	1.63	41	25.25	641	25.75	654	RF/RTJ#69	1.00	25	850	386
20”	500	26.88	683	14.50	368	20.16	512	17.32	440	24	1.63	41	26.00	660	26.75	679	RF/RTJ#73	1.00	25	1125	510
24”	600	31.13	791	17.25	438	23.54	598	20.87	530	24	1.63	41	29.75	756	30.75	781	RF/RTJ#77	1.00	25	1750	794
26”	650	34.13	867	18.00	457	23.82	605	24.00	610	28	1.88	48	31.75	806	32.75	832	RF/RTJ#93	1.00	25	1950	885
28”	700	36.00	914	19.00	483	24.69	627	22.64	575	28	2.00	51	33.25	845	34.25	870	RF/RTJ#94	1.00	25	2300	1043
30”	750	38.25	972	19.88	505	26.81	681	24.80	630	28	2.00	51	34.25	870	35.25	895	RF/RTJ#95	1.00	25	2850	1293
32”	800	40.25	1022	21.00	533	28.50	724	25.59	650	28	2.25	57	36.25	921	37.25	946	RF/RTJ#96	1.00	25	3200	1452
36”	900	44.50	1130	25.00	635	32.13	816	29.53	750	28	2.50	64	41.25	1048	42.50	1080	RF/RTJ#98	1.00	25	4700	2132
40”	1000	45.50	1156	26.00	660	36.00	914	-	-	32	2.25	57	44.50	1130	-	-	RF	1.50	a	5200	2359
42”	1050	48.00	1219	27.60	701	38.00	965	39.50	1003	28	2.50	64	47.25	1200	-	-	RF	1.50	38	6000	2722

Wafer Type - ASME Class 900

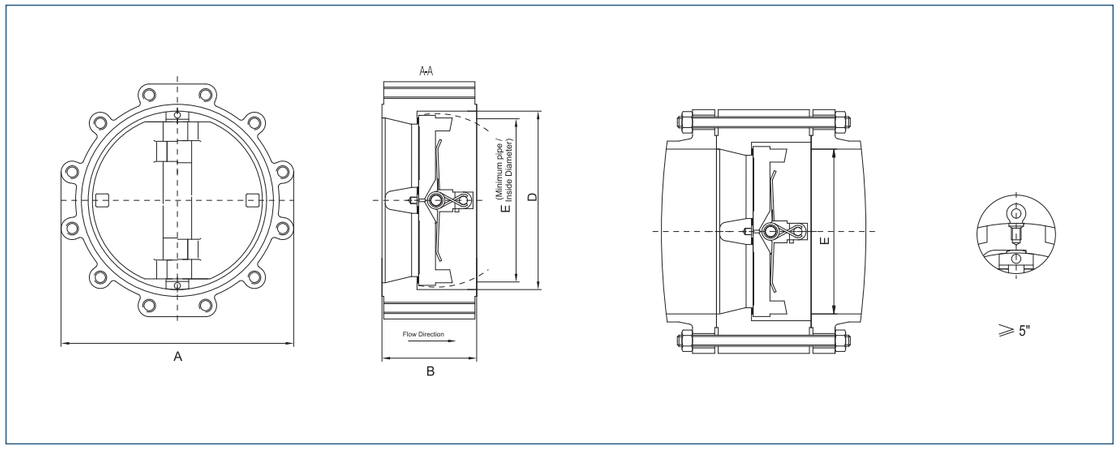
Size		Dimensions								Stud details								End facing	Hook screw hole size		Weight	
		A		B		D		E		No.	Diameter		RF Stud length		RFJ Stud length							
NPS	DN	in	mm	in	mm	in	mm	in	mm		in	mm	in	mm	in	mm			in	mm	lbs	kg
2”	50	5.63	143	2.75	70	2.24	57	1.34	34	8	0.88	22	8.50	216	8.75	222	RF/RTJ#24		-	-	11.5	5
3”	80	6.63	168	3.25	83	3.39	86	2.48	63	8	0.88	22	8.50	216	9.00	229	RF/RTJ#31		-	-	21	10
4”	100	8.13	206	4.00	102	4.50	114	3.27	83	8	1.13	29	10.25	260	10.75	273	RF/RTJ#37		-	-	43	20
6”	150	11.38	289	6.25	159	6.63	168	5.47	139	12	1.13	29	13.25	337	13.75	349	RF/RTJ#45		0.50	13	125	57
8”	200	14.13	359	8.13	206	8.63	219	6.30	160	12	1.38	35	16.25	413	16.75	425	RF/RTJ#49		0.50	13	275	125
10”	250	17.13	435	9.50	241	10.39	264	7.60	193	16	1.38	35	18.50	470	18.75	476	RF/RTJ#53		0.50	13	400	181
12”	300	19.63	498	11.50	292	12.60	320	9.84	250	20	1.38	35	20.75	527	21.25	540	RF/RTJ#57		0.75	19	450	204
14”	350	20.50	521	14.00	356	13.39	340	10.43	265	20	1.50	38	23.75	603	14.50	622	RF/RTJ#62		0.75	19	700	318
16”	400	22.63	575	15.13	384	15.04	382	10.83	275	20	1.63	41	25.50	648	26.25	667	RF/RTJ#66		1.00	25	950	431
18”	450	25.13	638	17.75	451	17.32	440	10.04	255	20	1.88	48	29.25	743	30.00	762	RF/RTJ#70		1.00	25	1400	635
20”	500	27.50	699	17.75	451	19.49	495	17.52	445	20	2.00	51	30.00	762	31.00	787	RF/RTJ#74		1.00	25	1650	748
24”	600	33.00	838	19.50	495	23.43	595	20.67	525	20	2.50	64	33.75	857	35.00	889	RF/RTJ#78		1.00	25	2325	1055

Wafer Type - ASME Class 1500

Size		Dimensions								Stud details								End facing	Hook screw hole size		Weight	
		A		B		D		E		No.	Diameter		RF Stud length		RFJ Stud length							
NPS	DN	in	mm	in	mm	in	mm	in	mm		in	mm	in	mm	in	mm			in	mm	lbs	kg
2”	50	5.63	143	2.75	70	2.24	57	1.34	34	8	0.88	22	8.50	216	8.75	222	RF/RTJ#24		-	-	11.5	5
3”	80	6.88	175	3.25	83	3.39	86	2.48	63	8	1.13	29	10.25	260	10.50	267	RF/RTJ#35		-	-	23	10
4”	100	8.25	210	4.00	102	4.50	114	3.31	84	8	1.25	32	11.75	298	12.00	305	RF/RTJ#39		-	-	45	20
6”	150	11.13	283	6.25	159	6.63	168	5.47	139	12	1.38	35	16.50	419	17.00	432	RF/RTJ#46		0.50	13	125	57
8”	200	13.88	352	8.13	206	8.27	210	6.69	170	12	1.63	41	19.75	502	20.50	521	RF/RTJ#50		0.50	13	275	125
10”	250	17.13	435	9.75	248	10.24	260	8.07	205	12	1.88	48	23.25	591	23.75	603	RF/RTJ#54		0.50	13	430	195
12”	300	20.50	521	12.00	305	12.28	312	9.06	230	16	2.00	51	27.00	686	28.00	711	RF/RTJ#58		0.75	19	700	318
14”	350	22.75	578	14.00	356	11.26	286	8.27	210	16	2.25	57	30.25	768	31.50	800	RF/RTJ#63		0.75	19	925	420
16”	400	25.25	641	15.13	384	16.00	406	12.81	325	16	2.50	64	32.75	832	34.25	870	RF/RTJ#67		1.00	25	1300	590
18”	450	27.75	705	18.44	468	18.00	457	13.75	349	16	2.75	70	38.00	965	39.50	1003	RF/RTJ#71		1.00	25	1900	862
20”	500	29.75	756	21.00	533	20.00	508	14.75	375	16	3.00	76	42.25	1073	44.00	1118	RF/RTJ#75		1.00	25	2600	1179
24”	600	35.50	902	22.00	559	24.00	610	15.13	384	16	3.50	89	46.25	1175	48.50	1232	RF/RTJ#79		1.00	25	3725	1690

Wafer Type - ASME Class 2500

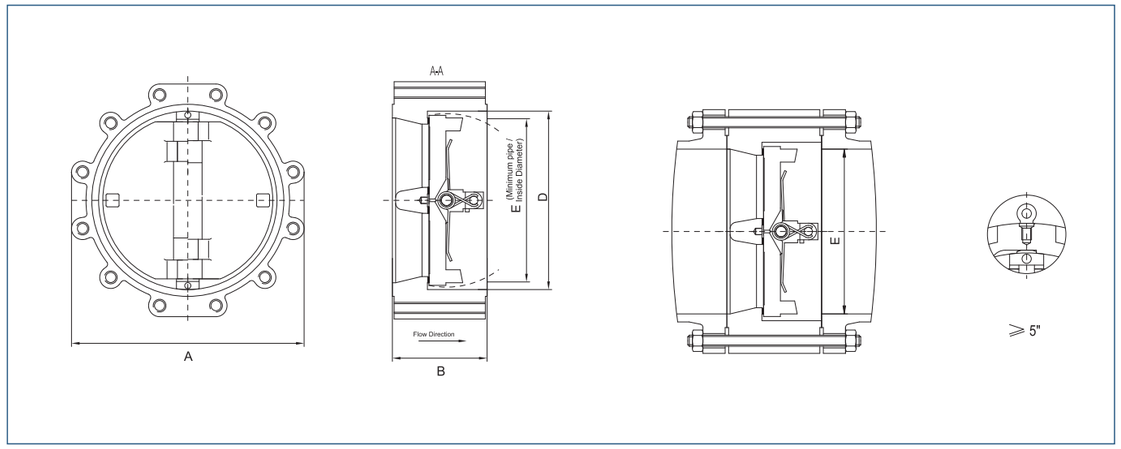
Size		Dimensions								Stud details								End facing	Hook screw hole size		Weight	
		A		B		D		E		No.	Diameter		RF Stud length		RFJ Stud length							
NPS	DN	in	mm	in	mm	in	mm	in	mm		in	mm	in	mm	in	mm			in	mm	lns	kg
2”	50	5.67	144	2.75	70	2.09	53	1.02	26	8	1.00	25.4	9.84	250	9.84	250	RF/RTJ#26		-	-	18.30	8.30
3”	80	7.68	195	3.38	86	3.23	82	2.28	58	8	1.25	32	12.20	310	12.60	320	RF/RTJ#32		-	-	39.70	18
4”	100	9.17	233	4.12	105	4.13	105	2.68	68	8	1.50	38	14.37	365	14.57	370	RF/RTJ#38		-	-	61.78	28
6”	150	12.44	316	6.25	159	6.50	160	5.00	127	8	2.00	51	20.08	510	20.47	520	RF/RTJ#47		0.50	13	185.30	84
8”	200	15.16	385	8.13	206	8.40	206	6.10	155	12	2.00	51	23.23	590	23.82	605	RF/RTJ#57		0.50	15	423.60	192
10”	250	18.66	474	10.00	254	10.24	260	7.80	198	12	2.50	63.5	29.53	750	30.31	770	RF/RTJ#55		0.50	17	673.00	305



Lug type

Lug Type - ASME Class 150

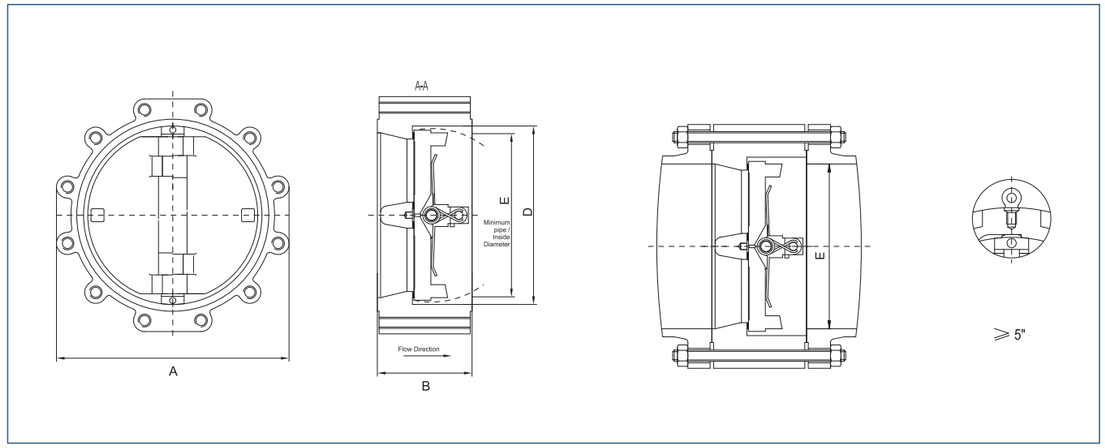
Size		Dimensions								Stud details					End facing	Hook screw hole size		Weight	
		A		B		D		E		No.	Diameter		RF Stud length						
NPS	DN	in	mm	in	mm	in	mm	in	mm		in	mm	in	mm		in	mm	lbs	kg
2”	50	6.00	152	2.38	60	2.36	60	1.34	34	4	0.63	16	2.75	70	RF	-	-	9	4
2 1/2”	65	7.00	178	2.63	67	2.99	76	2.13	54	4	0.63	16	2.75	70	RF	-	-	24	11
3”	80	7.50	191	2.88	73	3.70	94	2.72	69	4	0.63	16	3.00	76	RF	-	-	18	8
4”	100	9.00	229	2.88	73	4.64	114	3.83	97	8	0.63	16	3.00	76	RF	-	-	33	15
5”	125	10.00	254	3.38	86	5.56	141	4.87	122	8	0.75	19	3.25	83	RF	-	-	53	24
6”	150	11.00	279	3.89	99	6.77	172	5.77	146	8	0.75	19	3.25	83	RF	0.50	13	53	24
8”	200	13.50	343	5.00	127	8.74	222	7.63	194	8	0.75	19	3.50	89	RF	0.50	13	130	59
10”	250	16.00	406	5.75	146	10.83	275	9.56	243	12	0.88	22	3.75	95	RF	0.50	13	216	96
12”	300	19.00	483	7.13	181	12.90	328	11.38	289	12	0.88	22	3.75	95	RF	0.75	19	270	123
14”	350	21.00	533	7.25	184	14.09	358	12.50	318	12	1.00	25	4.25	108	RF	0.75	19	330	150
16”	400	23.50	597	7.48	190	15.98	406	14.57	320	16	1.00	29	4.25	108	RF	1.00	25	420	191
18”	450	25.00	635	8.00	203	18.03	458	16.65	423	16	1.13	29	4.75	121	RF	1.00	25	500	227
20”	500	27.50	699	8.63	219	20.16	512	18.35	466	20	1.13	32	5.00	127	RF	1.00	25	650	295
24”	600	32.00	813	8.75	222	23.10	587	22.63	575	20	1.25	32	5.50	140	RF	1.00	25	850	386
26”	650	34.25	870	8.74	222	24.70	627	23.50	597	24	1.25	32	6.50	165	RF	1.00	25	1600	726
28”	700	36.50	927	12.00	305	27.00	687	25.43	646	28	1.25	32	6.50	165	RF	1.00	25	1900	862
30”	750	38.75	984	12.00	305	29.70	740	28.03	712	28	1.25	32	6.75	171	RF	1.00	25	1700	771
32”	800	41.75	1060	14.00	356	31.10	790	29.80	757	28	1.50	38	7.50	191	RF	1.00	25	2400	1089
36”	900	46.00	1168	14.50	368	35.50	901	33.43	849	32	1.50	38	8.00	203	RF	1.00	25	2800	1270
40”	1000	50.75	1289	17.00	432	40.00	1016	36.02	915	36	1.50	38	8.00	203	RF	1.50	38	4100	1860
42”	1050	53.00	1346	17.00	432	41.16	1046	38.62	981	36	1.50	38	8.25	210	RF	1.50	38	4400	1996
48”	1200	59.50	1511	20.63	524	46.26	1175	43.54	1106	44	1.50	38	8.75	222	RF	1.50	38	6600	2994
54”	1350	66.25	1683	23.25	591	54.00	1372	51.50	1308	44	1.75	44	9.75	248	RF	1.50	38	8300[2]	3765[2]
60”	1500	73.00	1854	26.00	660	58.98	1498	56.00	1422	52	1.75	44	10.25	260	RF	2.00	51	10700[2]	4853[2]



Lug type

Lug Type - ASME Class 300

Size		Dimensions								Stud details					End facing	Hook screw hole size		Weight	
		A		B		D		E		No.	Diameter		RF Stud length						
NPS	DN	in	mm	in	mm	in	mm	in	mm		in	mm	in	mm		in	mm	lbs	kg
2”	50	6.50	165	2.38	60	2.38	60	1.34	34	8	0.63	16	2.75	70	RF	-	-	18	8
2 1/2”	65	7.50	191	2.63	67	2.99	76	2.13	54	8	0.75	19	3.25	83	RF	-	-	26	12
3”	80	8.25	210	2.88	73	3.70	94	2.72	69	8	0.75	19	3.50	89	RF	-	-	33	15
4”	100	10.00	254	2.88	73	4.65	118	3.83	97	8	0.75	19	3.50	89	RF	-	-	55	25
5”	125	11.00	279	3.38	86	5.56	141	4.87	122	8	0.75	19	3.75	95	RF	-	-	70	32
6”	150	12.50	318	3.89	99	6.77	172	5.77	146	12	0.75	19	3.75	95	RF	0.50	13	99	45
8”	200	15.00	381	5.00	127	8.74	222	7.63	194	12	0.88	22	4.25	108	RF	0.50	13	143	65
10”	250	17.50	445	5.75	146	10.83	275	9.56	243	16	1.00	25	4.75	121	RF	0.50	13	233	106
12”	300	20.50	521	7.13	181	12.91	328	11.38	289	16	1.13	29	5.25	133	RF	0.75	19	350	159
14”	350	23.00	584	8.75	222	14.09	358	12.50	318	20	1.13	29	5.25	133	RF	0.75	19	550	250
16”	400	25.50	648	9.13	232	15.96	406	14.57	370	20	1.25	32	5.75	146	RF	1.00	25	750	340
18”	450	28.00	711	10.38	264	18.03	458	16.14	410	24	1.25	32	6.00	152	RF	1.00	25	950	431
20”	500	30.50	775	11.50	292	20.20	512	17.94	456	24	1.25	32	6.00	152	RF	1.00	25	1250	567
24”	600	36.00	914	12.50	318	23.40	595	21.56	548	24	1.50	38	7.00	178	RF	1.00	25	1850	839
26”	650	38.25	972	12.50	318	25.50	647	23.46	596	28	1.63	41	7.75	197	RF	1.00	25	2200	998
28”	700	40.75	1035	14.50	368	27.60	700	26.38	670	28	1.63	41	8.25	210	RF	1.00	25	2700	1225
30”	750	43.00	1092	14.50	368	29.10	740	27.56	700	28	1.75	44	8.75	222	RF	1.00	25	2800	1270
32”	800	45.25	1149	14.50	368	30.80	782	29.21	742	28	1.88	48	9.25	235	RF	1.00	25	3400	1542
36”	900	50.00	1270	19.00	483	35.59	904	33.85	860	32	2.00	51	9.75	248	RF	1.00	25	4600	2087
40”	1000	58.75	1238	21.50	546	37.10	942	-	-	32	1.63	41	9.25	235	RF	1.50	38	5100	2313
42”	1050	50.75	1289	22.38	568	38.60	980	35.83	910	32	1.63	41	9.50	241	RF	1.50	38	6100	2767
48”	1200	57.75	1467	24.75	629	43.60	1108	47.00	1194	32	1.88	48	10.50	267	RF	1.50	38	10000	4536



Lug type

Lug Type - ASME Class 600

Size		Dimensions								Stud details						End facing	Hook screw hole size		Weight	
		A		B		D		E		No.	Diameter		RF Stud length		RFJ Stud length					
NPS	DN	in	mm	in	mm	in	mm	in	mm		in	mm	in	mm	in	mm		in	mm	lbs	kg
2”	50	6.50	165	2.38	60	2.38	60	1.34	34	8	0.63	16	3.25	83	3.75	95	RF/RTJ#23	-	-	18	8
3”	80	8.25	210	2.88	73	3.70	94	2.72	69	8	0.75	19	3.75	95	4.25	108	RF/RTJ#31	-	-	33	15
4”	100	10.75	273	3.13	79	4.65	118	3.83	97	8	0.88	22	4.25	108	4.75	121	RF/RTJ#37	-	-	86	39
6”	150	14.00	356	5.38	137	6.77	172	5.04	128	12	1.00	25	5.00	127	5.50	140	RF/RTJ#45	0.50	13	172	78
8”	200	16.50	419	6.50	165	8.74	222	7.09	180	12	1.13	29	5.75	146	6.00	152	RF/RTJ#49	0.50	13	312	142
10”	250	20.00	508	8.38	213	10.63	270	8.05	205	16	1.25	32	6.25	159	6.75	171	RF/RTJ#53	0.50	13	515	234
12”	300	22.00	559	9.00	229	12.60	320	10.70	272	20	1.25	32	6.50	165	6.75	171	RF/RTJ#57	0.75	19	550	250
14”	350	23.75	603	10.75	273	13.86	352	11.42	290	20	1.38	35	6.75	171	7.25	184	RF/RTJ#61	0.75	19	800	363
16”	400	27.00	686	12.00	305	16.00	406	13.58	345	20	1.50	38	7.50	191	7.75	197	RF/RTJ#65	1.00	25	1150	522
18”	450	29.25	743	14.25	362	18.03	458	14.76	375	20	1.63	41	8.00	203	8.50	216	RF/RTJ#69	1.00	25	1550	703
20”	500	32.00	813	14.50	368	20.16	512	17.32	440	24	1.63	41	8.25	210	9.00	229	RF/RTJ#73	1.00	25	1900	862
24”	600	37.00	940	17.25	438	23.54	598	20.87	530	24	1.63	41	8.75	222	9.50	241	RF/RTJ#77	1.00	25	3000	1361
26”	650	40.00	1016	18.00	457	23.82	605	24.00	610	28	1.88	48	9.50	241	10.50	267	RF/RTJ#93	1.00	25	3400	1542
28”	700	42.25	1073	19.00	483	24.69	627	22.64	575	28	2.00	51	10.00	254	11.00	179	RF/RTJ#94	1.00	25	4000	1814
30”	750	44.50	1130	19.88	505	26.81	681	24.80	630	28	2.00	51	10.25	260	11.25	286	RF/RTJ#95	1.00	25	4700	2132
32”	800	47.00	1194	21.00	533	28.50	724	25.59	650	28	2.25	57	11.00	279	12.00	305	RF/RTJ#96	1.00	25	5400	2449
36”	900	51.75	1314	25.00	635	32.13	816	29.53	750	28	2.50	64	11.75	298	13.00	330	RF/RTJ#98	1.00	25	7800	3538
40”	1000	52.00	1321	26.00	660	36.00	914	-	-	32	2.25	57	12.50	318	-	-	RF	1.50	38	8100	3674
42”	1050	55.25	1403	27.60	701	38.00	965	39.50	1003	28	2.50	64	13.50	343	-	-	RF	1.50	38	9600	4355

Lug Type - ASME Class 900

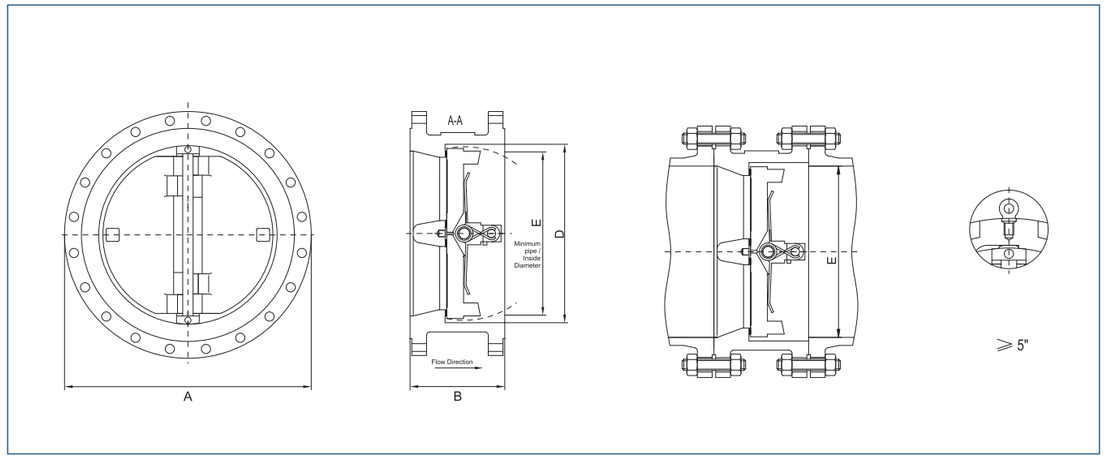
Size		Dimensions								Stud details								End facing	Hook screw hole size		Weight	
		A		B		D		E		No.	Diameter		RF Stud length		RFJ Stud length							
NPS	DN	in	mm	in	mm	in	mm	in	mm		in	mm	in	mm	in	mm			in	mm	lbs	kg
2”	50	8.50	216	2.75	70	2.24	57	1.34	34	8	0.88	22	4.25	108	4.75	121	RF/RTJ#24		-	-	37	17
3”	80	9.50	241	3.25	83	3.39	86	2.48	63	8	0.88	22	4.00	102	4.50	114	RF/RTJ#31		-	-	60	27
4”	100	11.50	292	4.00	102	4.50	114	3.27	83	8	1.13	29	5.00	127	5.50	140	RF/RTJ#37		-	-	95	43
6”	150	15.00	381	6.25	159	6.63	168	5.47	139	12	1.13	29	5.25	133	5.75	146	RF/RTJ#45		0.50	13	255	116
8”	200	18.50	470	8.13	207	8.63	219	6.30	160	12	1.38	35	6.25	159	6.75	171	RF/RTJ#49		0.50	13	480	218
10”	250	21.50	546	9.50	241	10.39	264	7.60	193	16	1.38	35	6.50	165	7.00	178	RF/RTJ#53		0.50	13	730	331
12”	300	24.00	610	11.50	292	12.60	320	9.84	250	20	1.38	35	6.75	171	7.25	184	RF/RTJ#57		0.75	19	850	386
14”	350	25.25	641	14.00	356	13.39	340	10.43	265	20	1.50	38	7.25	184	7.75	197	RF/RTJ#62		0.75	19	1250	567
16”	400	27.75	705	15.13	384	15.04	382	10.83	275	20	1.63	41	7.75	197	8.50	216	RF/RTJ#66		1.00	25	1650	748
18”	450	31.00	787	17.75	451	17.32	440	10.04	255	20	1.88	48	8.50	216	9.50	241	RF/RTJ#70		1.00	25	2500	1134
20”	500	33.75	857	17.75	451	19.49	495	17.52	445	20	2.00	51	9.25	235	10.00	254	RF/RTJ#74		1.00	25	2900	1315
24”	600	41.00	1041	19.50	495	23.43	595	20.67	525	20	2.50	64	11.00	279	12.00	305	RF/RTJ#78		1.00	25	4400	1996

Lug Type - ASME Class 1500

Size		Dimensions								Stud details								End facing	Hook screw hole size		Weight	
		A		B		D		E		No.	Diameter		RF Stud length		RFJ Stud length							
NPS	DN	in	mm	in	mm	in	mm	in	mm		in	mm	in	mm	in	mm			in	mm	lbs	kg
2”	50	8.50	216	2.75	70	2.24	57	1.34	34	8	0.88	22	4.25	108	4.75	121	RF/RTJ#24		-	-	35	16
3”	80	10.50	267	3.25	83	3.39	86	2.48	63	8	1.13	29	5.25	133	5.75	146	RF/RTJ#35		0.38	10	71	32
4”	100	12.25	311	4.00	102	4.50	114	3.31	84	8	1.25	32	6.00	152	6.25	159	RF/RTJ#39		0.50	13	150	68
6”	150	15.50	394	6.25	159	6.63	168	5.47	139	12	1.38	35	7.25	184	7.75	197	RF/RTJ#46		0.50	13	265	120
8”	200	19.00	483	8.13	206	8.27	210	6.69	170	12	1.63	41	8.25	210	9.00	229	RF/RTJ#50		0.75	19	625	284
10”	250	23.00	584	9.75	248	10.24	260	8.07	205	12	1.88	48	9.50	241	10.25	260	RF/RTJ#54		0.75	19	798	362
12”	300	26.50	673	12.00	305	12.28	312	9.06	230	16	2.00	51	10.50	267	11.50	292	RF/RTJ#58		0.75	19	1400	635
14”	350	29.50	749	14.00	356	11.26	286	8.27	210	16	2.25	57	11.50	292	12.75	324	RF/RTJ#63		1.00	25	2400	1089
16”	400	32.50	826	15.13	384	16.00	406	12.81	325	16	2.50	64	12.75	324	14.00	356	RF/RTJ#67		1.00	25	2500	1134
18”	450	36.00	914	18.44	468	18.00	457	13.75	349	16	2.75	70	14.00	356	15.25	387	RF/RTJ#71		1.50	38	3900	1769
20”	500	38.75	984	21.00	533	20.00	508	14.75	375	16	3.00	76	15.25	387	16.75	425	RF/RTJ#75		1.50	38	5800	2631
24”	600	46.00	1168	22.00	559	24.00	610	15.13	384	16	3.50	89	17.50	445	19.25	489	RF/RTJ#79		1.50	38	7200	3266

Lug Type - ASME Class 2500

Size		Dimensions								Stud details								End facing	Hook screw hole size		Weight	
		A		B		D		E		No.	Diameter		RF Stud length		RFJ Stud length							
NPS	DN	in	mm	in	mm	in	mm	in	mm		in	mm	in	mm	in	mm			in	mm	lbs	kg
2”	50	9.25	235	2.76	70	2.09	53	1.02	26	8	1.00	25.40	10.04	255	10.04	255	RF/RTJ#26		-	-	37.51	17.00
3”	80	12.01	305	3.39	86	3.23	82	2.28	58	8	1.25	31.80	12.01	305	12.40	315	RF/RTJ#32		-	-	79.43	36.00
4”	100	13.15	334	4.13	105	4.13	105	2.68	68	8	1.50	38.10	14.37	365	14.57	370	RF/RTJ#38		-	-	122.02	55.30
6”	150	17.91	455	6.26	159	6.30	160	5.00	127	8	2.00	50.80	20.08	510	20.47	520	RF/RTJ#47		0.59	15	344.21	156.00
8”	200	21.65	550	8.11	206	8.11	206	6.10	155	12	2.00	50.80	23.23	590	23.82	605	RF/RTJ#51		0.67	17	655.33	297.00
10”	250	26.57	675	10.00	254	10.24	260	7.80	198	12	2.50	63.50	29.53	750	30.31	770	RF/RTJ#55		1.10	28	1195.92	542.00



Double flanged type

Double flanged type - ASME Class 150

Size		Dimensions								Stud details					End facing	Weight	
		A		B		D		E		No.	Diameter		RF Stud length				
NPS	DN	in	mm	in	mm	in	mm	in	mm		in	mm	in	mm		lbs	kg
2”	50	5.91	150	4.49	114	2.36	60	1.34	34	4	0.625	15.9	3.54	90	RF	15.45	7
3”	80	7.48	190	4.76	121	3.70	94	2.72	69	4	0.625	15.9	3.74	95	RF	28.68	13
4”	100	9.06	230	4.76	121	4.65	118	3.82	97	8	0.625	15.9	3.74	95	RF	41.92	19
6”	150	11.02	280	5.12	130	6.77	172	5.75	146	8	0.75	19.1	4.13	105	RF	66.20	30
8”	200	13.58	345	5.00	127	8.74	222	7.64	194	8	0.75	19.1	4.53	115	RF	92.67	42
10”	250	15.94	405	5.75	146	10.83	275	9.57	243	12	0.875	22.2	4.72	120	RF	147.84	67
12”	300	19.00	483	7.13	181	12.91	328	11.38	289	12	0.88	22	4.75	121	RF	279	127
14”	350	21.00	533	7.25	184	14.09	358	12.50	318	12	1.00	25	5.25	133	RF	319	145
16”	400	23.50	597	7.50	191	15.98	406	14.76	375	16	1.00	29	5.50	140	RF	387	176
18”	450	25.00	635	8.00	203	18.00	457	16.88	429	16	1.13	29	6.00	152	RF	460	209
20”	500	27.50	699	8.63	219	20.16	512	18.81	478	20	1.13	32	6.25	159	RF	600	272
24”	600	32.00	813	8.75	222	23.43	595	22.63	575	20	1.25	32	7.00	178	RF	862	391
26”	650	34.25	870	14.00	356	26.00	660	24.25	616	24	1.25	32	8.75	222	RF	1500	680
28”	700	36.50	927	15.00	381	28.00	711	-	-	28	1.25	32	9.00	229	RF	1700	771
30”	750	38.75	984	12.00	305	30.00	762	29.25	743	28	1.25	32	9.25	235	RF	1750	794
32”	800	41.75	1060	14.00	356	32.00	813	-	-	28	1.50	38	10.50	267	RF	2300	1043
36”	900	46.00	3368	14.50	368	36.00	914	35.00	889	32	1.50	38	11.25	286	RF	2525	1145
40”	1000	50.75	1289	17.00	432	40.00	1016	-	-	36	1.50	38	11.25	286	RF	3900	1769
42”	1050	53.00	1346	17.00	432	42.00	1067	41.00	1041	36	1.50	38	11.75	298	RF	4220	1914
48”	1200	59.50	1511	20.63	524	48.00	1219	47.00	1194	44	1.50	38	12.50	318	RF	5900	2676
54”	1350	66.25	1683	23.25	591	54.00	1372	51.50	1308	44	1.75	44	14.00	356	RF	7700	3493
60”	1500	73.00	1854	26.00	660	60.00	1524	56.00	1422	52	1.75	44	15.00	381	RF	10000	4536

Cryogenic Dual Plate Check Valve

Dimension & Weight

Double flanged type - ASME Class 300

Size		Dimensions								Stud details						End facing	Weight	
		A		B		D		E		No.	Diameter		RF Stud length					
NPS	DN	in	mm	in	mm	in	mm	in	mm		in	mm	in	mm			lbs	kg
2”	50	6.50	165	4.49	114	2.36	60	1.34	34	8	0.625	15.9	3.74	95	RF		19.86	9
3”	80	8.27	210	4.76	121	3.70	94	2.72	69	8	0.75	19.1	4.53	115	RF		37.51	17
4”	100	10.04	255	4.76	121	4.65	118	3.82	97	8	0.75	19.1	4.72	120	RF		59.58	27
6”	150	12.60	320	5.12	130	6.77	172	5.75	146	12	0.75	19.1	4.92	125	RF		103.71	47
8”	200	14.96	380	5.98	152	8.74	222	7.64	194	12	0.875	22.2	5.71	145	RF		176.52	80
10”	250	17.52	445	7.01	178	10.83	275	9.57	243	16	1.00	25.4	6.50	165	RF		231.68	105
12”	300	20.50	521	7.13	181	12.91	328	11.38	289	16	1.13	29	6.75	171	RF		336	152
14”	350	23.00	584	8.75	222	14.09	358	12.50	318	20	1.13	29	7.00	178	RF		431	196
16”	400	25.50	648	9.13	232	16.06	408	14.76	375	20	1.25	32	7.50	191	RF		675	306
18”	450	28.00	711	10.38	264	18.00	457	16.88	429	24	1.25	32	7.75	197	RF		850	386
20”	500	30.50	775	11.50	292	20.16	512	17.94	456	24	1.25	32	8.25	210	RF		1078	489
24”	600	36.00	914	12.50	318	23.43	595	21.56	548	24	1.50	38	9.25	235	RF		1965	891
26”	650	38.25	972	14.00	356	26.00	660	24.38	619	28	1.63	41	10.50	267	RF		2200	998
28”	700	40.75	1035	15.00	381	28.00	711	-	-	28	1.63	41	11.00	279	RF		2600	1179
30”	750	43.00	1092	14.50	368	30.00	762	28.75	730	28	1.75	44	11.75	298	RF		3525	1599
32”	800	45.25	1149	16.00	406	32.00	813	-	-	28	1.88	48	12.75	324	RF		3300	1497
36”	900	50.00	1270	19.00	483	36.00	914	35.00	889	32	2.00	51	13.25	337	RF		4700	2132
40”	1000	58.75	1238	21.50	546	36.00	914	-	-	32	1.63	41	13.25	337	RF		4900	2223
42”	1050	50.75	1289	22.38	568	40.00	1016	41.00	1041	32	1.63	41	13.75	349	RF		5000	2268
48”	1200	57.75	1467	24.75	629	44.00	1118	47.00	1194	32	1.88	48	15.25	387	RF		7400	3357

Double flanged type - ASME Class 600

Size		Dimensions								Stud details								End facing	Weight	
		A		B		D		E		No.	Diameter		RF Stud length		RFJ Stud length					
NPS	DN	in	mm	in	mm	in	mm	in	mm		in	mm	in	mm	in	mm			lbs	kg
2”	50	6.50	165	4.76	121	2.36	60	1.34	34	8	0.625	15.9	4.53	115	4.53	115	RF/RTJ#23		22.07	10
3”	80	8.27	210	5.63	143	3.70	94	2.72	69	8	0.75	19.1	5.12	130	5.12	130	RF/RTJ#31		46.34	21
4”	100	10.83	275	6.50	165	4.65	118	3.82	97	8	0.875	22.2	5.91	150	5.91	150	RF/RTJ#37		86.05	39
6”	150	13.98	355	7.64	194	6.77	172	5.04	128	12	1.00	25.4	6.89	175	6.89	175	RF/RTJ#45		158.87	72
8”	200	16.54	420	8.62	219	8.74	222	7.09	180	12	1.125	28.6	7.68	195	7.87	200	RF/RTJ#49		275.81	125
10”	250	20.08	510	9.61	244	10.63	270	8.07	205	16	1.25	31.8	8.66	220	8.66	220	RF/RTJ#53		439.09	199
12”	300	22.00	559	9.00	229	12.75	324	11.38	289	20	1.25	32	8.50	216	9.00	229	RF/RTJ#57		550	249
14”	350	23.75	603	10.75	273	14.00	356	12.50	318	20	1.38	35	9.00	229	9.50	241	RF/RTJ#61		846	384
16”	400	27.00	686	12.00	305	16.00	406	14.31	364	20	1.50	38	9.75	248	10.25	260	RF/RTJ#65		1010	458
18”	450	29.25	743	14.25	362	18.00	457	16.13	410	20	1.63	41	10.50	267	11.00	279	RF/RTJ#69		1320	599
20”	500	32.00	813	14.50	368	20.00	508	17.94	456	24	1.63	41	11.25	286	11.75	298	RF/RTJ#73		1700	771
24”	600	37.00	940	17.25	438	24.00	610	21.56	548	24	1.63	41	12.25	311	13.00	330	RF/RTJ#77		2580	170
26”	650	40.00	1016	18.00	457	26.00	660	24.00	610	28	1.88	48	13.25	337	14.25	362	RF/RTJ#93		3100	1406
28”	700	42.25	1073	19.00	483	28.00	711	-	-	28	2.00	51	14.00	356	15.00	381	RF/RTJ#94		3800	1724
30”	750	44.50	1130	19.88	505	30.00	762	28.75	730	28	2.00	51	14.00	356	15.00	381	RF/RTJ#95		5390	2445
32”	800	47.00	1194	21.00	533	32.00	813	-	-	28	2.25	57	14.75	375	16.00	406	RF/RTJ#96		6000	2722
36”	900	51.75	1314	25.00	635	36.00	914	33.75	857	28	2.50	64	16.00	406	17.00	432	RF/RTJ#98		6700	3039
42”	1050	55.25	1403	27.60	701	38.00	965	39.50	1003	28	2.50	64	19.50	495	-	-	RF		9400	4264

Double flanged type - ASME Class 900

Size		Dimensions								Stud details								End facing	Weight	
		A		B		D		E		No.	Diameter		RF Stud length		RFJ Stud length					
NPS	DN	in	mm	in	mm	in	mm	in	mm		in	mm	in	mm	in	mm			lbs	kg
12”	300	24.00	610	11.50	292	12.75	324	10.13	257	20	1.38	35	8.75	222	9.25	235	RF/RTJ#57		770	349
14”	350	25.25	641	14.00	356	14.00	356	11.50	292	20	1.50	38	9.25	235	10.00	254	RF/RTJ#62		1240	562
16”	400	27.75	705	15.13	384	16.00	406	12.81	325	20	1.63	41	10.00	254	10.75	273	RF/RTJ#66		1210	549
18”	450	31.00	787	17.75	451	18.00	457	14.44	367	20	1.88	48	11.00	279	11.75	298	RF/RTJ#70		1845	837
20”	500	33.75	857	17.75	451	20.00	508	17.94	456	20	2.00	51	12.00	305	12.75	324	RF/RTJ#74		3940	1787
24”	600	41.00	1041	19.50	495	24.00	610	21.50	546	20	2.50	64	14.00	356	15.00	381	RF/RTJ#78		4175	1894

Note: 1.A=OD 2. B=F to F 3.D=ID 4. E= Minimum ID 5. Yellow part is amened by technical Dept.

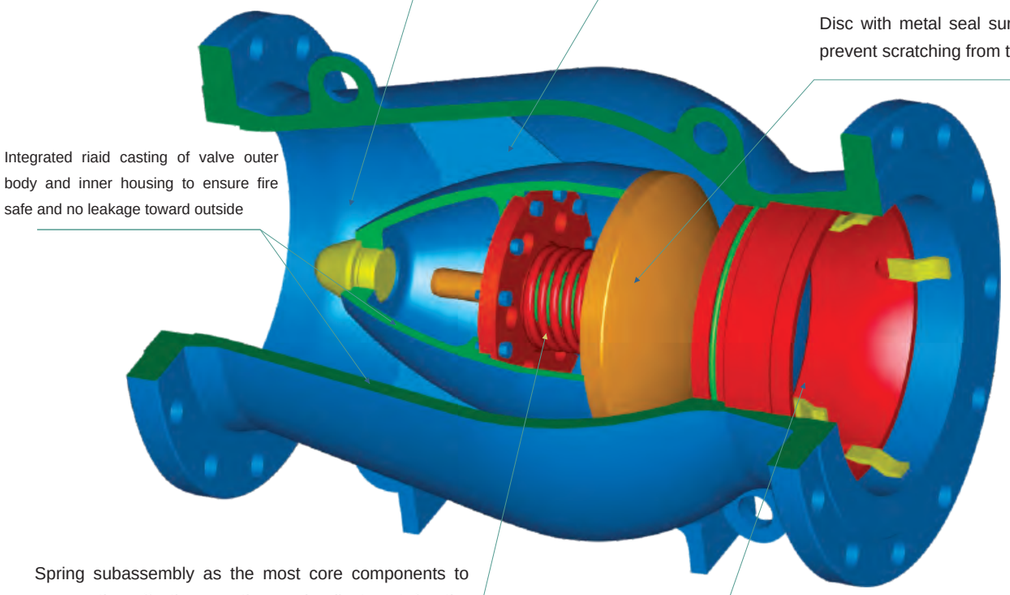
Design Feature

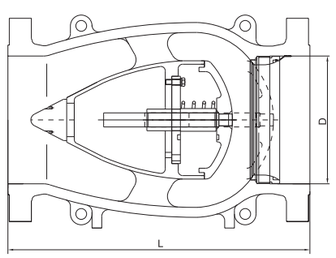
Cryogenic Axial Flow Check Valve

Neway series SA axial flow check valve is a streamlined venturi port design and available in size from 2" to 48" and in pressure rating from ASME class 150 through 2500 and a wide range of body and trim materials for special application requirement.

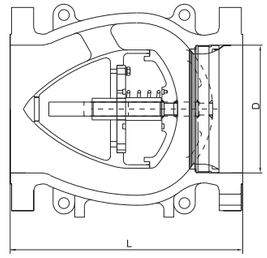
In Neway axial flow check valve, the disc is the only moving part to minimize internal wear, and the configuration of disc. seating and body provides streamlined flow path with al venture effect so as to reduce pressure loss as small as possible. The compressed disc spring initiates valve closure as fow slows down and provides quick reaction on flow velocity change.

These unique design features ensure Neway series SA valves can deliver an effective dynamic reaction under various flow deceleration conditions, this design valve can be used in a wide range of critical and demanding service applications, such as fast-reversing reciprocating compressor system or in installations where the check valve must be placed in close proximity to the pump inlet or outlet.





Long pattern



Short pattern

Flange End - ASME Class 150

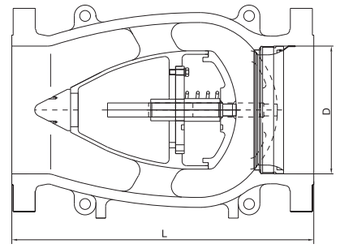
Size		Dimensions						Weight			
		D		L							
				Long pattern(RF/BW)		Short pattern(RF/BW)		Long pattern		Short pattern	
NPS	DN	in	mm	in	mm	in	mm	lbs	kg	lbs	kg
2	50	2.01	51	7.99	203	5.91	150	31	14	-	-
3	80	2.99	76	9.49	241	7.09	180	53	24	-	-
4	100	4.02	102	11.5	292	9.25	235	86	39	-	-
6	150	5.98	152	14.02	356	10.63	270	148	67	134	61
8	200	7.99	203	19.49	495	12.99	330	260	118	216	98
10	250	10	254	24.49	622	15.16	385	406	184	333	151
12	300	12.01	305	27.52	699	18.70	475	584	265	474	215
14	350	13.27	337	30.98	787	20.08	510	787	357	631	286
16	400	15.24	387	34.02	864	21.46	545	1091	495	877	398
18	450	17.24	438	38.5	978	24.02	610	1157	525	959	435
20	500	19.25	489	38.5	978	26.57	675	1770	803	1504	682
22	550	21.26	540	42.01	1067	-	-	1892	858	1590	721
24	600	23.27	591	50.98	1295	31.89	810	2610	1184	2167	983
28	700	27.01	686	57.01	1448	37.20	945	3316	1504	-	-
30	750	29.02	737	60	1524	39.76	1010	4125	1871	-	-
34	850	32.76	832	-	-	-	-	5761	2613	-	-
36	900	34.49	876	77.01	1956	47.83	1215	6486	2942	-	-
40	1000	38.5	978	85	2159	53.15	1350	8765	3976	-	-
42	1050	40.24	1022	89.02	2261	55.71	1415	10423	4728	-	-
48	1200	45.98	1168	101.02	2566	63.58	1615	13843	6279	-	-

Note:Short pattern is a Neway Standard dimension

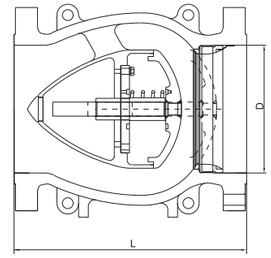
Flange End - ASME Class 300

Size		Dimensions						Weight			
		D		L							
				Long pattern(RF/BW)		Short pattern(RF/BW)		Long pattern		Short pattern	
NPS	DN	in	mm	in	mm	in	mm	lbs	kg	lbs	kg
2	50	2.01	51	10.51	267	5.91	150	40	18	-	-
3	80	2.99	76	12.52	318	7.09	180	75	34	-	-
4	100	4.02	102	14.02	356	9.25	235	121	55	-	-
6	150	5.98	152	17.52	445	10.63	270	220	100	192	87
8	200	7.99	203	20.98	533	12.99	330	370	168	317	144
10	250	10	254	24.49	622	15.16	385	606	275	507	230
12	300	12.01	305	27.99	711	18.70	475	802	364	675	306
14	350	13.27	337	32.99	838	20.08	510	1098	498	915	415
16	400	15.24	387	34.02	864	21.46	545	1440	653	1197	543
18	450	17.24	438	38.5	978	24.02	610	1967	892	1609	730
20	500	19.25	489	40	1016	26.57	675	2533	1149	2202	999
22	550	21.26	540	44.02	1118	-	-	3038	1378	2612	1185
24	600	23.27	591	52.99	1346	31.89	810	3699	1678	3144	1426
28	700	27.01	686	59.02	1499	37.20	945	5101	2314	4361	1978
30	750	29.02	737	62.76	1594	39.76	1010	6195	2810	5265	2388
34	850	32.76	832	-	-	-	-	8545	3876	-	-
36	900	34.49	876	82.01	2083	47.83	1215	9647	4376	-	-
40	1000	38.5	978	95.98	2438	53.15	1350	12064	5472	-	-
42	1050	40.24	1022	103.03	2617	55.71	1415	13521	6133	-	-
48	1200	45.98	1168	124.06	3151	63.58	1615	17855	8099	-	-

Note:Short pattern is a Neway Standard dimension



Long pattern



Short pattern

Flange End - ASME Class 400

Size		Dimensions										Weight			
		D		L											
				Long pattern(RF/BW)		Long pattern(RTJ)		Short pattern(RF/BW)		Short pattern(RTJ)		Long pattern		Short pattern	
NPS	DN	in	mm	in	mm	in	mm	in	mm	in	mm	lbs	kg	lbs	kg
2	50	2.01	51	11.5	292	11.61	295	5.91	150	6.02	153	51	23	-	-
3	80	2.99	76	14.02	356	14.13	359	7.09	180	7.20	183	97	44	-	-
4	100	4.02	102	17.01	432	17.13	435	9.25	235	9.37	238	154	70	-	-
6	150	5.98	152	22.01	559	22.13	562	10.63	270	10.75	273	295	134	247	112
8	200	7.99	203	25.98	660	26.1	663	12.99	330	13.11	333	492	223	410	186
10	250	10	254	30.98	787	31.1	790	15.16	385	15.28	388	743	337	604	274
12	300	12.01	305	32.99	838	33.11	841	18.70	475	18.82	478	957	434	736	334
14	350	13.27	337	35	889	35.12	892	20.08	510	20.20	513	1268	575	988	448
16	400	15.24	387	39.02	991	39.13	994	21.46	545	21.57	548	-	-	-	-
18	450	17.24	438	42.99	1092	43.11	1095	24.02	610	24.13	613	-	-	-	-
20	500	19.25	489	47.01	1194	47.24	1200	26.57	675	26.81	681	-	-	-	-
22	550	21.26	540	50.98	1295	51.38	1305	-	-	-	-	-	-	-	-
24	600	23.27	591	55	1397	55.39	1407	31.89	810	32.28	820	-	-	-	-
28	700	27.01	686	62.99	1600	63.5	1613	37.20	945	37.72	958	-	-	-	-
30	750	29.02	737	65	1651	65.51	1664	39.76	1010	40.28	1023	-	-	-	-
34	850	32.76	832	-	-	-	-	-	-	-	-	-	-	-	-
36	900	34.49	876	82.01	2083	82.64	2099	47.83	1215	48.46	1231	-	-	-	-
40	1000	38.5	978	90	2286	-	-	53.15	1350	53.78	1366	-	-	-	-
42	1050	40.24	1022	95.98	2438	-	-	55.71	1415	56.34	1431	-	-	-	-
48	1200	45.98	1168	100	2540	-	-	63.58	1615	64.21	1631	-	-	-	-

Note:Short pattern is a Neway Standard dimension

Flange End - ASME Class 600

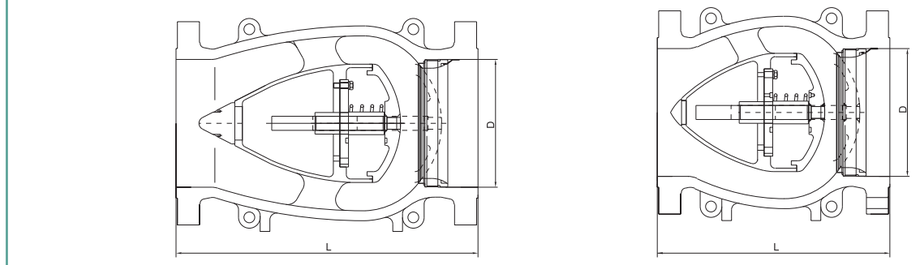
Size		Dimensions										Weight			
		D		L											
				Long pattern(RF/BW)		Long pattern(RTJ)		Short pattern(RF/BW)		Short pattern(RTJ)		Long pattern		Short pattern	
NPS	DN	in	mm	in	mm	in	mm	in	mm	in	mm	lbs	kg	lbs	kg
2	50	2.01	51	11.5	292	11.61	295	5.91	150	6.02	153	53	24	-	-
3	80	2.99	76	14.02	356	14.13	359	7.09	180	7.20	183	97	44	-	-
4	100	4.02	102	17.01	432	17.13	435	9.25	235	9.37	238	168	76	-	-
6	150	5.98	152	22.01	559	22.13	562	10.63	270	10.75	273	368	167	309	140
8	200	7.99	203	25.98	660	26.1	663	12.99	330	13.11	333	615	279	514	233
10	250	10	254	30.98	787	31.1	790	15.16	385	15.28	388	966	438	785	356
12	300	12.01	305	32.99	838	33.11	841	18.70	475	18.82	478	1261	572	966	438
14	350	13.27	337	35	889	35.12	892	20.08	510	20.20	513	1563	709	1219	553
16	400	15.24	387	39.02	991	39.13	994	21.46	545	21.57	548	2310	1048	1854	841
18	450	17.24	438	42.99	1092	43.11	1095	24.02	610	24.13	613	2857	1296	2231	1012
20	500	19.25	489	47.01	1194	47.24	1200	26.57	675	26.81	681	3739	1696	2890	1311
22	550	21.26	540	50.98	1295	51.38	1305	-	-	-	-	4603	2088	3589	1628
24	600	23.27	591	55	1397	55.39	1407	31.89	810	32.28	820	5172	2346	4081	1851
28	700	27.01	686	62.99	1600	63.5	1613	37.20	945	37.72	958	8113	3680	6570	2980
30	750	29.02	737	65	1651	65.51	1664	39.76	1010	40.28	1023	9700	4400	8031	3643
34	850	32.76	832	-	-	-	-	-	-	-	-	13139	5960	10512	4768
36	900	34.49	876	82.01	2083	82.64	2099	47.83	1215	48.46	1231	14286	6480	11343	5145
40	1000	38.5	978	90	2286	-	-	53.15	1350	53.78	1366	15697	7120	-	-
42	1050	40.24	1022	95.98	2438	-	-	55.71	1415	56.34	1431	17284	7840	-	-
48	1200	45.98	1168	100	2540	-	-	63.58	1615	64.21	1631	19577	8880	-	-

Note:Short pattern is a Neway Standard dimension

Flange End - ASME Class 900

Size		Dimensions										Weight			
		D		L											
				Long pattern(RF/BW)		Long pattern(RTJ)		Short pattern(RF/BW)		Short pattern(RTJ)		Long pattern		Short pattern	
NPS	DN	in	mm	in	mm	in	mm	in	mm	in	mm	lbs	kg	lbs	kg
2	50	2.01	51	14.49	368	14.61	371	6.69	170	6.81	173	128	58	-	-
3	80	2.99	76	15	381	15.12	384	7.87	200	7.99	203	196	89	-	-
4	100	4.02	102	17.99	457	18.11	460	9.25	235	9.37	238	251	114	203	92
6	150	5.98	152	24.02	610	24.13	613	10.63	270	10.75	273	485	220	390	177
8	200	7.99	203	29.02	737	29.13	740	12.99	330	13.11	333	924	419	710	322
10	250	10	254	32.99	838	33.11	841	16.73	425	16.85	428	1429	648	1056	479
12	300	12.01	305	37.99	965	38.11	968	19.69	500	19.80	503	1865	846	1351	613
14	350	12.76	324	40.51	1029	40.87	1038	21.65	550	22.05	560	2434	1104	1907	865
16	400	14.76	375	44.49	1130	44.88	1140	22.83	580	23.23	590	3351	1520	2778	1260
18	450	16.73	425	47.99	1219	48.5	1232	25.59	650	26.10	663	5291	2400	-	-
20	500	18.62	473	52.01	1321	52.48	1333	26.97	685	27.48	698	7055	3200	-	-
24	600	22.52	572	60.98	1549	61.73	1568	33.07	840	33.82	859	9171	4160	-	-
30	750	28.11	714	72.99	1854	73.86	1876	-	-	-	-	15609	7080	-	-
36	900	33.74	857	84.88	2156	-	-	-	-	-	-	22487	10200	-	-

Note:Short pattern is a Neway Standard dimension



Long pattern　　Short pattern

Flange End - ASME Class 1500

Size		Dimensions										Weight			
		D		L											
				Long pattern(RF/BW)		Long pattern(RTJ)		Short pattern(RF/BW)		Short pattern(RTJ)		Long pattern		Short pattern	
NPS	DN	in	mm	in	mm	in	mm	in	mm	in	mm	lbs	kg	lbs	kg
2	50	2.01	51	14.49	368	14.61	371	6.69	170	6.81	173	126	57	-	-
3	80	2.99	76	18.5	470	18.62	473	8.66	220	8.78	223	240	109	-	-
4	100	4.02	102	21.5	546	21.61	549	10.63	270	10.75	273	386	175	-	-
6	150	5.75	146	27.76	705	27.99	711	13.39	340	13.62	346	970	440	772	350
8	200	7.64	194	32.76	832	33.15	842	14.96	380	15.35	390	1459	662	1166	529
10	250	9.49	241	39.02	991	39.37	1000	17.72	450	18.11	460	2604	1181	2132	967
12	300	11.38	289	44.49	1130	45.12	1146	20.47	520	21.10	536	3534	1603	2553	1158
14	350	12.52	318	49.49	1257	50.24	1276	21.65	550	22.40	569	5397	2448	3940	1787
16	400	14.25	362	54.49	1384	55.39	1407	22.83	580	23.70	602	7937	3600	5944	2696
18	450	-	-	60.51	1537	61.38	1559	25.59	650	26.46	672	10758	4880	8069	3660
20	500	-	-	65.51	1664	66.38	1686	26.97	685	27.83	707	14109	6400	10679	4844
24	600	-	-	76.5	1943	77.64	1972	33.07	840	34.17	868	17284	7840	-	-

Note:Short pattern is a Neway Standard dimension

Flange End - ASME Class 2500

Size		Dimensions										Weight			
		D		L											
				Long pattern(RF/BW)		Long pattern(RTJ)		Short pattern(RF/BW)		Short pattern(RTJ)		Long pattern		Short pattern	
NPS	DN	in	mm	in	mm	in	mm	in	mm	in	mm	lbs	kg	lbs	kg
2	50	1.73	44	17.76	451	17.87	454	8.66	220	8.78	223	256	116	-	-
3	80	2.52	64	22.76	578	22.99	584	11.81	300	12.05	306	582	264	-	-
4	100	3.5	89	26.5	673	26.89	683	13.78	350	14.17	360	1146	520	939	426
6	150	5.24	133	35.98	914	36.5	927	15.35	390	15.87	403	2469	1120	1975	896
8	200	7.13	181	40.24	1022	40.87	1038	16.93	430	17.56	446	4268	1936	3329	1510
10	250	8.86	225	50	1270	50.87	1292	21.26	540	22.13	562	6614	3000	-	-
12	300	10.51	267	55.98	1422	56.89	1445	23.62	600	24.49	622	9700	4400	-	-

Note:Short pattern is a Neway Standard dimension

Design Features

Universal Characteristics

Body Material Selection

Brittleness occurs in common steel at low temperature, the body material should meet the requirements of working conditions

Temp Range: -110°C -196°C

Recommended Material: CF3MICF3/CF8M/CF8 F316L/F304L/F316/F304/Dual Certified etc which can applied to cryogenic service

Stem extension structure (Not applicable to Check valve)

Lengthen the valve bonnet to keep the packing working at room temperature and ensure the good sealing performance of the packing.

Extending height of valve bonnet by default meets the requirements of BS6364. SPE 77/200, and also can be designed according to customer requirements.

The valve bonnet with lengthening structure is more convenient for winding the insulation layer to prevent the loss of cold energy.

End Connection

BW, RF, RTJ, etc.

Prevention of overpressure in valve cavity

To avoid the risk of overpressure, following designs are recommended: self-relief seat, drilling holes in the ball or the gate (upstream).

Fire safe, Anti-static

Neway meet the requirement with appropriate fire and anti-static design, and the corresponding qualification certificate are available.

Low Emission

All cryogenic valves are low emission designed and meet ISO15848, SHELL 77/312 requirements, and have corresponding qualification certificates.

Note

MDMT as per ASME B31.3.

Part of design standard refer to SPE 77/200,BS 6364, ASME B16.34 and relevant API/ASME/ISO standard.

Global Typical LNG Project References

Domestic

Guangzhou Huangfeng Sinoenergy LNG Co.Ltd.-Chaozhou LNG
ENN (Zhoushan) LNG Co.,Ltd.-Zhoushan LNG
CNOOC Fuian LNG Co.Ltd.-CNOOC Fujian LNG Termina
CNOOC Zheliang Ningbo LNG Co.Ltd.-Zheliang LNG Terminal
Sinopec Tianjin Liquefied Natural Gas Co., Ltd. -Sinopec Tianjing LNG Project
CNOOC Guangxi Fangchenggang Natural Gas Corporation Limited-Guanaxi LNG Proiact
CNOOC Guangxi Fangchengang Natural Gas Corporation Limited-Guangai LING Project
CNOOC Tianing LNG Co., Ltd. -Tianing FLNG Terminal
Kunlun Energy Huanggang LNG Co.Ltd.-5000,000mday ING Plant localization Proiect
Shandong Taian Kunlun Eneray Co. Ltd-Taian 600.000 tonsl vear ING localization Project
Ninaxia Hanas LNG Co., Ltd, -3000.000m/day LNG Plant
Guangdong Dapena LNG Co..Ltd. - Shenzhen LNG Terminal

Overseas

Eni Coral South Development Project
Novatek Yamal LNG
Freeport LNG
Portovaya LNG
Puget Sound Energy Tacoma LNG
Knpc Al-zour LNG Import Project
Shell Prelude FLNG Project
Petronas FLNG 1 & 2 Project
Shell Sakhalin II
Dominion Cove Point Liquefaction Expansion Project
QCLNG Project
Donggi Senoro LNG Project
Petronas Mdd Project
Shell Pearl GTL Project

Neway Factory

NEWAY Head Office **Founded in 2014**

Total area: 2,295sqm
Office area: 6,885sqm

NEWAY Manufacturing Base **Founded in 2006**
Expanded in 2013

Main products: Ball Valve, Butterfly Valve, Gate Valve, Globe Valve, Check Valve, Control Valve
Building area: 230,000 sqm
Work shop: 140,061 sqm

NEWAY Foundry (Suzhou) **Founded in 2008**
Expanded in 2015

Main products: Sand Casting
Building area: 112,500 sqm
Work shop: 98,000 sqm

NEWAY Foundry (Dafeng) **Founded in 2008**

Main products: Lost wax investment casting
Building area: 40,000 sqm
Work shop: 20,000 sqm

Neway Precision Forging(Liyang).,LTD **Founded in 2017**

Main products: Hammer forging, annular forging
Office area: 3,000 sqm
Work shop: 30,000 sqm

Neway Butterfly Valve Plant **Founded in 2020**

Main products: Butterfly Valve
Building area: 30,000 sqm
Work shop: 19,000 sqm (first floor)
7,000 sqm (second floor)

Product Warranty

Seller will replace without charge or refund the purchase price of products provided by Seller which prove to be defective in material or workmanship, provided in each case that the product is properly installed and is used in the service for which Seller recommends it and that written claim, specifying the alleged defect, is presented to the Seller within 18 months from the date of shipment or 12 months after installation, whichever occurs first. Seller shall in no event bear any labor, equipment, engineering or other costs incurred in connection with repair of replacement. The warranty stated in this paragraph is in lieu of all other warranties, either expressed or implied. With respect to warranties, this paragraph states Buyer's exclusive remedy and seller's exclusive liability.