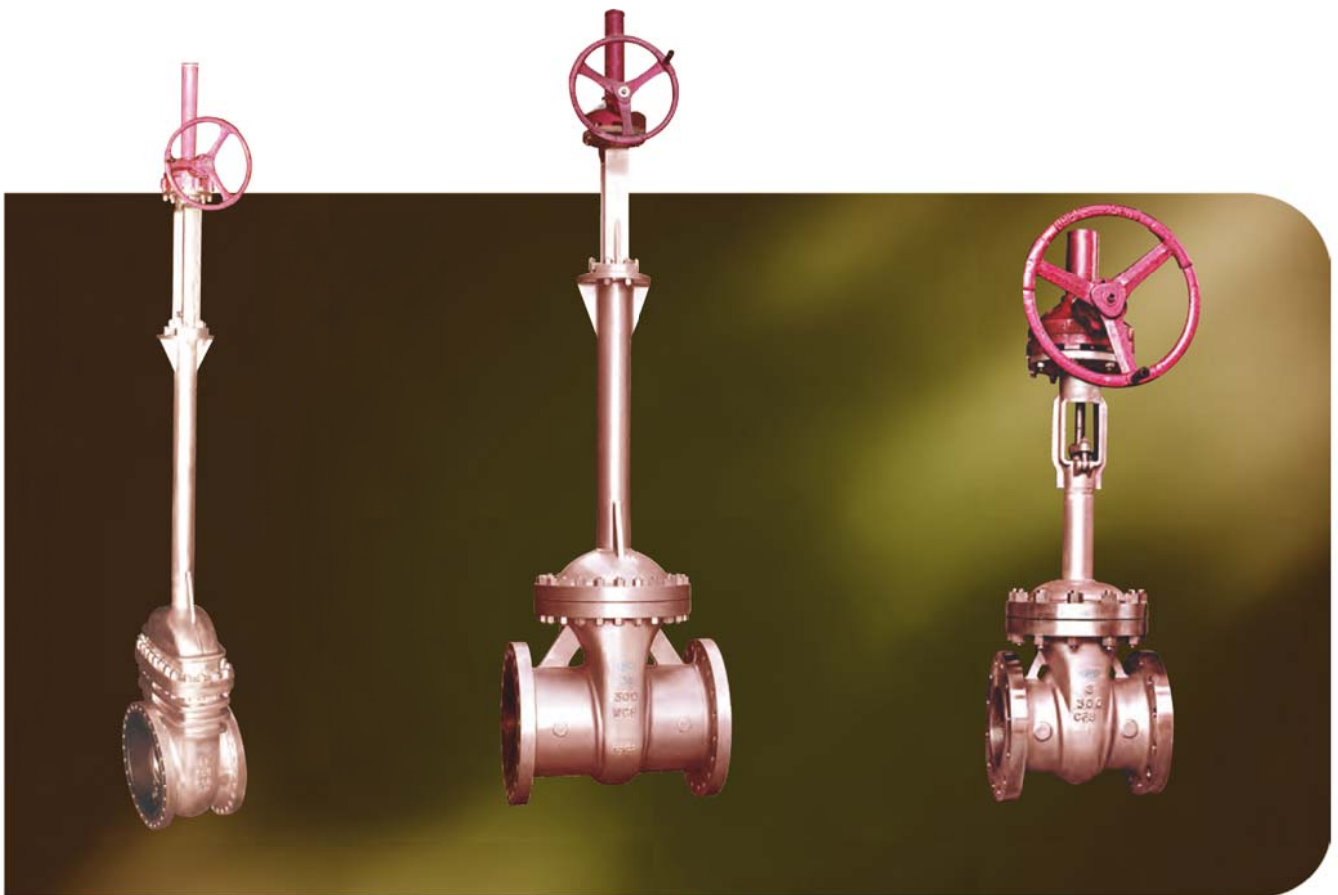
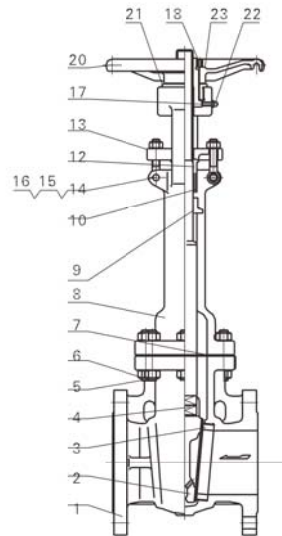


Cryogenic Valve



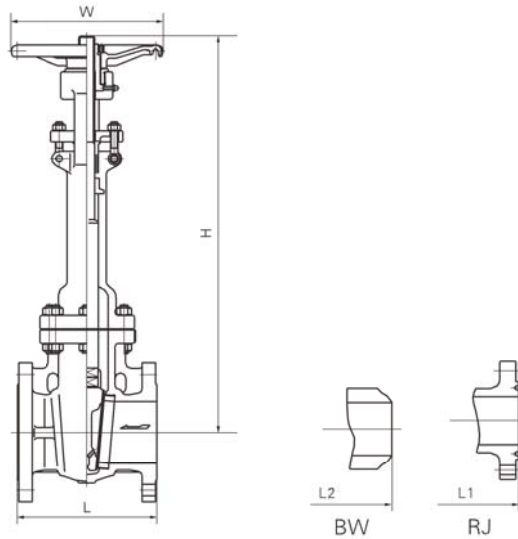
Cryogenic Gate Valve



Main parts material sheet

Item	Part name	LC3	CF8	CF3	CF3M	CE3MN
1	Body	A352 LC3	A351 CF8	A351 CF3	A351 CF3M	CE3MN
2	Wedge disc	A352 LC3	A351 CF8	A351 CF3	A351 CF3M	CE3MN
3	Seat	A352 LC3	F304	F304L	F316L	F53
4	Stem	A182 F304	F304	A182 F304L	A182 F316L	A182 F53
5	Bolt	A193 B16	A182 B8	A193 B8	A193 B8M	A193 B8M
6	Nut	A194 4	A194 8	A194 8	A194 8M	A194 8M
7	Gasket	304+flexible graphite	304+flexible graphite	304+flexible graphite	316+flexible graphite	316+flexible graphite
8	Bonnet	A352 LC3	A351 CF8	A351 CF3	A351 CF3M	CE3MN
9	Packing	A182 F304	F304	F304L	F316C	F53
10	Distance Ring	304+flexible graphite	304+flexible graphite	304+flexible graphite	316+flexible graphite	316+flexible graphite
12	Packing gland	A182 F304	F304	F304	A182 F316L	A182 F316L
13	Packing plate	A216 WCB	CF8	CF8	A351 CF8	A351 CF8
14	Eye bolt	A193 B16	B8	B8	A193 B8M	A193 B8M
15	Nut	A194 4	8	8	A194 8M	A194 8M
16	Pin	1035	304	304	304	304
17	Stem nut	A439 type D2	A439 type D2	A439 type D2	A439 type D2	A439 type D2
18	Locking nut	1035	1035	1035	1035	1035
20	Hand wheel	Ducerle L10m	DucerleL10m	Ducerle L10m	Ducerle L10m	Ducerle L10m
21	Bearing gland	1035	1035	1035	1035	1035
22	Oil cap	Finished product	Finished product	Finished product	Finished product	Finished product
23	Nameplate	304	304	304	304	304

Cryogenic Gate Valve



CL150

Spec (NAP)	in	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	28	30	32	36
Face to face(mm)	L	178	190	203	229	254	267	292	330	356	381	406	432	457	508	610	610	660	711
	L1	191	203	216	241	267	279	305	343	368	394	419	445	470	521	-	-	-	-
	L2	216	241	283	305	381	403	419	457	502	572	610	660	711	813	914	914	956	1060
Center height(mm)	H	510	550	590	670	750	800	890	1150	1285	1420	1550	1690	1840	2140	2300	2600	2830	3100
Hand wheel diameter (mm)	W	200	200	250	280	300	300	350	400	450	500	600	680	750	800				

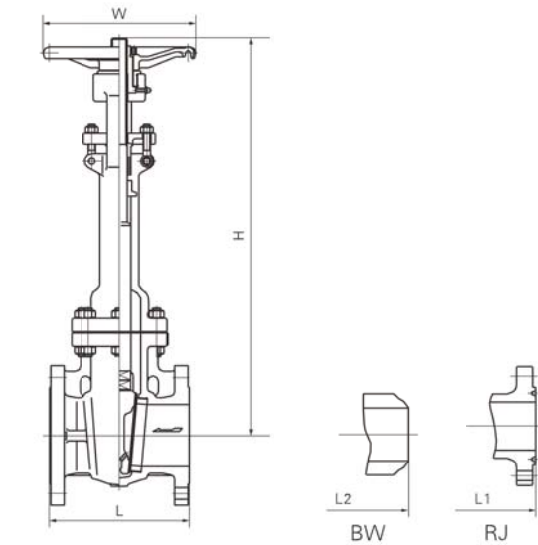
CL300

Spec (NAP)	in	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	28	30	32	36
Face to face(mm)	L	216	241	283	305	381	403	419	457	502	762	838	914	991	1143	1346	1397	1524	1727
	L1	232	257	298	321	397	419	435	473	518	778	854	930	1010	1165	1372	1422	1553	1756
	L2	216	241	283	305	381	403	419	457	502	762	838	914	991	1143	1346	1397	1524	1727
Center height(mm)	H	515	565	615	690	770	820	915	1175	1305	1450	1580	1720	1860	2170	2340	2640	2870	3150
Hand wheel diameter (mm)	W	200	200	250	300	300	350	400	450	500	550	680	750	920	-	-	-	-	-

CL600

Spec (NAP)	in	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	28	30	32	36
Face to face(mm)	L	292	330	356	432	508	559	660	787	838	889	991	1092	1194	1397				
	L1	295	333	359	435	511	562	664	791	841	892	994	1095	1200	1407				
	L2	292	330	356	432	508	559	660	787	838	889	991	1092	1194	1397				
Center height(mm)	H	540	595	640	730	810	865	950	1205	1345	1500	1640	1760	1960	2210				
Hand wheel diameter (mm)	W	200	250	280	300	400	450	500	680	750	700	-	-	-	-				

Cryogenic Gate Valve



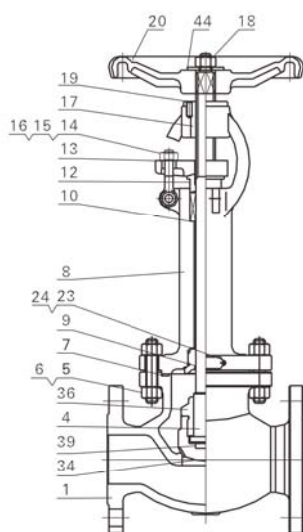
CL900

Spec (NAP)	in	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	
Face to face(mm)	L	368	419	381	457	559	610	737	838	965	1029	1130				
	L1	371	422	384	460	562	613	740	841	968	1039	1140				
	L2	368	419	381	457	559	610	737	838	965	1029	1130				
Center height(mm)	H	605	640	700	760	850	905	1000	1255	1400	1590	1710				
Hand wheel diameter (mm)	W	300	300	350	400	-	600	600	650	700	-	-				

CL1500

Spec (NAP)	in	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	
Face to face(mm)	L	368	419	470	546	673	705	832	991	1130	1257	1384				
	L1	371	422	473	549	676	711	842	1001	1146	1276	1406				
	L2	368	419	470	546	673	705	832	911	1130	1257	1384				
Center height(mm)	H	625	680	750	800	900	960	1060	1300	1505	1700	1800				
Hand wheel diameter (mm)	W	300	350	400	550	-	-	-	-	-	-	-				

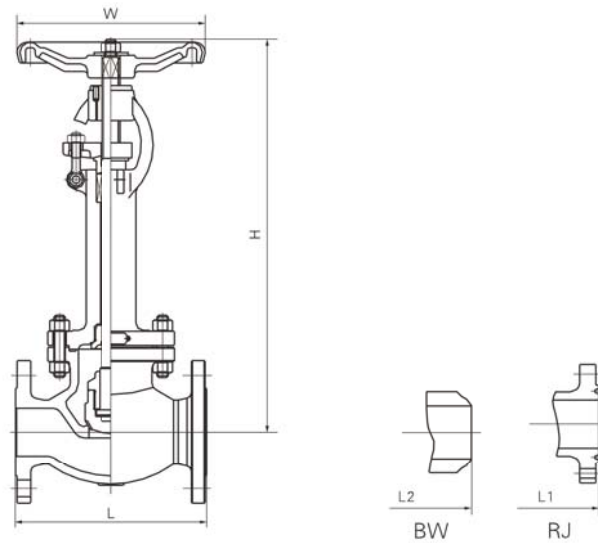
Cryogenic Globe Valve



Main parts material sheet

Item	Part name	LC3	CF8	CF3	CF3M	CE3MN
1	Body	A352 LC3	A351 CF8	A351 CF3	A351 CF3M	CE3MN
4	Stem	A182 F304	A182 F304	A182 F304L	A182 F316L	A182 F53
5	Bolt	A193 B7	A193 B8	A193 B8	A193 B8M	A193 B8M
6	Nut	A194 2H	A194 8	A194 8	A194 8M	A194 8M
7	Bonnet	304+柔性石墨	304+柔性石墨	304+柔性石墨	316+柔性石墨	316+柔性石墨
8	Packing	A352 LC3	A351 CF8	A351 CF3	A351 CF3M	CE3MN
9	Distance ring	A182 F304	A182 F304	A182 F304L	A182 F316L	A182 FF53
10	Packing gland	304+柔性石墨	304+柔性石墨	304+柔性石墨	316+柔性石墨	316+柔性石墨
12	Packing plate	A182 F304	A182 F304	A182 F304L	A182 F316L	A182 F53
13	Eye bolt	A216 WCB	A351 CF8	A351 CF8	A351 CF8	A351 CF8
14	Nut	A193 B7	A193 B8	A193 B8	A193 B8M	A193 B8M
15	Pin	A194 2H	A194 8	A194 8	A194 8M	A194 8M
16	Stem nut	420	304	304	304	304
17	Locking nut	A439 type D2	A439 type D2	A439 type D2	A439 type D2	A439 type D2
18	Locking screw	1035	1035	1035	1035	1035
19	Hand wheel	1035	1035	1035	1035	1035
20	Nameplate	Ducerle L10m	Ducerle L10m	Ducerle L10m	Ducerle L10m	Ducerle L10m
23	Rivet	304	304	304	304	304
24	Pressure seal seat	AL	AL	AL	AL	AL
34	Disc	F304	F304	F304L	F316L	F53
36	Disc cover	F304	F304	F304L	F316L	F53
39	Gasket	304	304	304	316	F53
44	Washer	1035	1035	1035	1035	1035

Cryogenic Globe Valve



CL150

Spec (NAP)	in	2	2 1/2	3	4	5	6	8	10	12	14	16
Face to face(mm)	L	203	216	241	292	356	406	495	622	698	787	914
	L1	216	229	254	305	369	419	508	635	711	800	927
	L2	203	216	241	292	356	406	495	622	698	787	914
Center height(mm)	H	520	540	575	640	675	757	927	1028	1060	1200	1305
Hand wheel diameter (mm)	W	220	250	280	320	320	400	450	560	560	-	-

CL300

Spec (NAP)	in	2	2 1/2	3	4	5	6	8	10	12	14	16
Face to face(mm)	L	267	292	318	356	400	445	559	622	711	838	863
	L1	283	308	334	372	416	461	575	638	727		
	L2	267	292	318	356	400	445	559	622	711		
Center height(mm)	H	530	560	595	660	705	770	950	1060	1105		
Hand wheel diameter (mm)	W	220	350	280	320	400	450	500	560	600		

CL600

Spec (NAP)	in	2	2 1/2	3	4	5	6	8	10	12	14	16
Face to face(mm)	L	292	330	356	432	508	559	660	787	838		
	L1	295	333	359	435	511	562	663	790	841		
	L2	292	330	356	432	508	559	660	787	838		
Center height(mm)	H	560	600	625	690	730	805	995	1100	1195		
Hand wheel diameter (mm)	W	285	280	320	400	500	560	600	650	760		