



AEV ²XC CRYOGENIC C-BALL VALVES

With its breakthrough “C” shaped ball design, the ²XC ball valve delivers unrivalled isolation, with improved safety, reliability, and performance.



FEATURES

- Designed to ASME B16.34, API 608, API 6D, BS 6364 and ISO 28921-1
- Bidirectional tight shut-off for soft seat valves
- C-Ball can achieve significantly better leakage performance than allowed in BS 6364 and ISO 28921-1 standard
- Fugitive emissions certified to ISO 15848-1
- Fire test certified to API 607 6th edition and ISO 10497 3rd edition
- ISO 5211 actuator mounting pad
- Unique C-Ball design removes risk of trapped liquid or liquefied gas in cryogenic applications
- Material complies to NACE MR0175 / ISO 15156 or MR0103, traceability available upon request
- Manufactured under ISO 9001 certified quality system
- CE marking PED 2014/68/EU available
- SIL 3 Certified for Product safety performance
- Various seat types are available in addition to the PEEK / PCTFE seat. Each seat option meets a wide range of performance criteria to suit a variety of applications

GENERAL APPLICATION

- LNG Liquefaction Terminals
- LNG Regasification Terminals
- Peak Shaving Plants
- LNG Bunkering
- FRSU
- FLNG
- LNG Fueling
- LNG Ships
- Gas Fractionation Plants
- Ethylene Storage
- Air Separation
- Emergency Shutdown
- HIPPS
- Ammonia
- LPG Fueling
- Rocket Engine Testing
- Liquid Oxygen

TECHNICAL DATA

Sizes: DN 15 - 750 / NPS 1/2 - 30*

Pressure rating: ANSI Class 150 - 4500; EN PN 10 - 400

Temperature Range: -254 to 200°C / -425 to 392°F

Standards

Design: ASME B16.34, API 6D, API 608, BS 6364, ISO 28921-1

Face-to-Face: ASME B16.10

End Connections:

Flange: ASME B16.5 / ASME B16.47; EN 1092-1
 BW: B 16.25 / EN 12224
 SW / Threaded: B 16.11 / EN 10241
 Hub ends: Special Machined for Space Industry

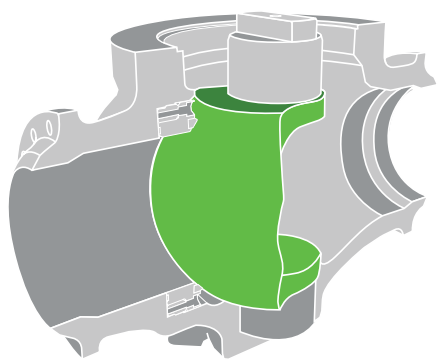
NOTES

Drawings and dimensional tables published in this datasheet represent a selection from a much wider range available. For more information, please contact your nearest Emerson sales office

*** Please consult the factory for sizes up to 42 inch.**

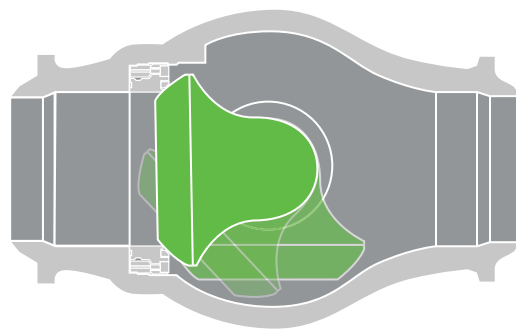
AEV 2XC CRYOGENIC C-BALL VALVES

DESIGN FEATURES



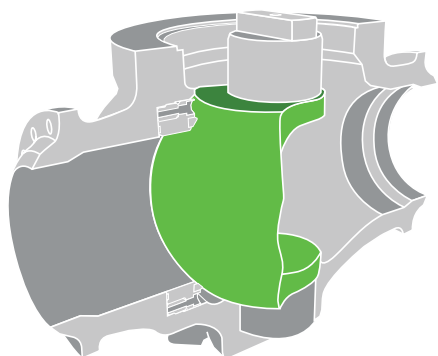
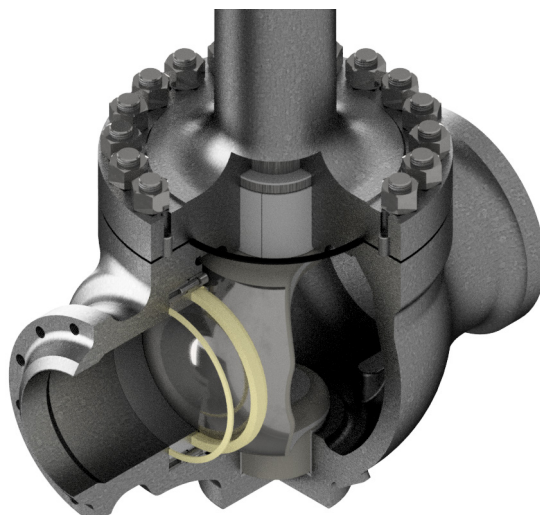
Cavity Free Design

The unique C-ball design of the valve has no cavities either behind the seat or within the valve body, eliminating the risk of media being trapped and removing the need for venting. This feature is especially crucial in High Pressure / Liquefied Gas, where trapped liquid could turn into gas and cause severe damage to the valve and facility.



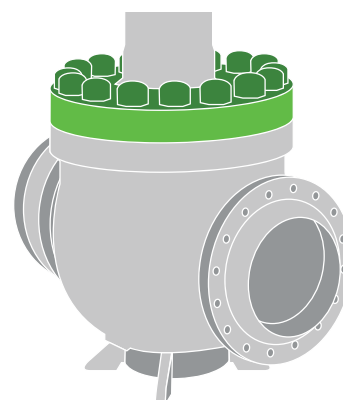
Double Eccentric Design

The double offset design creates a "cam motion," ensuring that the ball and seat are not in constant contact for most of the 90-degree travel. This design eliminates the need for springs and dynamic seals, providing superior sealing performance independent of process pressure.



Superior Tightness

AEV cryogenic valves are tested to API 598 standards. These valves can achieve significantly better leakage performance than allowed in BS 6364 and ISO 28921-1 standard when tested in cryogenic conditions in both sealing directions.

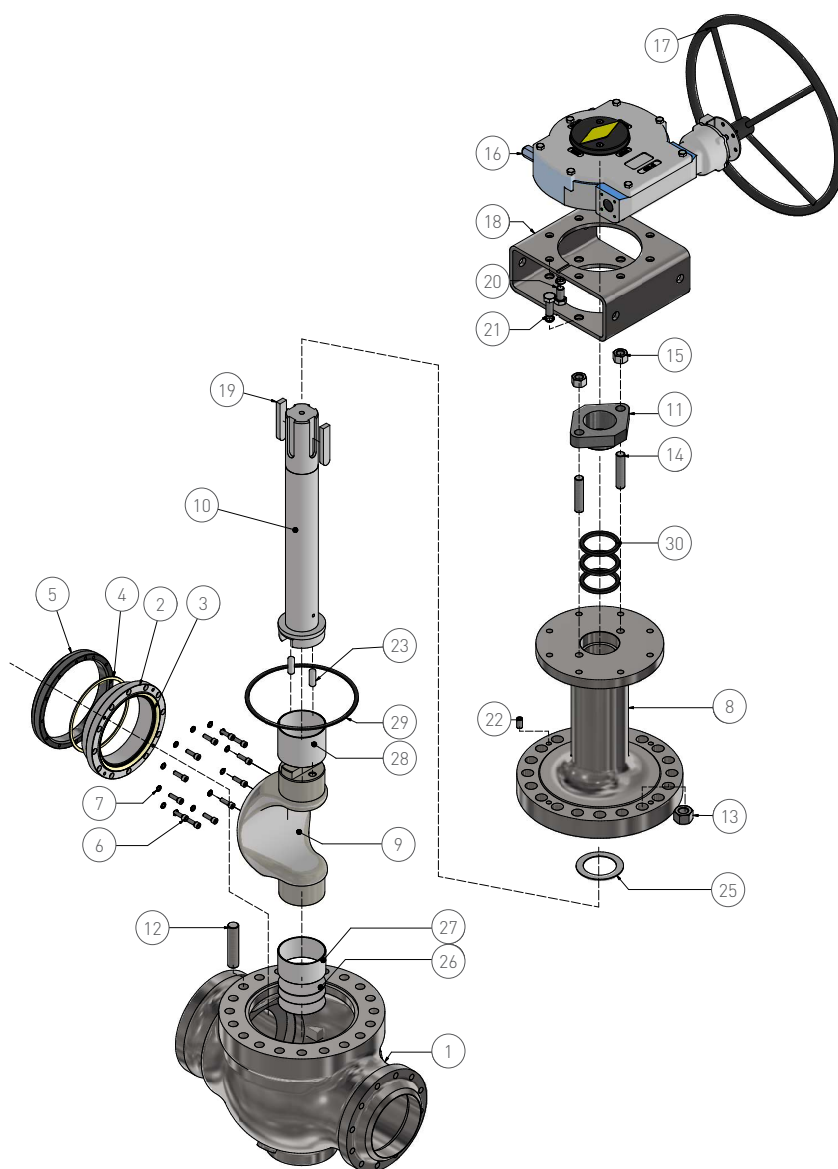


Unibody Top-Entry Design

Efficient top-entry design with minimal parts allows for rapid in-line maintenance. Eliminates additional leakage paths due to unibody design. The entire trim can be removed, enabling safe repair work outside the pipeline.

AEV ²XC CRYOGENIC C-BALL VALVES

BASIC CONFIGURATION SECTIONAL DRAWING



Item	Description	Qty	Item	Description	Qty
1	Body	1	16	Gear	1
2	Seat Ring	1	17	Handwheel	1
3	Seat Insert	1	18	Bracket	1
4	Gasket Seat	1	19	Key	4
5	Seat Retainer	1	20	Screw	8
6	Screw	12	21	Screw	8
7	Pair Lock Washer	12	22	Stabilization Screw	4
8	Extended Bonnet	1	23	Pin	2
9	C-Ball	1	24	Spacer Stem Bearing	1
10	Extended Stem	1	25	Stem Bearing	1
11	Packing Flange	1	26	Ball Support	1
12	Body Stud	20	27	Lower Tr. Bearing	1
13	Body Nut	20	28	Upper Tr. Bearing	1
14	Flange Stud	2	29	Gasket	1
15	Flange Nut	2	30	Packing Ring	3

NOTE

AEV C-Ball Valve shown is representative, and the qualities mentioned are for illustrative purposes only.

AEV 2XC CRYOGENIC C-BALL VALVES

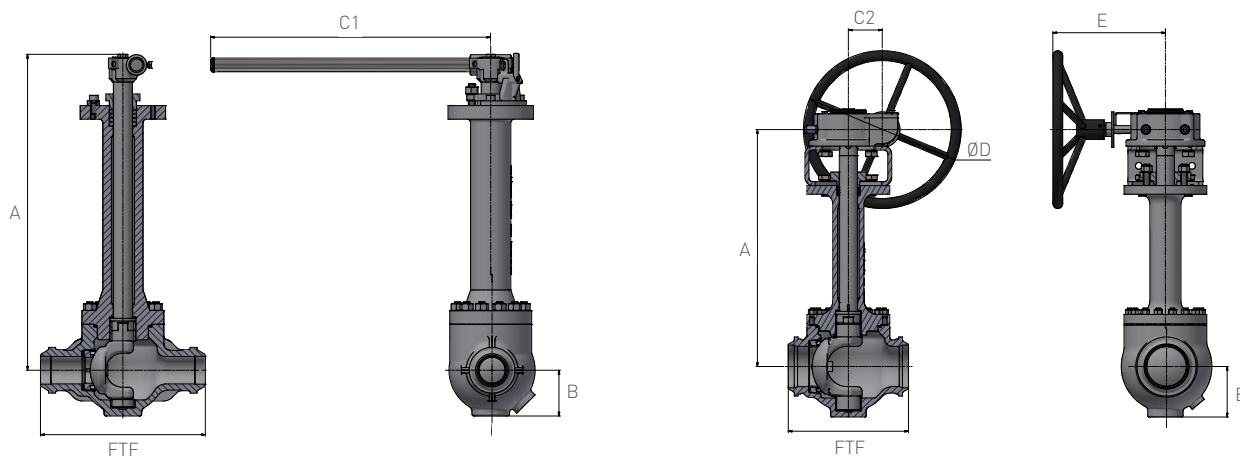
TYPICAL MATERIAL SELECTION

Typical Material Selection - Please refer to basic configuration sectional drawing on page 3.

Parts Description	Variant 1	Variant 2	Variant 3	Variant 4
Body	ASTM A351 CF3M (EN 10213 1.4409)	A351 CF8M (EN 10213 1.4408)	ASTM A351 CF3 (EN 10213 1.4309)	ASTM A351 CF8 (EN 10213 1.4308)
Seat Ring			UNS S31600	
Seat Insert			PCTFE / PEEK	
Gasket Seat			Graphite / PEEK	
Extended Bonnet			Same as Body	
C-Ball			ASTM A351 CF8M	
Extended Stem		UNS S31600 / UNS S31600 CD / XM-19 (UNS S20910)		
Packing Flange			Same as body	
Body Stud		ASTM A320 B8M CL.2 (10269 1.4401)		
Body Nut		ASTM A194 8M		
Flange Stud		ASTM A320 B8M CL.2 (10269 1.4401)		
Flange Nut		ASTM A194 8M		
Gear		Cast iron		
Handwheel		Carbon steel		
Bracket		Stainless steel – Carbon steel		
Key		AISI 316		
Screw		Stainless Steel A4		
Screw		Stainless Steel A4		
Stem Bearing		AISI 316 Coated		
Support Ring		AISI 316 Coated		
Lower Trunnion Bearing		AISI 316 Coated – Nitronic 60		
Upper Trunnion Bearing		AISI 316 Coated – Nitronic 60		
Gasket		SPW AISI 316 / Graphite – Graphite		
Packing Ring		Graphite		

AEV 2XC CRYOGENIC C-BALL VALVES

DIMENSIONS AND WEIGHTS / ASME CLASS 150 - BW END CONNECTIONS



Lever Operated
Sizes DN 15 - 50 / NPS 1/2 - 2

Handwheel Operated
Sizes DN 65 - 600 / NPS 2 1/2 - 24

ASME CLASS 150 DIMENSIONS mm

Size in	Full Bore								Reduced Bore							
DN	FTF	A	B	C1	C2	ØD	E	Weight kg	FTF	A	B	C1	C2	ØD	E	Weight kg
15	140	377	37	245	-	-	-	7	-	-	-	-	-	-	-	-
20	152	397	42	245	-	-	-	9	-	-	-	-	-	-	-	-
25	165	397	43	330	-	-	-	10	-	-	-	-	-	-	-	-
40	190	459	67	330	-	-	-	19	-	-	-	-	-	-	-	-
50	216	459	70	410	-	-	-	21	-	-	-	-	-	-	-	-
65	241	500	85	-	71	300	282	35	241	450	70	-	52	300	254	25
80	282	557	87	-	71	300	282	52	283	500	70	-	71	300	254	32
100	305	631	122	-	86	400	286	88	305	557	90	-	71	300	282	56
150	457	709	179	-	105	400	409	150	457	631	130	-	86	400	309	98
200	521	774	215	-	130	500	418	263	521	709	183	-	105	400	409	187
250	559	912	260	-	182	600	470	477	559	774	215	-	130	500	447	295
300	635	959	300	-	182	600	470	651	635	912	260	-	182	600	470	431
350	762	1144	340	-	209	600	491	1040	762	959	300	-	182	600	470	700
400	838	1210	380	-	209	600	491	1294	838	1144	340	-	209	600	491	825
450	914	1247	421	-	209	600	491	1500	914	1210	380	-	209	600	491	1155
500	991	1330	490	-	209	600	491	2100	991	1247	421	-	209	600	541	2075
600	1143	1472	560	-	256	700	541	2700	1143	1330	490	-	209	600	541	2200

ASME CLASS 150 DIMENSIONS inches

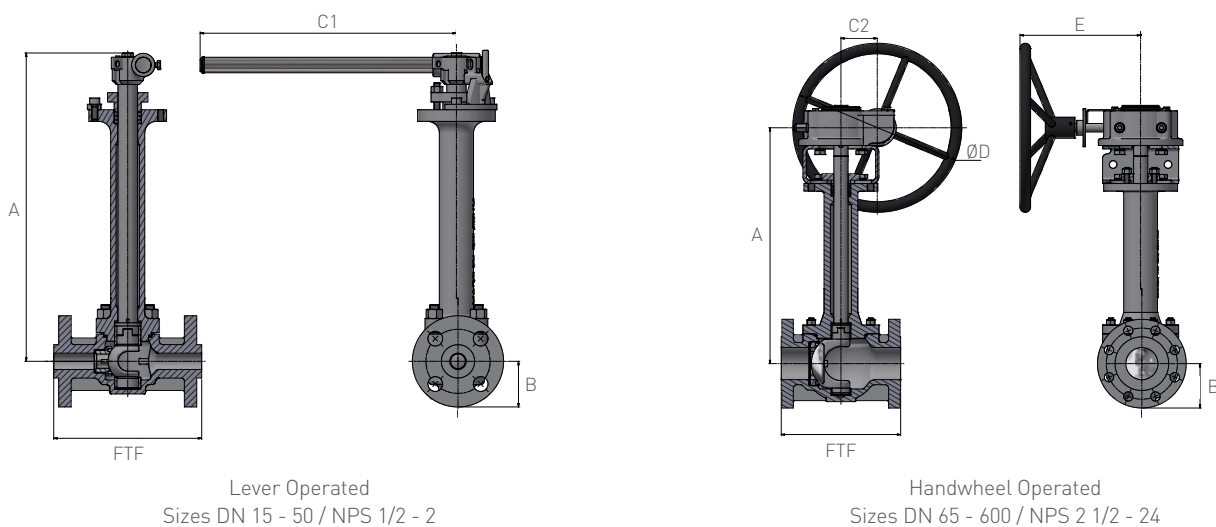
Size in	Full Bore								Reduced Bore							
NPS	FTF	A	B	C1	C2	ØD	E	Weight lbs	FTF	A	B	C1	C2	ØD	E	Weight lbs
1/2	5.51	14.84	1.46	9.65	-	-	-	15	-	-	-	-	-	-	-	-
3/4	5.98	15.63	1.65	9.65	-	-	-	20	-	-	-	-	-	-	-	-
1	6.50	15.63	1.69	12.99	-	-	-	22	-	-	-	-	-	-	-	-
1 1/2	7.48	18.07	2.64	12.99	-	-	-	42	-	-	-	-	-	-	-	-
2	8.50	18.07	2.76	16.14	-	-	-	46	-	-	-	-	-	-	-	-
2 1/2	9.49	19.69	3.35	-	2.80	11.81	11.10	77	9.49	17.72	2.76	-	2.05	11.81	10.00	55
3	11.10	21.93	3.43	-	2.80	11.81	11.10	115	11.14	19.69	2.76	-	2.80	11.81	10.00	71
4	12.01	24.84	4.80	-	3.39	15.75	11.26	194	12.01	21.93	3.54	-	2.80	11.81	11.10	124
6	17.99	27.91	7.05	-	4.13	15.75	16.10	331	17.99	24.84	5.12	-	3.39	15.75	12.17	216
8	20.51	30.47	8.46	-	5.12	19.69	16.46	581	20.51	27.91	7.20	-	4.13	15.75	16.10	413
10	22.01	35.91	10.24	-	7.17	23.62	18.50	1053	22.01	30.47	8.46	-	5.12	19.69	17.60	651
12	25.00	37.76	11.81	-	7.17	23.62	18.50	1437	25.00	35.91	10.24	-	7.17	23.62	18.50	951
14	30.00	45.04	13.39	-	8.23	23.62	19.33	2296	30.00	37.76	11.81	-	7.17	23.62	18.50	1545
16	32.99	47.64	14.96	-	8.23	23.62	19.33	2857	32.99	45.04	13.39	-	8.23	23.62	19.33	1821
18	35.98	49.09	16.57	-	8.23	23.62	19.33	3311	35.98	47.64	14.96	-	8.23	23.62	19.33	2550
20	39.02	52.36	19.29	-	8.23	23.62	19.33	4636	39.02	49.09	16.57	-	8.23	23.62	21.30	4581
24	45.00	57.95	22.05	-	10.08	27.56	21.30	5960	45.00	52.36	19.29	-	8.23	23.62	21.30	4850

NOTE

Please consult factory for sizes above 24 in.

AEV²XC CRYOGENIC C-BALL VALVES

DIMENSIONS AND WEIGHTS / ASME CLASS 150 - FLANGED END CONNECTIONS



ASME CLASS 150 DIMENSIONS mm

Size in	Full Bore								Reduced Bore								
	DN	FTF	A	B	C1	C2	ØD	E	Weight kg	FTF	A	B	C1	C2	ØD	E	Weight kg
15	108	377	45	245	-	-	-	-	7	-	-	-	-	-	-	-	-
20	117	390	50	330	-	-	-	-	10	-	-	-	-	-	-	-	-
25	127	390	54	330	-	-	-	-	10	-	-	-	-	-	-	-	-
40	165	435	68	330	-	-	-	-	19	-	-	-	-	-	-	-	-
50	178	435	75	410	-	-	-	-	22	-	-	-	-	-	-	-	-
65	190	500	90	-	71	300	282	40	190	450	90	-	52	300	254	25	
80	203	557	95	-	71	300	282	59	203	500	95	-	71	300	254	33	
100	229	631	122	-	86	400	286	94	229	557	115	-	71	300	282	57	
150	394	709	179	-	105	400	409	182	394	631	140	-	86	400	309	110	
200	457	774	215	-	130	500	418	268	457	709	183	-	105	400	409	190	
250	533	912	260	-	182	600	470	485	533	774	215	-	130	500	447	320	
300	610	959	300	-	182	600	470	750	610	912	260	-	182	600	470	431	
350	686	1144	340	-	209	600	491	1100	686	959	300	-	182	600	470	700	
400	762	1210	380	-	209	600	491	1350	732	1144	340	-	209	600	491	825	
450	864	1247	421	-	209	600	491	1600	864	1210	380	-	209	600	491	1155	
500	914	1330	490	-	209	600	491	2400	914	1247	421	-	209	600	541	2075	
600	1067	1472	560	-	256	700	541	3000	1067	1330	490	-	209	600	541	2700	

ASME CLASS 150 DIMENSIONS inches

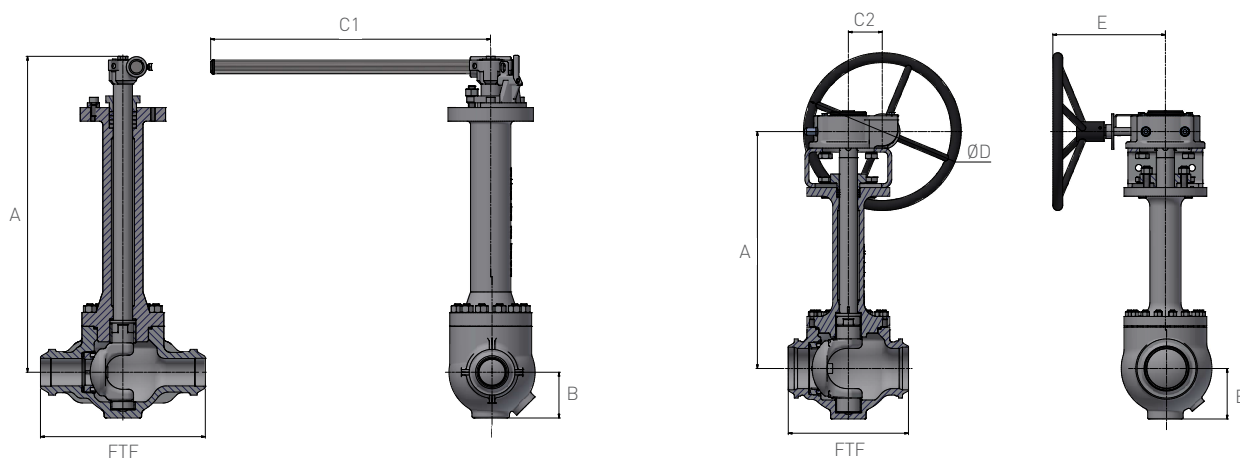
Size in	Full Bore								Reduced Bore								
	NPS	FTF	A	B	C1	C2	ØD	E	Weight lbs	FTF	A	B	C1	C2	ØD	E	Weight lbs
1/2	4.25	14.84	1.77	9.65	-	-	-	-	15	-	-	-	-	-	-	-	-
3/4	4.61	15.35	1.97	12.99	-	-	-	-	22	-	-	-	-	-	-	-	-
1	5.00	15.35	2.13	12.99	-	-	-	-	22	-	-	-	-	-	-	-	-
1 1/2	6.50	17.13	2.68	12.99	-	-	-	-	42	-	-	-	-	-	-	-	-
2	7.01	17.13	2.95	16.14	-	-	-	-	49	-	-	-	-	-	-	-	-
2 1/2	7.48	19.69	3.54	-	2.80	11.81	11.10	88	7.48	17.72	3.54	-	2.05	11.81	10.00	55	
3	7.99	21.93	3.74	-	2.80	11.81	11.10	130	7.99	19.69	3.74	-	2.80	11.81	10.00	73	
4	9.02	24.84	4.80	-	3.39	15.75	11.26	208	9.02	21.93	4.53	-	2.80	11.81	11.10	126	
6	15.51	27.91	7.05	-	4.13	15.75	16.10	402	15.51	24.84	5.51	-	3.39	15.75	12.17	243	
8	17.99	30.47	8.46	-	5.12	19.69	16.46	592	17.99	27.91	7.20	-	4.13	15.75	16.10	419	
10	20.98	35.91	10.24	-	7.17	23.62	18.50	1071	20.98	30.47	8.46	-	5.12	19.69	17.60	706	
12	24.02	37.76	11.81	-	7.17	23.62	18.50	1656	24.02	35.91	10.24	-	7.17	23.62	18.50	951	
14	27.01	45.04	13.39	-	8.23	23.62	19.33	2428	27.01	37.76	11.81	-	7.17	23.62	18.50	1545	
16	30.00	47.64	14.96	-	8.23	23.62	19.33	2980	28.82	45.04	13.39	-	8.23	23.62	19.33	1821	
18	34.02	49.09	16.57	-	8.23	23.62	19.33	3532	34.02	47.64	14.96	-	8.23	23.62	19.33	2550	
20	35.98	52.36	19.29	-	8.23	23.62	19.33	5298	35.98	49.09	16.57	-	8.23	23.62	21.30	4581	
24	42.01	57.95	22.05	-	10.08	27.56	21.30	6623	42.01	52.36	19.29	-	8.23	23.62	21.30	5960	

NOTES

1. Please consult factory for sizes above 24 in.
2. Please refer to ASME 16.5 for number of holes, size of the hole and circle diameter.

AEV²XC CRYOGENIC C-BALL VALVES

DIMENSIONS AND WEIGHTS / ASME CLASS 300 - BW END CONNECTIONS



Lever Operated
 Sizes DN 15 - 40 / NPS 1/2 - 1 1/2

Handwheel Operated
 Sizes DN 50 - 600 / NPS 2 - 24

ASME CLASS 300 DIMENSIONS mm

Size in	Full Bore								Reduced Bore							
DN	FTF	A	B	C1	C2	ØD	E	Weight kg	FTF	A	B	C1	C2	ØD	E	Weight kg
15	140	377	45	245	-	-	-	7	-	-	-	-	-	-	-	-
20	152	397	45	330	-	-	-	9	-	-	-	-	-	-	-	-
25	165	397	45	330	-	-	-	10	-	-	-	-	-	-	-	-
40	190	459	67	410	-	-	-	19	-	-	-	-	-	-	-	-
50	216	489	70	-	52	300	252	26	216	450	70	-	52	-	-	26
65	242	500	85	-	86	400	286	50	241	489	70	-	52	300	252	26
80	282	558	87	-	86	400	286	60	283	500	70	-	86	300	252	26
100	305	635	122	-	105	400	409	100	305	558	90	-	86	400	286	61
150	457	709	179	-	105	400	409	178	457	635	130	-	105	500	309	98
200	521	778	215	-	182	500	470	288	521	709	183	-	105	400	409	200
250	559	950	260	-	182	500	470	555	559	778	215	-	182	500	470	300
300	635	985	300	-	209	600	491	725	635	950	260	-	182	500	470	510
350	762	1150	340	-	209	600	491	1200	762	985	300	-	209	600	491	750
400	838	1210	380	-	209	600	491	1400	838	1150	340	-	209	600	491	1155
450	914	1247	421	-	256	700	531	1762	914	1210	380	-	209	600	491	1570
500	991	1330	490	-	256	700	531	2500	991	1247	421	-	256	700	531	2200
600	1143	1471	560	-	424	750	711	3259	1143	1330	490	-	256	700	531	3000

ASME CLASS 300 DIMENSIONS inches

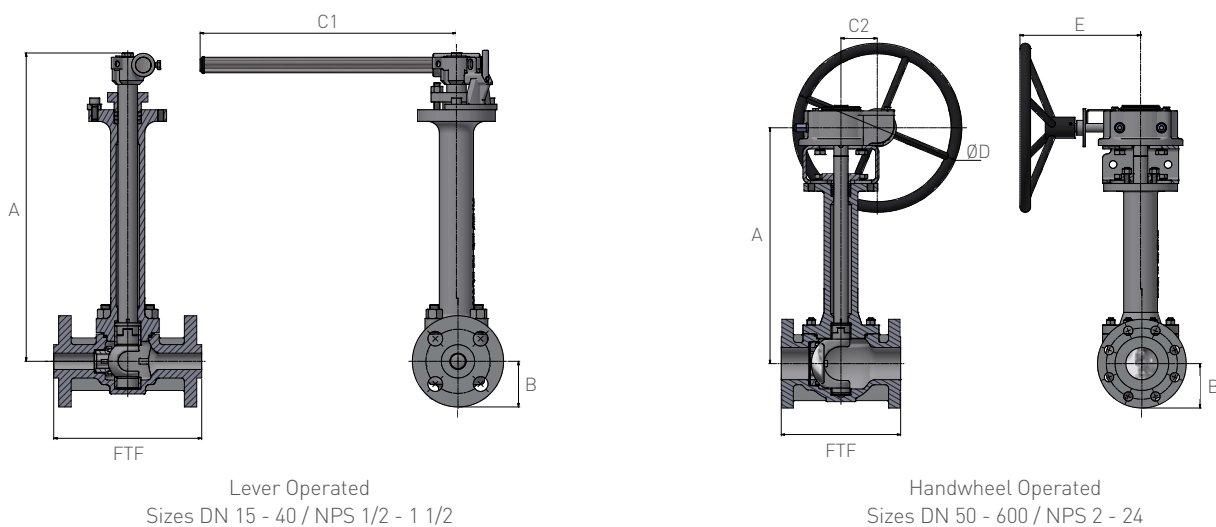
Size in	Full Bore								Reduced Bore							
NPS	FTF	A	B	C1	C2	ØD	E	Weight lbs	FTF	A	B	C1	C2	ØD	E	Weight lbs
1/2	5.51	14.84	1.77	9.65	-	-	-	15	-	-	-	-	-	-	-	-
3/4	5.98	15.63	1.77	12.99	-	-	-	20	-	-	-	-	-	-	-	-
1	6.50	15.63	1.77	12.99	-	-	-	22	-	-	-	-	-	-	-	-
1 1/2	7.48	18.07	2.64	16.14	-	-	-	42	-	-	-	-	-	-	-	-
2	8.50	19.25	2.76	-	2.05	11.81	9.92	57	8.50	17.72	2.76	-	2.05	-	-	57
2 1/2	9.53	19.69	3.35	-	3.39	15.75	11.26	110	9.49	19.25	2.76	-	2.05	11.81	9.92	57
3	11.10	21.97	3.43	-	3.39	15.75	11.26	132	11.14	19.69	2.76	-	3.39	11.81	9.92	57
4	12.01	25.00	4.80	-	4.13	15.75	16.10	221	12.01	21.97	3.54	-	3.39	15.75	11.26	135
6	17.99	27.91	7.05	-	4.13	15.75	16.10	393	17.99	25.00	5.12	-	4.13	19.69	12.17	216
8	20.51	30.63	8.46	-	7.17	19.69	18.50	636	20.51	27.91	7.20	-	4.13	15.75	16.10	442
10	22.01	37.40	10.24	-	7.17	19.69	18.50	1225	22.01	30.63	8.46	-	7.17	19.69	18.50	662
12	25.00	38.78	11.81	-	8.23	23.62	19.33	1600	25.00	37.40	10.24	-	7.17	19.69	18.50	1126
14	30.00	45.28	13.39	-	8.23	23.62	19.33	2649	30.00	38.78	11.81	-	8.23	23.62	19.33	1656
16	32.99	47.64	14.96	-	8.23	23.62	19.33	3091	32.99	45.28	13.39	-	8.23	23.62	19.33	2550
18	35.98	49.09	16.57	-	10.08	27.56	20.91	3890	35.98	47.64	14.96	-	8.23	23.62	19.33	3466
20	39.02	52.36	19.29	-	10.08	27.56	20.91	5519	39.02	49.09	16.57	-	10.08	27.56	20.91	4857
24	45.00	57.91	22.05	-	16.69	29.53	27.99	7194	45.00	52.36	19.29	-	10.08	27.56	20.91	6623

NOTE

Please consult factory for sizes above 24 in.

AEV 2XC CRYOGENIC C-BALL VALVES

DIMENSIONS AND WEIGHTS / ASME CLASS 300 - FLANGED END CONNECTIONS



ASME CLASS 300 DIMENSIONS mm

Size in	Full Bore								Reduced Bore							
DN	FTF	A	B	C1	C2	ØD	E	Weight kg	FTF	A	B	C1	C2	ØD	E	Weight kg
15	140	377	48	245	-	-	-	8	-	-	-	-	-	-	-	-
20	152	397	58	330	-	-	-	12	-	-	-	-	-	-	-	-
25	165	397	63	330	-	-	-	13	-	-	-	-	-	-	-	-
40	190	459	78	410	-	-	-	20	-	-	-	-	-	-	-	-
50	216	489	83	-	52	300	252	32	216	450	83	-	52	-	-	26
65	242	500	95	-	86	400	286	55	241	489	95	-	52	300	252	26
80	282	558	105	-	86	400	286	69	283	500	105	-	86	300	252	39
100	305	635	128	-	105	400	409	128	305	558	128	-	86	400	286	77
150	403	709	178	-	105	400	409	201	403	635	160	-	105	500	309	135
200	502	778	215	-	182	500	470	331	502	709	190	-	105	400	409	241
250	568	950	260	-	182	500	470	540	568	778	223	-	182	500	470	350
300	648	985	300	-	209	600	491	800	648	950	260	-	182	500	470	550
350	762	1150	340	-	209	600	491	1250	762	985	300	-	209	600	491	825
400	838	1210	380	-	209	600	491	1500	838	1150	340	-	209	600	491	1250
450	914	1247	421	-	256	700	531	2100	914	1210	380	-	209	600	491	1735
500	991	1330	490	-	256	700	531	3300	991	1247	421	-	256	700	531	2200
600	1143	1471	560	-	424	750	711	4100	1143	1330	490	-	256	700	531	3000

ASME CLASS 300 DIMENSIONS inches

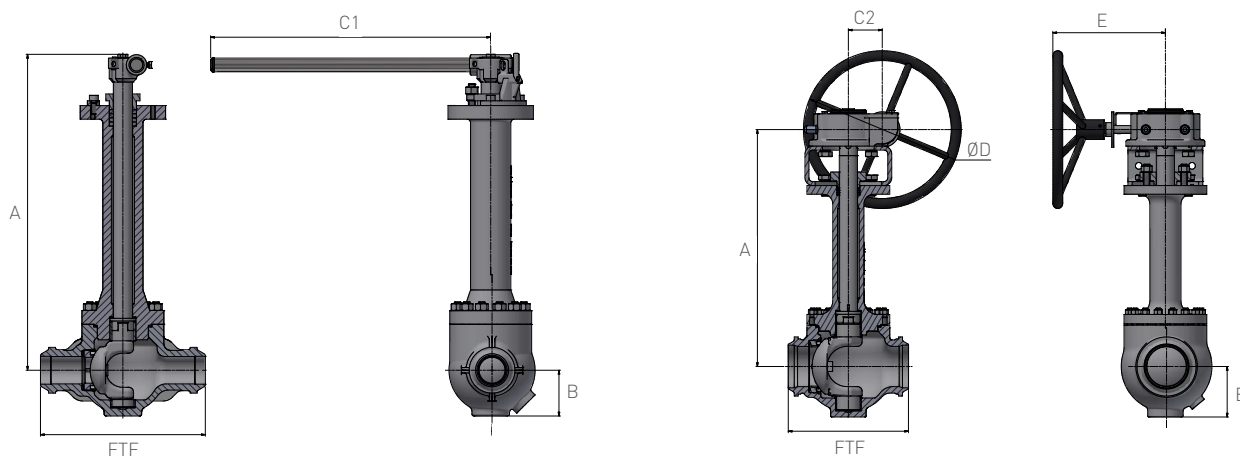
Size in	Full Bore								Reduced Bore							
NPS	FTF	A	B	C1	C2	ØD	E	Weight lbs	FTF	A	B	C1	C2	ØD	E	Weight lbs
1/2	5.51	14.84	1.89	9.65	-	-	-	18	-	-	-	-	-	-	-	-
3/4	5.98	15.63	2.28	12.99	-	-	-	26	-	-	-	-	-	-	-	-
1	6.50	15.63	2.48	12.99	-	-	-	29	-	-	-	-	-	-	-	-
1 1/2	7.48	18.07	3.07	16.14	-	-	-	44	-	-	-	-	-	-	-	-
2	8.50	19.25	3.27	-	2.05	11.81	9.92	71	8.50	17.72	3.27	-	2.05	-	-	57
2 1/2	9.53	19.69	3.74	-	3.39	15.75	11.26	121	9.49	19.25	3.74	-	2.05	11.81	9.92	57
3	11.10	21.97	4.13	-	3.39	15.75	11.26	152	11.14	19.69	4.13	-	3.39	11.81	9.92	86
4	12.01	25.00	5.04	-	4.13	15.75	16.10	283	12.01	21.97	5.04	-	3.39	15.75	11.26	170
6	15.87	27.91	7.01	-	4.13	15.75	16.10	444	15.87	25.00	6.30	-	4.13	19.69	12.17	298
8	19.76	30.63	8.46	-	7.17	19.69	18.50	731	19.76	27.91	7.48	-	4.13	15.75	16.10	532
10	22.36	37.40	10.24	-	7.17	19.69	18.50	1192	22.36	30.63	8.78	-	7.17	19.69	18.50	773
12	25.51	38.78	11.81	-	8.23	23.62	19.33	1766	25.51	37.40	10.24	-	7.17	19.69	18.50	1214
14	30.00	45.28	13.39	-	8.23	23.62	19.33	2759	30.00	38.78	11.81	-	8.23	23.62	19.33	1821
16	32.99	47.64	14.96	-	8.23	23.62	19.33	3311	32.99	45.28	13.39	-	8.23	23.62	19.33	2759
18	35.98	49.09	16.57	-	10.08	27.56	20.91	4636	35.98	47.64	14.96	-	8.23	23.62	19.33	3830
20	39.02	52.36	19.29	-	10.08	27.56	20.91	7285	39.02	49.09	16.57	-	10.08	27.56	20.91	4857
24	45.00	57.91	22.05	-	16.69	29.53	27.99	9051	45.00	52.36	19.29	-	10.08	27.56	20.91	6623

NOTES

1. Please consult factory for sizes above 24 in.
2. Please refer to ASME 16.5 for number of holes, size of the hole and circle diameter.

AEV 2XC CRYOGENIC C-BALL VALVES

DIMENSIONS AND WEIGHTS / ASME CLASS 600 - BW END CONNECTIONS



Lever Operated
 Sizes DN 15 - 40 / NPS 1/2 - 1 1/2

Handwheel Operated
 Sizes DN 50 - 600 / NPS 2 - 24

ASME CLASS 600 DIMENSIONS mm

Size in	Full Bore								Reduced Bore							
DN	FTF	A	B	C1	C2	ØD	E	Weight kg	FTF	A	B	C1	C2	ØD	E	Weight kg
15	165	397	37	245	-	-	-	7	-	-	-	-	-	-	-	-
20	190	397	45	330	-	-	-	9	-	-	-	-	-	-	-	-
25	216	397	45	330	-	-	-	10	-	-	-	-	-	-	-	-
40	241	459	67	410	-	-	-	19	-	-	-	-	-	-	-	-
50	292	534	87	-	71	300	258	39	292	500	87	-	71	-	-	40
65	330	569	94	-	86	400	286	64	330	534	87	-	71	300	284	41
80	356	600	116	-	86	500	306	86	356	569	87	-	86	300	284	43
100	432	623	136	-	105	400	409	125	432	600	116	-	86	500	309	89
150	559	763	185	-	130	500	418	249	559	623	137	-	105	400	409	141
200	660	882	240	-	182	600	470	494	660	763	187	-	130	500	418	280
250	787	969	288	-	182	600	470	750	787	882	242	-	182	600	470	547
300	838	1071	325	-	205	600	496	1060	838	969	288	-	182	600	470	800
350	889	1125	365	-	205	600	496	1250	889	1071	325	-	205	600	496	1000
400	991	1257	405	-	256	700	531	1715	991	1125	365	-	205	600	496	1280
450	1092	1383	460	-	364	750	800	2646	1092	1257	405	-	256	700	531	1760
500	1194	1446	510	-	364	750	800	3337	1194	1383	460	-	364	750	800	2600
600	1397	1642	620	-	427	750	832	5589	1397	1446	510	-	364	750	800	3440

ASME CLASS 600 DIMENSIONS inches

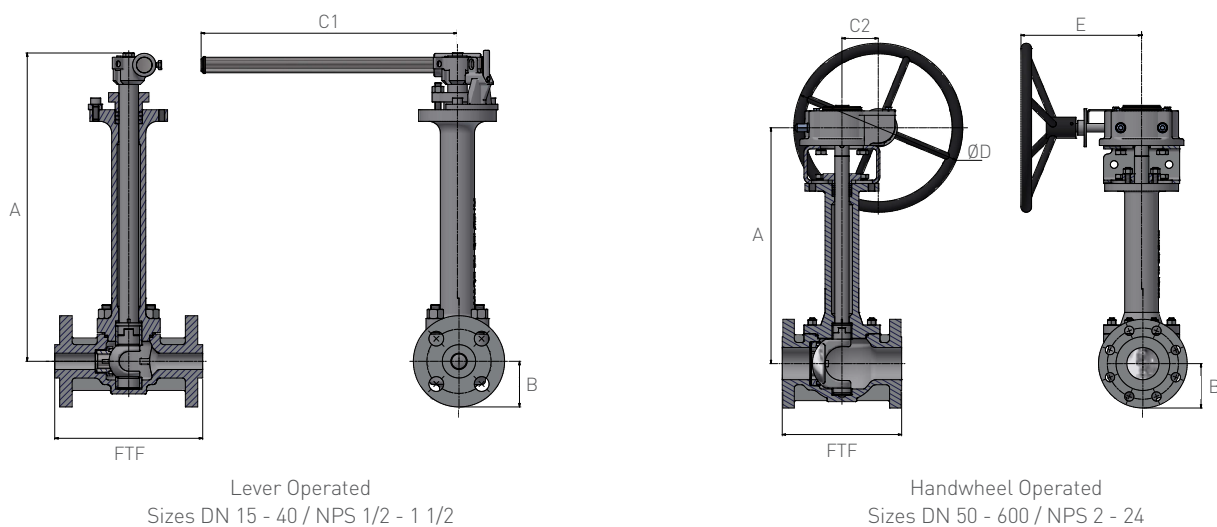
Size in	Full Bore								Reduced Bore							
NPS	FTF	A	B	C1	C2	ØD	E	Weight lbs	FTF	A	B	C1	C2	ØD	E	Weight lbs
1/2	6.50	15.63	1.46	9.65	-	-	-	15	-	-	-	-	-	-	-	-
3/4	7.48	15.63	1.77	12.99	-	-	-	20	-	-	-	-	-	-	-	-
1	8.50	15.63	1.77	12.99	-	-	-	22	-	-	-	-	-	-	-	-
1 1/2	9.49	18.07	2.64	16.14	-	-	-	42	-	-	-	-	-	-	-	-
2	11.50	21.02	3.43	-	2.80	11.81	10.16	86	11.50	19.69	3.43	-	2.80	-	-	88
2 1/2	12.99	22.40	3.70	-	3.39	15.75	11.26	141	12.99	21.02	3.43	-	2.80	11.81	11.18	91
3	14.02	23.62	4.57	-	3.39	19.69	12.05	190	14.02	22.40	3.43	-	3.39	11.81	11.18	95
4	17.01	24.53	5.35	-	4.13	15.75	16.10	276	17.01	23.62	4.57	-	3.39	19.69	12.17	196
6	22.01	30.04	7.28	-	5.12	19.69	16.46	550	22.01	24.53	5.39	-	4.13	15.75	16.10	311
8	25.98	34.72	9.45	-	7.17	23.62	18.50	1091	25.98	30.04	7.36	-	5.12	19.69	16.46	618
10	30.98	38.15	11.34	-	7.17	23.62	18.50	1656	30.98	34.72	9.53	-	7.17	23.62	18.50	1208
12	32.99	42.17	12.80	-	8.07	23.62	19.53	2340	32.99	38.15	11.34	-	7.17	23.62	18.50	1766
14	35.00	44.29	14.37	-	8.07	23.62	19.53	2759	35.00	42.17	12.80	-	8.07	23.62	19.53	2208
16	39.02	49.49	15.94	-	10.08	27.56	20.91	3786	39.02	44.29	14.37	-	8.07	23.62	19.53	2826
18	42.99	54.45	18.11	-	14.33	29.53	31.50	5841	42.99	49.49	15.94	-	10.08	27.56	20.91	3885
20	47.01	56.93	20.08	-	14.33	29.53	31.50	7366	47.01	54.45	18.11	-	14.33	29.53	31.50	5740
24	55.00	64.65	24.41	-	16.81	29.53	32.76	12338	55.00	56.93	20.08	-	14.33	29.53	31.50	7594

NOTE

Please consult factory for sizes above 24 in.

AEV 2XC CRYOGENIC C-BALL VALVES

DIMENSIONS AND WEIGHTS / ASME CLASS 600 - FLANGED END CONNECTIONS



ASME CLASS 600 DIMENSIONS mm

Size in	Full Bore								Reduced Bore							
DN	FTF	A	B	C1	C2	ØD	E	Weight kg	FTF	A	B	C1	C2	ØD	E	Weight kg
15	165	397	48	245	-	-	-	10	-	-	-	-	-	-	-	-
20	190	397	58	330	-	-	-	13	-	-	-	-	-	-	-	-
25	216	397	63	330	-	-	-	14	-	-	-	-	-	-	-	-
40	241	459	78	410	-	-	-	25	-	-	-	-	-	-	-	-
50	292	534	87	-	71	300	258	47	292	500	87	-	71	-	-	40
65	330	569	95	-	86	400	286	70	330	534	95	-	71	300	284	45
80	356	600	116	-	86	500	306	95	256	569	105	-	86	300	284	54
100	432	623	136	-	105	400	409	150	432	600	137	-	86	500	309	125
150	559	763	185	-	130	500	418	260	559	623	177	-	105	400	409	196
200	660	882	240	-	182	600	470	550	660	763	210	-	130	500	418	380
250	787	969	288	-	182	600	470	810	787	882	255	-	182	600	470	600
300	838	1071	325	-	205	600	496	1100	838	969	288	-	182	600	470	920
350	889	1125	365	-	205	600	496	1300	889	1071	325	-	205	600	496	1150
400	991	1257	405	-	256	700	531	1800	991	1125	365	-	205	600	496	1450
450	1092	1383	460	-	364	750	800	2700	1092	1257	405	-	256	700	531	2000
500	1194	1446	510	-	364	750	800	3500	1194	1383	460	-	364	750	800	2900
600	1397	1642	620	-	427	750	832	5300	1397	1446	510	-	364	750	800	3800

ASME CLASS 600 DIMENSIONS inches

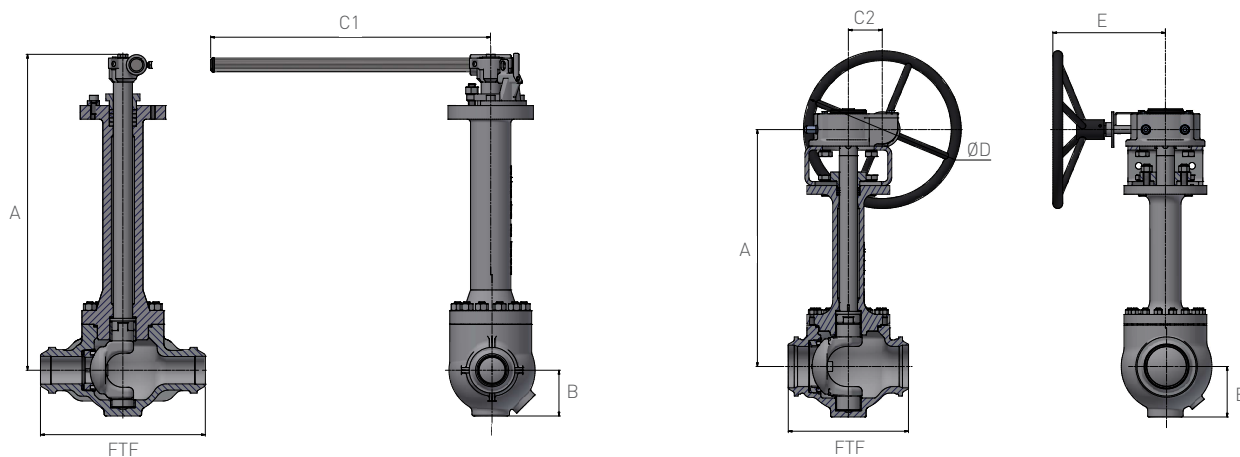
Size in	Full Bore								Reduced Bore							
NPS	FTF	A	B	C1	C2	ØD	E	Weight lbs	FTF	A	B	C1	C2	ØD	E	Weight lbs
1/2	6.50	15.63	1.89	9.65	-	-	-	22	-	-	-	-	-	-	-	-
3/4	7.48	15.63	2.28	12.99	-	-	-	29	-	-	-	-	-	-	-	-
1	8.50	15.63	2.48	12.99	-	-	-	31	-	-	-	-	-	-	-	-
1 1/2	9.49	18.07	3.07	16.14	-	-	-	55	-	-	-	-	-	-	-	-
2	11.50	21.02	3.43	-	2.80	11.81	10.16	104	11.50	19.69	3.43	-	2.80	-	-	88
2 1/2	12.99	22.40	3.74	-	3.39	15.75	11.26	155	12.99	21.02	3.74	-	2.80	11.81	11.18	99
3	14.02	23.62	4.57	-	3.39	19.69	12.05	210	10.08	22.40	4.13	-	3.39	11.81	11.18	119
4	17.01	24.53	5.35	-	4.13	15.75	16.10	331	17.01	23.62	5.39	-	3.39	19.69	12.17	276
6	22.01	30.04	7.28	-	5.12	19.69	16.46	574	22.01	24.53	6.97	-	4.13	15.75	16.10	433
8	25.98	34.72	9.45	-	7.17	23.62	18.50	1214	25.98	30.04	8.27	-	5.12	19.69	16.46	839
10	30.98	38.15	11.34	-	7.17	23.62	18.50	1788	30.98	34.72	10.04	-	7.17	23.62	18.50	1325
12	32.99	42.17	12.80	-	8.07	23.62	19.53	2428	32.99	38.15	11.34	-	7.17	23.62	18.50	2031
14	35.00	44.29	14.37	-	8.07	23.62	19.53	2870	35.00	42.17	12.80	-	8.07	23.62	19.53	2539
16	39.02	49.49	15.94	-	10.08	27.56	20.91	3974	39.02	44.29	14.37	-	8.07	23.62	19.53	3201
18	42.99	54.45	18.11	-	14.33	29.53	31.50	5960	42.99	49.49	15.94	-	10.08	27.56	20.91	4415
20	47.01	56.93	20.08	-	14.33	29.53	31.50	7726	47.01	54.45	18.11	-	14.33	29.53	31.50	6402
24	55.00	64.65	24.41	-	16.81	29.53	32.76	11700	55.00	56.93	20.08	-	14.33	29.53	31.50	8389

NOTES

1. Please consult factory for sizes above 24 in.
2. Please refer to ASME 16.5 for number of holes, size of the hole and circle diameter.

AEV 2XC CRYOGENIC C-BALL VALVES

DIMENSIONS AND WEIGHTS / ASME CLASS 900 - BW END CONNECTIONS



Lever Operated
Sizes DN 15 - 25 / NPS 1/2 - 1

Handwheel Operated
Sizes DN 40 - 600 / NPS 1 1/2 - 24

ASME CLASS 900 DIMENSIONS mm

Size in	Full Bore								Reduced Bore							
DN	FTF	A	B	C1	C2	ØD	E	Weight kg	FTF	A	B	C1	C2	ØD	E	Weight kg
15	216	399	45	330	-	-	-	10	-	-	-	-	-	-	-	-
20	229	399	48	330	-	-	-	13	-	-	-	-	-	-	-	-
25	254	399	48	410	-	-	-	15	-	-	-	-	-	-	-	-
40	305	474	82	-	52	300	232	37	-	-	-	-	-	-	-	-
50	368	515	95	-	86	400	286	80	-	-	-	-	-	-	-	-
65	419	550	95	-	86	500	306	85	419	515	95	-	86	300	271	90
80	381	600	116	-	86	500	306	90	381	550	95	-	86	400	310	125
100	457	635	140	-	130	400	398	152	457	600	116	-	86	500	310	200
150	610	772	190	-	182	500	470	350	610	635	140	-	130	500	466	300
200	737	907	250	-	182	600	470	630	737	772	190	-	182	500	466	400
250	838	995	300	-	209	600	491	937	838	907	250	-	182	600	521	650
300	965	1160	320	-	306	600	491	1075	965	995	300	-	209	600	521	900
350	1029	1255	375	-	375	700	626	1835	1029	1160	320	-	306	600	521	1080
400	1130	1326	425	-	280	700	800	2550	1130	1255	375	-	375	700	620	1735
450	1219	1525	475	-	364	750	800	3000	1219	1325	425	-	280	700	800	2500
500	1321	1570	525	-	364	750	800	4400	1321	1525	475	-	364	750	800	3875
600	1549	1710	575	-	427	750	832	5150	1549	1570	525	-	364	750	800	4500

ASME CLASS 900 DIMENSIONS inches

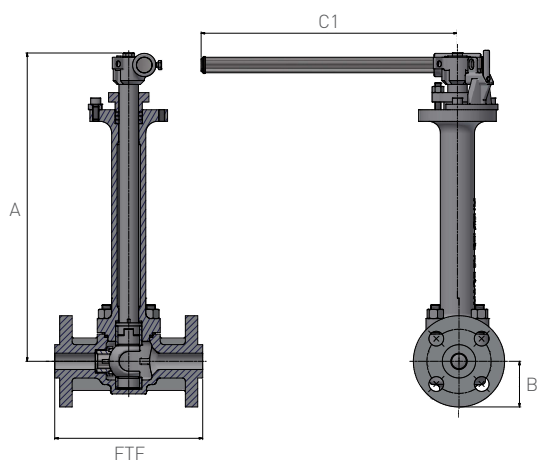
Size in	Full Bore								Reduced Bore							
NPS	FTF	A	B	C1	C2	ØD	E	Weight lbs	FTF	A	B	C1	C2	ØD	E	Weight lbs
1/2	8.50	15.71	1.77	12.99	-	-	-	22	-	-	-	-	-	-	-	-
3/4	9.02	15.71	1.89	12.99	-	-	-	29	-	-	-	-	-	-	-	-
1	10.00	15.71	1.89	16.14	-	-	-	33	-	-	-	-	-	-	-	-
1 1/2	12.01	18.66	3.23	-	2.05	11.81	9.13	82	-	-	-	-	-	-	-	-
2	14.49	20.28	3.74	-	3.39	15.75	11.26	177	-	-	-	-	-	-	-	-
2 1/2	16.50	21.65	3.74	-	3.39	19.69	12.05	188	16.50	20.28	3.74	-	3.39	11.81	10.67	199
3	15.00	23.62	4.57	-	3.39	19.69	12.05	199	15.00	21.65	3.74	-	3.39	15.75	12.20	276
4	17.99	25.00	5.51	-	5.12	15.75	15.67	336	17.99	23.62	4.57	-	3.39	19.69	12.20	442
6	24.02	30.39	7.48	-	7.17	19.69	18.50	773	24.02	25.00	5.51	-	5.12	19.69	18.35	662
8	29.02	35.71	9.84	-	7.17	23.62	18.50	1391	29.02	30.39	7.48	-	7.17	19.69	18.35	883
10	32.99	39.17	11.81	-	8.23	23.62	19.33	2068	32.99	35.71	9.84	-	7.17	23.62	20.51	1435
12	37.99	45.67	12.60	-	12.05	23.62	19.33	2373	37.99	39.17	11.81	-	8.23	23.62	20.51	1987
14	40.51	49.41	14.76	-	14.76	27.56	24.65	4051	40.51	45.67	12.60	-	12.05	23.62	20.51	2384
16	44.49	52.20	16.73	-	11.02	27.56	31.50	5629	44.49	49.41	14.76	-	14.76	27.56	24.41	3830
18	47.99	60.04	18.70	-	14.33	29.53	31.50	6623	47.99	52.17	16.73	-	11.02	27.56	31.50	5519
20	52.01	61.81	20.67	-	14.33	29.53	31.50	9713	52.01	60.04	18.70	-	14.33	29.53	31.50	8554
24	60.98	67.32	22.64	-	16.81	29.53	32.76	11369	60.98	61.81	20.67	-	14.33	29.53	31.50	9934

NOTE

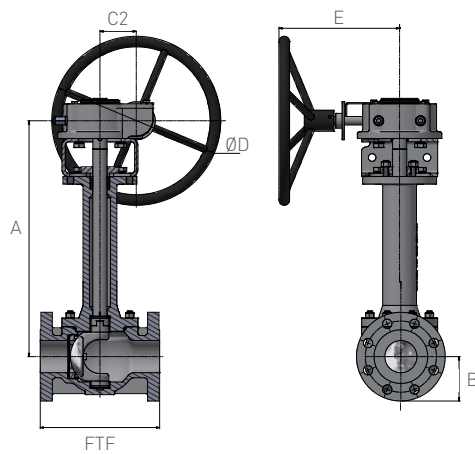
Please consult factory for sizes above 24 in.

AEV²XC CRYOGENIC C-BALL VALVES

DIMENSIONS AND WEIGHTS / ASME CLASS 900 - FLANGED END CONNECTIONS



Lever Operated
Sizes DN 15 - 25 / NPS 1/2 - 1



Handwheel Operated
Sizes DN 40 - 600 / NPS 1 1/2 - 24

ASME CLASS 900 DIMENSIONS mm

Size in	Full Bore								Reduced Bore							
DN	FTF	A	B	C1	C2	ØD	E	Weight kg	FTF	A	B	C1	C2	ØD	E	Weight kg
15	216	399	60	330	-	-	-	11	-	-	-	-	-	-	-	-
20	229	399	65	330	-	-	-	15	-	-	-	-	-	-	-	-
25	254	399	75	410	-	-	-	20	-	-	-	-	-	-	-	-
40	305	474	90	-	52	300	232	40	-	-	-	-	-	-	-	-
50	368	515	108	-	86	400	286	90	-	-	-	-	-	-	-	-
65	419	550	123	-	86	500	306	100	419	515	127	-	86	300	271	90
80	381	600	120	-	86	500	306	115	381	550	120	-	86	400	310	100
100	457	635	145	-	130	400	398	220	457	600	145	-	86	500	310	150
150	610	772	190	-	182	500	470	415	610	635	190	-	130	500	466	300
200	737	907	250	-	182	600	470	715	737	772	235	-	182	500	466	500
250	838	995	305	-	209	600	491	950	838	907	273	-	182	600	521	850
300	965	1160	320	-	306	600	491	1300	965	995	300	-	209	600	521	1050
350	1029	1255	375	-	375	700	626	1990	1029	1160	320	-	306	600	521	1380
400	1130	1326	425	-	280	700	800	2800	1130	1255	375	-	375	700	620	1990
450	1219	1525	475	-	364	750	800	3500	1219	1325	425	-	280	700	800	2835
500	1321	1570	525	-	364	750	800	4500	1321	1525	475	-	364	750	800	3875
600	1549	1710	575	-	427	750	832	5500	1549	1570	525	-	364	750	800	5000

ASME CLASS 900 DIMENSIONS inches

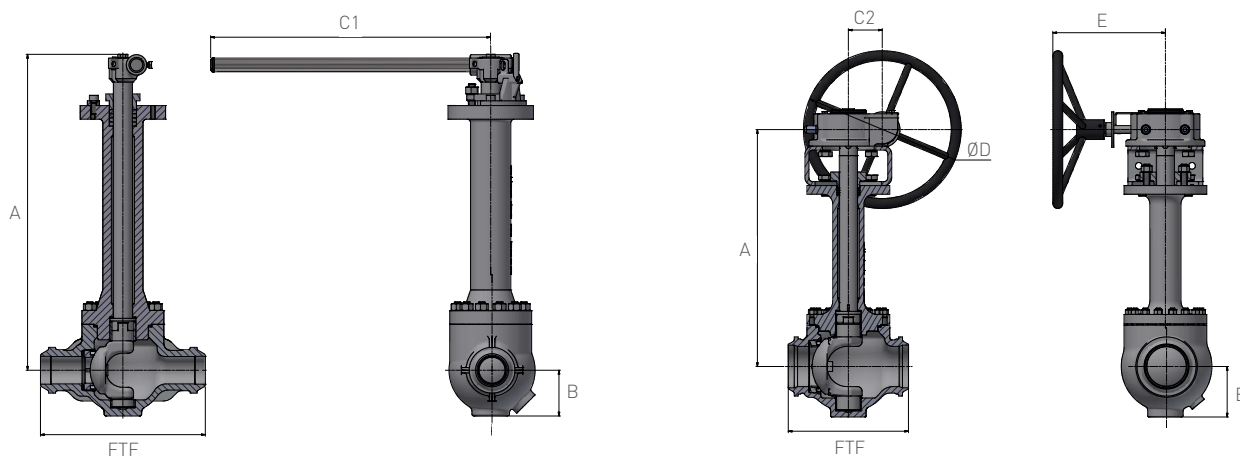
Size in	Full Bore								Reduced Bore							
NPS	FTF	A	B	C1	C2	ØD	E	Weight lbs	FTF	A	B	C1	C2	ØD	E	Weight lbs
1/2	8.50	15.71	2.36	12.99	-	-	-	24	-	-	-	-	-	-	-	-
3/4	9.02	15.71	2.56	12.99	-	-	-	33	-	-	-	-	-	-	-	-
1	10.00	15.71	2.95	16.14	-	-	-	44	-	-	-	-	-	-	-	-
1 1/2	12.01	18.66	3.54	-	2.05	11.81	9.13	88	-	-	-	-	-	-	-	-
2	14.49	20.28	4.25	-	3.39	15.75	11.26	199	-	-	-	-	-	-	-	-
2 1/2	16.50	21.65	4.84	-	3.39	19.69	12.05	221	16.50	20.28	5.00	-	3.39	11.81	10.67	199
3	15.00	23.62	4.72	-	3.39	19.69	12.05	254	15.00	21.65	4.72	-	3.39	15.75	12.20	221
4	17.99	25.00	5.71	-	5.12	15.75	15.67	486	17.99	23.62	5.71	-	3.39	19.69	12.20	331
6	24.02	30.39	7.48	-	7.17	19.69	18.50	916	24.02	25.00	7.48	-	5.12	19.69	18.35	662
8	29.02	35.71	9.84	-	7.17	23.62	18.50	1578	29.02	30.39	9.25	-	7.17	19.69	18.35	1104
10	32.99	39.17	12.01	-	8.23	23.62	19.33	2097	32.99	35.71	10.75	-	7.17	23.62	20.51	1876
12	37.99	45.67	12.60	-	12.05	23.62	19.33	2870	37.99	39.17	11.81	-	8.23	23.62	20.51	2318
14	40.51	49.41	14.76	-	14.76	27.56	24.65	4393	40.51	45.67	12.60	-	12.05	23.62	20.51	3046
16	44.49	52.20	16.73	-	11.02	27.56	31.50	6181	44.49	49.41	14.76	-	14.76	27.56	24.41	4393
18	47.99	60.04	18.70	-	14.33	29.53	31.50	7726	47.99	52.17	16.73	-	11.02	27.56	31.50	6258
20	52.01	61.81	20.67	-	14.33	29.53	31.50	9934	52.01	60.04	18.70	-	14.33	29.53	31.50	8554
24	60.98	67.32	22.64	-	16.81	29.53	32.76	12141	60.98	61.81	20.67	-	14.33	29.53	31.50	11023

NOTES

1. Please consult factory for sizes above 24 in.
2. Please refer to ASME 16.5 for number of holes, size of the hole and circle diameter.

AEV 2XC CRYOGENIC C-BALL VALVES

DIMENSIONS AND WEIGHTS / ASME CLASS 1500 - BW END CONNECTIONS



Lever Operated
 Sizes DN 15 - 25 / NPS 1/2 - 1

Handwheel Operated
 Sizes DN 40 - 400 / NPS 1 1/2 - 16

ASME CLASS 1500 DIMENSIONS mm

Size in	Full Bore								Reduced Bore							
DN	FTF	A	B	C1	C2	ØD	E	Weight kg	FTF	A	B	C1	C2	ØD	E	Weight kg
15	216	399	45	330	-	-	-	10	-	-	-	-	-	-	-	-
20	229	399	48	330	-	-	-	13	-	-	-	-	-	-	-	-
25	254	399	48	410	-	-	-	15	-	-	-	-	-	-	-	-
40	305	474	82	-	52	300	232	37	-	-	-	-	-	-	-	-
50	368	515	95	-	86	400	286	80	-	-	-	-	-	-	-	-
65	419	600	105	-	130	400	397	100	419	512	95	-	86	300	271	90
80	470	730	120	-	130	400	397	150	470	600	105	-	86	300	271	125
100	546	750	155	-	211	500	447	250	546	730	120	-	130	400	397	200
150	705	800	200	-	367	600	571	525	705	750	155	-	311	500	447	400
200	832	900	280	-	384	700	571	1000	832	800	200	-	367	600	571	625
250	991	1045	325	-	384	700	571	1825	991	900	280	-	384	600	571	1100
300	1130	1160	350	-	406	750	626	2100	1130	1045	325	-	384	600	571	1600
350	1257	1275	400	-	406	750	626	2650	1257	1160	350	-	406	700	626	2135
400	1384	1320	450	-	406	750	626	4600	1384	1275	400	-	406	700	626	3785

ASME CLASS 1500 DIMENSIONS inches

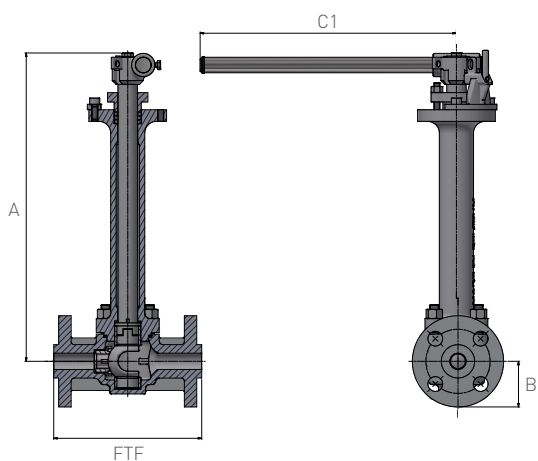
Size in	Full Bore								Reduced Bore							
NPS	FTF	A	B	C1	C2	ØD	E	Weight lbs	FTF	A	B	C1	C2	ØD	E	Weight lbs
1/2	8.50	15.71	1.77	12.99	-	-	-	22	-	-	-	-	-	-	-	-
3/4	9.02	15.71	1.89	12.99	-	-	-	29	-	-	-	-	-	-	-	-
1	10.00	15.71	1.89	16.14	-	-	-	33	-	-	-	-	-	-	-	-
1 1/2	12.01	18.66	3.23	-	2.05	11.81	9.13	82	-	-	-	-	-	-	-	-
2	14.49	20.28	3.74	-	3.39	15.75	11.26	177	-	-	-	-	-	-	-	-
2 1/2	16.50	23.62	4.13	-	5.12	15.75	15.63	221	16.50	20.16	3.74	-	3.39	11.81	10.67	199
3	18.50	28.74	4.72	-	5.12	15.75	15.63	331	18.50	23.62	4.13	-	3.39	11.81	10.67	276
4	21.50	29.53	6.10	-	8.31	19.69	17.60	552	21.50	28.74	4.72	-	5.12	15.75	15.63	442
6	27.76	31.50	7.87	-	14.45	23.62	22.48	1159	27.76	29.53	6.10	-	12.24	19.69	17.60	883
8	32.76	35.43	11.02	-	15.12	27.56	22.48	2208	32.76	31.50	7.87	-	14.45	23.62	22.48	1380
10	39.02	41.14	12.80	-	15.12	27.56	22.48	4029	39.02	35.43	11.02	-	15.12	23.62	22.48	2428
12	44.49	45.67	13.78	-	15.98	29.53	24.65	4636	44.49	41.14	12.80	-	15.12	23.62	22.48	3532
14	49.49	50.20	15.75	-	15.98	29.53	24.65	5850	49.49	45.67	13.78	-	15.98	27.56	24.65	4713
16	54.49	51.97	17.72	-	15.98	29.53	24.65	10155	54.49	50.20	15.75	-	15.98	27.56	24.65	8355

NOTE

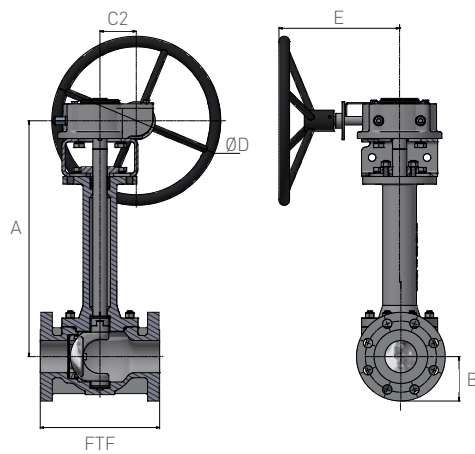
Please consult factory for sizes above 16 in.

AEV 2XC CRYOGENIC C-BALL VALVES

DIMENSIONS AND WEIGHTS / ASME CLASS 1500 - FLANGED END CONNECTIONS



Lever Operated
Sizes DN 15 - 25 / NPS 1/2 - 1



Handwheel Operated
Sizes DN 40 - 400 / NPS 1 1/2 - 16

ASME CLASS 1500 DIMENSIONS mm

Size in	Full Bore								Reduced Bore							
DN	FTF	A	B	C1	C2	ØD	E	Weight kg	FTF	A	B	C1	C2	ØD	E	Weight kg
15	216	399	60	330	-	-	-	11	-	-	-	-	-	-	-	-
20	229	399	65	330	-	-	-	15	-	-	-	-	-	-	-	-
25	254	399	75	410	-	-	-	20	-	-	-	-	-	-	-	-
40	305	474	90	-	52	300	232	40	-	-	-	-	-	-	-	-
50	368	515	108	-	86	400	286	90	-	-	-	-	-	-	-	-
65	419	600	123	-	130	400	397	100	419	512	127	-	86	300	271	90
80	470	730	133	-	130	400	397	200	470	600	133	-	86	300	271	125
100	546	750	155	-	211	500	447	450	546	730	155	-	130	400	397	200
150	705	800	200	-	367	600	571	750	705	750	197	-	311	500	447	400
200	832	900	280	-	384	700	571	1200	832	800	243	-	367	600	571	825
250	991	1045	325	-	384	700	571	2175	991	900	293	-	384	600	571	1450
300	1130	1160	350	-	406	750	626	2500	1130	1045	337	-	384	600	571	1905
350	1257	1275	400	-	406	750	626	3100	1257	1160	375	-	406	700	626	2535
400	1384	1320	450	-	406	750	626	5200	1384	1275	412	-	406	700	626	4280

ASME CLASS 1500 DIMENSIONS inches

Size in	Full Bore								Reduced Bore							
NPS	FTF	A	B	C1	C2	ØD	E	Weight lbs	FTF	A	B	C1	C2	ØD	E	Weight lbs
1/2	8.50	15.71	2.36	12.99	-	-	-	24	-	-	-	-	-	-	-	-
3/4	9.02	15.71	2.56	12.99	-	-	-	33	-	-	-	-	-	-	-	-
1	10.00	15.71	2.95	16.14	-	-	-	44	-	-	-	-	-	-	-	-
1 1/2	12.01	18.66	3.54	-	2.05	11.81	9.13	88	-	-	-	-	-	-	-	-
2	14.49	20.28	4.25	-	3.39	15.75	11.26	199	-	-	-	-	-	-	-	-
2 1/2	16.50	23.62	4.84	-	5.12	15.75	15.63	221	16.50	20.16	5.00	-	3.39	11.81	10.67	199
3	18.50	28.74	5.24	-	5.12	15.75	15.63	442	18.50	23.62	5.24	-	3.39	11.81	10.67	276
4	21.50	29.53	6.10	-	8.31	19.69	17.60	993	21.50	28.74	6.10	-	5.12	15.75	15.63	442
6	27.76	31.50	7.87	-	14.45	23.62	22.48	1656	27.76	29.53	7.76	-	12.24	19.69	17.60	883
8	32.76	35.43	11.02	-	15.12	27.56	22.48	2649	32.76	31.50	9.57	-	14.45	23.62	22.48	1821
10	39.02	41.14	12.80	-	15.12	27.56	22.48	4801	39.02	35.43	11.54	-	15.12	23.62	22.48	3201
12	44.49	45.67	13.78	-	15.98	29.53	24.65	5519	44.49	41.14	13.27	-	15.12	23.62	22.48	4205
14	49.49	50.20	15.75	-	15.98	29.53	24.65	6843	49.49	45.67	14.76	-	15.98	27.56	24.65	5596
16	54.49	51.97	17.72	-	15.98	29.53	24.65	11479	54.49	50.20	16.22	-	15.98	27.56	24.65	9448

NOTES

1. Please consult factory for sizes above 16 in.
2. Please refer to ASME 16.5 for number of holes, size of the hole and circle diameter.
3. Please consult factory for Class 2500 and Class 4500 valve dimensions.

AEV²XC CRYOGENIC C-BALL VALVES

CERTIFICATION

CERTIFICATION TABLE

Quality Management System	ISO 9001:2015	
Regional Product Certification	PED TSG / TS CRN TRCU	
Environmental Management System	ISO 14001:2004	
Health And Safety Management System	OHSAS 18001:2007	
Product	Fire Safety	API 607 / ISO 10497
	Fugitive Emission	ISO 15848-1
	Product Safety	SIL 3
Applicable Product Standards	Design Standards:	ASME B16.34 , API 6D and API 608
	Face-to-Face:	ASME B16.10
	Flange Standards:	ASME B16.5 / ASME B16.47; EN 1092-1
	Buttweld Ends:	B 16.25 / EN 12224
	Design Specifications:	BS 6364 / ISO 28921-1
Verification/Certification	ABS DNV LR BV Marine NK	
Testing Standard Compliance	API 598 ASME B 16.34 ISO 5208 EN 12266-1 ANSI/FCI 70-2 BS 6364 / ISO 28921-1 ISO 15848-2	

NOTES

Sectional drawings and dimensional tables on this datasheet refer to valves with gears. However, note that AEV valves are suitable for operation with quarter-turn actuators (pneumatic, hydraulic, electric, etc.).

FCDS-20173-EN © 2024 Emerson Electric Co. All rights reserved 10/24. The Emerson logo is a trademark and service mark of Emerson Electric Co. AEV is a mark of an entity in the Emerson family of businesses. All other marks are the property of their respective owners.

Neither Emerson nor any of its affiliated entities assume responsibility for the selection, use or maintenance of any product. Responsibility for proper selection, use, and maintenance of any product remains solely with the purchaser and end user.

The contents of this publication are presented for informational purposes only, and while every effort has been made to ensure their accuracy, they are not to be construed as warranties or guarantees, express or implied, regarding the products or services described herein or their use or applicability. All sales are governed by our terms and conditions, which are available upon request. We reserve the right to modify or improve the designs or specifications of such products at any time without notice.

Emerson.com