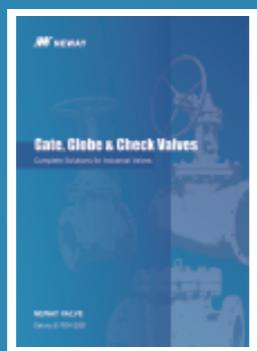


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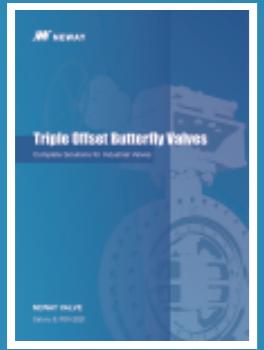
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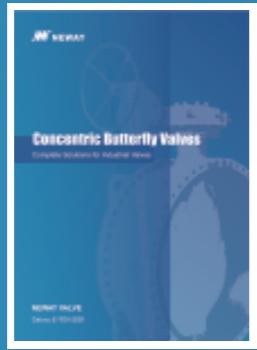
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Cat.no.:E-FSV



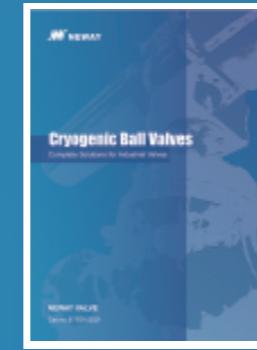
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Cat.no.:E-CBV



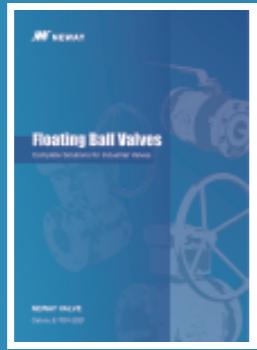
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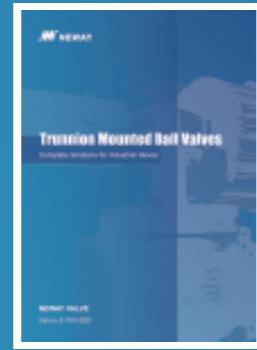
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Cat.no.:E-FWBV



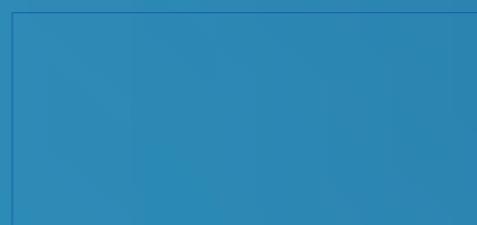
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Cat.no.:E-TMBV



Cat.no.:E-MSBV



Complete Solutions for Industrial Valves

# Cryogenic Gate, Globe & Check Valves

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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 35,000 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**

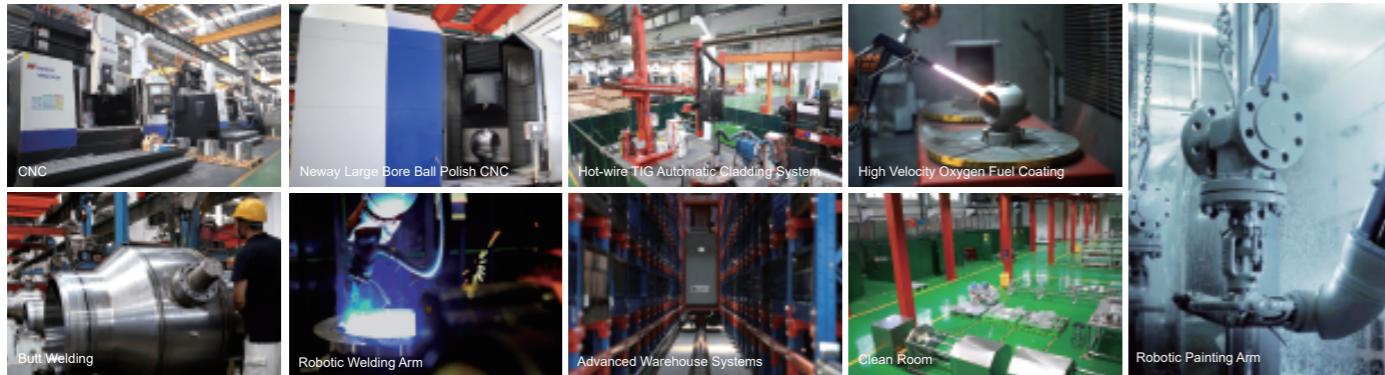
Neway is dedicated to the pursuit of "Zero Defect". We maintain a quality management system that encompasses our entire operation from order entry, to final inspection. Through Neway's continuous efforts, our products have successfully achieved industrial certificates including ISO 9001, API 6A, API 6D, CE/PED, ASME N & NPT, TA-Luft, ABS, CU-TR, and Fire-Safe approvals.



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

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 environments in which they operate. Therefore we request that our customers communicate with our engineering department. Our valve optimization program continuously strives to provide valves that withstand deterioration in service, and ensure safety over the valves expected lifetime.

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.



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.



## 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;
- Hardening 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;
- Hardening 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

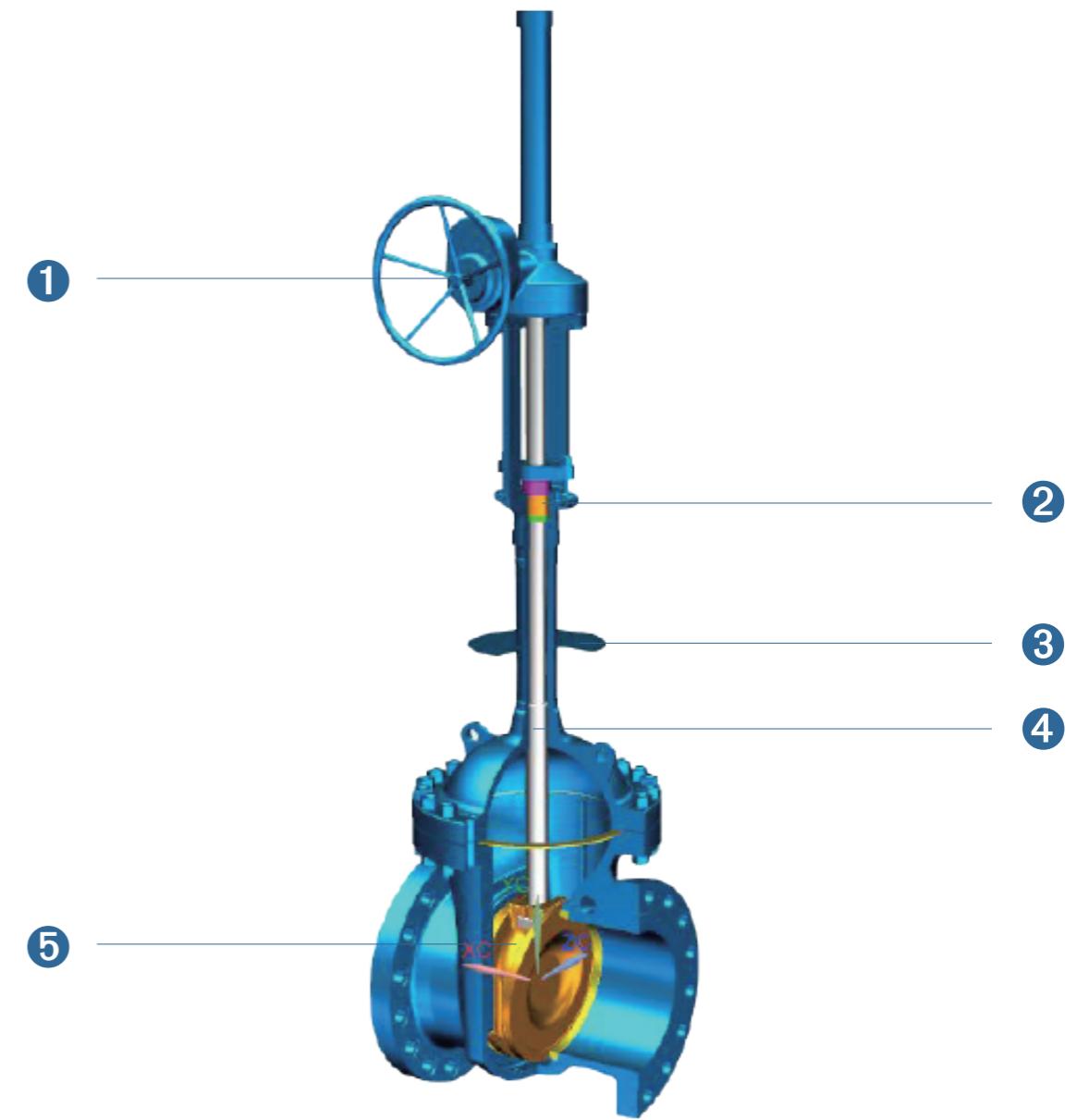
- Ball-like pin can achieve self-alignment, which makes it easier to seal at low temperature;
- Ensure the optimal flow design & the maximum flow capacity by fluid analysis software calculation;
- Metal-seat structure, with sealing surface subject to hard-alloy weld overlay, which performs well in scouring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



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
<ul style="list-style-type: none"> <li>Venturi streamline design, low flow resistance, without impact;</li> <li>Dual sealing (Lipseal + Graphite) between body and seat;</li> <li>One-piece body, without external leaking point;</li> <li>Ensure minimum flow resistance and best dynamic characteristics by fluid analysis software calculation;</li> <li>Specialized machining &amp; grinding process to achieve good sealing performance.</li> </ul>					



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
<ul style="list-style-type: none"> <li>Short length, light weight and compact structure;</li> <li>Low flow resistance with desirable flow capacity, without water hammer;</li> <li>One-piece body, without external leaking point;</li> <li>Ensure superior sealing capability via specialized production process.</li> </ul>					



# Cast Steel Cryogenic Gate Valve

## Dimension & Weight

### Class 150

### Cast Steel Cryogenic Gate Valve

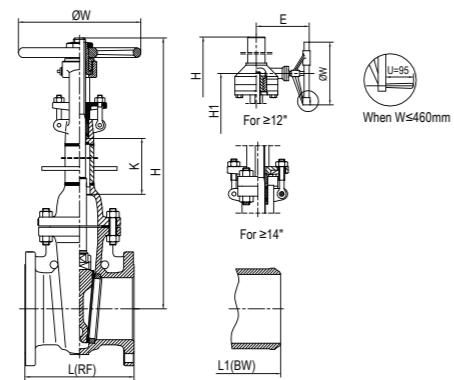


Figure NO.:  
GG1R / GG1B

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	

## Dimension & Weight

# Cast Steel Cryogenic Gate Valve

### Class 300

### Cast Steel Cryogenic Gate Valve

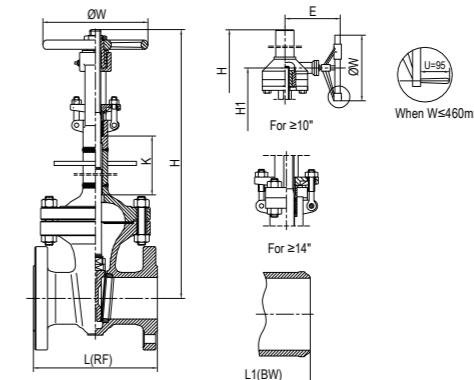


Figure NO.:  
GG3R / GG3B

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	21.7	18.1	18.1	18.1	24.0	24.0	24.0	
	mm	250	300	400	450	550	460	460	460	460	610	610	610	
H	in	19.0	22.0	25.2	36.6	41.9	69.1	77.4	86.6	94.9				

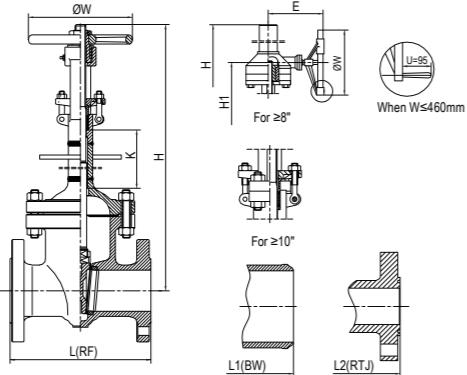
# Cast Steel Cryogenic Gate Valve

## Dimension & Weight

### 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

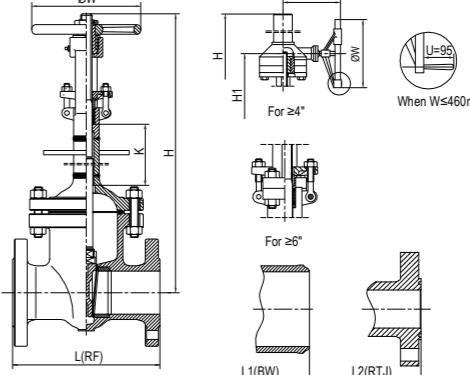
## Dimension & Weight

# Cast Steel Cryogenic Gate Valve

### 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</td				

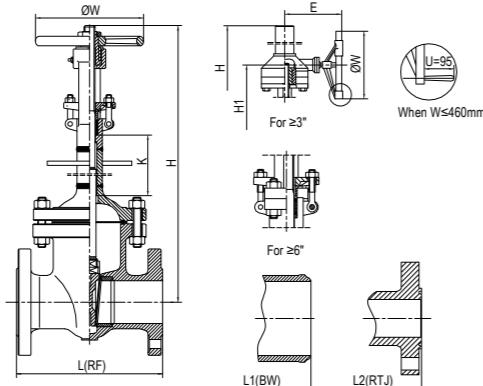
# Cast Steel Cryogenic Gate Valve

## Dimension & Weight

**Class 1500**

Cast Steel Cryogenic Gate Valve

Figure NO.:  
GG15R / GG15B



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

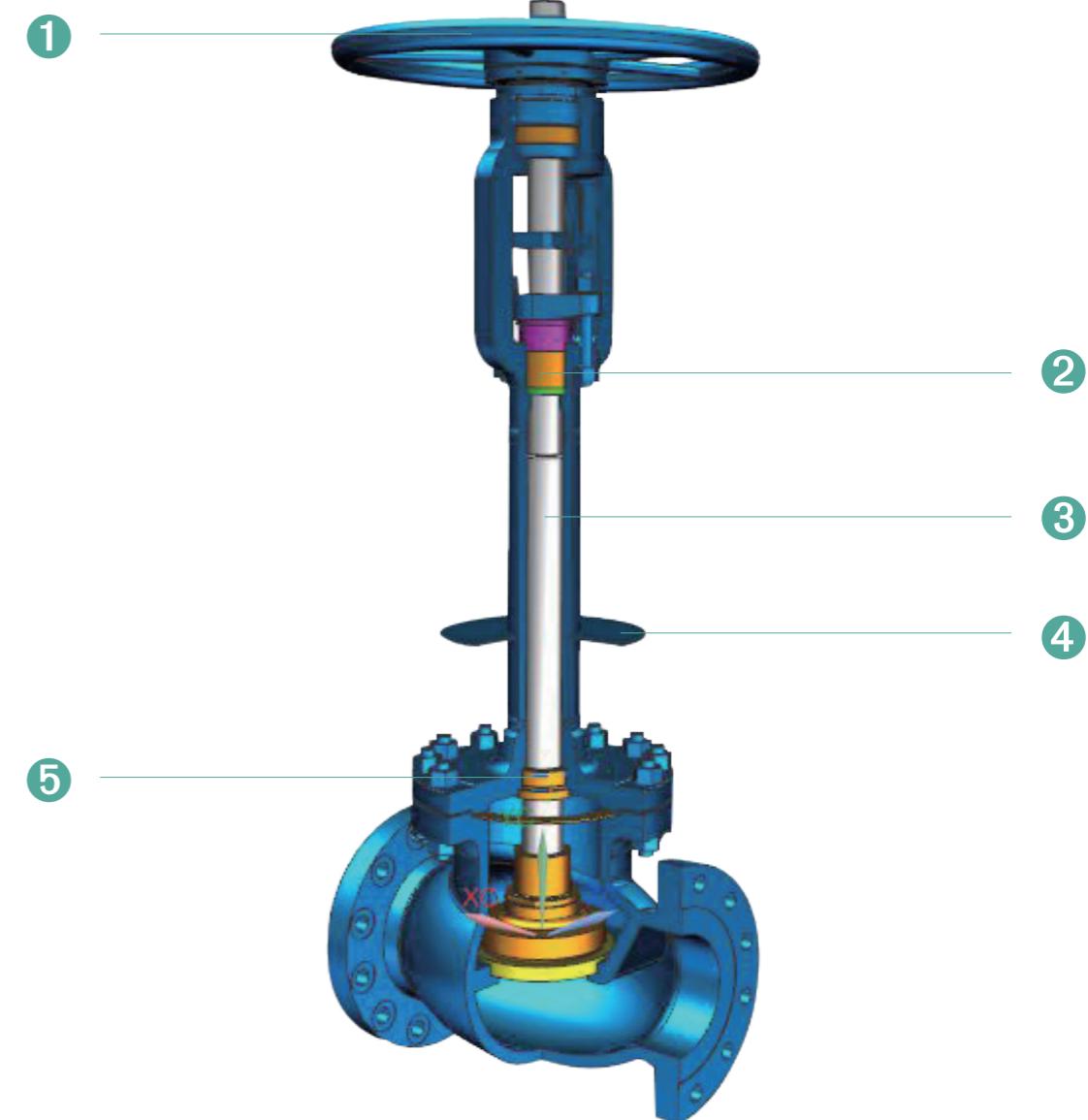
NPS	in	2"	3"	4"	6"	8"
DN	mm	50	80	100	150	200
L(RF)	in	14.5	18.5	21.5	27.8	32.8
L1(BW)	mm	368	470	546	705	832
L2(RTJ)	in	14.5	18.5	21.5	27.8	32.8
W	mm	368	470	546	705	832
W	in	14.6	18.6	21.6	28.0	33.1
L1(BW)	mm	371	473	549	711	842
H	in	13.8	12.0	18.1	24.0	24.0
H	mm	350	305	460	610	610
H1	in	23.3	43.2	45.7	59.8	68.3
H1	mm	593	1098	1161	1520	1736
K	in	NA	29.4	29.9	47.5	48.9
K	mm	NA	746	759	1207	1243
E	in	4.9	5.9	5.9	13.8	13.8
E	mm	125	150	150	350	350
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
L1(BW)	mm	368	470	546	705	832
L2(RTJ)	in	14.5	18.5	21.5	27.8	32.8
W	mm	368	470	546	705	832
W	in	14.6	18.6	21.6	28.0	33.1
L1(BW)	mm	371	473	549	711	842
H	in	13.8	12.0	18.1	24.0	24.0
H	mm	350	305	460	610	610
H	in	28.3	49.1	51.6	59.8	68.3
H	mm	718	1248	1311	1520	1736
H1	in	NA	35.3	35.8	47.5	48.9
H1	mm	NA	896	909	1207	1243
K	in	9.8	11.8	11.8	13.8	13.8
K	mm	250	300	300	350	350
E	in	NA	9.4	9.4	19.6	22.8
E	mm	NA	238	238	497	580
WT (RF)	KG	102	195	276	682	1110
WT (BW)	KG	82	155	220	570	920

## Design Feature

# Cast Steel Cryogenic Globe 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 PCTFE bushing is applied in the bottom of the bonnet to guide and support stem to stay stable.

# Cast Steel Cryogenic Globe Valve

## Dimension & Weight

### Class 150

### Cast Steel Cryogenic Globe Valve

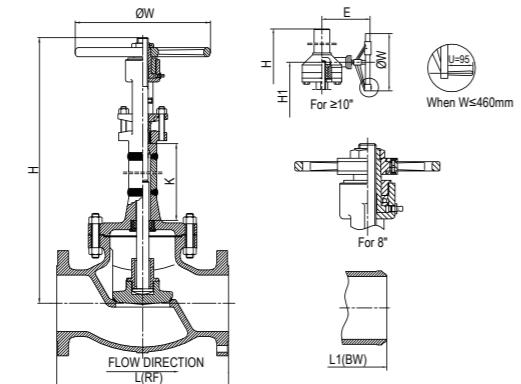


Figure NO.:  
GLG1R / GLG1B

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

## Dimension & Weight

# Cast Steel Cryogenic Globe Valve

### Class 300

### Cast Steel Cryogenic Globe Valve

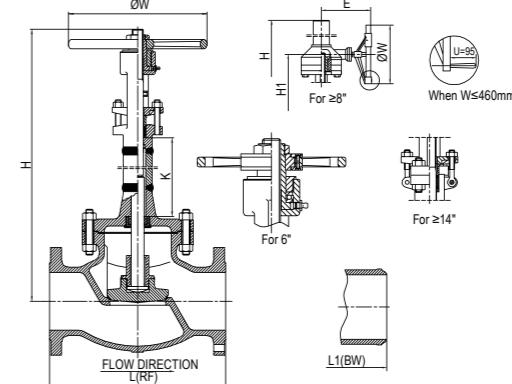


Figure NO.:  
GLG3R / GLG3B

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	NA	NA	39.6	41.2	46.8	51.9
	mm	NA	NA	NA	NA	NA	NA	1007	1047	1188	1319
K	in	4.9	5.9	5.9	6.9	6.9	6.9	7.9	7.9	9.8	11.8
	mm	125	150	150	175	175	200	200	250	250	300
E	in	NA	NA	NA	NA	NA	NA	19.6	22.8	25.2	29.1
	mm	NA	NA	NA	NA	NA	NA	497	580	639	739
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

# Cast Steel Cryogenic Globe Valve

## Dimension & Weight

### Class 600

### Cast Steel Cryogenic Globe Valve

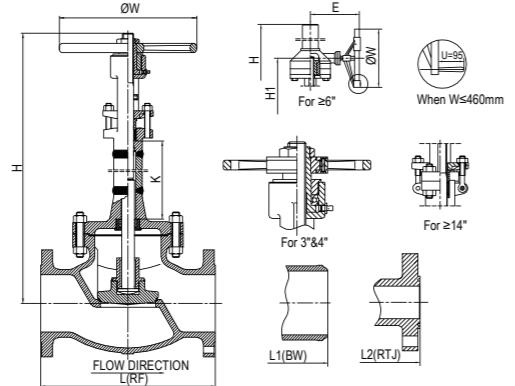


Figure NO.:  
GLG6R / GLG6B

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

## Dimension & Weight

# Cast Steel Cryogenic Globe Valve

### Class 900

### Cast Steel Cryogenic Globe Valve

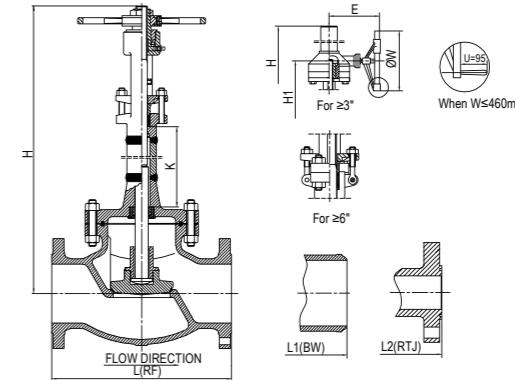


Figure NO.:  
GLG9R / GLG9B

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	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	25	

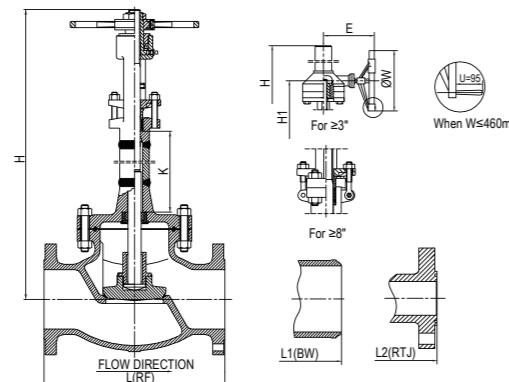
# Cast Steel Cryogenic Globe Valve

## Dimension & Weight

### 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

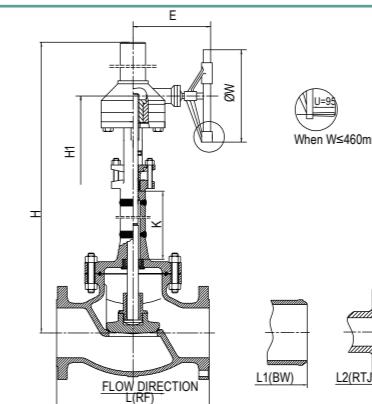
## Dimension & Weight

# Cast Steel Cryogenic Globe Valve

### Class 2500

### Cast Steel Cryogenic Globe Valve

Figure NO.:  
GLG25R / GLG25B



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

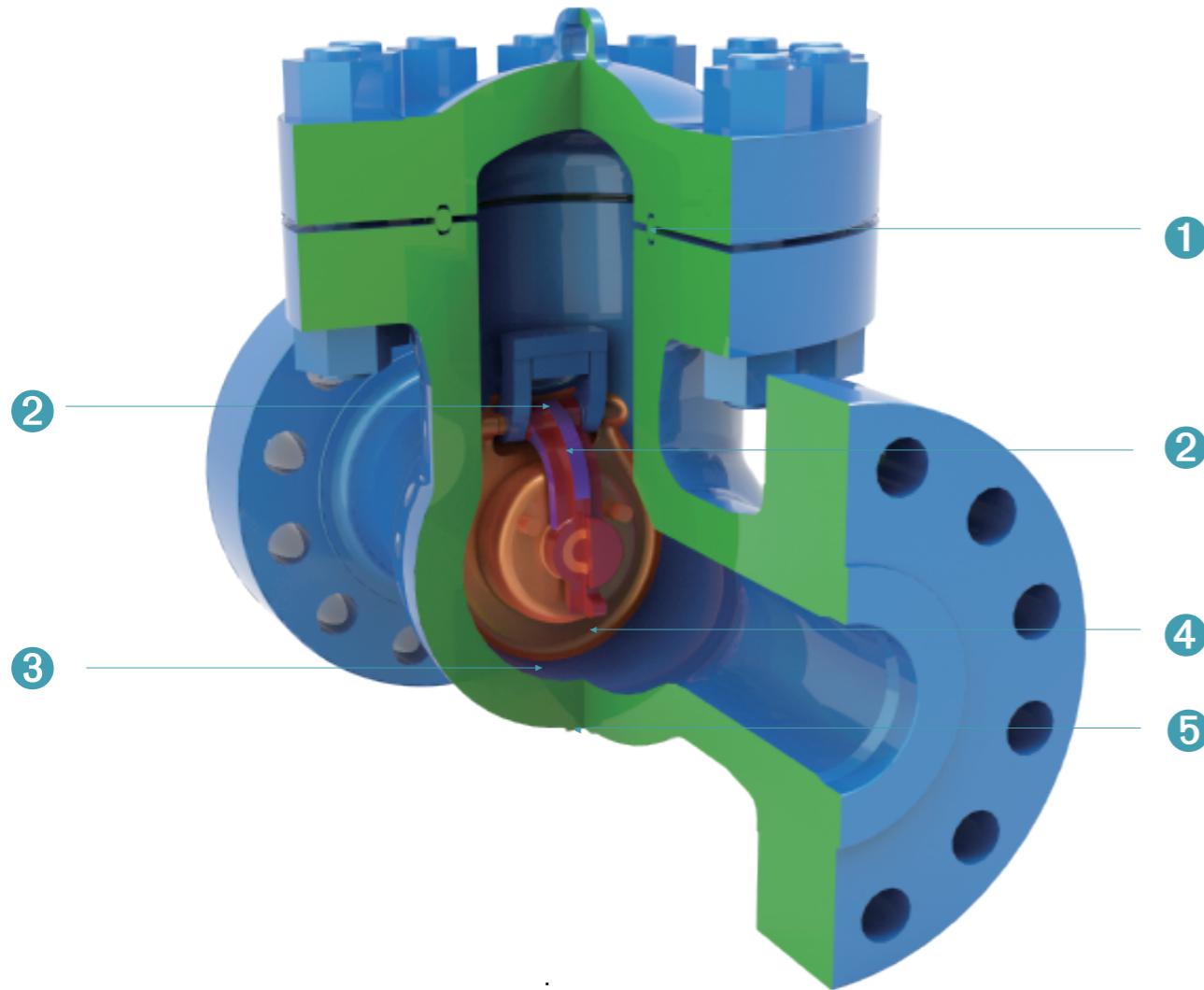
NPS	in	2"	3"	4"	6"	8"
DN	mm	50	80	100	150	200
L(RF)	in	17.8	22.8	26.5	36.0	40.2
	mm	451	578	673	914	1022
L1(BW)	in	17.8	22.8	26.5	36.0	40.2
	mm	451	578	673	914	1022
L2(RTJ)	in	17.9	23.0	26.9	36.5	40.9
	mm	454	584	683	927	1038
W	in	18.1	24.0	28.0	31.9	31.9
	mm	460	610	710	810	810
H	in	28.7	35.4	40.8	56.7	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

# Cast Steel Cryogenic Check Valve

## Design Feature



**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 bottom to top.

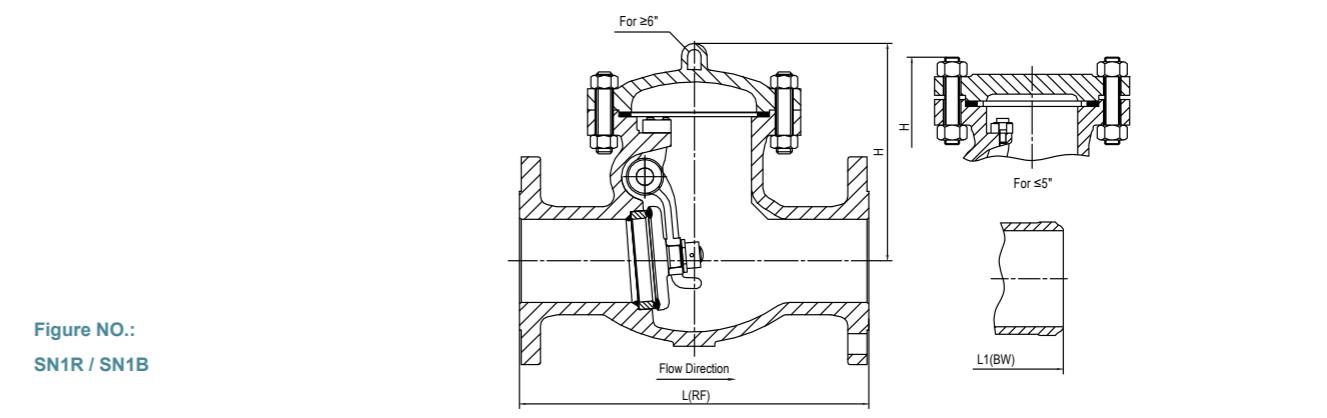
**5** Provision of standard bosses for a drain tapping at location G at the lower part of body centerline. Additional bosses conform to customer requirements.

## Dimension & Weight

# Cast Steel Cryogenic Check Valve

## Class 150

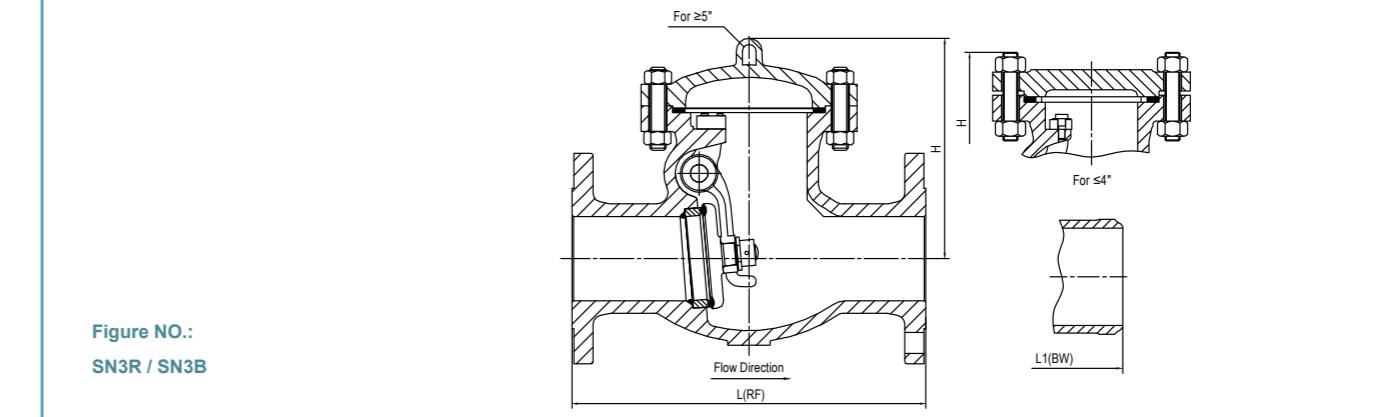
## Cast Steel Cryogenic Check Valve(Swing Type)



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
L1(BW)	in	203	241	292	356	495	622	699	787	864	978	978	1295
H	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
L1(BW)	mm	203	241	292	356	495	622	699	787.0	864	978	978	1295
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)



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
L1(BW)	in	267	318	356	445	533	622	711	838	864	978	1016	1346
H	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
L1(BW)	mm	267	318	356	445	533	622	711	838.0	864	978	1016	1346
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

## Cast Steel Cryogenic Check Valve

Dimension & Weight

### Class 600

#### Cast Steel Cryogenic Check Valve(Swing Type)

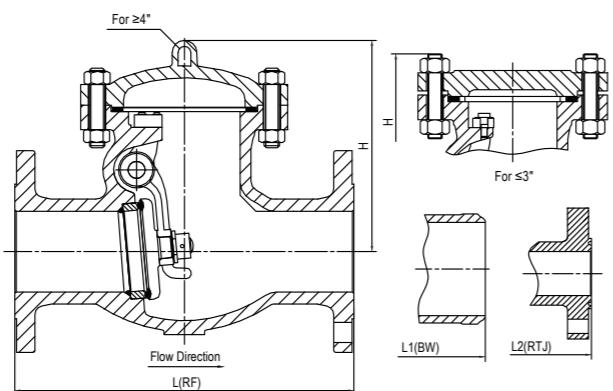


Figure NO.:  
SN6R / SN6B

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
L(RF)	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
L1(BW)	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
L2(RTJ)	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
H	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)

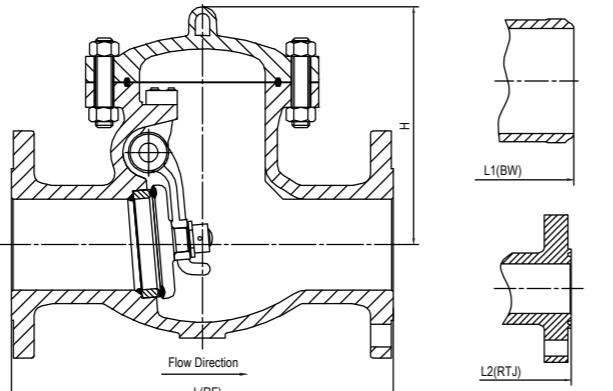


Figure NO.:  
SN9R / SN9B

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
L(RF)	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
L1(BW)	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
L2(RTJ)	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
H	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

Dimension & Weight

## Cast Steel Cryogenic Check Valve

### Class 1500

#### Cast Steel Cryogenic Check Valve(Swing Type)

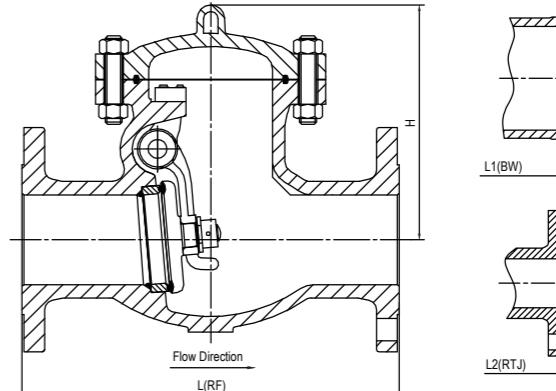


Figure NO.:  
SN15R / SN15B

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
L(RF)	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
L1(BW)	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
L2(RTJ)	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
H	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)

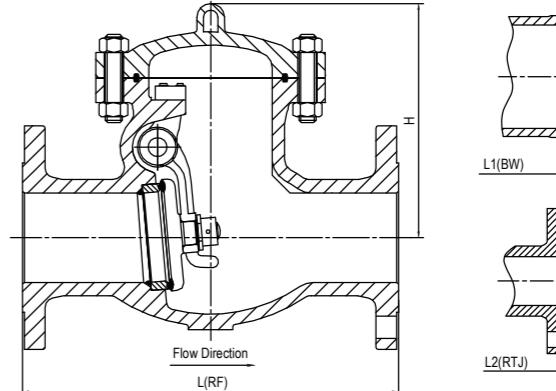


Figure NO.:  
SN25R / SN25B

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
L(RF)	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
L1(BW)	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
L2(RTJ)	mm	454	584	683	927	1038	1292	1445
H	in	15.0	17.0	20.4	22.7	28.8	33.0	35.3
H	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

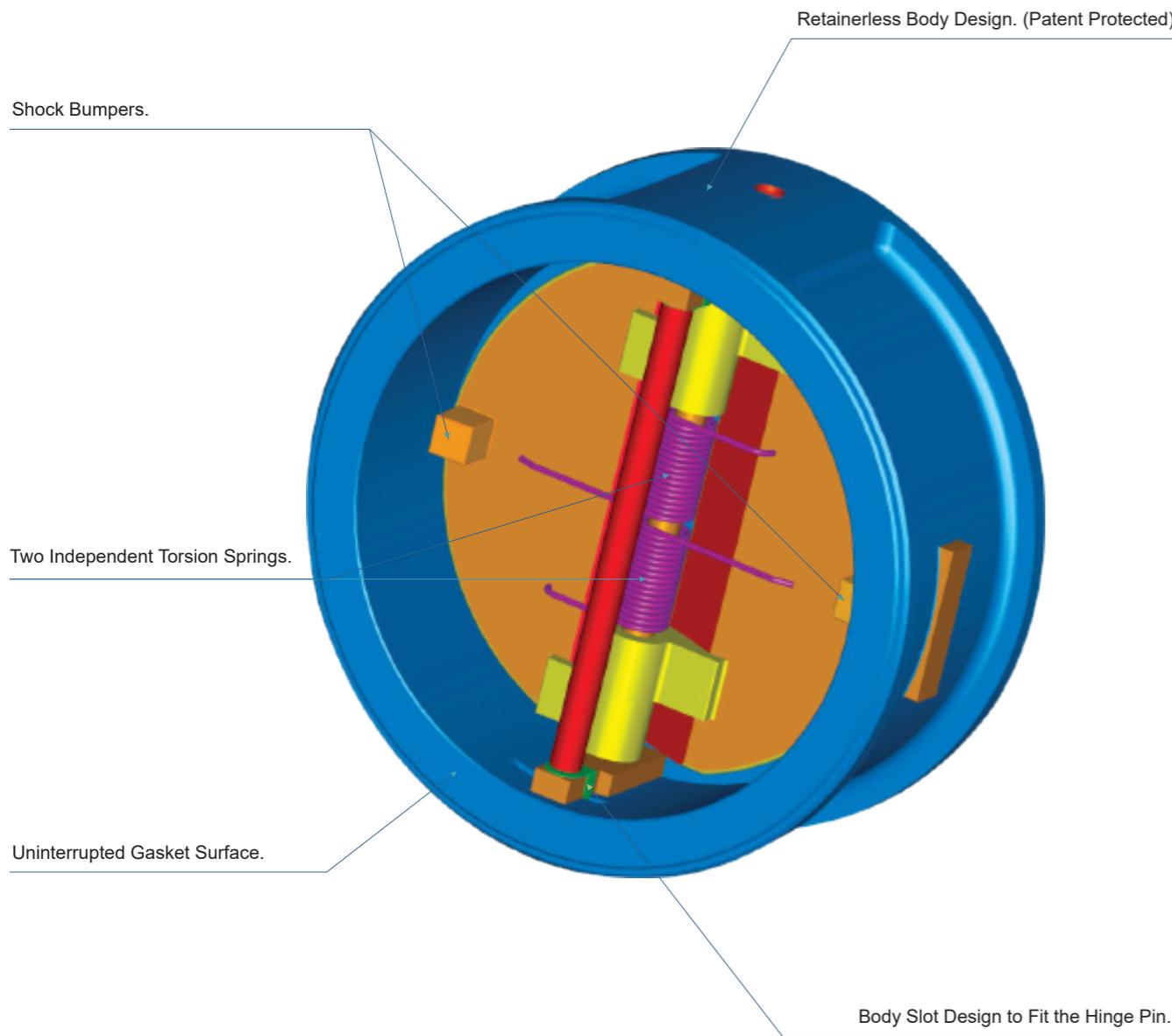
# Cryogenic Dual Plate Check Valve

## 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.

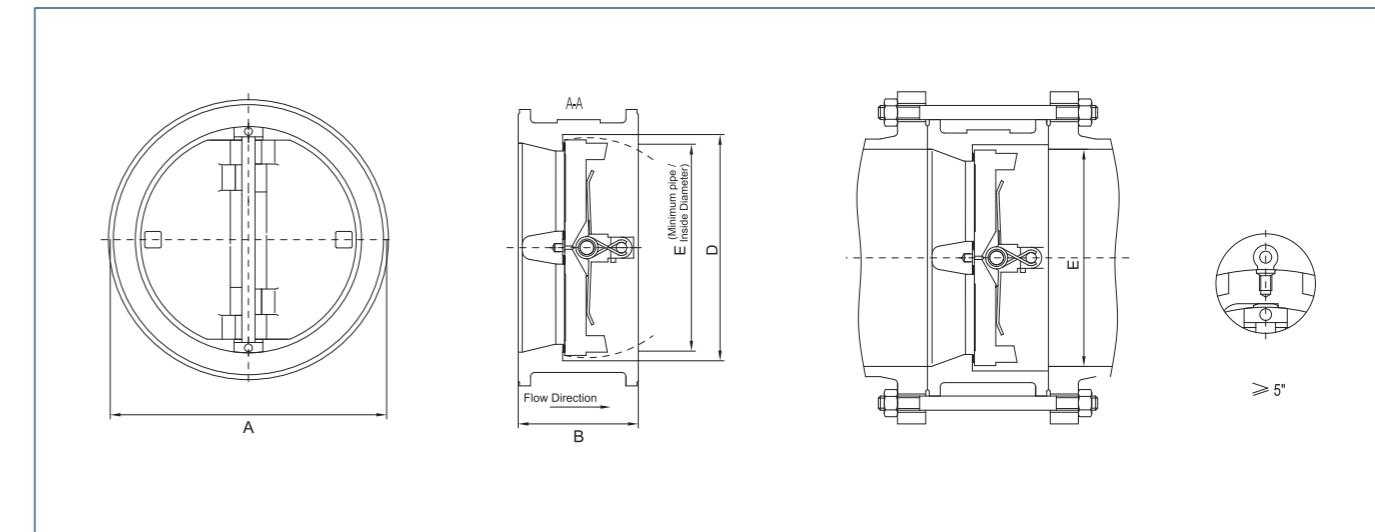
Compared to conventional swing check valves, NEWAY'S dual plate check valves have the advantage of zero leakage toward outside (nobolted or threaded connections), cost savings, they can be installed in any line orientation, superior seal performance, offer minimal line shock, lower pressure loss and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



## Dimension & Weight

# Cryogenic Dual Plate Check Valve



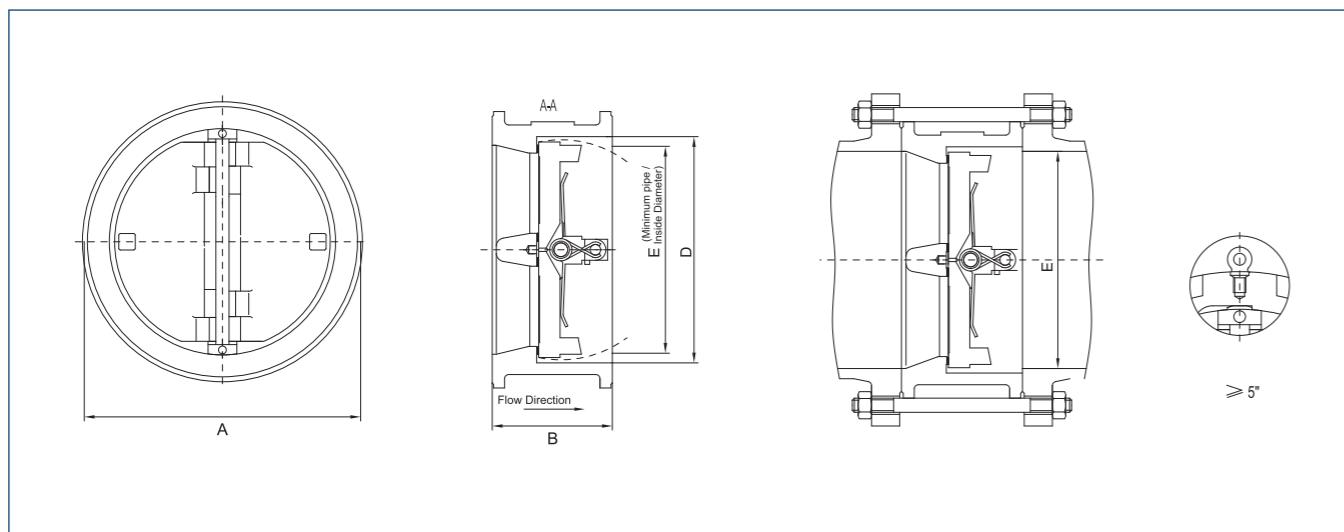
Wafer type

### 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
2½"	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)	

## Cryogenic Dual Plate Check Valve

### Dimension & Weight



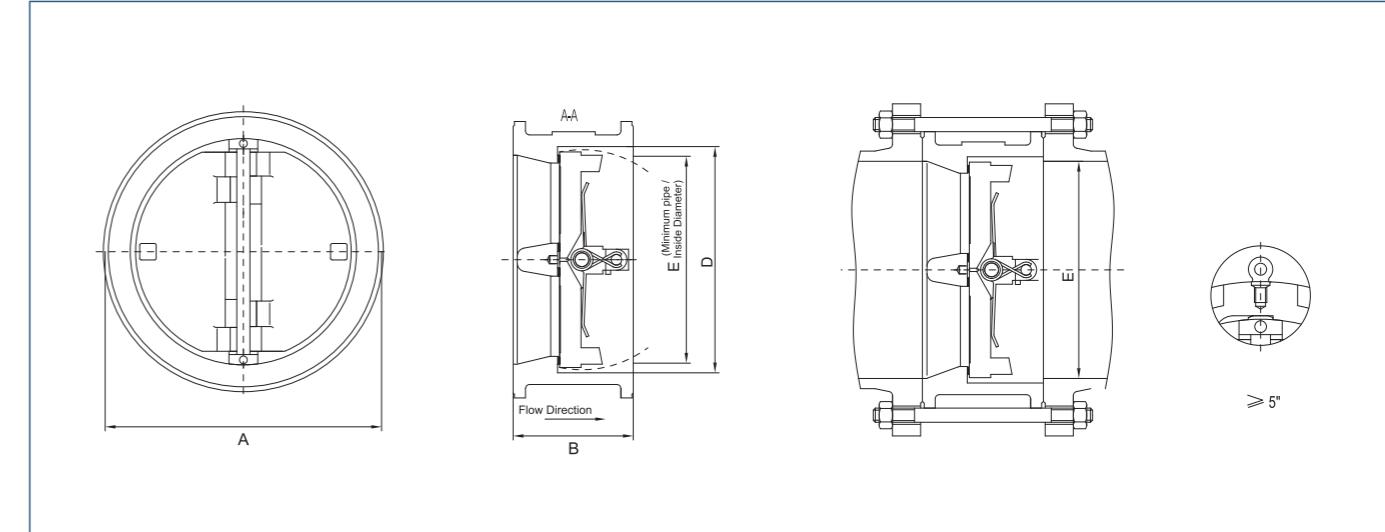
Wafer type

### Wafer Type - ASME Class 300

Size		Dimensions								Stud details			End facing	Hook screw hole size	Weight				
		A		B		D		E							in	mm	lbs	kg	
NPS	DN	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm		
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

### Dimension & Weight

## Cryogenic Dual Plate Check Valve



Wafer type

### Wafer Type - ASME Class 600

Size		Dimensions								Stud details					End facing	Hook screw hole size	Weight				
		A		B		D		E									in	mm	lbs	kg	
NPS	DN	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm				
2"	50	4.38	111	2.38	60	2.36	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/RT				

## Cryogenic Dual Plate Check Valve

### Dimension & Weight

#### 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			
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	3
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

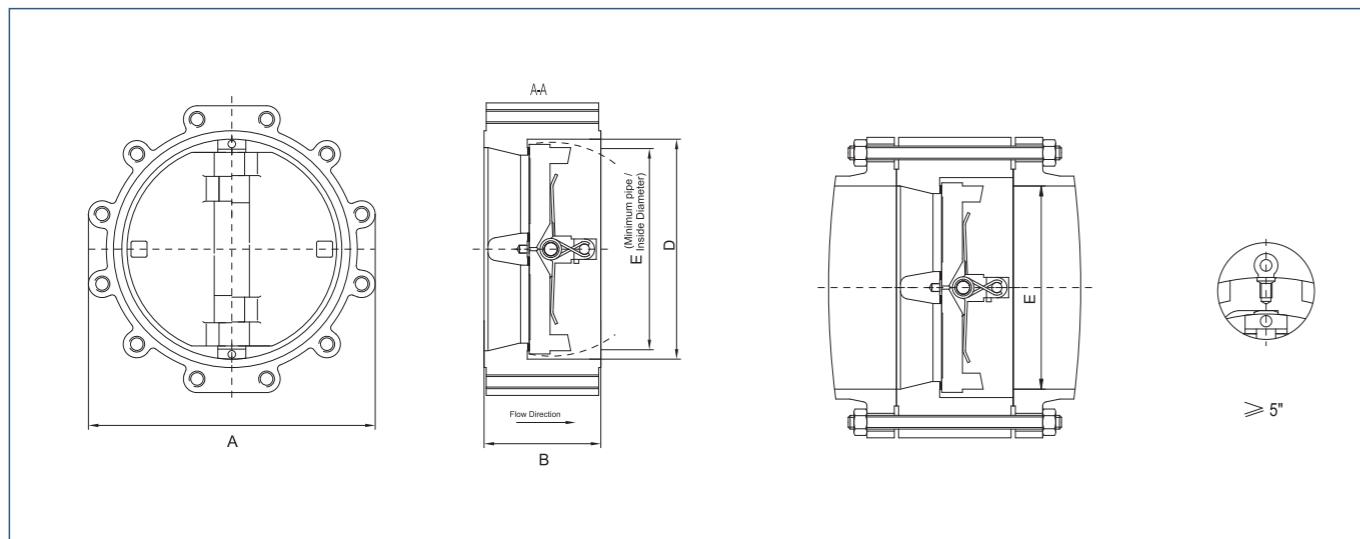
Size		Dimensions								Stud details								End facing	Hook screw hole size	Weight	
		A		B		D		E		No.	Diameter		RF Stud length		RFJ Stud length						
NPS	DN	in	mm	in	mm	in	mm	in	mm		in	mm	in	mm	in	mm	in	mm			
2"	50	5.63	143	2.75	70	2.24	57	1.34	34	8	0.88	22	8.50	216	8.75	222	RF/RTJ#24	-	-	11.5	5
3"	80	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																		

## Cryogenic Dual Plate Check Valve

### Dimension & Weight

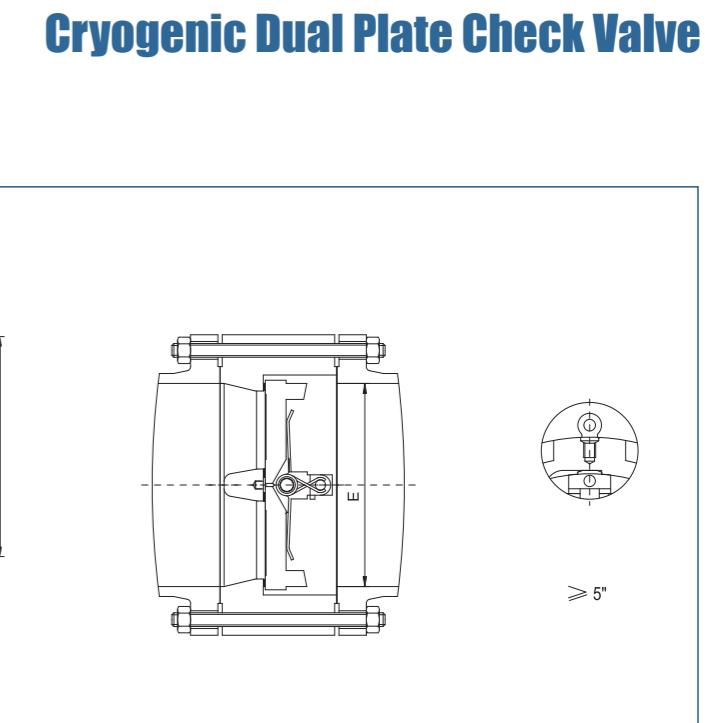


Lug type

### 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	in	mm	in	mm	lbs	kg	
NPS	DN	in	mm	in	mm	in	mm	in	mm						in	mm			
2"	50	6.50	165	2.38	60	2.38	60	1.34	34	8	0.63	16	2.75	70	RF	-	-	18	8
2½"	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

### Dimension & Weight



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		in	mm	lbs	kg	
NPS	DN	in	mm	in	mm	in	mm	in	mm						in	mm			
2"	50	6.50	165	2.38	60	2.38	60	1.34	34	8	0.63	16	3.25	83	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	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	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	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	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	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	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	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	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	RF/RTJ#69	1.00	25	1550	703
20"	500	32.00	813	14.50	368	20.16	512	17.32	440										

## Cryogenic Dual Plate Check Valve

### Dimension & Weight

#### 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	No.	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	No.	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					

## Cryogenic Dual Plate Check Valve

### Dimension & Weight

Double flanged type - ASME Class 300

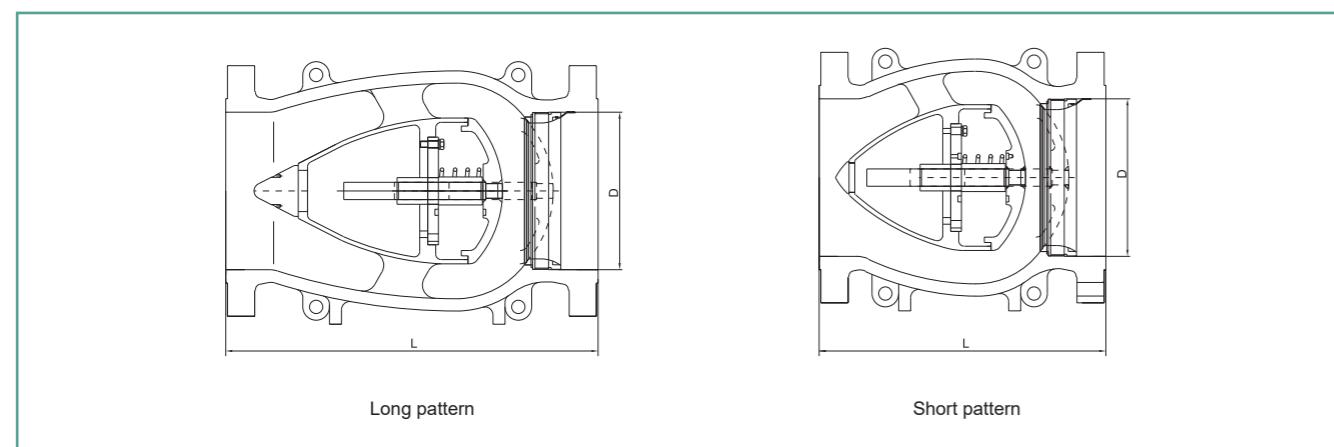
Size		Dimensions								Stud details				End facing	Weight	
		A		B		D		E		No.	Diameter		RF Stud length			
NPS	DN	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lbs	kg	
2"	50	6.50	165	4.49	114	2.36	60	1.34	34	8	0.625	15.9	3.74	95	RF	19.86 9
3"	80	8.27	210	4.76	121	3.70	94	2.72	69	8	0.75	19.1	4.53	115	RF	37.51 17
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		RFJ Stud length			
NPS	DN	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	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	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	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	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	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	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	3										

## Cryogenic Axial Flow Check Valve

### Dimension & Weight



Flange End - ASME Class 150

Size		Dimensions						Weight			
		D		L		Long pattern(RF/BW)		Short pattern(RF/BW)		Long 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	-	-

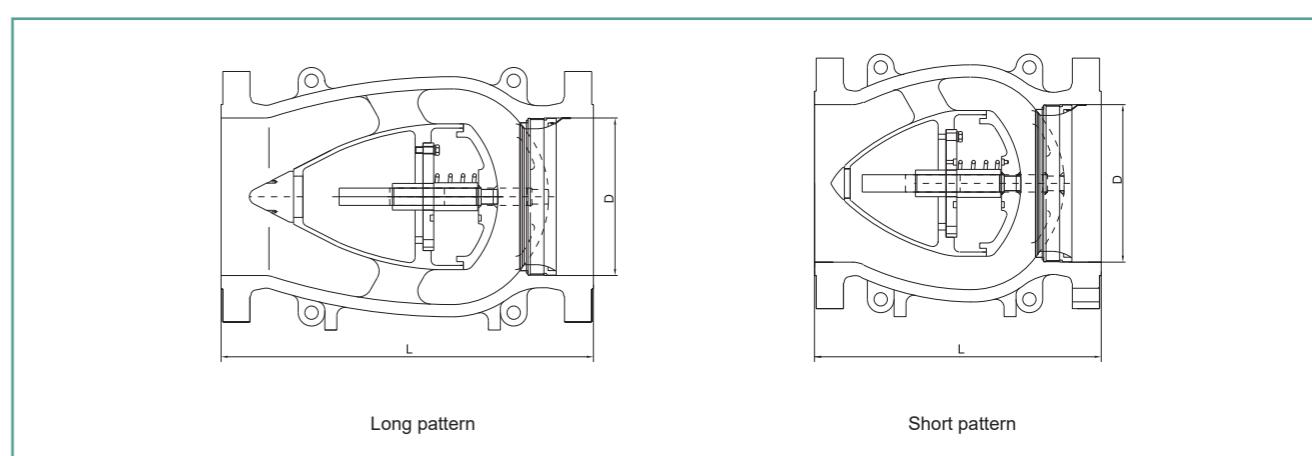
Note: Short pattern is a Neway Standard dimension

Size		Dimensions						Weight			
		D		L		Long pattern(RF/BW)		Short pattern(RF/BW)		Long 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

### Dimension & Weight

## Cryogenic Axial Flow Check Valve



Long pattern

Short pattern

Note: Short pattern is a Neway Standard dimension

## Cryogenic Axial Flow Check Valve

## Dimension & Weight

Flange End - ASME Class 600													
Size		Dimensions										Weight	
		D		L									
NPS	DN	in	mm	Long pattern(RF/BW)		Long pattern(RTJ)		Short pattern(RF/BW)		Short pattern(RTJ)		Long pattern	
				in	mm	in	mm	in	mm	in	mm	lbs	kq
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
8	200	7.99	203	25.98	660	26.1	663	12.99	330	13.11	333	615	279
10	250	10	254	30.98	787	31.1	790	15.16	385	15.28	388	966	438
12	300	12.01	305	32.99	838	33.11	841	18.70	475	18.82	478	1261	572
14	350	13.27	337	35	889	35.12	892	20.08	510	20.20	513	1563	709
16	400	15.24	387	39.02	991	39.13	994	21.46	545	21.57	548	2310	1048
18	450	17.24	438	42.99	1092	43.11	1095	24.02	610	24.13	613	2857	1296
20	500	19.25	489	47.01	1194	47.24	1200	26.57	675	26.81	681	3739	1696
22	550	21.26	540	50.98	1295	51.38	1305	-	-	-	-	4603	2088
24	600	23.27	591	55	1397	55.39	1407	31.89	810	32.28	820	5172	2346
28	700	27.01	686	62.99	1600	63.5	1613	37.20	945	37.72	958	8113	3680
30	750	29.02	737	65	1651	65.51	1664	39.76	1010	40.28	1023	9700	4400
34	850	32.76	832	-	-	-	-	-	-	-	-	13139	5960
36	900	34.49	876	82.01	2083	82.64	2099	47.83	1215	48.46	1231	14286	6480
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

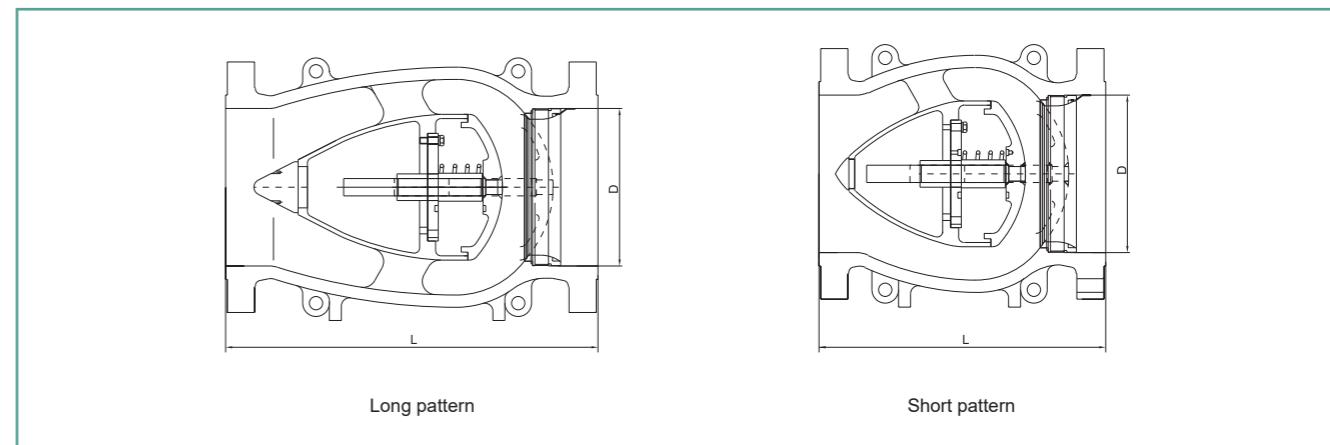
Flange End - ASME Class 900

Size		Dimensions										Weight			
		D		L											
NPS	DN	in	mm	Long pattern(RF/BW)		Long pattern(RTJ)		Short pattern(RF/BW)		Short pattern(RTJ)		Long pattern		Short pattern	
				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

Dimension & Weight

# Cryogenic Axial Flow Check Valve



Flange End - ASME Class 1500

Size		Dimensions										Weight			
		D		L											
NPS	DN	in	mm	Long pattern(RF/BW)		Long pattern(RTJ)		Short pattern(RF/BW)		Short pattern(RTJ)		Long pattern		Short pattern	
		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											
NPS	DN	in	mm	Long pattern(RF/BW)		Long pattern(RTJ)		Short pattern(RF/BW)		Short pattern(RTJ)		Long pattern		Short pattern	
				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 Terminal

CNOOC Zheliang Ningbo LNG Co.Ltd.-Zheliang LNG Terminal

Sinopec Tianjin Liquefied Natural Gas Co., Ltd. -Sinopec Tianjin LNG Project

CNOOC Guangxi Fangchenggang Natural Gas Corporation Limited-Guanaxi LNG Project

CNOOC Guangxi Fangchenggang Natural Gas Corporation Limited-Guangai LNG Project

CNOOC Tianing LNG Co., Ltd. -Tianing FLNG Terminal

Kunlun Energy Huanggang LNG Co.Ltd.-5000,000mday ING Plant localization Project

Shandong Taian Kunlun Eneray Co. Ltd-Taian 600.000 tons/year 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

## Product Warranty



**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 Flow Control(Suzhou) Co.,Ltd**

Founded in 2020

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

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 or 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.