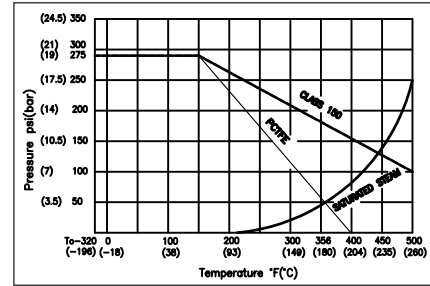
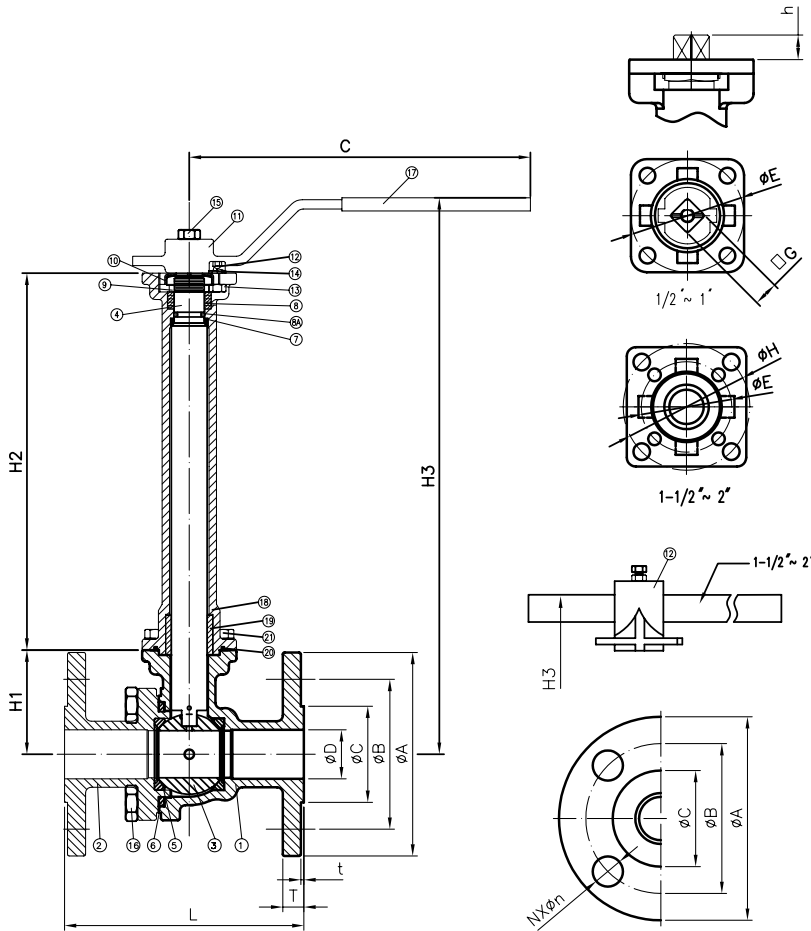


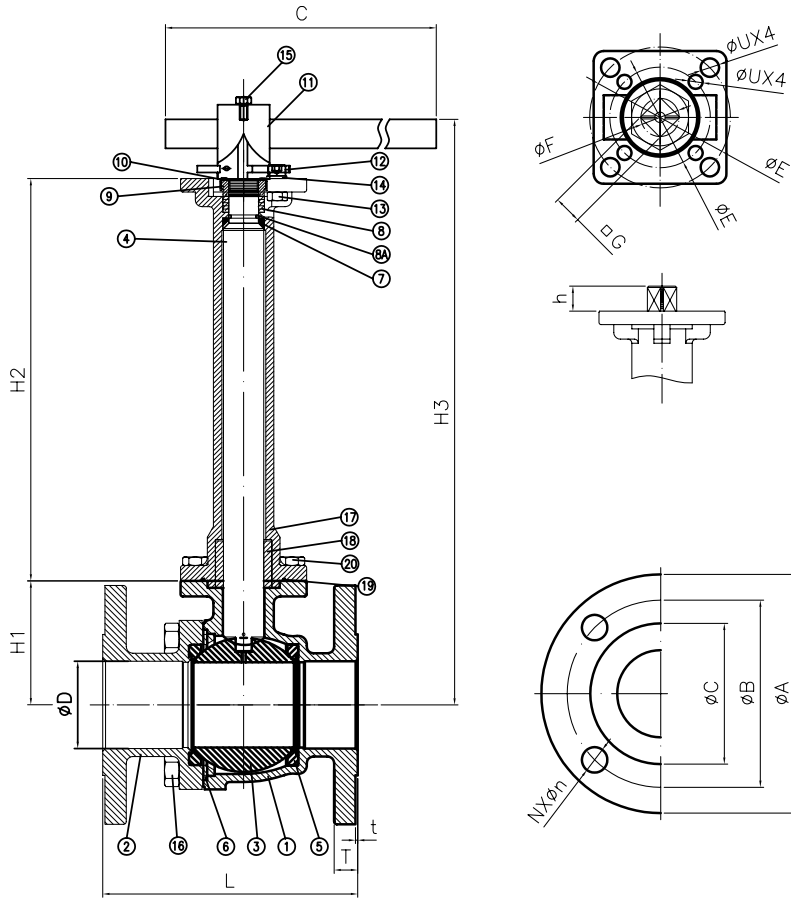
## DIMENSIONS AND MATERIAL LIST CRYOGENIC BALL VALVE SERIES 90C – ANSI 150 (1/2" ~ 2")



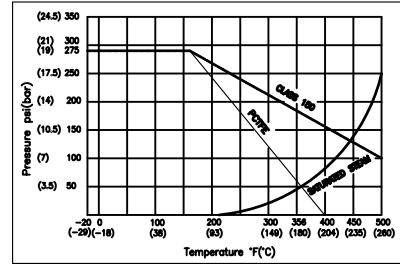
ITEM	DESCRIPTION	MATERIAL	NO. PCS
1	BODY	CF8M	1
2	END CAP	CF8M	1
3	BALL	CF8M	1
4	ANTI STATIC STEM	17-4 PH SS	1
5	BALL SEAT	PCTFE (KEL-F)	2
6	BODY SEAL	316 SPIRAL WOUND+GRAFOIL	1
7	THRUST WASHER	PCTFE (KEL-F)	1
8A	O-RING	VITON	1
8	STEM PACKING	PCTFE (KEL-F)	5
9	STEM NUT	SS304	1
10	LOCK SADDLE	SS304	1
11	HANDLE	SS304	1
12	STOP BOLT	SS304	1
13	STOP NUT	SS304	1
14	STOP WASHER	SS304	1
15	HANDLE BOLT	SS304	1
16	BODY BOLT	SS304	4
17	HANDLE SLEEVE	VINYL	1
18	EXTENSION	CF8M	1
19	THRUST PACKING	25%CARBON-75%PTFE	1
20	EXTENSION GASKET	GRAFOIL	1
21	EXTENSION BOLT	SS304	4

SIZE	ØD	ØC	ØB	ØA	H1	H2	H3	L	T	t	Øn	N	C	h	□G	ØE	ØH
1/2"	0.59	1.38	2.38	3.5	1.89	7.87	11.1	4.25	0.41	0.06	0.63	4	6.14	0.31	0.35	F04	-
3/4"	0.79	1.69	2.76	3.88	2.09	7.87	11.3	4.65	0.41	0.06	0.63	4	6.14	0.31	0.35	F04	-
1"	0.98	2.01	3.13	4.25	2.28	7.87	11.69	5.00	0.44	0.06	0.63	4	7.13	0.39	0.43	F05	-
1-1/2"	1.50	2.87	3.88	5.00	3.00	11.81	16.57	6.50	0.56	0.06	0.63	4	11.61	0.51	0.55	F05	F07
2"	1.97	3.62	4.74	6.00	3.35	11.81	16.93	7.01	0.63	0.06	0.75	4	11.61	0.51	0.55	F05	F07

## DIMENSIONS AND MATERIAL LIST CRYOGENIC BALL VALVE SERIES 90C – ANSI 150 (2-1/2" ~ 4")



ANSI CLASS 150

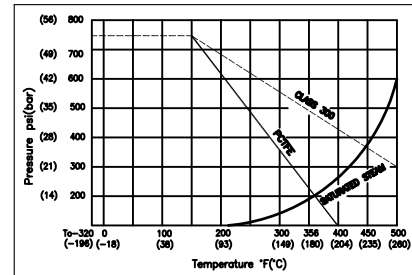
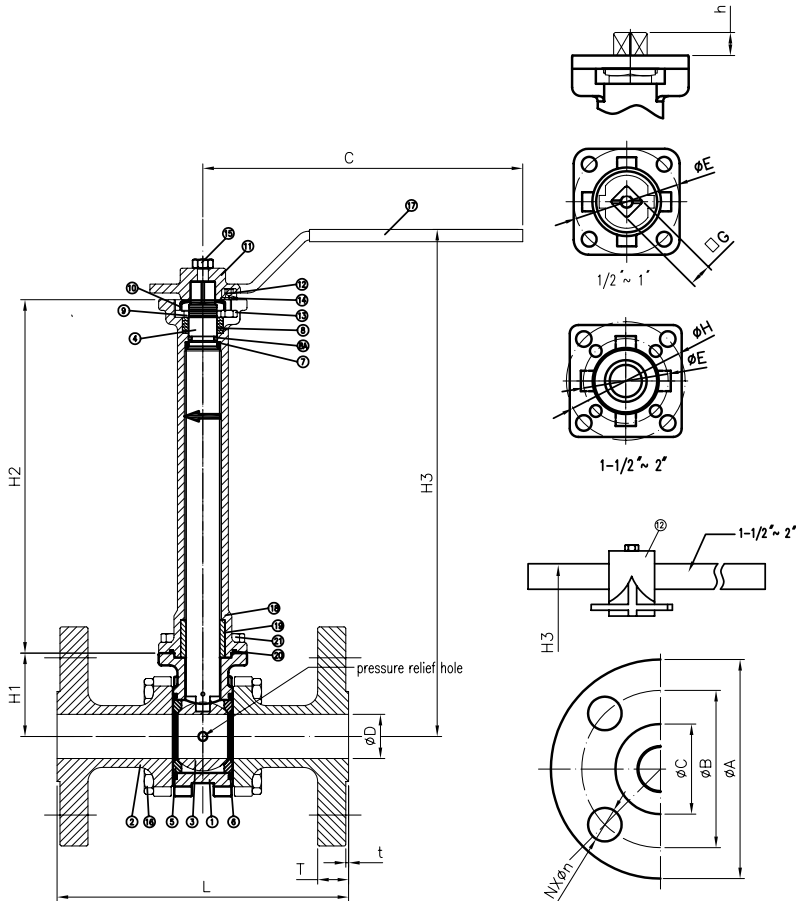


IC9a	59{ / wt Çlh b	MATERIAL	NO. PCS
1	BODY	CF8M	1
2	END CAP	CF8M	2
3	BALL	CF8M	1
4	ANTI STATIC STEM	17-4 PH SS	1
5	BALL SEAT	PCTFE (KEL-F)	2
6	BODY SEAL	GRAFOIL	2
7	THRUST WASHER	PCTFE (KEL-F)	1
8A	O-RING	VITON	1
8	STEM PACKING	PCTFE (KEL-F)	5
9	STEM NUT	SS304	1
10	LOCK SADDLE	SS304	1
11	HANDLE	SS304	1
12	STOP BOLT	SS304	1
13	STOP NUT	SS304	1
14	STOP WASHER	SS304	1
15	HANDLE BOLT	SS304	1
*16	BODY BOLT	SS304	8
17	EXTENSION	CF8M	1
18	THRUST PACKING	25%CARBON-75%PTFE	1
19	EXTENSION GASKET	GRAFOIL	1
20	EXTENSION BOLT	SS304	4

\*16 BODY BOLT 2-1/2" - 6 3" - 6 4" - 8

SIZE	ØD	ØC	ØB	ØA	H1	H2	H3	L	T	t	Øn	N	C	h	□G	ØF	ØE	U
2-1/2"	2.56	4.13	5.49	7.01	3.64	11.85	17.24	7.48	0.69	0.06	0.75	4	11.61	0.75	0.67	0.87	F07/F10	Ø0.35 / Ø0.43
3"	3.15	5.00	6.00	7.50	4.01	11.85	17.64	7.99	0.75	0.06	0.75	4	15.55	0.75	0.67	0.87	F07/F10	Ø0.35 / Ø0.43
4"	3.94	6.18	7.50	9.02	4.86	11.85	18.46	9.02	0.94	0.06	0.75	8	19.49	0.83	0.87	1.10	F07/F10	Ø0.35 / Ø0.43

## DIMENSIONS AND MATERIAL LIST CRYOGENIC BALL VALVE SERIES 93C – ANSI 300 (1/2" ~ 2")



ITEM	DESCRIPTION	MATERIAL	NO. PCS
1	BODY	CF8M	1
2	END CAP	CF8M	2
3	BALL	CF8M	1
4	ANTI STATIC STEM	17-4 PH SS	1
5	BALL SEAT	PCTFE (KEL-F)	2
6	BODY SEAL	GRAFOIL	2
7	THRUST WASHER	PCTFE (KEL-F)	1
8A	O-RING	VITON	1
8	STEM PACKING	PCTFE (KEL-F)	5
9	STEM NUT	SS304	1
10	LOCK SADDLE	SS304	1
11	HANDLE	SS304	1
12	STOP BOLT	SS304	1
13	STOP NUT	SS304	1
14	STOP WASHER	SS304	1
15	HANDLE BOLT	SS304	1
*16	BODY BOLT	SS304	8
17	HANDLE SLEEVE	VINYL	1
18	EXTENSION	CF8M	1
19	THRUST PACKING	25%CARBON-75%PTFE	1
20	EXTENSION GASKET	GRAFOIL	1
21	EXTENSION BOLT	SS304	4

\*16 BODY BOLT 2" - 12

SIZE	ØD	ØC	ØB	ØA	H1	H2	H3	L	T	t	Øn	N	C	h	ØG	ØE	ØH
1/2"	0.59	1.38	2.62	3.74	1.54	7.87	10.79	5.51	0.56	0.06	0.63	0.16	6.14	0.31	0.35	F04	-
3/4"	0.79	1.69	3.25	4.61	1.68	7.87	10.87	5.98	0.63	0.06	0.75	0.16	6.14	0.31	0.35	F04	-
1"	0.98	2.01	3.50	4.88	1.86	7.87	11.30	6.50	0.69	0.06	0.75	0.16	7.13	0.39	0.43	F05	-
1-1/2"	1.50	2.87	4.51	6.14	2.30	11.81	15.87	7.48	0.81	0.06	0.87	0.16	15.55	0.51	0.55	F05	F07
2"	1.97	3.62	5.00	6.50	3.00	11.81	16.65	8.50	0.88	0.06	0.75	0.31	15.55	0.51	0.55	F05	F07