

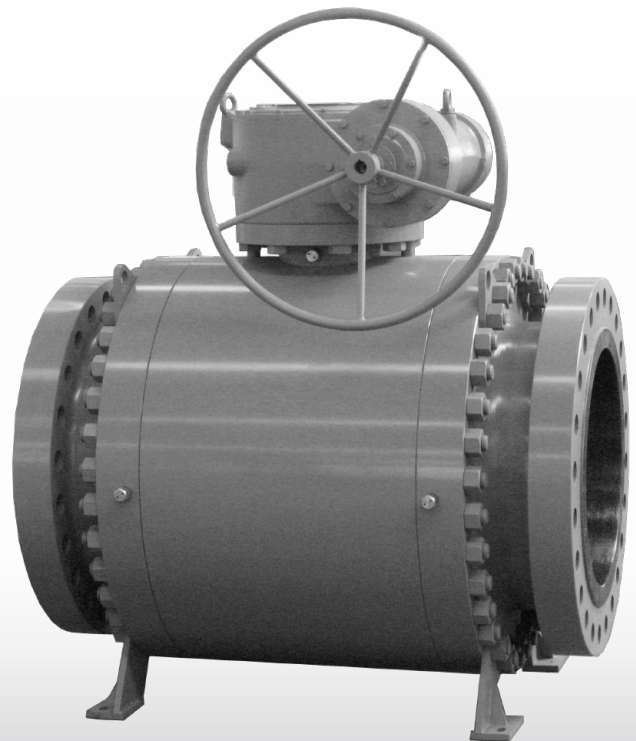


Trunnion Mounted Ball Valve



MODEL AOV-TMBV

American Oilfield Valves trunnion-mounted ball valve is ideal for pipeline, process, power, oil & gas and other flow control applications where quality, design, safety, and environmental protection is paramount.



Introduction

American Oilfield Valves MODEL AOV-TMBV Trunnion-mounted ball valve is engineered to the latest API, ISO and ASME standards and manufactured using best-in-class materials and technologies. The result is the highest quality and most competitively-priced trunnion-mounted ball valve available.

American Oilfield Valves addresses all of the safety, quality and design issues important for ensuring consistent field performance and environmental protection and are designed to provide superior performance in a variety of applications including offshore platforms, oil, gas and other liquids pipelines, tank farms, meter stations, chemical processing plants and refineries.

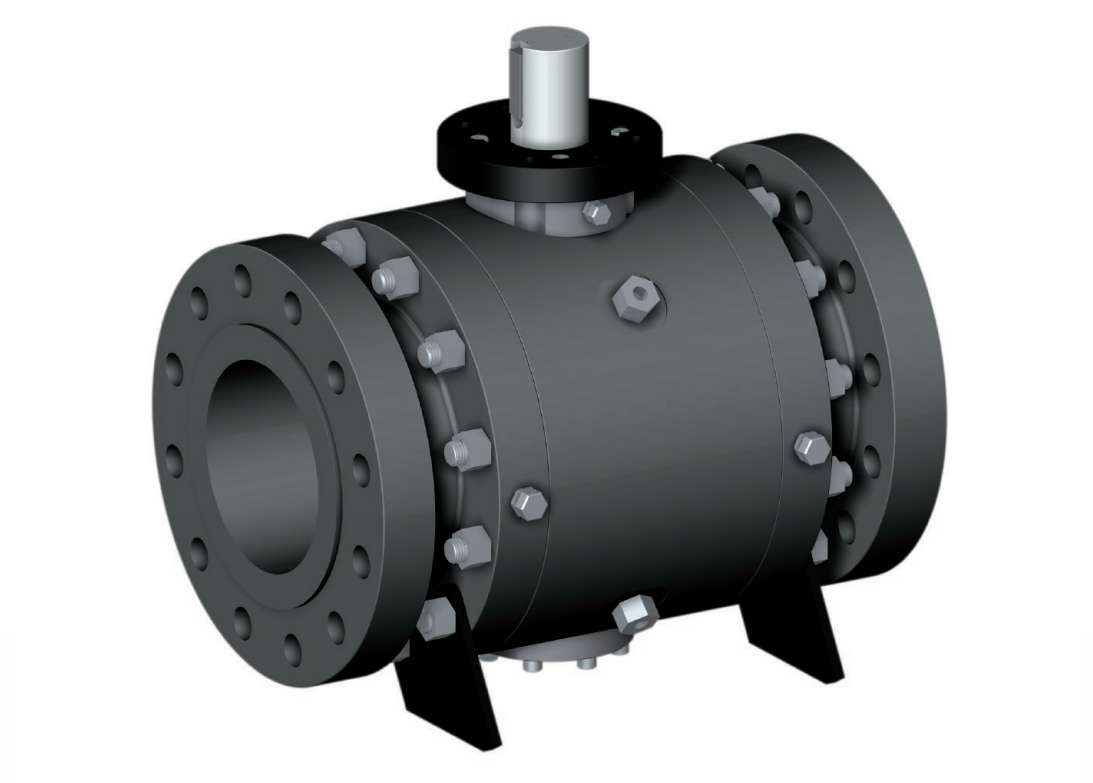
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MODEL AOV-TMBV - Trunnion Mounted Ball Valve

The MODEL AOV-TMBV Three-Piece, Trunnion Ball Valve

- 2”- 36” ANSI
- Class: 150, 300, 600, 900, 1500 & 2500
- In Full and Reduced Port

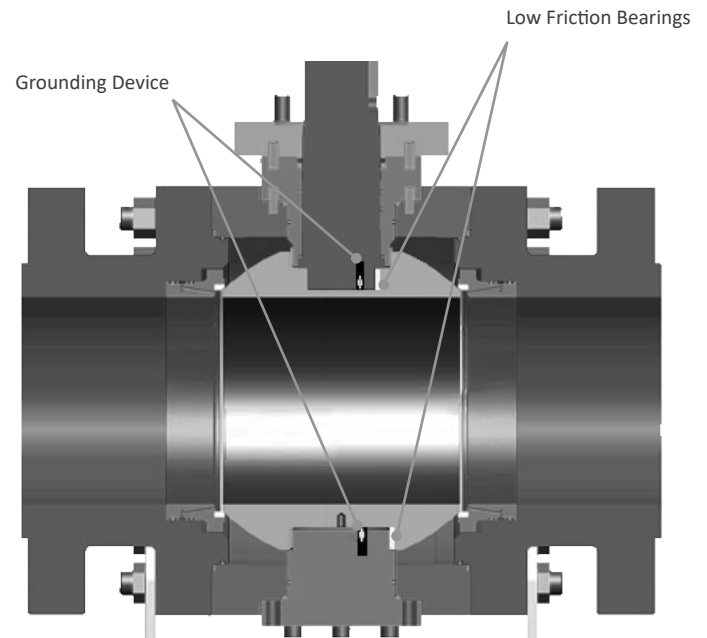


MAIN PARTS

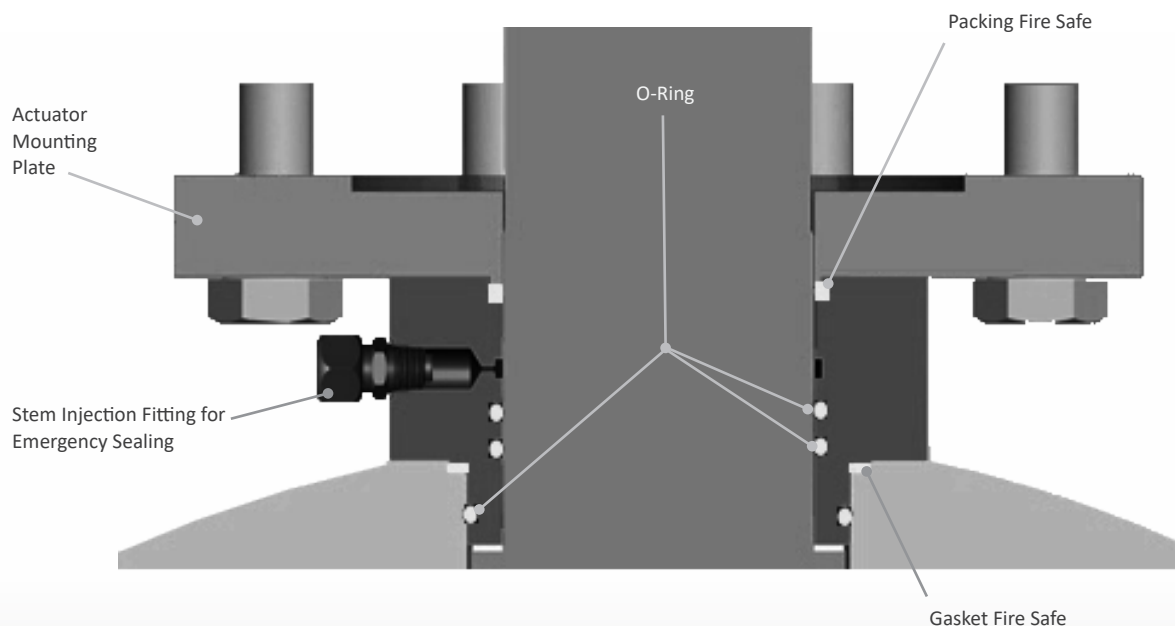
PART NAME	MATERIAL
BODY / ADAPTER	A105, LF2, 316, 316L, 304, 304L
BALL / STEM	316, 316L, 304, 304L, F6a, 17-4PH, CS+1mil ENP, CS+3mil ENP
SEAT	NYLON, DEVLON, PEEK

Ball Valve Main Features

- Body is made of three forgings, the individual parts are bolted together.
- Double block and bleed feature means that it's possible to bleed or block the cavity in fully closed or opened position.
- A large trunnion support design Ensures central positioning under the highest working pressure. Trunnion mounted ball permits ease of operation.
- Grounding device are supplied for positive anti-static between ball/stem and body. Corrosion resistant low friction bearings are supplied.

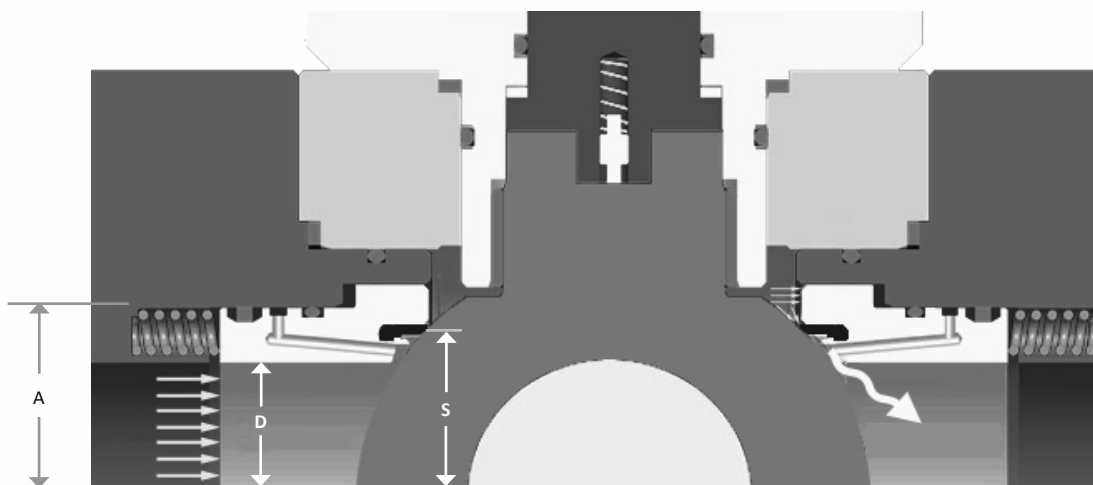
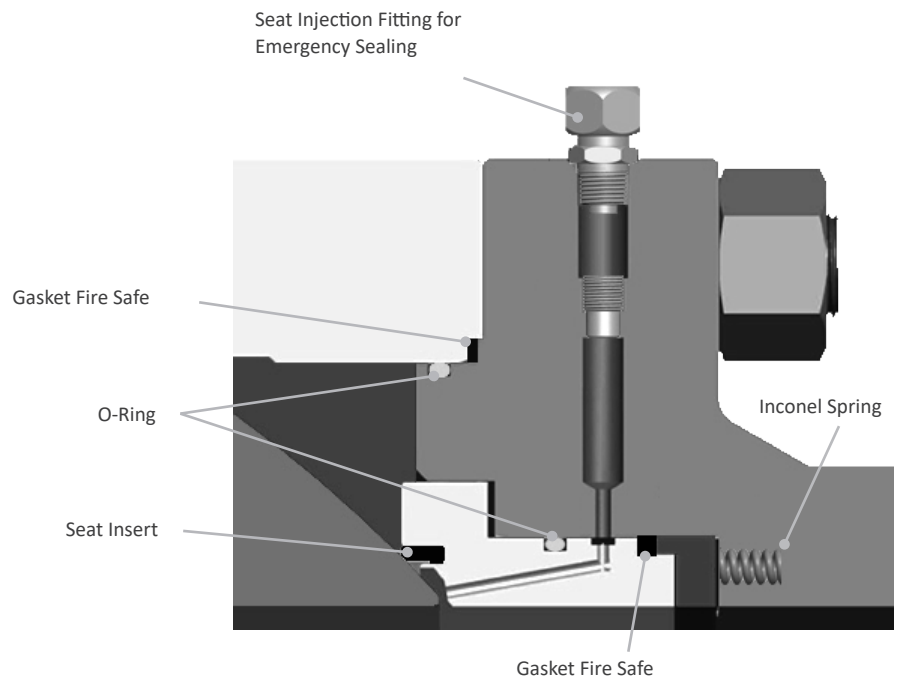


- Actuator mounting plate are machined and drilled ready for mounting actuator.
- Two set of O-ring plus fire safe packing on the stem/metal seat efficiently prevent leakage.



Ball Valve Main Features

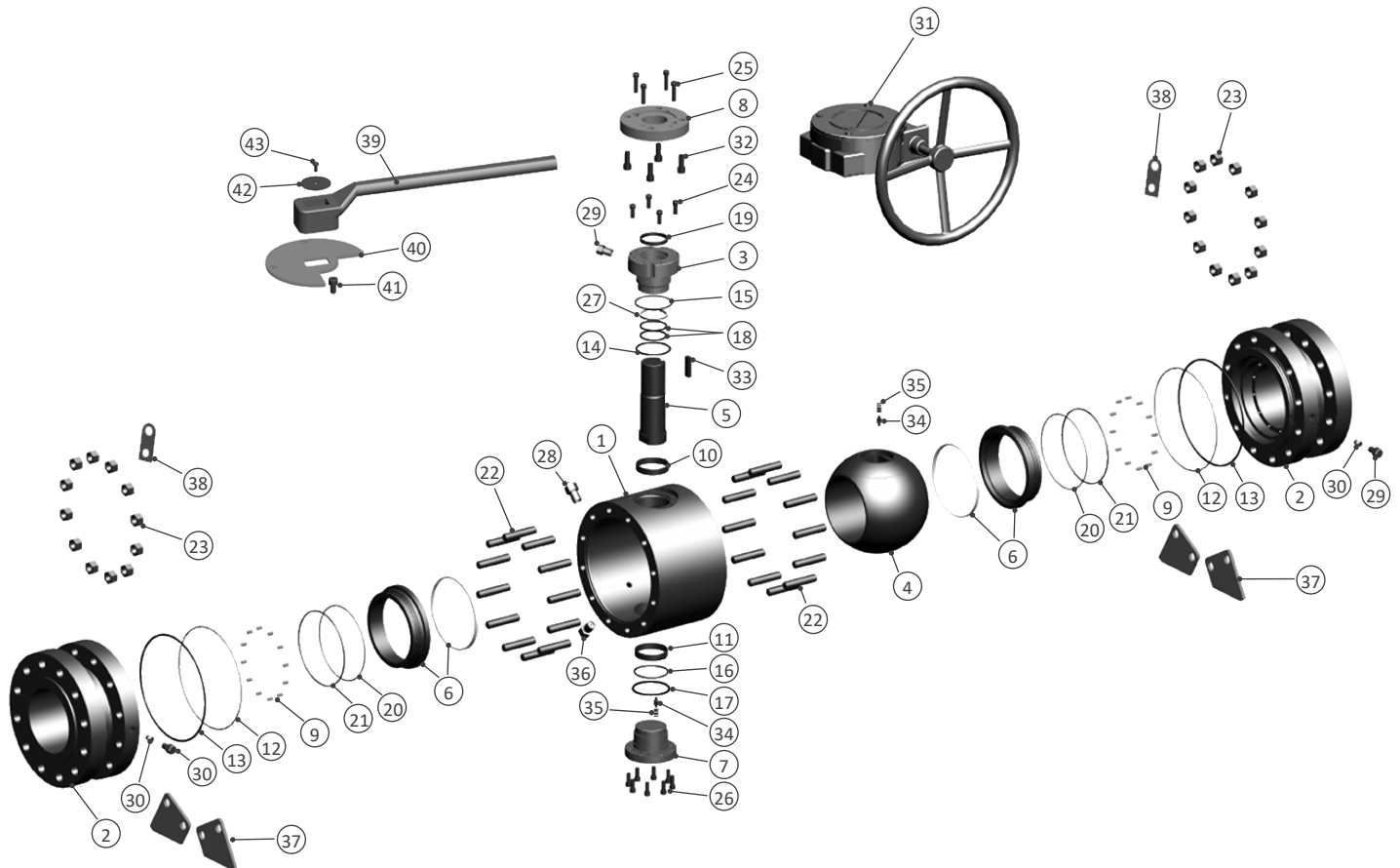
- Inconel spring force the seat with Nylon/DEVLON seal toward ball, creating seal on both up stream and down stream of valve.
- Sealant injection fittings for emergency stem or seat sealing are supplied.
- Seat inserts are contained within a one-piece metal seat ring. With no or very low line pressure, sealing between the seats and ball is achieved by seat springs. With higher line pressure, the line pressure, in conjunction with the spring load, forces the up-stream seat ring against the ball, which results in tighter sealing.
- Self relieving seat is designed to prevent excessive pressure buildup within the valve by automatically relieving pressure when body cavity pressure exceeds the spring load on the seats.
- Fire-safe design tested to API 607



$$(A^2 - D^2) > (S^2 - D^2)$$

MODEL AOV-TMBV Component Parts

MODEL AOV-TMBV 2"- 4" Class 600, 900, 1500 and 2500 | 3"-12" Class 150 and 300



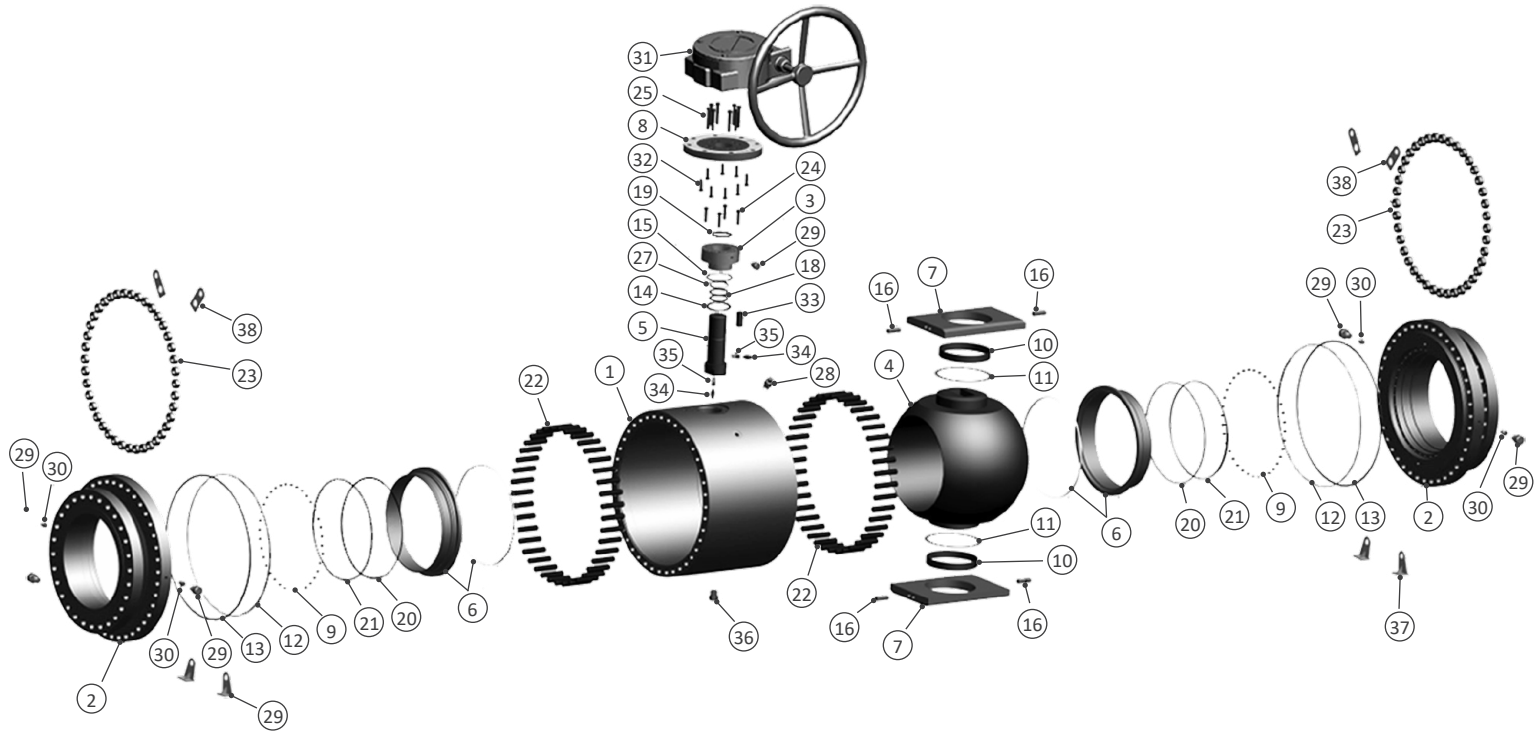
COMPONENT	DESCRIPTION
1	Body
2	Adapter
3	Bonnet
4	Ball
5	Stem
6	Seat Ring Sub Assembly
7	Trunnion
8	Top Cover
9	Seat Spring
10	Stem Bearing
11	Trunnion Bearing
12	Adapter Seal
13	Adapter Sub-Seal
14	Bonnet Seal
15	Bonnet Sub-Seal

COMPONENT	DESCRIPTION
16	Trunnion Seal
17	Trunnion Sub-Seal
18	Stem Seal
19	Stem Sub-Seal
20	Seat Seal
21	Seat Sub-Seal
22	Adapter Studs
23	Adapter Nuts
24	Bonnet Screw
25	Top Cover Screw
26	Trunnion Screw
27	Thrust Bearing-Stem
28	Bleed Valve
29	Injection Fitting
30	Check Valve

COMPONENT	DESCRIPTION
31	G.O.P
32	G.O.P Screw
33	Stem Key
34	Grounding Plunge
35	Grounding Spring
36	Drain Plug
37	Support Foot
38	Lifting lug
39	Handle
40	Stop Plate
41	Stop Plate Screw
42	Retainer
43	Handle Screw

MODEL AOV-TMBV Component Parts

MODEL AOV-TMBV 14"- 48" Class 150, 300 and 600 | 6"-24" Class 900, 1,500 and 2,500

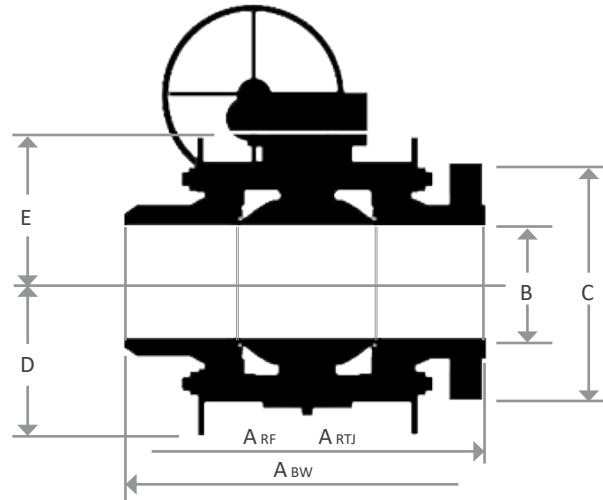


COMPONENT	DESCRIPTION
1	Body
2	Closure
3	Bonnet
4	Ball
5	Stem
6	Seat Ring Sub Assembly
7	Trunnion Support
8	Top Cover
9	Seat Spring
10	Trunnion Bearing
11	Thrust Bearing Ball
12	Closure Seal
13	Closure Sub-Seal
14	Bonnet Seal
15	Bonnet Sub-Seal

COMPONENT	DESCRIPTION
16	Trunnion Alignment Pin
17	N/A
18	Stem Seal
19	Stem Sub-Seal
20	Seat Seal
21	Seat Sub-Seal
22	Closure Studs
23	Closure Nuts
24	Bonnet Screw
25	Top Cover Screw
26	N/A
27	Thrust Bearing-Stem
28	Bleed Valve
29	Injection Fitting
30	Check Valve

COMPONENT	DESCRIPTION
31	Gear
32	Gear Screw
33	Stem Key
34	Grounding Plunge
35	Grounding Spring
36	Drain Plug
37	Support Foot
38	Lifting Lug

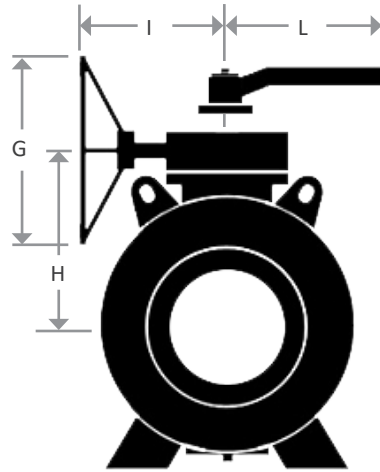
Dimensions and Weights ANSI Class 150



NOTES: Dimension "D" includes trunnion screws, drain plug and support brackets. Other sizes are available upon request.

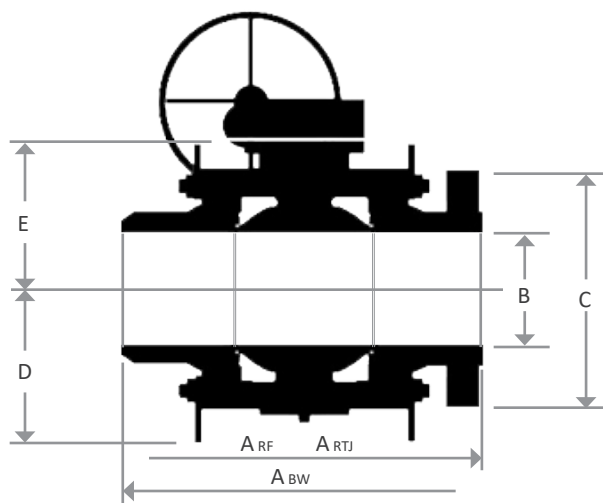
SIZE	A RF		A RTJ		A BW		B		C		D		E	
inch	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
2	7.00	178	7.50	191	8.50	216	2.00×2.00	50.8×50.8	6.00	152	4.41	112	4.25	108
3X2	8.00	203	8.50	216	11.12	283	3.00×2.00	76.2×50.8	7.50	191	4.41	112	4.25	108
3	8.00	203	8.50	216	11.12	283	3.00×3.00	76.2×76.2	7.50	191	5.35	136	6.02	153
4X3	9.00	229	9.50	241	12.00	305	4.00×3.00	101.6×76.2	9.00	229	5.35	136	6.02	153
4	9.00	229	9.50	241	12.00	305	4.00×4.00	101.6×101.6	9.00	229	5.94	151	7.48	190
6X4	15.50	394	16.00	406	18.00	457	6.00×4.00	152.4×101.6	11.00	279	5.94	151	7.48	190
6	15.50	394	16.00	406	18.00	457	6.00×6.00	152.4×152.4	11.00	279	7.20	183	9.06	230
8X6	18.00	457	18.50	470	20.50	521	8.00×6.00	203.2×152.4	13.50	343	7.20	183	9.06	230
8	18.00	457	18.50	470	20.50	521	8.00×8.00	203.2×203.2	13.50	343	10.28	261	10.59	269
10X8	21.00	533	21.50	546	22.00	559	10.00×8.00	254×203.2	16.00	406	10.28	261	10.59	269
10	21.00	533	21.50	546	22.00	559	10.00×10.00	254×254	16.00	406	12.80	325	12.13	308
12X10	24.00	610	24.50	622	25.00	635	12.00×10.00	304.8×254	19.00	483	12.80	325	12.13	308
12	24.00	610	24.50	622	25.00	635	12.00×12.00	304.8×304.8	19.00	483	14.76	375	13.98	355
14X12	27.00	686	27.50	699	30.00	762	13.25×12.00	337×304.8	21.00	535	14.76	375	13.98	355
14	27.00	686	27.50	699	30.00	762	13.25×13.25	337×337	21.00	535	15.04	382	15.08	383
16X14	30.00	762	30.50	775	33.00	838	15.25×13.25	387×337	23.50	595	15.04	382	15.08	383
16	30.00	762	30.50	775	33.00	838	15.25×15.25	387×387	23.50	595	15.75	400	16.85	428
18X16	34.00	864	34.50	876	36.00	914	17.25×15.25	438×387	25.00	635	17.75	400	16.85	428
18	34.00	864	34.50	876	36.00	914	17.25×17.25	438×438	25.00	635	19.13	486	18.94	481
20X18	36.00	914	36.50	927	39.00	991	19.25×17.25	489×438	27.50	700	19.13	486	18.94	481
20	36.00	914	36.50	927	39.00	991	19.25×19.25	489×489	27.50	700	19.69	500	20.35	517
24X20	42.00	1067	42.50	1080	45.00	1143	23.25×19.25	591×489	32.00	815	19.69	500	20.35	517
24	42.00	1067	42.50	1080	45.00	1143	23.25×23.25	591×591	32.00	815	22.80	579	23.43	595
30X24	51.00	1295	-	-	55.00	1397	29.00×23.25	736.5×591	38.75	984	22.80	579	23.43	595
30	51.00	1295	-	-	55.00	1397	29.00×29.00	736.5×736.5	38.75	984	27.95	710	29.57	751
36X30	60.00	1524	-	-	68.00	1727	34.50×29.00	876×736.5	46.00	1168	27.95	710	29.57	751
36	60.00	1524	-	-	68.00	1727	34.50×34.50	876×876	46.00	1168	31.89	810	34.02	864

Dimensions and Weights ANSI Class 150



SIZE	G		H		I		L		WEIGHT			
	inch	mm	inch	mm	inch	mm	inch	mm	FL		BW	
	inch	mm	inch	mm	inch	mm	inch	mm	LBS	KG	LBS	KG
2	-	-	-	-	-	-	8.65	220	44	20	37	17
3X2	-	-	-	-	-	-	8.65	220	53	24	44	20
3	-	-	-	-	-	-	14.95	380	82	37	75	34
4X3	-	-	-	-	-	-	14.95	380	97	44	88	40
4	-	-	-	-	-	-	17.75	450	132	60	121	55
6X4	-	-	-	-	-	-	17.75	450	176	80	165	75
6	15.75	400	10.60	269	12.85	327	-	-	364	165	342	155
8X6	15.75	400	10.60	269	12.85	327	-	-	406	184	381	173
8	15.75	400	12.15	308	12.85	327	-	-	728	330	684	310
10X8	15.75	400	12.15	308	12.85	327	-	-	794	360	750	340
10	19.70	500	14.65	372	14.15	360	-	-	1222	554	1162	527
12X10	19.70	500	14.65	372	14.15	360	-	-	1378	625	1290	585
12	23.65	600	16.50	419	16.45	418	-	-	1771	803	1649	748
14X12	23.65	600	16.50	419	16.45	418	-	-	1918	870	1808	820
14	27.50	700	17.75	451	22.65	575	-	-	2095	950	1985	900
16X14	27.50	700	17.75	451	22.65	575	-	-	2227	1010	2116	960
16	27.50	700	19.50	496	22.65	575	-	-	3054	1385	2911	1320
18X16	27.50	700	19.50	496	22.65	575	-	-	3210	1456	3064	1390
18	27.50	700	22.05	560	22.65	575	-	-	4190	1900	3969	1800
20X18	27.50	700	22.05	560	22.65	575	-	-	4332	1965	4112	1865
20	27.50	700	23.45	596	22.65	575	-	-	4994	2265	4763	2160
24X20	27.50	700	23.45	596	22.65	575	-	-	5335	2420	5137	2330
24	27.50	700	26.85	682	22.80	579	-	-	8159	3700	7916	3590
30X24	27.50	700	26.85	682	22.80	579	-	-	9259	4200	8973	4070
30	27.50	700	35.45	901	26.40	670	-	-	13010	5900	12767	5790
36X30	27.50	700	35.45	901	26.40	670	-	-	14991	6800	14771	6700
36	27.50	700	39.90	1014	26.40	670	-	-	20727	9400	20507	9300

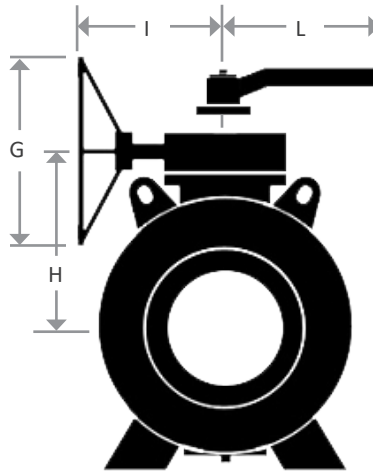
Dimensions and Weights ANSI Class 300



NOTES: Dimension "D" includes trunnion screws, drain plug and support brackets. Other sizes are available upon request.

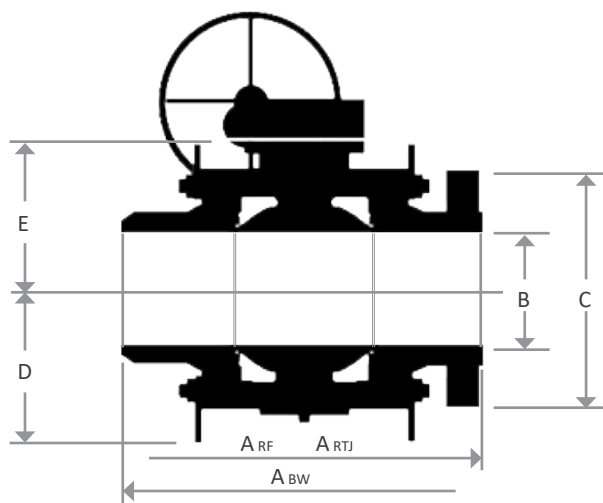
SIZE	A _{RF}		A _{RTJ}		A _{BW}		B		C		D		E	
inch	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
2	8.50	216	9.15	232	8.50	216	2.00×2.00	50.8×50.8	6.50	165	4.41	112	4.25	108
3X2	11.14	283	11.75	298	11.14	283	3.00×2.00	76.2×50.8	8.25	210	4.41	112	4.25	108
3	11.14	283	11.75	298	11.14	283	3.00×3.00	76.2×76.2	8.25	210	5.35	136	6.00	153
4X3	12.00	305	12.65	321	12.00	305	4.00×3.00	101.6×76.2	10.00	254	5.35	136	6.00	153
4	12.00	305	12.65	321	12.00	305	4.00×4.00	101.6×101.6	10.00	254	5.94	151	7.48	190
6X4	15.88	403	16.50	419	18.00	457	6.00×4.00	152.4×101.6	12.50	318	5.94	151	7.48	190
6	15.88	403	16.50	419	18.00	457	6.00×6.00	152.4×152.4	12.50	318	7.20	183	9.05	230
8X6	19.75	502	20.38	518	20.50	521	8.00×6.00	203.2×152.4	15.00	381	7.20	183	9.05	230
8	19.75	502	20.38	518	20.50	521	8.00×8.00	203.2×203.2	15.00	381	11.42	290	10.70	272
10X8	22.38	568	23.00	584	22.00	559	10.00×8.00	254×203.2	17.50	445	11.42	290	10.70	272
10	22.38	568	23.00	584	22.00	559	10.00×10.00	254×254	17.50	445	13.39	340	12.72	323
12X10	25.50	648	26.15	664	25.00	635	12.00×10.00	304.8×254	20.50	520	13.39	340	12.72	323
12	25.50	648	26.15	664	25.00	635	12.00×12.00	304.8×304.8	20.50	520	15.91	404	14.30	363
14X12	30.00	762	30.65	778	30.00	762	13.25×12.00	337×304.8	23.00	585	15.91	404	14.30	363
14	30.00	762	30.65	778	30.00	762	13.25×13.25	337×337	23.00	585	14.80	376	15.28	388
16X14	33.00	838	33.62	854	33.00	838	15.25×13.25	387×337	25.50	650	14.80	376	15.28	388
16	33.00	838	33.62	854	33.00	838	15.25×15.25	387×387	25.50	650	16.38	416	16.97	431
18X16	36.00	914	36.62	930	36.00	914	17.25×15.25	438×387	28.00	710	16.38	416	16.97	431
18	36.00	914	36.62	930	36.00	914	17.25×17.25	438×438	28.00	710	19.17	487	19.30	490
20X18	39.00	991	39.75	1010	39.00	991	19.25×17.25	489×438	30.50	775	19.17	487	19.30	490
20	39.00	991	39.75	1010	39.00	991	19.25×19.25	489×489	30.50	775	18.35	466	20.28	515
24X20	45.00	1143	45.88	1165	45.00	1143	23.25×19.25	591×489	36.00	915	18.35	466	20.28	515
24	45.00	1143	45.88	1165	45.00	1143	23.25×23.25	591×591	36.00	915	23.46	596	23.75	603
30X24	55.00	1397	56.00	1422	55.00	1397	29.00×23.25	736.5×591	43.00	1092	23.46	596	23.75	603
30	55.00	1397	56.00	1422	55.00	1397	29.00×29.00	736.5×736.5	43.00	1092	28.15	715	29.75	756
36X30	68.00	1727	69.12	1756	68.00	1727	34.50×29.00	876×736.5	50.00	1270	28.15	715	29.75	756
36	68.00	1727	69.12	1756	68.00	1727	34.50×34.50	876×876	50.00	1270	32.09	815	34.20	869

Dimensions and Weights ANSI Class 300



SIZE	G		H		I		L		WEIGHT			
	inch	mm	inch	mm	inch	mm	inch	mm	FL		BW	
	inch	mm	inch	mm	inch	mm	inch	mm	LBS	KG	LBS	KG
2	-	-	-	-	-	-	8.65	220	55	25	44	20
3X2	-	-	-	-	-	-	8.65	220	75	34	55	25
3	-	-	-	-	-	-	14.95	380	101	46	84	38
4X3	-	-	-	-	-	-	14.95	380	123	56	99	45
4	-	-	-	-	-	-	17.75	450	194	88	165	75
6X4	-	-	-	-	-	-	17.75	450	256	116	187	85
6	15.75	400	10.60	269	12.85	327	-	-	406	184	353	160
8X6	15.75	400	10.60	269	12.85	327	-	-	485	220	419	190
8	19.70	500	12.85	327	14.15	360	-	-	811	368	705	320
10X8	19.70	500	12.85	327	14.15	360	-	-	985	447	871	395
10	19.70	500	15.25	387	14.15	360	-	-	1301	590	1124	510
12X10	19.70	500	15.25	387	14.15	360	-	-	1446	656	1268	575
12	23.65	600	16.80	427	16.45	418	-	-	1931	876	1775	805
14X12	23.65	600	16.80	427	16.45	418	-	-	2154	977	1962	890
14	27.50	700	17.95	456	22.65	575	-	-	2579	1170	2337	1060
16X14	27.50	700	17.95	456	22.65	575	-	-	2919	1324	2491	1130
16	27.50	700	19.65	499	22.65	575	-	-	3298	1496	2712	1230
18X16	27.50	700	19.65	499	22.65	575	-	-	3494	1585	2976	1350
18	27.50	700	22.40	569	22.65	575	-	-	4916	2230	4321	1960
20X18	27.50	700	22.40	569	22.65	575	-	-	5203	2360	4586	2080
20	27.50	700	23.70	602	22.80	579	-	-	5886	2670	5225	2370
24X20	27.50	700	23.70	602	22.80	579	-	-	7165	3250	6349	2880
24	27.50	700	28.40	721	26.40	670	-	-	9480	4300	8378	3800
30X24	27.50	700	28.40	721	26.40	670	-	-	13669	6200	12125	5500
30	27.50	700	35.65	906	26.40	670	-	-	14771	6700	13140	5960
36X30	27.50	700	35.65	906	26.40	670	-	-	17417	7900	15653	7100
36	27.50	700	40.12	1019	27.15	690	-	-	21605	9800	19621	8900

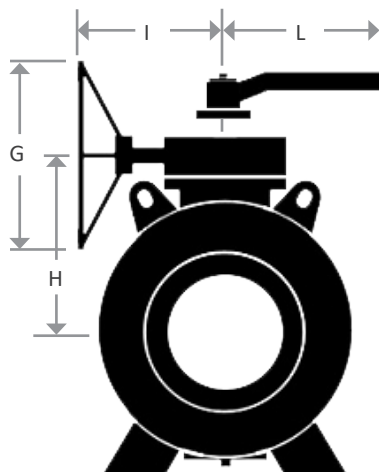
Dimensions and Weights ANSI Class 600



NOTES: Dimension “D” includes trunnion screws, drain plug and support brackets. Other sizes are available upon request.

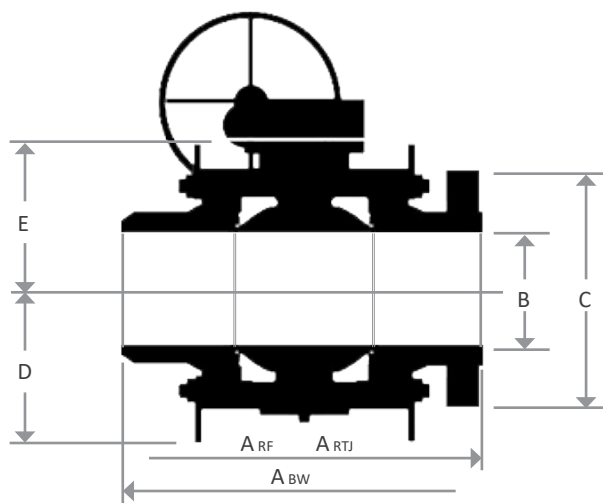
SIZE	A RF		A RTJ		A BW		B		C		D		E	
inch	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
2	11.50	292	11.62	295	11.50	292	2.00×2.00	50.8×50.8	6.50	165	3.86	98	6.10	155
3X2	14.00	356	14.12	359	14.00	356	3.00×2.00	76.2×50.8	8.25	210	3.86	98	6.10	155
3	14.00	356	14.12	359	14.00	356	3.00×3.00	76.2×76.2	8.25	210	4.84	123	6.54	166
4X3	17.00	432	17.12	435	17.00	432	4.05×3.00	103×76.2	10.75	273	4.84	123	6.54	166
4	17.00	432	17.12	435	17.00	432	4.05×4.05	103×103	10.75	273	5.87	149	7.76	197
6X4	22.00	559	22.12	562	22.00	559	6.00×4.05	152.4×103	14.00	356	5.87	149	7.76	197
6	22.00	559	22.12	562	22.00	559	6.00×6.00	152.4×152.4	14.00	356	7.20	183	9.06	230
8X6	26.00	660	26.12	664	26.00	660	8.00×6.00	203.2×152.4	16.50	419	7.20	183	9.06	230
8	26.00	660	26.12	664	26.00	660	8.00×8.00	203.2×203.2	16.50	419	11.18	284	10.79	274
10X8	31.00	787	31.12	791	31.00	787	10.00×8.00	254×203.2	20.00	510	11.18	284	10.79	274
10	31.00	787	31.12	791	31.00	787	10.00×10.00	254×254	20.00	510	14.17	360	12.95	329
12X10	33.00	838	33.12	841	33.00	838	12.00×10.00	304.8×254	22.00	560	14.17	360	12.95	329
12	33.00	838	33.12	841	33.00	838	12.00×12.00	304.8×304.8	22.00	560	14.25	362	14.88	378
14X12	35.00	889	35.12	892	35.00	889	13.25×12.00	337×304.8	23.75	605	14.25	362	14.88	378
14	35.00	889	35.12	892	35.00	889	13.25×13.25	337×337	23.75	605	15.51	394	15.39	391
16X14	39.00	991	39.12	994	39.00	991	15.25×13.25	387×337	27.00	685	15.51	394	15.39	391
16	39.00	991	39.12	994	39.00	991	15.25×15.25	387×387	27.00	685	15.55	395	17.13	435
18X16	43.00	1092	43.12	1095	43.00	1092	17.25×15.25	438×387	29.25	745	15.55	395	17.13	435
18	43.00	1092	43.12	1095	43.00	1092	17.25×17.25	438×438	29.25	745	19.65	499	19.53	496
20X18	47.00	1194	47.25	1200	47.00	1194	19.25×17.25	489×438	32.00	815	19.65	499	19.53	496
20	47.00	1194	47.25	1200	47.00	1194	19.25×19.25	489×489	32.00	815	21.42	544	21.30	541
24X20	55.00	1397	55.38	1407	55.00	1397	23.25×19.25	591×489	37.00	940	21.42	544	21.30	541
24	55.00	1397	55.38	1407	55.00	1397	23.25×23.25	591×591	37.00	940	23.46	596	23.78	604
30X24	65.00	1651	65.50	1664	65.00	1651	29.00×23.25	736.5×591	44.50	1130	23.46	596	23.78	604
30	65.00	1651	65.50	1664	65.00	1651	29.00×29.00	736.5×736.5	44.50	1130	29.29	744	30.16	766
36X30	82.00	2083	82.64	2099	82.00	2083	34.50×29.00	876×736.5	51.75	1314	29.29	744	30.16	766
36	82.00	2083	82.64	2099	82.00	2083	34.50×34.50	876×876	51.75	1314	33.46	850	35.00	889

Dimensions and Weights ANSI Class 600



SIZE	G		H		I		L		WEIGHT			
									FL		BW	
inch	inch	mm	inch	mm	inch	mm	inch	mm	LBS	KG	LBS	KG
2	-	-	-	-	-	-	22.5	575	84	38	66	30
3X2	-	-	-	-	-	-	22.5	575	108	49	77	35
3	-	-	-	-	-	-	27.5	700	168	76	143	65
4X3	-	-	-	-	-	-	27.5	700	220	100	176	80
4	15.75	400	9.30	236	12.85	327	33.5	850	287	130	231	105
6X4	15.75	400	9.30	236	12.85	327	33.5	850	392	178	287	130
6	15.75	400	10.60	269	12.85	327	-	-	589	267	463	210
8X6	15.75	400	10.60	269	12.85	327	-	-	723	328	595	270
8	23.65	600	12.85	326	14.85	377	-	-	1045	474	904	410
10X8	23.65	600	12.85	326	14.85	377	-	-	1279	580	1080	490
10	23.65	600	15.45	393	16.45	418	-	-	1786	810	1455	660
12X10	23.65	600	15.45	393	16.45	418	-	-	1949	884	1631	740
12	27.50	700	17.55	446	21.45	545	-	-	2793	1267	2315	1050
14X12	27.50	700	17.55	446	21.45	545	-	-	3146	1427	2624	1190
14	27.50	700	18.50	470	22.65	575	-	-	3020	1370	2734	1240
16X14	27.50	700	18.50	470	22.65	575	-	-	3384	1535	2954	1340
16	27.50	700	20.25	514	22.65	575	-	-	4228	1918	3616	1640
18X16	27.50	700	20.25	514	22.65	575	-	-	4674	2120	4012	1820
18	27.50	700	22.95	583	22.80	579	-	-	6217	2820	5423	2460
20X18	27.50	700	22.95	583	22.80	579	-	-	6691	3035	5864	2660
20	27.50	700	25.95	659	26.40	670	-	-	8267	3750	7275	3300
24X20	27.50	700	25.95	659	26.40	670	-	-	9414	4270	8686	3940
24	27.50	700	29.70	754	27.15	690	-	-	13779	6250	12699	5760
30X24	27.50	700	29.70	754	27.15	690	-	-	16755	7600	15653	7100
30	27.50	700	36.05	916	27.15	690	-	-	20062	9100	18298	8300
36X30	27.50	700	36.05	916	27.15	690	-	-	22708	10300	20944	9500
36	27.50	700	40.90	1039	32.70	830	-	-	28440	12900	25353	11500

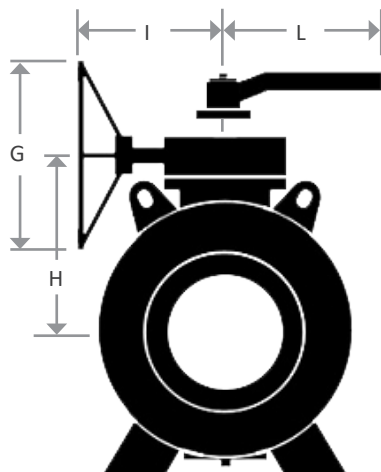
Dimensions and Weights ANSI Class 900



NOTES: Dimension “D” includes trunnion screws, drain plug and support brackets. Other sizes are available upon request.

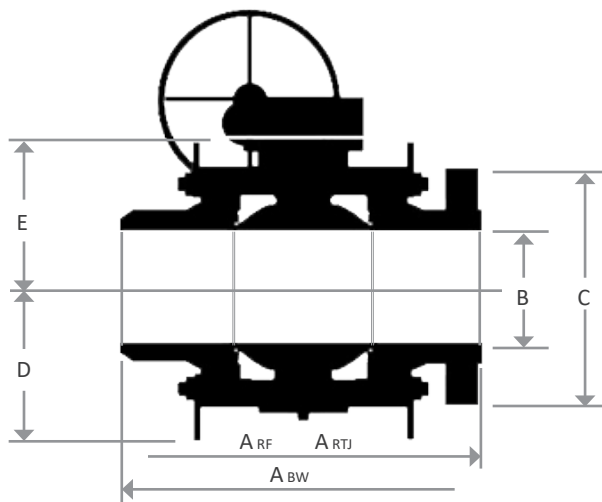
SIZE	A RF		A RTJ		A BW		B		C		D		E	
inch	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
2	14.50	368	14.62	371	14.50	368	2.00×2.00	50.8×50.8	8.50	216	4.29	109	5.87	149
3X2	15.00	381	15.12	384	15.00	381	3.00×2.00	76.2×50.8	9.50	241	4.29	109	5.87	149
3	15.00	381	15.12	384	15.00	381	3.00×3.00	76.2×76.2	9.50	241	5.47	139	7.05	179
4X3	18.00	457	18.12	460	18.00	457	4.05×3.00	103×76.2	11.50	292	5.47	139	7.05	179
4	18.00	457	18.12	460	18.00	457	4.05×4.05	103×103	11.50	292	6.42	163	8.50	216
6X4	24.00	610	24.12	613	24.00	610	6.00×4.05	152.4×103	15.00	381	6.42	163	8.50	216
6	24.00	610	24.12	613	24.00	610	6.00×6.00	152.4×152.4	15.00	381	7.09	180	10.04	255
8X6	29.00	737	29.12	740	29.00	737	8.00×6.00	203.2×152.4	18.50	470	7.09	180	10.04	255
8	29.00	737	29.12	740	29.00	737	8.00×8.00	203.2×203.2	18.50	470	12.09	307	11.65	296
10X8	33.00	838	33.12	841	33.00	838	10.00×8.00	254×203.2	21.50	546	12.09	307	11.65	296
10	33.00	838	33.12	841	33.00	838	10.00×10.00	254×254	21.50	546	14.02	356	13.46	342
12X10	38.00	965	38.12	968	38.00	965	12.00×10.00	304.8×254	24.00	610	14.02	356	13.46	342
12	38.00	965	38.12	968	38.00	965	12.00×12.00	304.8×304.8	24.00	610	14.96	380	16.14	410
14X12	40.50	1029	40.88	1038	40.50	1029	12.75×12.00	324×304.8	25.25	641	14.96	380	16.14	410
14	40.50	1029	40.88	1038	40.50	1029	12.75×12.75	324×324	25.25	641	16.06	408	15.55	395
16X14	44.50	1130	44.88	1140	44.50	1130	14.75×12.75	374.65×324	27.75	705	16.06	408	15.55	395
16	44.50	1130	44.88	1140	44.50	1130	14.75×14.75	374.65×374.65	27.75	705	18.31	465	17.83	453
18X16	48.00	1219	48.5	1232	48.00	1219	16.75×14.75	425.5×374.65	31.00	787	18.31	465	17.83	453
18	48.00	1219	48.5	1232	48.00	1219	16.75×16.75	425.5×425.5	31.00	787	20.08	510	20.20	513
20X18	52.00	1321	52.5	1334	52.00	1321	18.62×16.75	473×425.5	33.75	855	20.08	510	20.20	513
20	52.00	1321	52.5	1334	52.00	1321	18.62×18.62	473×473	33.75	855	22.05	560	21.69	551
24X20	61.00	1549	61.75	1568	61.00	1549	22.50×18.62	572×473	41.00	1041	22.05	560	21.69	551
24	61.00	1549	61.75	1568	61.00	1549	22.50×22.50	572×572	41.00	1041	24.41	620	24.80	630

Dimensions and Weights ANSI Class 900



SIZE	G		H		I		L		WEIGHT			
	inch	mm	inch	mm	inch	mm	inch	mm	FL		BW	
	inch	mm	inch	mm	inch	mm	inch	mm	LBS	KG	LBS	KG
2	7.85	200	7.30	186	9.05	230	22.65	575	115	52	75	34
3X2	7.85	200	7.30	186	9.05	230	22.65	575	132	60	110	50
3	7.85	200	8.50	216	9.05	230	27.55	700	216	98	154	70
4X3	7.85	200	8.50	216	9.05	230	27.55	700	265	120	198	90
4	15.75	400	10.05	255	12.85	327	33.45	850	386	175	276	125
6X4	15.75	400	10.05	255	12.85	327	33.45	850	540	245	430	195
6	23.65	600	12.10	307	14.85	377	-	-	783	355	573	260
8X6	23.65	600	12.10	307	14.85	377	-	-	970	440	661	300
8	27.50	700	14.15	360	21.45	545	-	-	1389	630	1080	490
10X8	27.50	700	14.15	360	21.45	545	-	-	1631	740	1323	600
10	27.50	700	16.15	410	22.65	575	-	-	2138	970	1653	750
12X10	27.50	700	16.15	410	22.65	575	-	-	2480	1125	1984	900
12	27.50	700	19.25	489	22.65	575	-	-	3064	1390	2425	1100
14X12	27.50	700	19.25	489	22.65	575	-	-	3285	1490	2579	1170
14	27.50	700	18.65	474	22.65	575	-	-	3638	1650	2866	1300
16X14	27.50	700	18.65	474	22.65	575	-	-	4034	1830	3197	1450
16	27.50	700	21.25	540	22.80	579	-	-	5071	2300	4034	1830
18X16	27.50	700	21.25	540	22.80	579	-	-	5788	2580	4497	2040
18	27.50	700	24.85	631	26.40	670	-	-	8598	3900	6878	3120
20X18	27.50	700	24.85	631	26.40	670	-	-	9259	4200	7408	3360
20	27.50	700	26.00	660	26.38	670	-	-	11244	5100	8995	4080
24X20	27.50	700	26.00	660	26.40	670	-	-	13448	6100	9480	4300
24	27.50	700	30.70	780	27.15	690	-	-	17196	7800	13118	5950

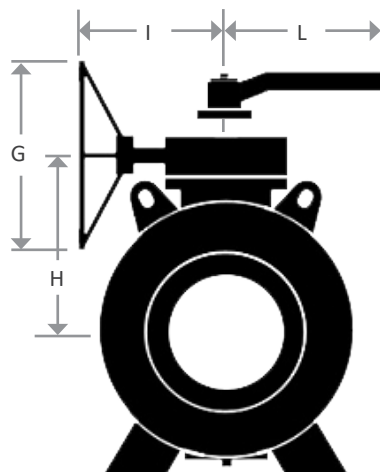
Dimensions and Weights ANSI Class 1500



NOTES: Dimension “D” includes trunnion screws, drain plug and support brackets. Other sizes are available upon request.

SIZE	A _{RF}		A _{RTJ}		A _{BW}		B		C		D		E	
inch	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
2	14.50	368	14.62	371	14.50	368	2.00×2.00	50.8×50.8	8.50	216	5.08	129	7.00	178
3X2	18.50	470	18.62	473	18.50	470	3.00×2.00	76.2×50.8	10.51	267	5.08	129	7.00	178
3	18.50	470	18.62	473	18.50	470	3.00×3.00	76.2×76.2	10.51	267	6.89	175	8.62	219
4X3	21.50	546	21.62	549	21.50	546	4.00×3.00	101.6×76.2	12.25	311	6.89	175	8.62	219
4	21.50	546	21.62	549	21.50	546	4.00×4.00	101.6×101.6	12.25	311	7.36	187	9.25	235
6X4	27.75	705	27.75	711	27.75	705	5.75×4.00	146×101.6	15.51	394	7.36	187	9.25	235
6	27.75	705	27.75	711	27.75	705	5.75×5.75	146×146	15.51	394	8.27	210	11.34	288
8X6	32.75	832	32.75	841	32.75	832	7.63×5.75	194×146	19.02	483	8.27	210	11.34	288
8	32.75	832	32.75	841	32.75	832	7.63×7.63	194×194	19.02	483	13.74	349	13.66	347
10X8	39.00	991	39.38	1000	39.00	991	9.50×7.63	241×194	23.00	584	13.74	349	13.66	347
10	39.00	991	39.38	1000	39.00	991	9.50×9.50	241×241	23.00	584	14.72	374	15.63	397
12X10	44.50	1130	45.12	1146	44.50	1130	11.38×9.50	289×241	26.50	673	14.72	374	15.63	397
12	44.50	1130	45.12	1146	44.50	1130	11.38×11.38	289×289	26.50	673	15.75	400	18.90	480
14X12	49.50	1257	50.25	1276	49.50	1257	12.40×11.38	315×289	29.53	750	15.75	400	18.90	480
14	49.50	1257	50.25	1276	49.50	1257	12.40×12.40	315×315	29.53	750	16.54	420	18.90	480
16X14	54.50	1384	55.38	1407	54.50	1384	14.25×12.40	360×315	32.52	826	16.54	420	18.90	480
16	54.50	1384	55.38	1407	54.50	1384	14.25×14.25	360×360	32.52	826	22.05	560	19.80	503

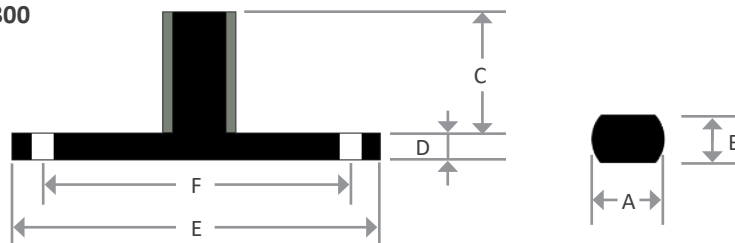
Dimensions and Weights ANSI Class 1500



SIZE	G		H		I		L		WEIGHT			
	inch	mm	inch	mm	inch	mm	inch	mm	FL	KG	BW	KG
2	7.85	200	8.45	215	9.05	230	22.65	575	170	77	110	50
3X2	7.85	200	8.45	215	9.05	230	22.65	575	221	100	198	90
3	15.75	400	10.15	258	12.85	327	-	-	386	175	298	135
4X3	15.75	400	10.15	258	12.85	327	-	-	448	203	375	170
4	19.70	500	11.40	290	14.15	360	-	-	622	282	419	190
6X4	19.70	500	11.40	290	14.15	360	-	-	851	386	706	320
6	27.50	700	13.40	340	21.45	545	-	-	1279	580	970	440
8X6	27.50	700	13.40	340	21.45	545	-	-	1557	706	1058	480
8	27.50	700	16.40	417	22.65	575	-	-	2326	1055	1632	740
10X8	27.50	700	16.40	417	22.65	575	-	-	2833	1285	1852	840
10	27.50	700	18.75	476	22.65	575	-	-	2977	1350	2205	1000
12X10	27.50	700	18.75	476	22.65	575	-	-	4300	1950	3021	1370
12	27.50	700	22.00	559	22.65	575	-	-	6240	2830	4322	1960
14X12	27.50	700	22.00	559	22.65	575	-	-	6880	3120	5733	2600
14	27.50	700	23.55	598	26.38	670	-	-	7387	3350	6174	2800
16X14	27.50	700	23.55	598	26.38	670	-	-	7828	3550	6615	3000
16	27.50	700	24.25	621	26.38	670	-	-	9923	4500	8379	3800

Top Mounting Dimensions and Stem Torque

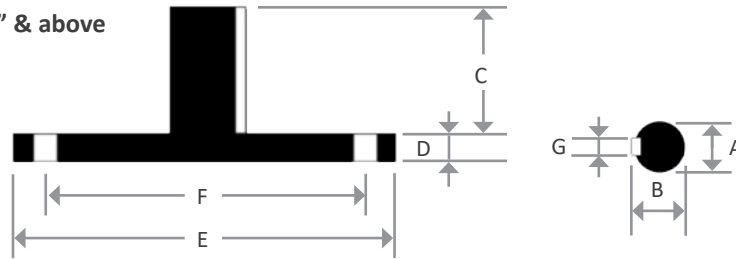
2" – 6", 8" CL 150 – 300



SIZE	CLASS	A		B		C		D		E	
inch		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
2	150	0.870	22.1	0.555	14.1	0.98	25	0.39	10	4.13	104.8
	300	0.870	22.1	0.555	14.1	1.18	30	0.39	10	4.13	104.8
	600	0.870	22.1	0.555	14.1	1.57	40	0.71	18	5.91	150
	900	0.870	22.1	0.555	14.1	1.57	40	0.71	18	5.91	150
	1500	1.232	31.3	0.748	19	1.57	40	0.94	24	5.91	150
3	150	1.232	31.3	0.748	19	1.57	40	0.71	18	4.33	110
	300	1.232	31.3	0.748	19	1.57	40	0.71	18	4.33	110
	600	1.378	35	0.992	25.2	1.97	50	0.79	20	6.22	158
	900	1.378	35	0.992	25.2	1.97	50	0.94	24	6.69	170
	1500	1.496	38	0.992	25.2	1.97	50	1.18	30	6.69	170
4	150	1.232	31.3	0.748	19	1.97	50	0.79	20	5.71	145
	300	1.232	31.3	0.748	19	1.97	50	0.79	20	5.71	145
	600	1.496	38	0.992	25.2	1.97	50	0.94	24	6.89	175
	900	1.772	38	0.992	25.2	1.97	50	1.18	30	6.89	175
	1500	1.772	45	1.244	31.6	1.97	50	1.18	30	8.27	210
6	150	1.988	50.5	1.244	31.6	1.97	50	1.18	30	6.89	175
	300	1.988	50.5	1.244	31.6	1.97	50	1.18	30	6.89	175
	600	1.988	50.5	1.244	31.6	1.97	50	1.18	30	6.89	175
	900	1.988	50.5	1.244	31.6	1.97	50	1.18	30	8.27	210
	1500	2.492	63.3	1.744	44.3	2.76	70	1.18	30	11.81	300
8	150	1.988	50.5	1.244	31.6	2.76	70	1.18	30	8.27	210
	300	2.488	63.2	1.744	44.3	2.76	70	1.18	30	8.27	210
	600	2.870	72.9	3.189	81	3.54	90	1.18	30	8.27	210
	900	2.870	72.9	3.189	81	3.74	95	1.18	30	11.81	300
	1500	2.870	72.9	3.189	81	3.74	95	1.38	35	11.81	300
10	150	2.870	72.9	3.189	81	2.95	75	1.18	30	11.81	300
	300	2.870	72.9	3.189	81	2.95	75	1.18	30	11.81	300
	600	3.240	82.3	3.606	91.6	3.54	90	1.18	30	11.81	300
	900	3.240	82.3	3.606	91.6	3.74	95	1.18	30	11.81	300
	1500	3.240	82.3	3.606	91.6	3.74	95	1.38	35	11.81	300
12	150	3.240	82.3	3.606	91.6	3.74	95	1.18	30	11.81	300
	300	3.240	82.3	3.606	91.6	3.74	95	1.18	30	11.81	300
	600	3.992	101.4	4.409	112	4.13	105	1.18	30	11.81	300
	900	3.992	101.4	4.409	112	4.13	105	1.38	35	13.78	350
	1500	3.992	101.4	4.409	112	4.13	105	1.57	40	13.78	350

Top Mounting Dimensions and Stem Torque

8" CL 600 – 1500, 10" & above



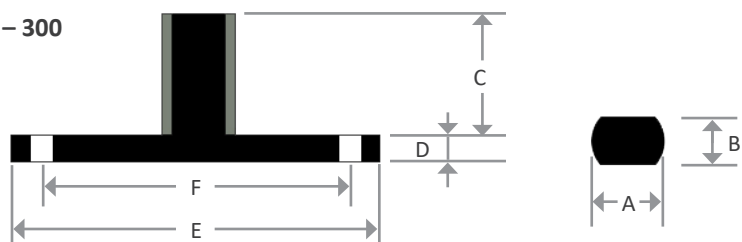
* Valve design operating torque.
For powered actuators, an additional 25% minimum shall be added as safety factors.

Position of holes: ISO 5211

SIZE	CLASS	F		G		H	I = (DIAMETER)		* TORQUE	
inch		inch	mm	inch	mm	holes	inch	mm	IN-LBS	N-M
2	150	-	-	-	-	-	-	-	531	60
	300	-	-	-	-	-	-	-	841	95
	600	4.92	125	-	-	4	0.53	13.5	1328	150
	900	4.92	125	-	-	4	0.53	13.5	1947	220
	1500	4.92	125	-	-	4	0.53	13.5	3717	420
3	150	-	-	-	-	-	-	-	1239	140
	300	-	-	-	-	-	-	-	1947	220
	600	5.43	138	-	-	4	0.53	13.5	2921	330
	900	5.43	138	-	-	4	0.53	13.5	4337	490
	1500	5.51	140	-	-	4	0.67	17	7169	810
4	150	4.92	125	-	-	4	0.53	13.5	1947	220
	300	4.92	125	-	-	4	0.53	13.5	3009	340
	600	5.51	140	-	-	4	0.67	17	4071	460
	900	5.51	140	-	-	4	0.67	17	7346	830
	1500	6.50	165	-	-	4	0.79	20	13276	1500
6	150	5.51	140	-	-	4	0.67	17	3363	380
	300	5.51	140	-	-	4	0.67	17	5399	610
	600	5.51	140	-	-	4	0.67	17	8497	960
	900	6.50	165	-	-	4	0.79	20	16639	1880
	1500	10.00	254	-	-	8	0.67	17	28765	3250
8	150	6.50	165	-	-	4	0.79	20	5664	640
	300	6.50	165	-	-	4	0.79	20	10444	1180
	600	6.50	165	0.748	19	4	0.79	20	17701	2000
	900	10.00	254	0.748	19	8	0.67	17	31863	3600
	1500	10.00	254	0.748	19	8	0.67	17	48679	5500
10	150	10.00	254	0.748	19	8	0.67	17	10621	1200
	300	10.00	254	0.748	19	8	0.67	17	18764	2120
	600	10.00	254	0.866	22	8	0.67	17	31686	3580
	900	10.00	254	0.866	22	8	0.67	17	46732	5280
	1500	10.00	254	0.866	22	8	0.67	17	66912	7560
12	150	10.00	254	0.866	22	8	0.67	17	14692	1660
	300	10.00	254	0.866	22	8	0.67	17	22038	2490
	600	10.00	254	1.000	25.4	8	0.67	17	47705	5390
	900	11.73	298	1.000	25.4	8	0.79	20	65318	7380
	1500	11.73	298	1.000	25.4	8	0.79	20	94703	10700

Top Mounting Dimensions and Stem Torque

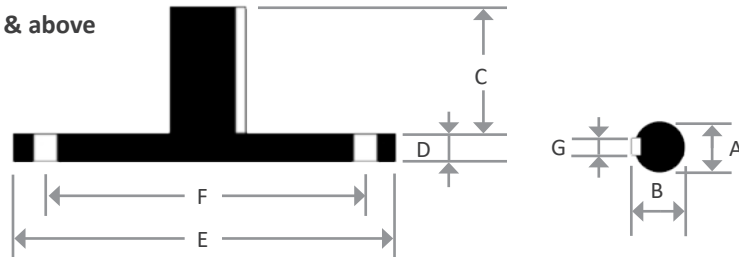
2" – 6", 8" CL 150 – 300



SIZE	CLASS	A		B		C		D		E	
inch		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
14	150	3.240	82.3	3.606	91.6	3.54	90	1.30	33	11.81	300
	300	3.240	82.3	3.606	91.6	3.54	90	1.30	33	11.81	300
	600	3.992	101.4	4.409	112	4.13	105	1.30	33	13.78	350
	900	3.992	101.4	4.409	112	4.13	105	1.38	35	13.78	350
	1500	4.331	110	4.732	120.2	4.53	115	1.38	35	13.78	350
16	150	3.240	82.3	3.606	91.6	3.74	95	1.30	33	11.81	300
	300	3.240	82.3	3.606	91.6	3.74	95	1.30	33	11.81	300
	600	3.992	101.4	4.409	112	4.13	105	1.30	33	13.78	350
	900	4.331	110	4.732	120.2	4.53	115	1.38	35	13.78	350
	1500	4.331	110	4.732	120.2	4.53	115	1.38	35	13.78	350
18	150	3.992	101.4	4.409	112	3.94	100	1.30	33	13.78	350
	300	3.992	101.4	4.409	112	3.94	100	1.30	33	13.78	350
	600	4.331	110	4.732	120.2	4.53	115	1.38	35	13.78	350
	900	4.331	110	4.732	120.2	4.53	115	1.38	35	13.78	350
20	150	3.992	101.4	4.409	112	4.53	115	1.30	33	13.78	350
	300	4.331	110	4.732	120.2	4.53	115	1.38	35	13.78	350
	600	4.331	110	4.732	120.2	4.53	115	1.38	35	13.78	350
	900	4.724	120	5.236	133	4.53	115	1.57	40	16.34	415
24	150	4.331	110	4.732	120.2	4.53	115	1.38	35	13.78	350
	300	4.331	110	4.732	120.2	4.53	115	1.38	35	13.78	350
	600	4.724	120	5.236	133	4.53	115	1.97	50	18.70	475
	900	5.906	150	6.551	166.4	7.87	200	1.97	50	18.70	475
30	150	4.331	110	4.732	120.2	5.91	150	1.38	35	13.78	350
	300	4.724	120	5.236	133	5.91	150	1.57	40	18.70	475
	600	5.906	150	6.551	166.4	7.87	200	1.97	50	18.70	475
36	150	4.724	120	5.236	133	5.91	150	1.57	40	16.34	415
	300	4.724	120	5.236	133	7.87	200	1.97	50	18.70	475
	600	5.906	150	6.551	166.4	7.87	200	1.97	50	18.70	475

Top Mounting Dimensions and Stem Torque

8" CL 600 – 1500, 10" & above



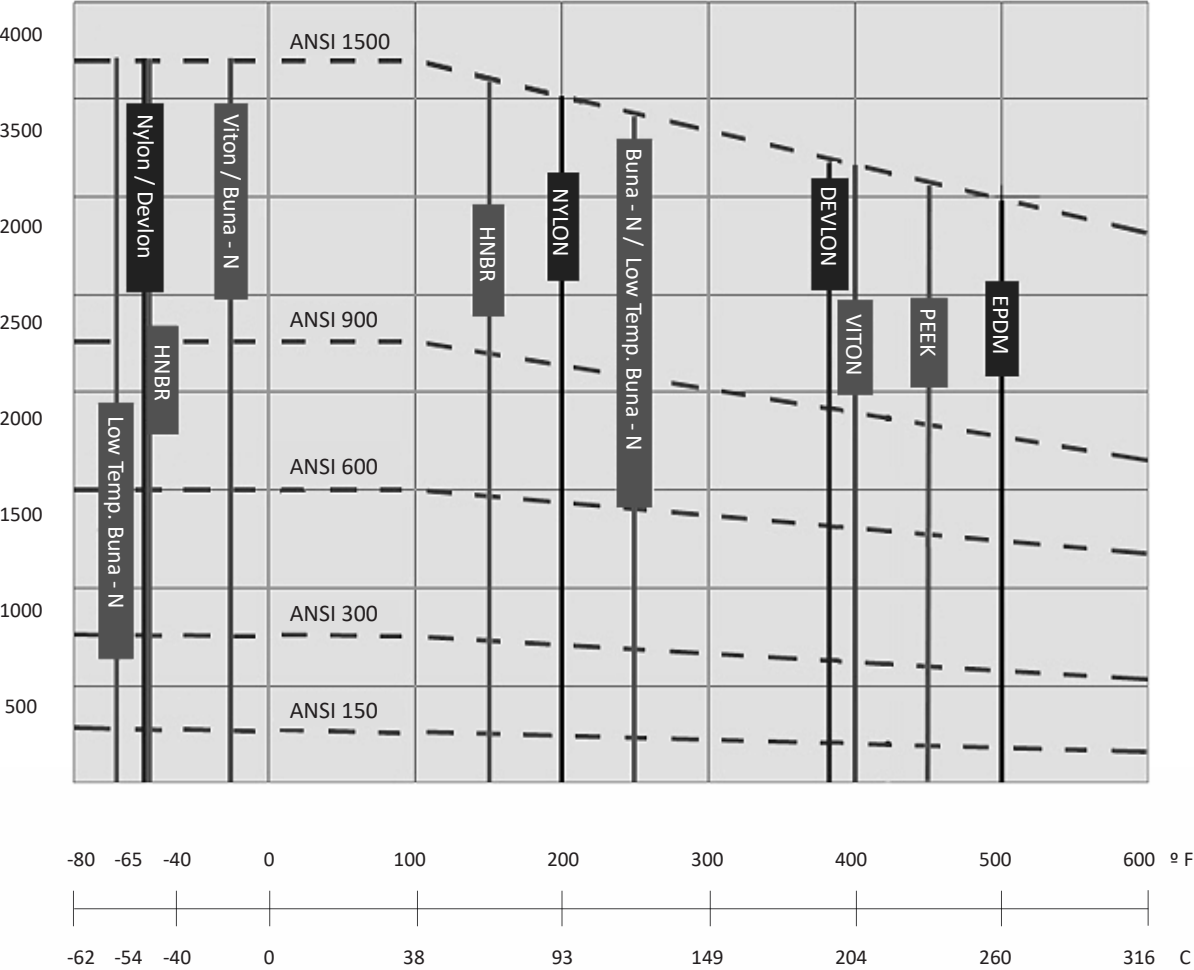
* Valve design operating torque.
For powered actuators, an additional 25% minimum shall be added as safety factors.

Position of holes: ISO 5211

SIZE inch	CLASS	F		G		H	I = (DIAMETER)		* TORQUE	
		inch	mm	inch	mm	holes	inch	mm	IN-LBS	N-M
14	150	10.00	254	0.866	22	8	0.67	17	24340	2750
	300	10.00	254	0.866	22	8	0.67	17	31686	3580
	600	11.73	298	1.000	25.4	8	0.79	20	57707	6520
	900	11.73	298	1.000	25.4	8	0.79	20	87180	9850
	1500	11.73	298	1.000	25.4	8	0.79	20	144975	16380
16	150	10.00	254	0.866	22	8	0.67	17	32305	3650
	300	10.00	254	0.866	22	8	0.67	17	49564	5600
	600	11.73	298	1.000	25.4	8	0.79	20	76869	8685
	900	11.73	298	1.000	25.4	8	0.79	20	112847	12750
	1500	11.73	298	1.000	25.4	8	0.79	20	172589	19500
18	150	11.73	298	1.000	25.4	8	0.79	20	42926	4850
	300	11.73	298	1.000	25.4	8	0.79	20	69390	7840
	600	11.73	298	1.000	25.4	8	0.79	20	118157	13350
	900	11.73	298	1.000	25.4	8	0.79	20	176838	19980
20	150	11.73	298	1.000	25.4	8	0.79	20	48325	5460
	300	11.73	298	1.000	25.4	8	0.79	20	84702	9570
	600	11.73	298	1.000	25.4	8	0.79	20	163739	18500
	900	14.02	356	1.000	25.4	8	1.34	34	232951	26320
24	150	11.73	298	1.000	25.4	8	0.79	20	97093	10970
	300	11.73	298	1.000	25.4	8	0.79	20	155596	17580
	600	15.98	406	1.240	31.5	8	1.50	38	273311	30880
	900	15.98	406	1.496	38	8	1.57	40	375006	42370
30	150	11.73	298	1.000	25.4	8	0.79	20	164447	18580
	300	15.98	406	1.240	31.5	8	1.50	38	243041	27460
	600	15.98	406	1.496	38	8	1.57	40	370226	41830
36	150	14.02	356	1.000	25.4	8	1.34	34	199850	22580
	300	15.98	406	1.240	31.5	8	1.50	38	302518	34180
	600	15.98	406	1.496	38	8	1.57	40	462628	52270

Pressure Temperature Chart

PSI



NOTE: Other materials are available upon request.

Specifications for Flow Coefficient

FLOW COEFFICIENTS (CV) RATING

SIZE	CL.150	CL.300	CL.600	CL.900	CL.1500
2×2	500	460	400	330	330
3×2	180	195	180	187	187
3×3	1350	1150	1050	935	830
4×3	545	535	550	510	510
4×4	2500	2200	1850	1760	1660
6×4	790	765	745	740	740
6×6	5300	5290	4460	4405	4100
8×6	1945	1945	2220	2035	2030
8×8	10500	9600	8730	8475	8010
10×8	4050	4040	4065	4060	4050
10×10	17500	16750	14250	14205	13310
12×10	6900	7100	7150	7135	7115
12×12	26300	25500	22550	21430	17070
14×12	13100	13200	14350	14290	14180
14×14	31850	30050	28400	26800	24275
16×14	14600	14580	14350	14315	14245
16×16	43300	41700	38150	36700	33215
18×16	19750	19800	20350	19750	
18×18	57300	55370	50950	48700	
20×18	27750	28050	29500	29430	
20×20	74500	72300	65600	62500	
24×20	44700	44650	48900	48710	
24×24	112300	109150	98150	94050	
30×24	76000	75900	73850		
30×30	179300	171200	158900		
36×30	123000	121550	118300		
36×36	258300	243050	226300		

Method of Calculating Flow

The Flow Coefficient “Cv” of a valve is the flow rate of water (gallons/minute) through a full opened valve with a pressure drop of 1 psi across the valve. To find the flow of liquid through the valve from the Cv, use the following formulas.

Liquid Flow

$$Q_L = C_v \sqrt{\frac{\Delta P}{G}}$$

where

Q_L=flow rate of liquid (gal./min.)

ΔP=differential pressure across the valve (psi)

G=specific gravity of liquid (for water,G=1)

Gas Flow

$$Q_g = 61 C_v \sqrt{\frac{P_2 \Delta P}{g}}$$

where

Q_g=flow rate of gas (CFH at STP)

P₂ =outlet pressure (psia)

g=specific gravity of gas (for air,g=1.0)

For non-critical flow

$$\frac{P_2}{P_1} < \frac{2}{3} \quad \cong \quad \frac{P_2}{P_1}$$

Material Specifications

DESCRIPTION	MATERIALS
Body, Bonnet or Adapter, Top Cover	1. Carbon steel: ASTM A105
	2. Low Temp. Carbon steel: ASTM A350-LF2
	3. Stainless steel: ASTM A182-F316
	ASTM A182-F304
	ASTM A182-F316L
	ASTM A182-F304L
	ASTM A182-F51
	4. Monel
Ball, Stem, Seat ring, Trunnion	1. Carbon steel with 1 Mil ENP
	2. Carbon steel with 3 Mil ENP
	3. Low Temp. Carbon steel with 3 Mil ENP
	4. Stainless steel: ASTM A182-F316
	ASTM A182-F304
	ASTM A182-F316L
	ASTM A182-F304L
	ASTM A182-F51
	ASTM A182-F6a
	5. Monel
	6. 17-4PH
Bolting	1. A193-B7M/A194-2HM 4. A193-B8/A194-8
	2. A193-B7/A194-2H 5. A193-B8M/A194-8M
	3. A320-L7/A194-4 6. A320-L7M/A194-7M
Stem Bearing, Trunnion Bearing	DU
Adapter Seal, Stem seal, Bonnet Seal	1. Buna-N 3. Low Temp. Buna-N
Seat Seal, Trunnion Seal	2. Viton 4. HNBR 5. EPDM
Adapter Sub-Seal, Bonnet Sub-Seal,	1. 316SS Spiral Wound Graphite
Stem Sub-Seal, Trunnion Sub-Seal	2. Graphite
Seat Insert	1. Devlon 2. Nylon 3. Peek
Thrust Bearing	PTFE
Seat Spring	Inconel X-750
Injection Fittings	1. Carbon steel 2. Stainless steel
Bleed Valve, Drain Plug	1. Carbon steel 2. Stainless steel
Key, Pin	1. Carbon steel 2. Stainless steel
Gear Operator	Cast Iron case, Carbon Steel worm & segment gear

Material Specifications

Specifications for Seat Materials

PROPERTIES	DEVLON	NYLON	PEEK
Type	Cast or Machined	Molded, Cast or Machined	Molded or Machined
Specific gravity	1.14	1.02±0.02	1.30-1.34
Hardness (ASTM D2240)	D78/80	D75±5	D85±5
Tensile strength(psi)	11592	8000(min)	11000(min)
Ultimate elongation (%)	5.37	250min(≤6") 16min(> 6")	30(min)
Temperature Limitations (°F)	-50 to 392	-50 to 200	-50 to 450
Color Code	Yellow	Natural	Various

Specifications for Seal Materials

PROPERTIES	VITON	BUNA-N	LOW TEMP. BUNA-N	EPDM	HNBR
Type	Molded	Molded	Molded	Molded	Molded
Specific gravity	1.85±0.02	1.31	1.31±0.03	1.23	1.33±0.03
Hardness (ASTM D2240)	D75±5	D90±5	D75±5	D90±5	D80±5
Tensile strength(psi)	— —	— —	1450	1960	2450(min)
Ultimate elongation (%)	— —	— —	125(min)	101	225(min)
Temperature Limitations (°F)	-20 to 400	-15 to 250	-65 to 250	-50 to 500	-50 to 300
Color Code	Orange	No Color Code	Yellow	Fluorescent Orange	Green

Specifications for Gasket

TYPE	USE	Temp. Range (°F)	PH
Spiral Wound 316SS+Graphite	100% Fire-safe	-328 to 500	0-14w
Solid Graphite	100% Fire-safe	-328 to 500	0-14

Ordering Model AOV-TMBV

PORT

RP = REGULAR PORT

FP = FULL PORT

ANSI CLASS

1 = CLASS 150

3 = CLASS 300

6 = CLASS 600

9 = CLASS 900

5 = CLASS 1500

2 = CLASS 2500

SIZE

02 = 2"

03 = 3"

04 = 4"

06 = 6"

08 = 8"

10 = 10"

12 = 12"

14 = 14"

16 = 16"

18 = 18"

20 = 20"

24 = 24"

26 = 26"

28 = 28"

30 = 30"

36 = 36"

1 = A105

2 = A350 LF2

3 = A182 F316

4 = A182 F316L

1 = A105/3 MIL ENP

2 = A350 LF2/ 3 MIL ENP

3 = A182 F316

4 = A182 F316L

5 = 17-4PH

B = Butt Weld

F = Flanged RF

J = Flanged RTJ

9 = RF X Butt Weld

0 = RTJ X Butt Weld

1 = Devlon

2 = Nylon

3 = Peek

4 = RTFE

5 = PTFE

1 = HNBR

2 = Viton (FKM)

3 = LT Buna N

4 = EPDM

5 = Aflas (400F)

6 = PC Buna N

7 = Graphite

8 = James Walker

1 = Pneumatic Actuator

2 = Gear Operator

3 = Handle

4 = Electric Actuator

5 = Bare Stem

AOV-TMBV - X X XX - X X X X X X

AOV-TMBV - 06 6 FP - 1 1 J 1 1 2

STANDARD American Oilfield Valves ASSEMBLY NUMBERS

Product Warranty

Limited Product Warranty

All products manufactured or sold by American Oilfield Valves are warranted against defects of material and workmanship for a period of twelve (12) months from the date of installation or eighteen (18) months from date of shipment, whichever period first expires, when all such products are used in the service and within the pressure range for which they were manufactured.

In the case of products or parts not wholly of American Oilfield Valves manufacture, American Oilfield Valves liability shall be limited to the extent of American Oilfield Valves recovery from the original manufacturer of such products or parts under its warranty or liability to American Oilfield Valves.

Any repair work performed by American Oilfield Valves is warranted for one year from completion of such repairs and applies only to work performed. If, within these specified periods, American Oilfield Valves receives notice from Buyer of any alleged defect in or nonconformance of any product or repair and if in American Oilfield Valves sole judgment the product or repair does not conform or is found to be defective in material or workmanship, then, Buyer shall, at American Oilfield Valves request, return the part or product F.O.B. to American Oilfield Valves designated plant or service location.

American Oilfield Valves has no liability for removal or reinstallation of products or equipment. American Oilfield Valves, at its option and expense, shall repair or replace the defective part or product, or repay to Buyer the full price paid by Buyer for such defective part, repair or product. Any repayment of purchase price shall be without interest.

American Oilfield Valves warranty liability, including defects caused by American Oilfield Valves negligence, shall be limited to such repair, replacement or refund, and shall not include claims for labor costs, expenses of Buyer resulting from such defects, recovery under general tort law or strict liability or for damages resulting from delays, loss of use, or other direct, indirect, incidental or consequential damages of any kind.

American Oilfield Valves will not be responsible for failures of products which have been in any way tampered with or altered by anyone other than an authorized representative of American Oilfield Valves, failures due to lack of compliance with recommended maintenance procedures or products which have been repaired or altered in such a way (in American Oilfield Valves judgment) as to affect the products adversely.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, STATUTORY OR IMPLIED, INCLUDING THE WARRANTY OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE WHICH EXCEED THE FOREGOING WARRANTY.

If you have questions regarding this warranty or if you would like information about other American Oilfield Valves products and services please contact us at the address and phone numbers below.



American OilField Valves
610 Rio Garnde Drive
Mission, Texas
78572

-  (956) 227-6332
-  (956) 227-6332
-  sales@aovvalves.com
-  www.aovvalves.com



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610 Rio Garnde Drive
Mission, Texas
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-  sales@aovvalves.com
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