

**Butt-Weld Type (Series LGW)
Flanged Type (Series LGF)**



Specification

Description : GVC Cryogenic LNG globe valves with extended cryogenic bolted bonnet according to BS 6364, OS&Y design, Direct Mount ISO table, adjustable gland packing, one-piece stem, extended bonnet pressure relief device, metal seated.

Numbering System : Series LGW : Cryogenic BUTT-WELD type Globe Valve
Series LGF : Cryogenic FLANGED type Globe Valve



[BUTT-WELD](#)
(Series LGW)



[FLANGED](#)
(Series LGF)

Standards : Cryogenic Globe Valves are designed in compliance with the requirements of ASME B16.34, BS 1873, BS 6364 and special customer's requirements (If applicable).
Valve design and flow analysed using Finite Element Method.

Testing * : All cryogenic valves are tested in the fully equipped cryogenic in-house testing facilities.

Materials : Stainless Steel 316, 316L, others on request.

Production Range : Size : DN 50 - DN 600 (2" - 48")
Working Pressure : Up to 250 Bar (3625 PSI)
Working Temperature : -196°C to + 815°C

Pressure Classes : ANSI/ASME 150 LBS, 300 LBS, 600 LBS, 900 LBS and 1500 LBS. Others on request.

Certification * : CE/PED, ABS Design Assessment, DNV, ABS and LRS type approvals, marine class society certified foundries and materials, inherently Fire Safe, BS 6364 cryogenic testing

Operation : With ISO 5210 top flange for direct mounting of an actuator.

Pressure Relief : Each cryogenic globe valve has a build-in pressure relief device, pressure in the valve's extended bonnet will be removed automatically by this device in case of sudden pressure increase in the valve extended bonnet.

Options : A lantern ring in the gland packing is optionally available

Typical Applications : Liquefied Gas Carriers (Propane, Butane, Acetylene, Ethylene etc.), LNG Carriers, LNG Receiving Terminals, LNG re-gasification units, LNG liquefaction units, LNG peak shaving plants, other Cryogenic Services (Liquefied Oxygen Plants [-160°C]), on board of FSRU's, FLNG's, VLGC's etc.

* See Catalogue "GVC Product Group L, Triple Eccentric Metal Seated Cryogenic LNG Butterfly Valves" for further details on our cryogenic testing, or consult us for further information.

Series



BUTT-WELD **Series LGW**

Size Range : DN 50 - DN 600 (2" - 24")

Pressure Classes : ANSI/ASME 150 LBS, 300 LBS, 600 LBS, 900 LBS and 1500 LBS

- Butt-weld end connections
- Bolted bonnet, OS&Y
- Inherently fire-safe
- Extended Cryogenic Bonnet (BS 6364) with build-in pressure relief device.
- One piece blow-out proof stem
- Direct mount ISO table, no additional brackets required
- Adjustable gland packing, can be adjusted without removal of the actuator



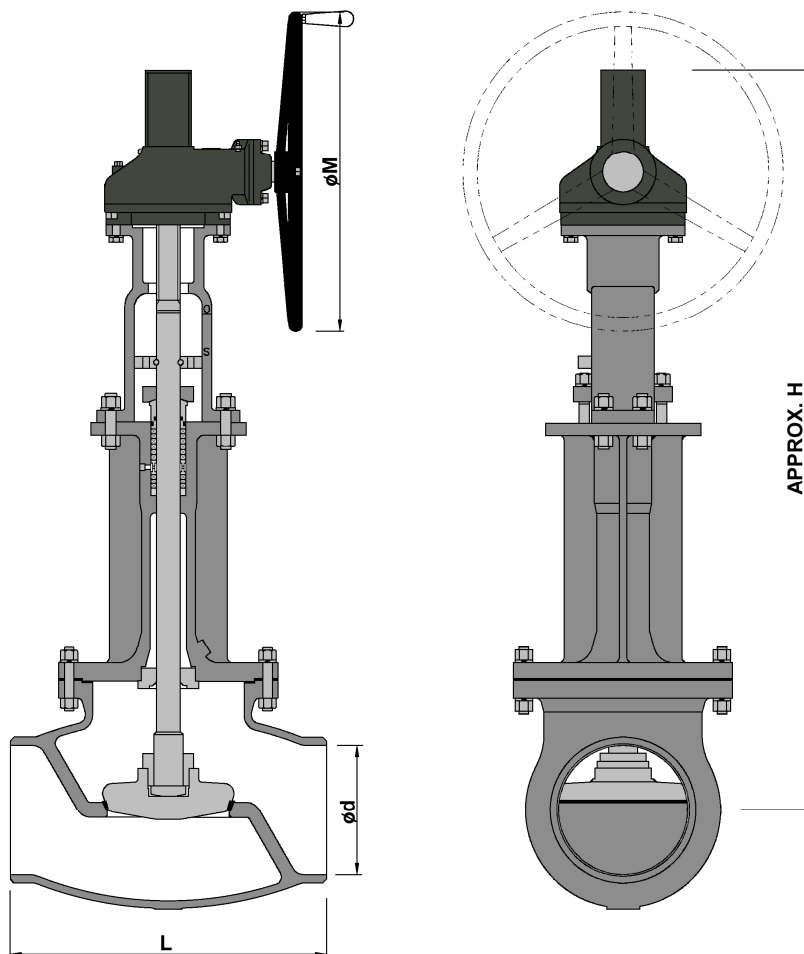
FLANGED **Series LGF**

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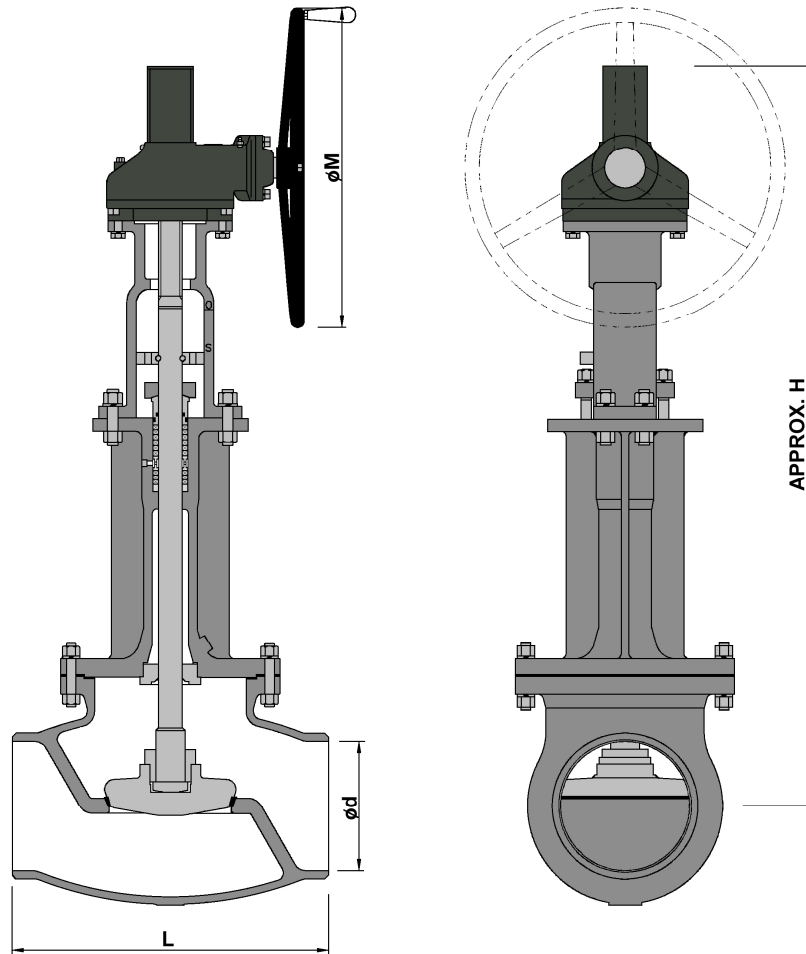
Series LGW Cryogenic Globe Valve Class 150# Butt-Weld Type DN 50 (2") - 600 (24")



Dimensions DN 50 (2") - 600 (24") **ANSI 150** [mm]

SIZE		L	REFERENCE ONLY		WEIGHT APPROX. (Kg)
Inch	DN		H	øM	
2"	50	203	816	200	22
3"	80	241	963	250	43
4"	100	292	985	250	56
6"	150	406	1053	355	110
8"	200	495	1271	355	198
10"	250	622	1326	450	279
12"	300	698	1640	500	368
14"	350	787	2064	710	606
16"	400	914	2099	710	815
18"	450	978	2479	900	1386
20"	500	978	2699	900	1720
24"	600	1295	2942	900	1914

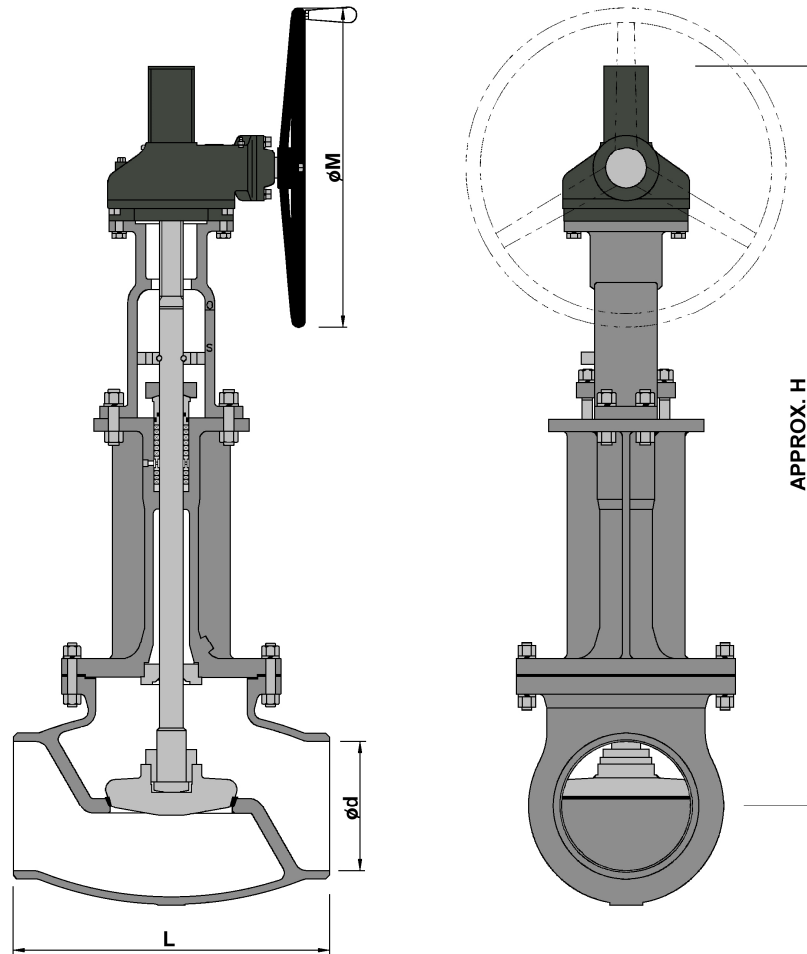
Series LGW Cryogenic Globe Valve Class 300# Butt-Weld Type DN 50 (2") - 600 (24")



Dimensions DN 50 (2") - 600 (24") **ANSI 300** [mm]

SIZE		L	REFERENCE ONLY		WEIGHT APPROX. (Kg)
Inch	DN		H	øM	
2"	50	267	838	250	29
3"	80	318	988	250	55
4"	100	356	1035	355	79
6"	150	444	1215	450	166
8"	200	559	1363	560	236
10"	250	622	1709	710	469
12"	300	711	1913	900	701
14"	350	838	2301	900	943
16"	400	864	2339	900	1418
18"	450	978	2530	900	1794
20"	500	1016	2807	900	2226
24"	600	1346	2986	900	2477

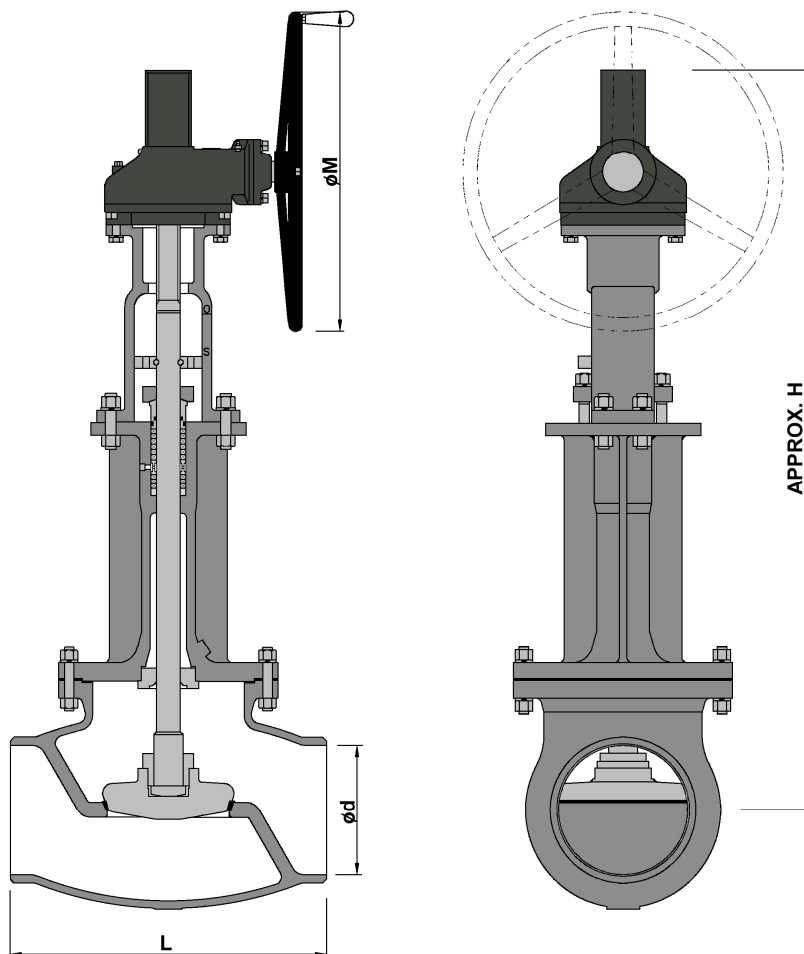
Series LGW Cryogenic Globe Valve Class 600# Butt-Weld Type DN 50 (2") - 400 (16")



Dimensions DN 50 (2") - 400 (16") **ANSI 600** [mm]

SIZE		L	REFERENCE ONLY		WEIGHT APPROX. (Kg)
Inch	DN		H	øM	
2"	50	292	607	250	33
3"	80	356	692	355	52
4"	100	432	776	450	101
6"	150	559	1176	560	199
8"	200	660	1426	710	540
10"	250	787	1590	900	1045
12"	300	838	1820	900	1734
14"	350	889	1980	900	2777
16"	400	990	2150	900	3727

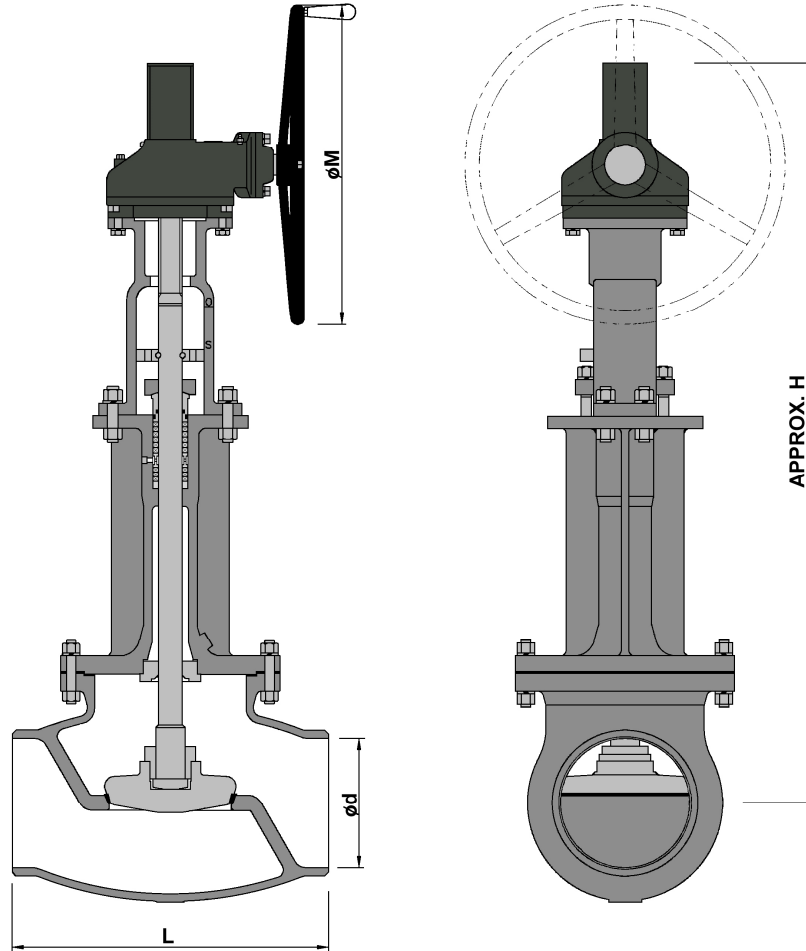
Series LGW Cryogenic Globe Valve Class 900# Butt-Weld Type DN 50 (2") - 400 (16")



Dimensions DN 50 (2") - 400 (16") **ANSI 900** [mm]

SIZE		L	REFERENCE ONLY		WEIGHT APPROX. (Kg)
Inch	DN		H	øM	
2"	50	368	688	355	75
3"	80	381	737	400	147
4"	100	457	882	450	151
6"	150	610	1488	560	345
8"	200	737	1789	710	1179
10"	250	838	1800	900	2004
12"	300	965	1910	900	2616
14"	350	1029	2003	900	3711
16"	400	1130	2210	900	4336

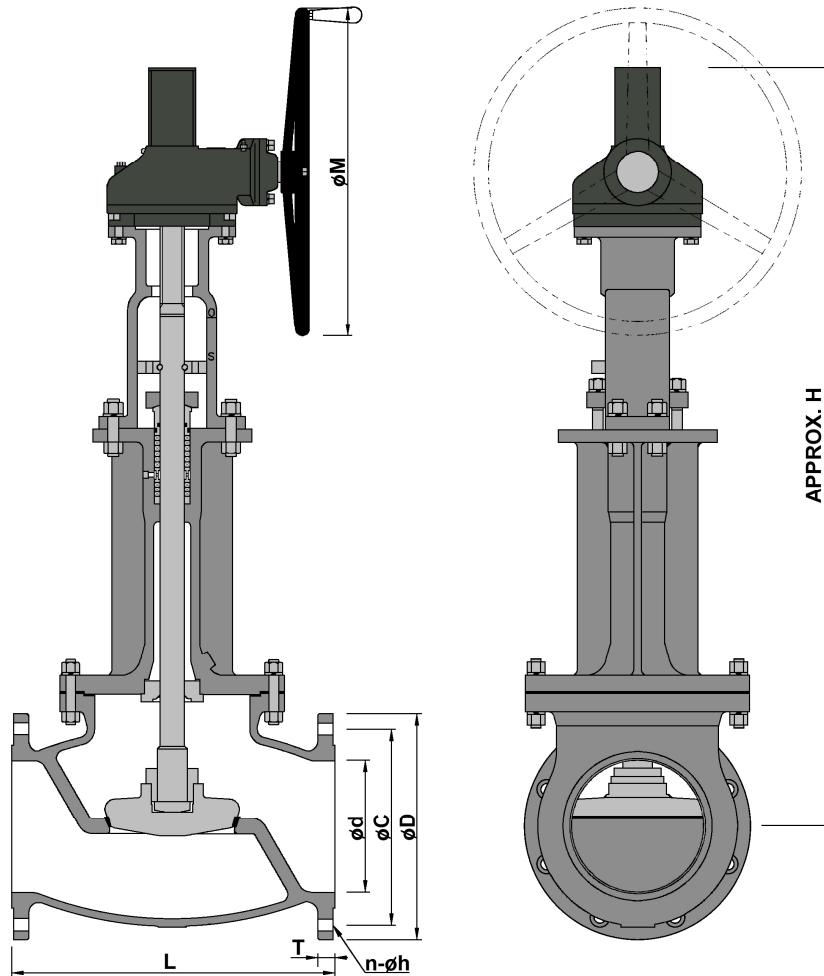
Series LGW Cryogenic Globe Valve Class 1500# Butt-Weld Type DN 50 (2") - 400 (16")



Dimensions DN 50 (2") - 400 (16") **ANSI 1500** [mm]

SIZE		L	REFERENCE ONLY		WEIGHT APPROX. (Kg)
Inch	DN		H	øM	
2"	50	368	688	400	75
3"	80	470	798	450	173
4"	100	546	865	560	255
6"	150	705	1320	710	586
8"	200	832	1620	900	1918
10"	250	991	1805	900	2198
12"	300	1130	2130	900	4344
14"	350	1257	2230	900	5490
16"	400	1384	2500	900	6756

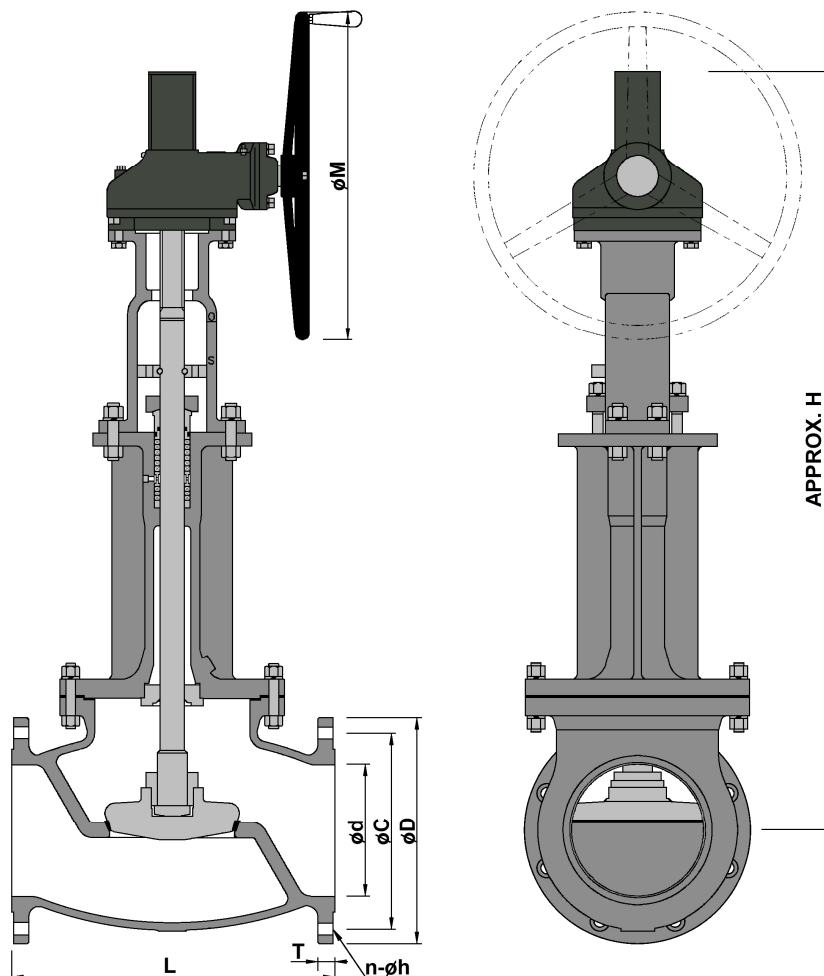
Series LGW Cryogenic Globe Valve Class 150# Flanged Type DN 50 (2") - 600 (24")



Dimensions DN 50 (2") - 600 (24") **ANSI 150** [mm]

SIZE		L	FLANGE			REFERENCE ONLY			WEIGHT APPROX. (Kg)
Inch	DN		øD	øC	n-øh	T	H	øM	
2"	50	203	150	120.7	4-19	19.5	816	200	26
3"	80	241	190	152.4	4-19	24.3	963	250	50
4"	100	292	230	190.5	8-19	24.3	985	250	71
6"	150	406	280	241.3	8-22	25.9	1053	355	162
8"	200	495	345	298.5	8-22	29	1271	355	230
10"	250	622	405	263	12-25	30.6	1326	450	286
12"	300	698	485	431.8	12-25	32.2	1640	500	398
14"	350	787	535	476.3	12-29	35.4	2064	710	640
16"	400	914	595	593.8	16-29	37	2099	710	858
18"	450	978	635	577.9	16-32	40.1	2479	900	1479
20"	500	978	700	635	20-32	43.3	2699	900	1811
24"	600	1295	815	749.3	20-35	48.1	2942	900	2014

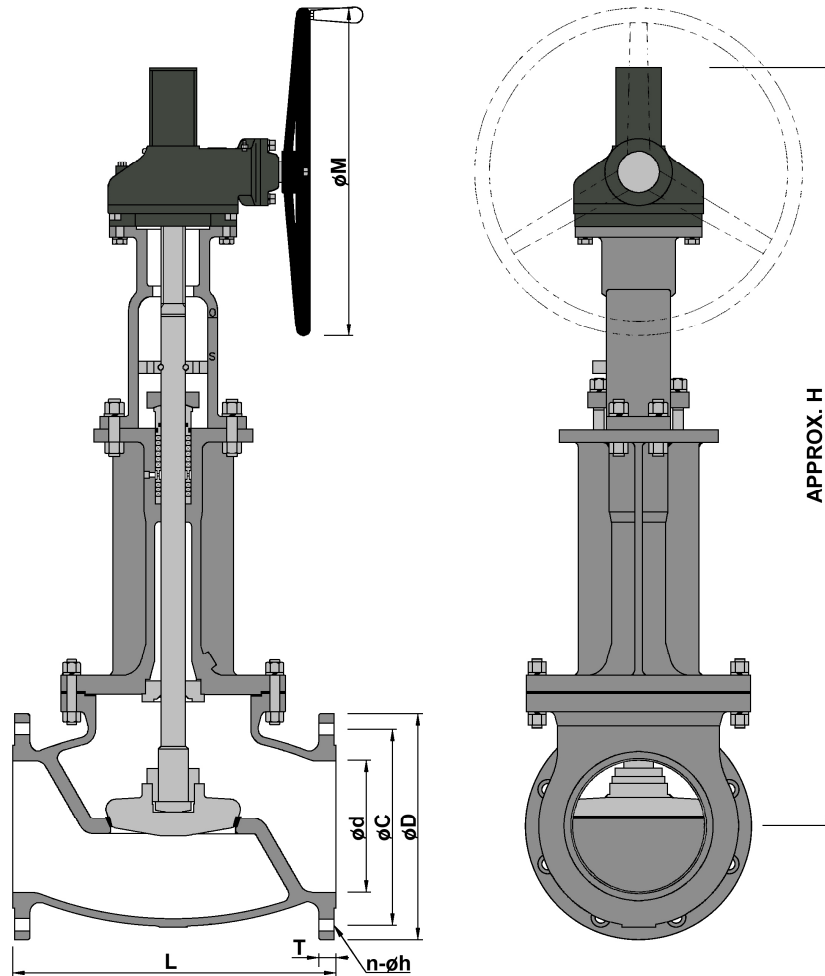
Series LGF Cryogenic Globe Valve Class 300# Flanged Type DN 50 (2") - 600 (24")



Dimensions DN 50 (2") - 600 (24") **ANSI 300** [mm]

SIZE		L	FLANGE			REFERENCE ONLY			WEIGHT APPROX. (Kg)
Inch	DN		øD	øC	n-øh	T	H	øM	
2"	50	267	165	127.0	8-19	22.7	838	250	35
3"	80	318	210	168.3	8-22	29	988	250	65
4"	100	356	255	200.0	8-22	32.2	1035	355	100
6"	150	444	320	269.9	12-22	37	1215	450	194
8"	200	559	380	330.2	12-25	41.7	1363	560	275
10"	250	622	445	387.4	16-29	48.1	1709	710	501
12"	300	711	520	450.8	16-32	51.3	1913	900	784
14"	350	838	585	514.4	20-32	54.4	2301	900	996
16"	400	864	650	571.5	20-35	57.6	2339	900	1496
18"	450	978	710	628.6	24-35	60.8	2530	900	1974
20"	500	1016	775	685.8	24-35	64	2807	900	2417
24"	600	1346	915	812.8	24-41	70.3	2986	900	2960

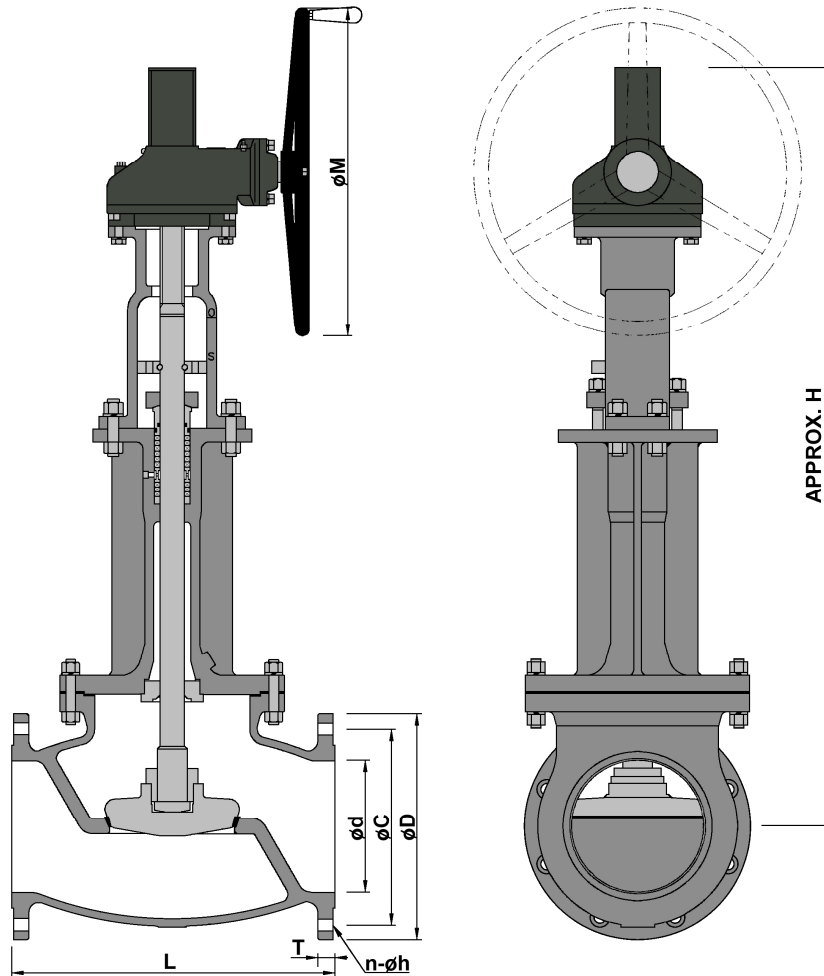
Series LGF Cryogenic Globe Valve Class 600# Flanged Type DN 50 (2") - 400 (16")



Dimensions DN 50 (2") - 400 (16") ANSI 600 [mm]

SIZE		L	FLANGE			REFERENCE ONLY			WEIGHT APPROX. (Kg)
Inch	DN		øD	øC	n-øh	T	H	øM	
2"	50	292	165	127.0	8-19	32.0	607	250	39
3"	80	356	210	168.3	8-22	38.2	692	355	59
4"	100	432	275	215.9	8-25	44.5	776	450	122
6"	150	559	355	292.1	12-29	54.1	1176	560	227
8"	200	660	420	349.2	12-32	62.0	1426	710	612
10"	250	787	510	431.8	16-35	69.9	1590	900	959
12"	300	838	560	489.0	20-35	73.1	1820	900	1918
14"	350	889	605	527.0	20-38	76.3	1980	900	3014
16"	400	990	685	603.2	20-41	82.6	2150	900	4034

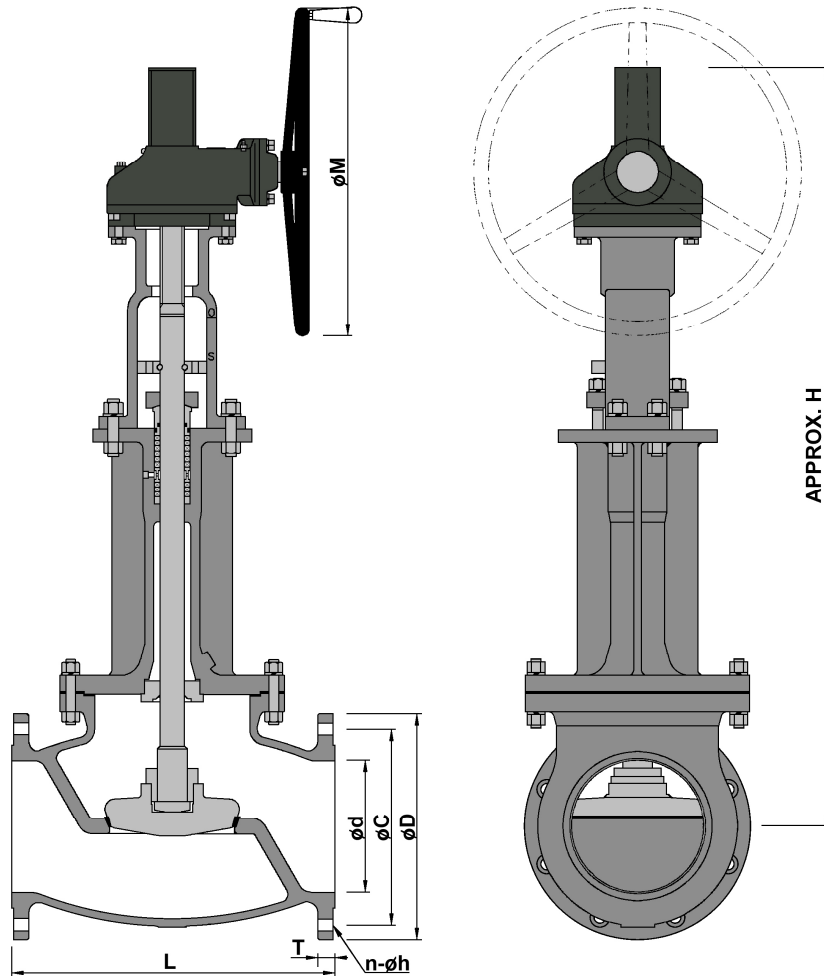
Series LGF Cryogenic Globe Valve Class 900# Flanged Type DN 50 (2") - 400 (16")



Dimensions DN 50 (2") - 400 (16") ANSI 900 [mm]

SIZE		L	FLANGE			REFERENCE ONLY			WEIGHT APPROX. (Kg)
Inch	DN		øD	øC	n-øh	T	H	øM	
2"	50	368	215	165.1	8-25	44.5	688	355	88
3"	80	381	240	190.5	8-25	95.3	737	400	167
4"	100	457	290	235.0	8-32	120.7	882	450	182
6"	150	610	380	317.5	12-32	174.7	1488	560	394
8"	200	737	470	393.7	12-38	225.5	1789	710	1335
10"	250	838	545	469.9	16-38	279.4	1800	900	2250
12"	300	965	610	633.4	20-38	330.2	1910	900	2894
14"	350	1029	640	558.8	20-41	362.0	2003	900	4027
16"	400	1130	705	616.0	20-44	412.8	2210	900	4694

Series LGF Cryogenic Globe Valve Class 1500# Flanged Type DN 50 (2") - 400 (16")



Dimensions DN 50 (2") - 400 (16") ANSI 1500 [mm]

SIZE		L	FLANGE			REFERENCE ONLY			WEIGHT APPROX. (Kg)
Inch	DN		øD	øC	n-øh	T	H	øM	
2"	50	368	215	165.1	8-25	44.5	688	400	88
3"	80	470	265	203.2	8-32	54.1	798	450	196
4"	100	546	310	241.3	8-35	60.4	865	560	308
6"	150	705	395	317.5	12-38	89.0	1320	710	669
8"	200	832	485	393.7	12-45	98.5	1620	900	2172
10"	250	991	585	482.6	12-51	114.4	1805	900	3512
12"	300	1130	675	571.5	16-54	130.3	2130	900	4806
14"	350	1257	750	635.0	16-60	139.8	2230	900	5958
16"	400	1384	825	704.8	16-67	152.5	2500	900	7314

Product Group C
Concentric Rubber Lined Butterfly Valves



Product Group O
*Double Eccentric Replaceable Seat Ring
Type Butterfly Valves (Cargo Oil)*



Product Group H, F and M
High Performance Butterfly Valves



Product Group T
Triple Eccentric Metal Seated Butterfly Valves



Product Group E
Disc Seated Butterfly Valves



Product Group L
*Cryogenic Butterfly Valves (LPG, LNG)
Ball, Gate, Globe and Check Valves*



Product Group D
Damper Butterfly Valves

