

Manufacturers of high quality valves for Oil and Gas
Production, Pipeline, Process, and Power applications.

ACCUSEAL[®] TRUNNION MOUNTED BALL VALVES



DEDICATED TO SERVICE

Whether you are a small distributor, engineering contractor, or major global user, Array is committed to being your valve partner.

ARRAY – DEDICATED TO SERVICE

In order to grow and profit in today's highly competitive energy industry you need a valve supplier who can:

- Provide high-quality valves
- Deliver on schedule
- Respond to your unique requirements
- Help you profit from every project or order

Every Array associate, from our Chief Engineer to our warehouse personnel, spend their days striving to meet these goals.

Our domestic and global manufacturing and sourcing operations help ensure that Array has the ability to respond to both short and long term procurement requirements.

Array is committed to being your valve partner – one who delivers an unparalleled level of service and support at competitive prices.

YOUR VALVE PARTNER
IN TODAY'S COMPETITIVE
ENERGY INDUSTRY.



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At Array, producing quality ball valves is not just about ensuring customer satisfaction and maintenance free performance – It is about preventing accidents which may have environmental impact.

The purpose of every valve manufactured by Array is to control the flow of volatile, often toxic, liquids and gases and keep them from being emitted into the atmosphere or spilled on the ground or into the water.

That is why every valve we sell is designed and manufactured to exceed standards set forth by the American Petroleum Institute (API), ASME, and other specifying organizations and why Array's quality systems and the quality systems of all of our suppliers are certified by API and/or the International Standards Organization (ISO).

It is also why we spend so much time working closely with our customers and suppliers to continuously improve the quality of our valves and the efficiency of our systems – because we recognize that the quality of our valves can positively impact the quality of our environment.

It is our primary concern and motivation.

**OUR ENVIRONMENT
MAKE A DIFFERENCE**



ACCUSEAL® TMBV PRODUCT RANGE

CLASS		SIZE (inches)													
API 6D	PORT	2	3	4	6	8	10	12	14	16	18	20	24	30	36
150	Full and Reduced	X	X	X	X	X	X	X	X	X	X	X	X	X	X
300		X	X	X	X	X	X	X	X	X	X	X	X	X	X
600		X	X	X	X	X	X	X	X	X	X	X	X	X	X
900		X	X	X	X	X	X	X	X	X	X	X	X	X	X
1500		X	X	X	X	X	X	X	X	X	X	X			
2500		X	X	X	X	X	X	X	X						

AVAILABLE MATERIALS: Carbon Steel, LF2, F316, Duplex Alloys, Chrome Alloys, Nickel Alloys



The Array Accuseal® TMBV Trunnion Ball Valve is a high integrity positive shut-off valve designed for gas, and other, applications where tight shutoff and zero leakage are required

The Array Accuseal® TMBV combines the latest materials and manufacturing technologies in offering the highest quality competitively priced Trunnion Ball Valve available. Engineered to the latest standards, the TMBV addresses design, safety, and quality issues that have become prominent in ensuring valve performance and environmental protection.

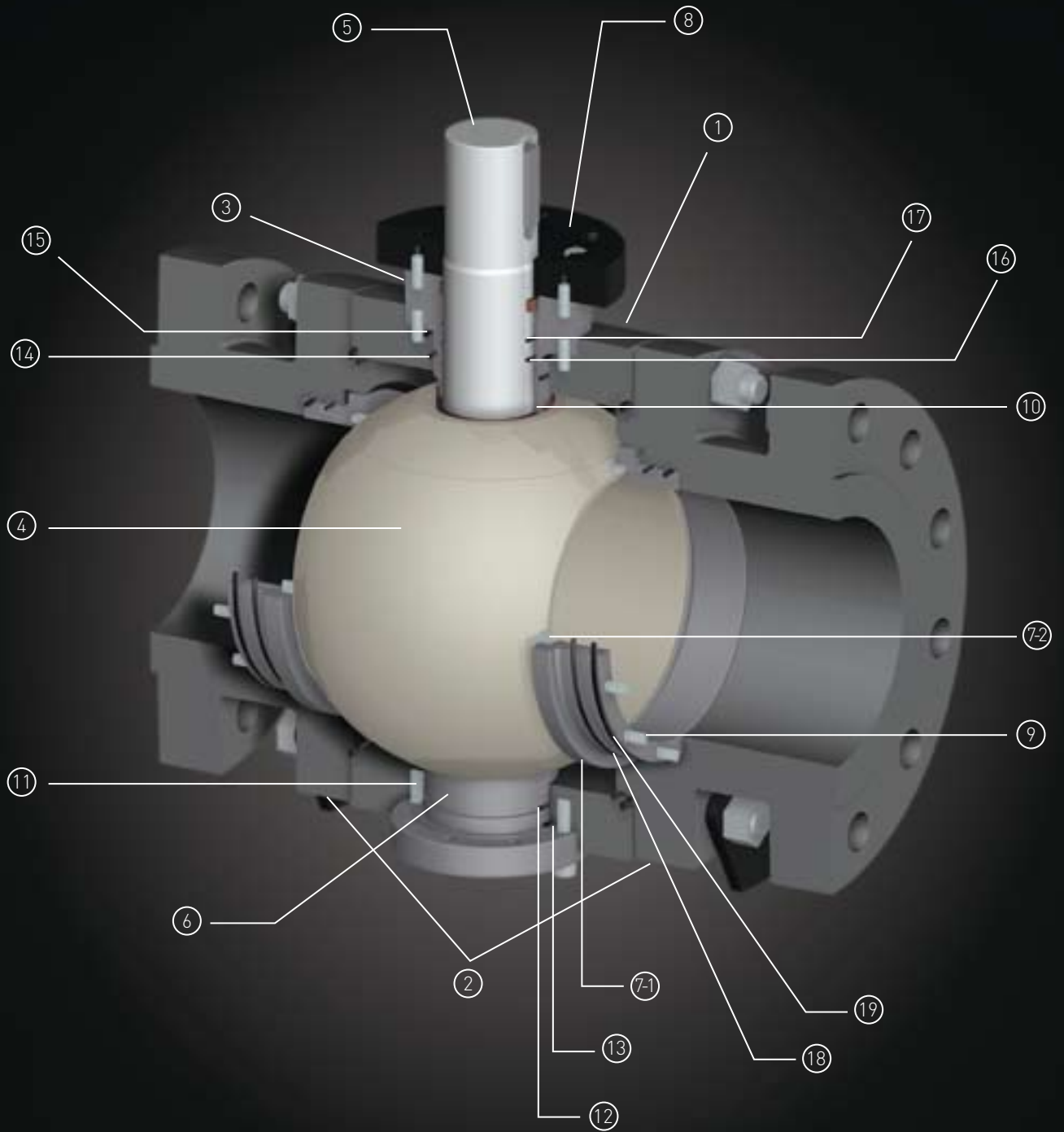
The Accuseal® TMBV has a wide variety of applications including gas and liquids pipelines, offshore platforms, tank farms, meter stations, chemical and refining processes.

The Accuseal® TMBV is manufactured to the stringent requirements of API 6D and ISO 9001.

DESIGN FEATURES

- Trunnion Design for tight shutoff and low operating torques
- Double Block and Bleed Bi-Directional Seating for added safety and piping economy
- 3-Piece Forged Body and End Connections for pressure retaining integrity
- Dual Seals at all pressure retaining boundaries for positive sealing to atmosphere and ensuring fire safety
- Blow Out Proof Stem in accordance with ASME B16.34 for maximum safety at high pressures
- Heavy Duty Metal Trunnion and Stem Bearings resulting in lower operating torque and maximized seat life
- Fire tested to API 607: 2005 5th Edition/ISO 10497-5: 2004 2nd Edition for reliable shutoff in emergency conditions
- Protected Anti-Static Devices between the ball/trunnion and the stem/bonnet ensures electric continuity preventing damage from static buildup
- ISO 5211 Compliant Top Mounting Flange for ease of standardized automation

GENERAL DESCRIPTION
FOR ACCUSEAL® TMBV





BILLS OF MATERIAL

	PART	A105/ENP	A105/316	LF2/ENP	LF2/316
1	BODY	ASTM A105	ASTM A105	ASTM A350 Gr. LF2	ASTM A350 Gr. LF2
2	ADAPTER	ASTM A105	ASTM A105	ASTM A350 Gr. LF2	ASTM A350 Gr. LF2
3	BONNET	ASTM A105	ASTM A105	ASTM A350 Gr. LF2	ASTM A350 Gr. LF2
4	BALL	A105+ENP	ASTM A276 TYPE 316	LF2+ENP	ASTM A276 TYPE 316
5	STEM	ASTM A182 F6G	ASTM A182 F316	ASTM A182 F6G	ASTM A182 F316
6	TRUNNION	A105+ENP	ASTM A276 TYPE 316	LF2+ENP	ASTM A276 TYPE 316
7-1	SEAT RING	A105+ENP	ASTM A276 TYPE 316	LF2+ENP	ASTM A276 TYPE 316
7-2	SEAT INSERT	DEVLON	DEVLON	DEVLON	DEVLON
8	TOP COVER	ASTM A105	ASTM A105	ASTM A350 Gr. LF2	ASTM A350 Gr. LF2
9	SEAT SPRING	INCONEL X-750	INCONEL X-750	INCONEL X-750	INCONEL X-750
10	STEM BEARING	PTFE	PTFE	PTFE	PTFE
11	TRUNNION BEARING	DU	DU	DU	DU
12	TRUNNION SEAL	HNBR	HNBR	HNBR	HNBR
13	TRUNNION SUB-SEAL	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE
14	BONNET SEAL	HNBR	HNBR	HNBR	HNBR
15	BONNET SUB-SEAL	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE
16	STEM SEAL	HNBR	HNBR	HNBR	HNBR
17	STEM SUB-SEAL	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE
18	SEAT SEAL	HNBR	HNBR	HNBR	HNBR
19	SEAT SUB-SEAL	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE

APPLICABLE DESIGN STANDARDS

API American Petroleum Institute

6D Specification for Pipeline Valves

598 Valve Inspection and Test

607 Fire Test for Soft Seated Quarter Turn Valves

ASME American Society of Mechanical Engineers

B16.5 Steel Pipe Flanges and Flanged Fittings

B16.10 Face to Face and End to End Dimensions of Ferrous Valves

B16.34 Steel Valves – Flanged and Butt Welding Ends

B31.4 Liquid Petroleum Transportation Piping Systems

B31.8 Gas Transmission and Distribution Piping Systems

ISO International Organization for Standardization

ISO 9001-2000 Quality Systems for Design/Development, Production, Installation, Servicing

ISO 5211 Topworks for Mounting Dimensions

BS British Standard

BS 5351 Steel Ball Valves for the Petroleum, Petrochemical, and Allied Industries

MSS Manufacturers Standardization Society

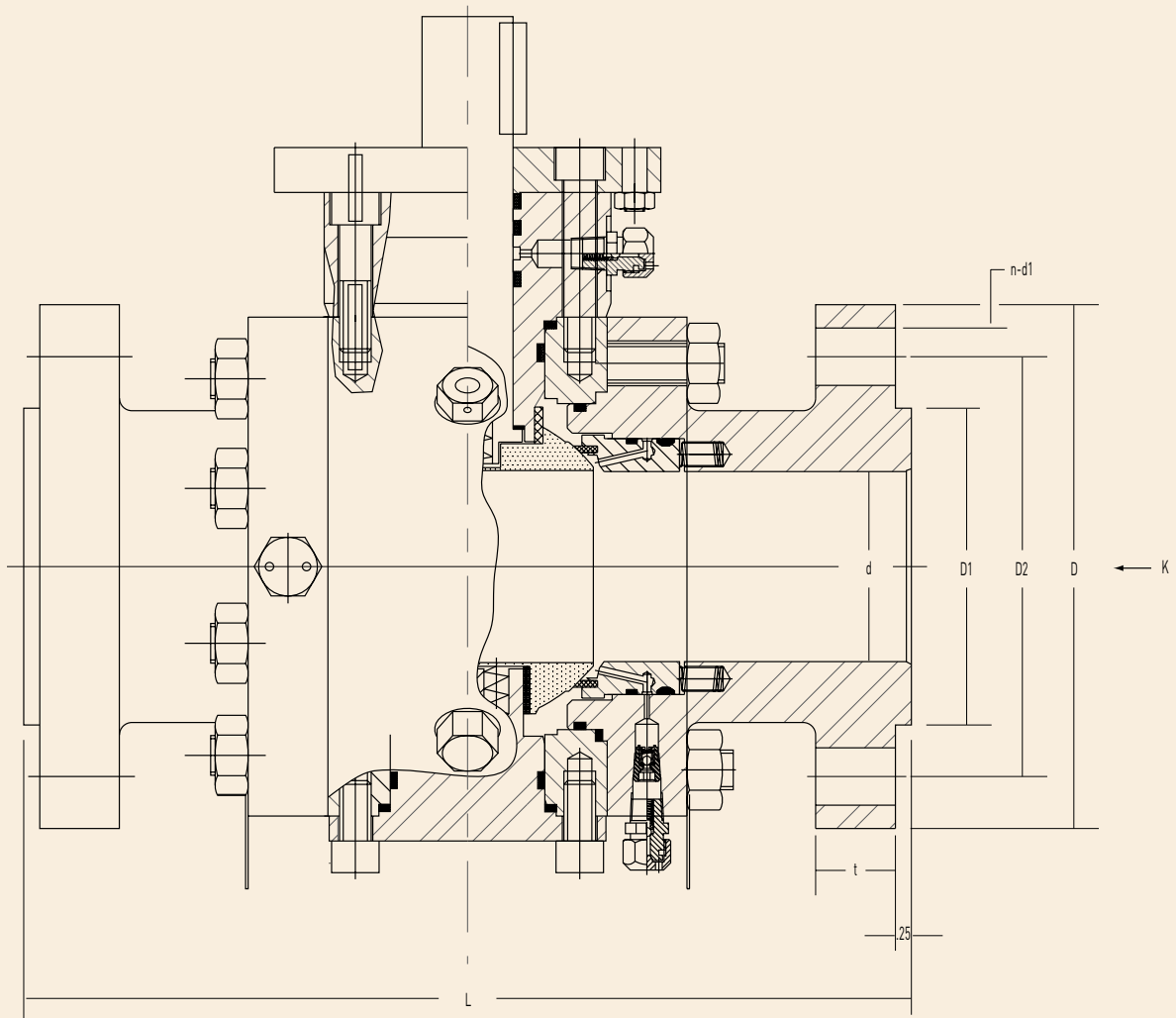
SP 25 Standard Marking System for Valves, Fittings, flanges, and Unions

SP 45 Bypass and Drain connection Standard

NACE National Association of Corrosion Engineers

MR0175 Sulfide Stress Cracking Resistant Metallic Materials for Oilfield Equipment

FULL DIMENSIONAL TABLE



CLASS 150 REDUCED PORT

SIZE		L		D		D1		D2		t		n	d1		d		WT	
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	#	in	mm	in	mm	lbs	kgs
2	50	7.01	178	5.98	152	3.62	92	4.74	120	0.63	16	4	0.75	19	1.50	51	42	19
3	75	7.99	203	7.48	190	5.00	127	6.00	152	0.75	19	4	0.75	19	2.01	76	53	24
4	100	9.02	229	9.02	229	6.18	157	7.50	190	0.94	24	8	0.75	19	2.99	102	97	44
6	150	15.51	394	10.98	279	8.50	216	9.49	241	1.02	26	8	0.87	22	4.02	152	179	81
8	200	17.99	457	13.50	343	10.63	270	11.75	298	1.13	28	8	0.87	22	5.98	203	406	184
10	250	20.98	533	15.98	406	12.76	324	14.25	362	1.19	30	12	1.00	25	7.99	254	796	361
12	300	24.02	610	19.02	483	15.00	381	17.00	431	1.26	32	12	1.00	25	10.00	305	1,378	625
14	350	27.01	686	20.98	533	16.26	413	18.74	476	1.38	35	12	1.14	29	12.01	337	1,920	871
16	400	30.00	762	23.50	597	18.50	470	21.26	540	1.46	37	16	1.14	29	13.27	387	2,227	1,010
18	450	34.02	864	25.00	635	20.98	533	22.76	578	1.50	38	16	1.26	32	15.24	438	3,210	1,456
20	500	35.98	914	27.52	699	22.99	584	25.00	635	1.61	41	20	1.26	32	17.24	489	4,336	1,967

**CLASS 150 FULL PORT**

SIZE		L		D		D1		D2		t		n	d1		d		WT	
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	#	in	mm	in	mm	lbs	kgs
2	50	7.01	178	5.98	152	3.62	92	4.74	120	0.63	16	4	0.75	19	2.01	51	43	19
3	75	7.99	203	7.48	190	5.00	127	6.00	152	0.75	19	4	0.75	19	2.99	76	80	36
4	100	9.02	229	9.02	229	6.18	157	7.50	190	0.94	24	8	0.75	19	4.02	102	132	60
6	150	15.51	394	10.98	279	8.50	216	9.49	241	1.02	26	8	0.87	22	5.98	152	364	165
8	200	17.99	457	13.50	343	10.63	270	11.75	298	1.13	28	8	0.87	22	7.99	203	728	330
10	250	20.98	533	15.98	406	12.76	324	14.25	362	1.19	30	12	1.00	25	10.00	254	1,221	554
12	300	24.02	610	19.02	483	15.00	381	17.00	431	1.26	32	12	1.00	25	12.01	305	1,770	803
14	350	27.01	686	20.98	533	16.26	413	18.74	476	1.38	35	12	1.14	29	13.27	337	2,094	950
16	400	30.00	762	23.50	597	18.50	470	21.26	540	1.46	37	16	1.14	29	15.24	387	3,053	1,385
18	450	34.02	864	25.00	635	20.98	533	22.76	578	1.50	38	16	1.26	32	17.24	438	4,189	1,900
20	500	35.98	914	27.52	699	22.99	584	25.00	635	1.61	41	20	1.26	32	19.25	489	4,991	2,264

CLASS 300 REDUCED PORT

SIZE		L		D		D1		D2		t		n	d1		d		WT	
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	#	in	mm	in	mm	lbs	kgs
2	50	8.50	216	6.50	165	3.62	92	5.00	127	0.91	23	8	0.75	19	2.01	51	47	21
3	75	11.14	283	8.27	210	5.00	127	6.61	168	1.10	28	8	0.87	22	2.99	76	74	33
4	100	12.01	305	10.00	254	6.18	157	7.87	200	1.22	31	8	0.87	22	4.02	102	123	56
6	150	15.87	403	15.52	318	8.50	216	10.63	270	1.46	37	12	0.87	22	5.98	152	256	116
8	200	19.76	502	15.00	381	10.63	270	12.99	330	1.65	42	12	1.00	25	7.99	203	485	220
10	250	22.36	568	17.52	445	12.76	324	15.26	387	1.89	48	16	1.13	28	10.00	254	985	447
12	300	25.51	648	20.51	521	15.00	381	17.76	451	2.01	51	16	1.23	31	12.01	305	1,446	656
14	350	30.00	762	22.99	584	16.26	413	20.26	514	2.13	54	20	1.26	32	13.27	337	2,154	977
16	400	32.99	838	25.51	648	18.50	470	22.50	571	2.28	58	20	1.26	32	15.24	387	2,919	1,324
18	450	35.98	914	27.99	711	20.98	533	24.74	628	2.32	59	24	1.38	35	17.24	438	3,494	1,585
20	500	39.02	991	30.51	775	22.99	584	27.01	686	2.44	62	24	1.38	35	19.25	489	5,203	2,360

CLASS 300 FULL PORT

SIZE		L		D		D1		D2		t		n	d1		d		WT	
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	#	in	mm	in	mm	lbs	kgs
2	50	8.50	216	6.50	165	3.62	92	5.000	127	0.91	23	8	0.75	19	2.01	51	52	23
3	75	11.14	283	8.27	210	5.00	127	6.61	168	1.10	28	8	0.87	22	2.99	76	101	46
4	100	12.01	305	10.00	254	6.18	157	7.87	200	1.22	31	8	0.87	22	4.02	102	194	88
6	150	15.87	403	12.52	318	8.50	216	10.63	270	1.46	37	12	0.87	22	5.98	152	406	184
8	200	19.76	502	15.00	381	10.63	270	12.99	330	1.65	42	12	1.00	25	7.99	203	811	368
10	250	22.36	568	17.52	445	12.76	324	15.26	387	1.89	48	16	1.13	28	10.00	254	1,301	590
12	300	25.51	648	20.51	521	15.00	381	17.76	451	2.01	51	16	1.25	31	12.01	305	1,921	876
14	350	30.00	762	22.99	584	16.26	413	20.26	514	2.13	54	20	1.26	32	13.27	337	2,584	1,172
16	400	32.99	838	25.51	648	18.50	470	22.50	571	2.28	58	20	1.26	32	15.24	387	3,298	1,496
18	450	35.98	914	27.99	711	20.98	533	24.74	628	2.32	59	24	1.38	35	17.24	438	4,916	2,230
20	500	39.02	991	30.51	775	22.99	584	27.01	686	2.44	62	24	1.38	35	19.25	489	5,886	2,670

FULL DIMENSIONAL TABLE

CLASS 600 REDUCED PORT

SIZE		L		D		D1		D2		t		n	d1		d		WT	
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	#	in	mm	in	mm	lbs	kgs
2	50	11.50	292	6.50	165	3.62	92	5.00	127	1.02	26	8	0.75	19	2.01	51	79	36
3	75	14.02	356	8.27	210	5.00	127	6.61	168	1.26	32	8	0.87	22	2.99	76	107	49
4	100	17.01	432	10.75	273	6.18	157	8.50	216	1.54	39	8	0.98	25	4.02	102	220	100
6	150	22.01	559	14.02	356	8.50	216	11.50	292	1.89	48	12	1.10	28	5.98	152	392	178
8	200	25.98	660	16.50	419	10.63	270	13.74	349	2.20	56	12	1.26	32	7.99	203	723	328
10	250	30.98	787	20.00	508	12.76	324	17.01	432	2.52	64	16	1.38	35	10.00	254	1,279	580
12	300	32.99	838	22.01	559	15.00	381	19.25	489	2.64	67	20	1.38	35	12.01	305	1,949	884
14	350	35.00	889	23.74	603	16.26	413	20.75	527	2.76	70	20	1.50	38	13.27	337	3,146	1,427
16	400	39.02	991	27.01	686	18.50	470	23.74	603	3.03	77	20	1.73	44	15.24	387	3,384	1,535
18	450	42.99	1092	29.25	743	20.98	533	25.75	654	3.27	83	20	1.73	44	17.24	438	4,674	2,120
20	500	47.24	1200	32.01	813	22.99	584	28.50	724	3.50	89	24	1.73	44	19.25	489	6,691	3,035
24	600	55.00	1397	37.01	940	27.24	692	32.99	838	4.02	102	24	2.05	52	23.27	591	9,414	4,270
30	750	65.51	1664	44.49	1130	33.74	857	40.25	1022	4.53	115	28	2.13	54	28.98	736	16,755	7,600
36	900	82.60	2098	51.77	1315	40.25	1022	47.01	1194	4.88	124	28	2.64	67	34.49	876	22,707	10,300

CLASS 600 FULL PORT

SIZE		L		D		D1		D2		t		n	d1		d		WT	
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	#	in	mm	in	mm	lbs	kgs
2	50	11.50	292	6.50	165	3.62	92	5.00	127	1.02	26	8	0.75	19	2.01	51	84	38
3	75	14.02	356	8.27	210	5.00	127	6.61	168	1.26	32	8	0.87	22	2.99	76	168	76
4	100	17.01	432	10.75	273	6.18	157	8.50	216	1.54	39	8	0.98	25	4.02	102	287	130
6	150	22.01	559	14.02	356	8.50	216	11.50	292	1.89	48	12	1.10	28	5.98	152	589	267
8	200	25.98	660	16.50	419	10.63	270	13.74	349	2.20	56	12	1.26	32	7.99	203	1,054	474
10	250	30.98	787	20.00	508	12.76	324	17.01	432	2.52	64	16	1.38	35	10.00	254	1,786	810
12	300	32.99	838	22.01	559	15.00	381	19.25	489	2.64	67	20	1.38	35	12.01	305	2,793	1,267
14	350	35.00	889	23.74	603	16.26	413	20.75	527	2.76	70	20	1.50	38	13.27	337	3,020	1,370
16	400	39.02	991	27.01	686	18.50	470	23.74	603	3.03	77	20	1.73	44	15.24	387	4,228	1,918
18	450	42.99	1092	29.25	743	20.98	533	25.75	654	3.27	83	20	1.73	44	17.24	438	6,217	2,820
20	500	47.24	1200	32.01	813	22.99	584	28.50	724	3.50	89	24	1.73	44	19.25	489	8,267	3,750
24	600	55.00	1397	37.01	940	27.24	692	32.99	838	4.02	102	24	2.05	52	23.27	591	13,779	6,250
30	750	65.51	1664	44.49	1130	33.74	857	40.25	1022	4.53	115	28	2.13	54	28.98	736	20,062	9,100
36	900	82.60	2098	51.77	1315	40.25	1022	47.01	1194	4.88	124	28	2.64	67	34.49	876	28,439	12,900

**CLASS 900 REDUCED PORT**

SIZE		L		D		D1		D2		t		n	d1		d		WT	
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	#	in	mm	in	mm	lbs	kgs
2	50	14.49	368	8.50	215	3.63	92.1	6.50	165	1.53	38	8	1.00	25	2.00	50	106	48
3	75	15.00	381	9.49	241	5.00	127	7.50	190	1.52	38	8	1.02	26	3.00	76	129	59
4	100	17.99	457	11.50	292	6.19	157	9.25	234	1.77	45	8	1.26	32	4.07	103	265	120
6	150	24.02	610	15.00	381	8.50	216	12.50	317	2.20	56	12	1.26	32	6.00	152	540	245
8	200	29.02	737	18.50	470	10.63	270	15.50	393	2.52	64	12	1.50	38	8.00	203	970	440
10	250	32.99	838	21.46	545	12.76	324	18.50	470	2.80	71	16	1.50	38	10.00	254	1,634	740
12	300	37.99	965	24.02	610	15.00	381	21.00	533	3.19	81	20	1.50	38	12.00	304	2,480	1,125

CLASS 900 FULL PORT

SIZE		L		D		D1		D2		t		n	d1		d		WT	
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	#	in	mm	in	mm	lbs	kgs
2	50	8.50	368	3.63	215	3.63	92	6.50	165	1.53	38	8	1.00	25	2.00	50	115	52
3	75	9.49	381	5.00	241	5.00	127	7.50	190	1.52	38	8	1.02	26	3.00	76	216	98
4	100	11.50	457	6.19	292	6.19	157	9.25	234	1.77	45	8	1.26	32	4.07	103	386	175
6	150	15.00	610	8.50	381	8.50	216	12.50	317	2.20	56	12	1.26	32	6.00	152	783	355
8	200	18.50	737	10.63	470	10.63	270	15.50	393	2.52	64	12	1.50	38	8.00	203	1,386	630
10	250	21.46	838	12.76	545	12.76	324	18.50	470	2.80	71	16	1.50	38	10.00	254	2,138	970
12	300	24.02	965	15.00	610	15.00	381	21.00	533	3.19	81	20	1.50	38	12.00	304	3,060	1,388

CLASS 1500 REDUCED PORT

SIZE		L		D		D1		D2		t		n	d1		d		WT	
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	#	in	mm	in	mm	lbs	kgs
2	50	14.49	368	8.50	216	6.50	92	6.50	165	1.54	39	8	1.02	26	2.00	50	154	70
3	75	18.50	470	10.50	267	8.00	127	8.00	203	4.89	48	8	1.26	32	3.00	76	220	100
4	100	21.50	546	12.24	311	9.50	158	9.50	241	2.13	54	8	1.38	35	4.07	103	448	203
6	150	27.76	705	15.51	394	12.50	248	12.50	317	3.27	83	12	1.50	38	5.75	146	851	386
8	200	32.76	832	19.02	483	15.50	194	15.50	393	3.66	93	12	1.75	44	7.64	194	1,556	706
10	250	39.02	991	23.03	585	19.00	241	19.00	482	4.29	109	12	2.00	50	9.49	241	2,837	1,287
12	300	44.49	1130	26.50	673	22.50	381	22.50	571	4.92	125	16	2.13	54	11.38	289	3,968	1,800

CLASS 1500 FULL PORT

SIZE		L		D		D1		D2		t		n	d1		d		WT	
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	#	in	mm	in	mm	lbs	kgs
2	50	14.49	368	8.50	216	4.88	124	6.50	165.1	1.54	39	8	1.02	26	2.00	50.8	169	77
3	75	18.50	470	10.51	267	6.61	168	8.00	203.2	1.89	48	8	1.26	32	3.00	76.2	386	175
4	100	21.50	546	12.24	311	7.64	194	9.50	241.3	2.13	54	8	1.38	35	4.07	103.3	622	282
6	150	27.76	705	15.51	394	9.76	248	12.50	317.5	3.27	83	12	1.50	38	5.75	146	1,279	580

TOP MOUNTING DIMENSIONS AND STEM TORQUE

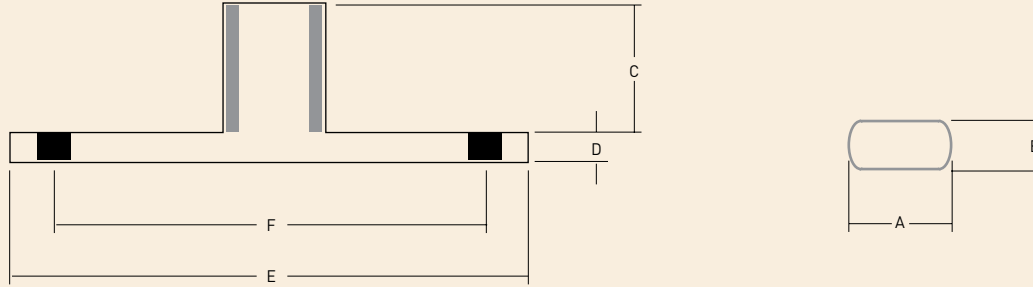


FIG.1 (2"-6", 8"CL150-300)

Size	Class	A		B		C		D		E		F		*Torque	
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in-lbs	kg
2	150	0.87	22	0.56	14	0.98	25	0.39	10	4.13	104	-	-	531	60
	300	0.87	22	0.56	14	1.18	30	0.39	10	4.13	104	-	-	841	95
	600	0.87	22	0.56	14	1.57	40	0.71	18	5.91	150	4.92	125	1,1326	150
	900	0.87	22	0.56	14	1.57	40	0.71	18	5.91	150	4.92	125	1,948	220
	1500	1.23	31	0.75	19	1.57	40	1.18	30	5.91	150	4.92	125	3,718	420
3	150	0.87	22	0.56	14	1.18	30	0.39	10	4.33	110	-	-	1,239	140
	300	1.23	31	0.75	19	1.57	40	0.71	18	4.33	110	-	-	1,948	220
	600	1.38	35	0.99	25	1.97	50	0.79	20	6.22	158	5.43	138	2,921	330
	900	1.38	35	0.99	25	1.97	50	0.94	24	6.69	170	5.43	138	4,338	490
	1500	1.50	38	0.99	25	1.97	50	1.18	30	6.69	170	5.51	140	7,171	810
4	150	1.23	31	0.78	19	1.97	50	0.79	20	5.71	145	-	-	1,948	220
	300	1.23	31	0.75	19	1.97	50	0.79	20	5.71	145	-	-	3,010	340
	600	1.50	38	0.99	25	1.97	50	0.94	24	6.89	175	5.51	140	4,072	460
	900	1.50	38	0.99	25	1.97	50	1.18	30	6.89	175	5.51	140	7,348	830
	1500	1.77	45	1.24	31	1.97	50	1.18	30	8.27	210	6.50	165	13,280	1500
6	150	1.99	50	1.24	31	1.97	50	1.18	30	6.89	175	5.51	140	3,364	380
	300	1.99	50	1.24	31	1.97	50	1.18	30	6.89	175	5.51	140	5,400	610
	600	1.99	50	1.24	31	1.97	50	1.18	30	6.89	175	5.51	140	8,499	960
	900	1.99	50	1.24	31	1.97	50	1.18	30	8.27	210	6.50	165	16,644	1880
	1500	2.79	63	1.74	44	2.76	70	1.18	30	11.81	300	10.00	254	28,772	3250
8	150	1.99	50	1.24	31	2.95	70	1.18	30	8.27	210	6.50	165	5,666	640
	300	2.49	63	1.74	44	2.95	70	1.18	30	8.27	210	6.50	165	10,447	1180
	600	2.87	72	3.19	81	3.54	90	1.18	30	8.27	210	6.50	165	17,706	2000
	900	2.87	72	3.19	81	3.74	95	1.57	40	11.81	300	10.00	254	31,871	3600
	1500	2.87	72	3.19	81	3.74	95	1.57	40	11.81	300	10.00	254	48,692	5500
10	150	2.87	72	3.19	81	2.95	75	1.18	30	11.81	300	10.00	254	10,624	1200
	300	2.87	72	3.19	81	2.95	75	1.18	30	11.81	300	10.00	254	018,768	2120
	600	3.24	82	3.61	91	3.54	90	1.18	30	11.81	300	10.00	254	31,694	3580
	900	3.24	82	3.61	91	3.74	95	1.18	30	11.81	300	10.00	254	46,744	5280
	1500	3.24	82	3.61	91	3.74	95	1.38	35	11.81	300	10.00	254	66,929	7560

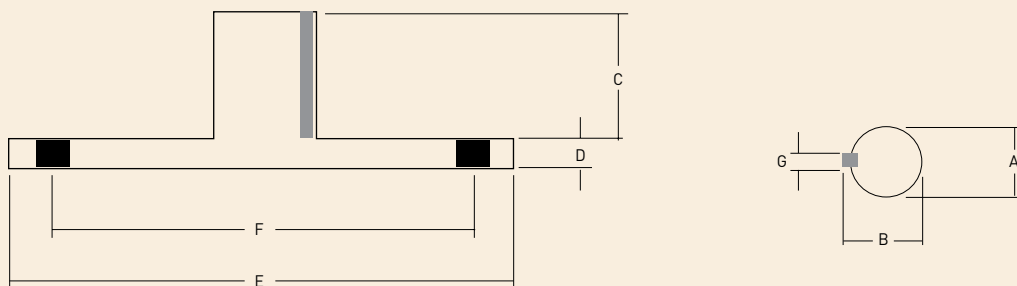
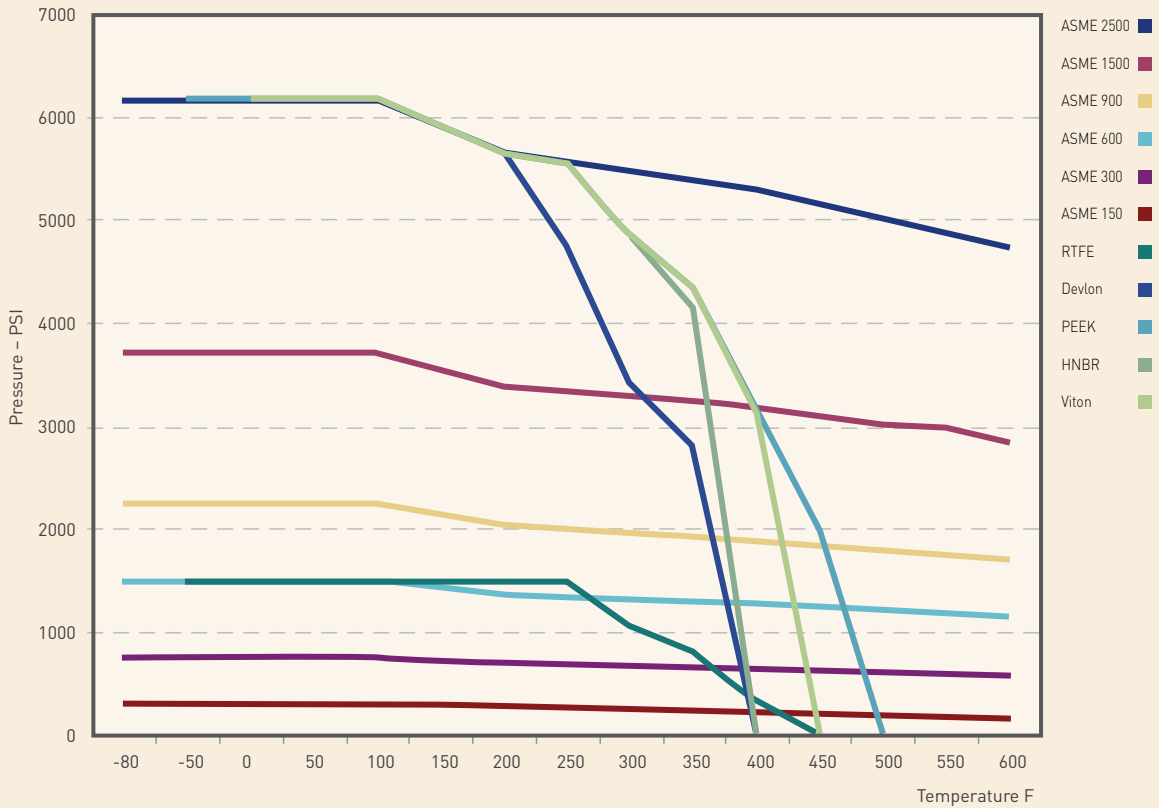


FIG.1 (8"CL600-900. 6" and above)

Size	Class	A		B		C		D		E		F		*Torque	
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in-lbs	kg
12	150	3.24	82	3.61	91	3.74	95	1.18	30	11.81	300	10.00	254	14,696	1660
	300	3.24	82	3.61	91	3.74	95	1.18	30	11.81	300	10.00	254	22,044	2490
	600	3.99	101	4.41	112	4.13	105	1.18	30	11.81	300	10.00	254	47,718	5390
	900	3.99	101	4.41	112	4.13	105	1.38	35	13.78	350	11.73	298	65,335	7380
	1500	3.99	101	4.41	112	4.13	105	1.38	35	13.78	350	11.73	298	94,727	10700
14	150	3.24	82	3.61	91	3.54	90	1.30	33	11.81	300	10.00	254	24,346	2750
	300	3.24	82	3.61	91	3.54	90	1.30	33	11.81	300	10.00	254	31,694	3580
	600	3.99	101	4.41	112	4.13	105	1.30	33	13.78	350	11.73	298	57,722	6520
	900	3.99	101	4.41	112	4.13	105	1.38	35	13.78	350	11.73	298	87,202	9850
	1500	4.33	110	4.73	120	4.53	115	1.38	35	13.78	350	11.73	298	145,012	16380
16	150	3.24	82	3.61	91	3.74	95	1.30	33	11.81	300	10.00	254	32,313	3650
	300	3.24	82	3.61	91	3.74	95	1.30	33	11.81	300	10.00	254	49,577	5600
	600	3.99	101	4.41	112	4.13	105	1.30	33	13.23	336	11.73	298	76,888	8685
	900	4.33	110	4.73	120	4.53	115	1.38	35	13.78	350	11.73	298	112,876	12750
	1500	4.33	110	4.73	120	4.53	115	1.38	35	13.78	350	11.73	298	172,634	19500
18	150	3.99	101	4.41	112	3.94	100	1.30	33	13.23	336	11.73	298	42,937	4850
	300	3.99	101	4.41	112	3.94	100	1.30	33	13.23	336	11.73	298	69,408	7840
	600	4.33	110	4.73	120	4.13	105	1.38	35	13.78	350	11.73	298	118,188	13350
	900	4.33	110	4.73	120	4.53	115	1.38	35	13.78	350	11.73	298	176,883	19980
20	150	3.99	101	4.41	112	4.53	115	1.38	35	13.78	350	11.73	298	48,337	5460
	300	4.33	110	4.73	120	4.53	115	1.38	35	13.78	350	11.73	298	84,723	9570
	600	4.33	110	4.73	120	4.53	115	1.38	35	13.78	350	11.73	298	163,781	18500
	900	4.72	120	5.24	133	4.53	115	1.57	40	1.57	415	14.02	356	233,001	26320
24	150	4.33	110	4.73	120	4.53	115	1.38	35	13.78	350	11.73	298	97,117	10970
	300	4.33	110	4.73	120	4.53	115	1.38	35	13.78	350	11.73	298	155,636	17580
	600	4.72	120	5.24	133	4.53	115	1.97	50	18.70	475	15.98	406	273,381	30880
	900	5.91	150	6.55	166	7.87	200	1.97	50	22.05	560	19.02	483	375,102	42370
30	150	4.33	110	4.73	120	7.09	180	1.38	35	13.78	350	13.78	298	164,489	18580
	300	4.72	120	5.24	133	7.09	180	1.57	40	1.57	415	16.34	356	243,103	27460
	600	5.91	150	6.55	166	7.87	200	1.97	50	1.97	560	22.05	483	370,321	41830
36	150	4.72	120	5.24	133	7.09	180	1.57	40	1.57	415	16.34	356	199,901	22580
	300	4.72	120	5.24	133	7.87	200	1.97	50	1.57	415	16.34	356	302,596	34180
	600	5.91	150	6.55	166	7.87	200	1.97	50	1.97	560	22.05	483	462,764	52270

* denotes valve design operating torque. For powered actuators, an additional 25% minimum shall be added as safety factors.

PRESSURE TEMPERATURES



HOW TO ORDER ACCUSEAL® TRUNNION MOUNTED BALL VALVES

Example -216F-11-D-FP-H-GO

Trunnion Design, ANSI Class 600, Raised Face Flanged Ends, A105 Carbon Steel Body

Material, Carbon Steel 3 mil ENP Trim, Devlon Seats, HNBR Seals, Gear Operator

All Accuseal® Ball Valves are standard NACE MR0175 and Firesafe API 607

21	6	F	-	1	1	-	D	-	FP	-	H	-	GO
TYPE	PRESSURE CLASS	END CONNECTIONS		BODY MATERIAL	TRIM		SEAT INSERT		PORT		O'RING		OPERATOR
21=TRUNNION	1 = CLASS 150	F = RAISED FACE		1 = A105	1 = A105/ENP		D = DEVLON		RP = REDUCED PORT		H = HNBR		LO = LEVER OP
	3 = CLASS 300	W = BUTTWELD		2 = F316 SS	2 = 316 SS		N = NYLON		FP = FULL PORT		V = VITON		GO = GEAR OP
	6 = CLASS 600	J = RTJ		3 = LF2	3 = LF2/ENP		T = PTFE				B = BUNA		BS = BARE STEM
	9 = CLASS 900	X = SPECIAL			4 = 410/ENP		R = RTFE				E = EPDM		A = ACTUATOR
	15 = CLASS 1500				5 = 316/HC		P = PEEK				K = KALREZ		
	25 = CLASS 2500										A = AFLAS		



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Array warrants to each original buyer of products manufactured by Array that such products are free from defects in material and workmanship under normal use and service for a period of one (1) year from the date of shipment provided that no warranty is made in respect to: 1) any product which has been repaired or altered in such a way in Array's judgement, as to effect the product adversely, 2) any product which has in Array's judgement, been subject to negligence, accident or improper storage, 3) any product which has not been operated or maintained in accordance with normal practice and in conformity with recommendations and public specifications of Array.

Array's obligation under this warranty is limited to use reasonable efforts to repair, replace or at its option, refunding the purchase price. The cost of labor for installing

a repaired or replacement product shall be borne by the purchaser. Replacement parts provided under the terms of this warranty are warranted for the remainder of the warranty period of the products upon which they were installed to the same extent as if such parts were original components thereof. Warranty serviced provided hereunder do not assume any liability for damages caused by any delays involving warranty service.

For complete specification information, prices and name, address and telephone number of the Array representative nearest you, call or write to us at the address below.

FOR WARRANTY OR SHIPMENT INFORMATION:

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ballvalves@array.com

FOR SALES OR SPECIFICATION INFORMATION:

Attention: Sales Manager
ballvalves@array.com

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