

Trunnion mounted ball valves offering long service life combined with tight shut-off performance for harsh service conditions.

Features

Ball valves, trunnion mounted, side entry design (Type 5500), top entry design (Type 5700).

- Valve body is designed in accordance with the requirements of API 6D for pipeline service.
- Antistatic and anti blow-out stem design with integral pins to ensure perfect ball positioning.
- Seat design gives perfect tightness and is available as either self-relieving type or double piston effect type.
- Design minimizes friction, leading to low operating torque.
- Available as double block and bleed execution, which allows for venting and draining of line fluid from the body cavity.
- Full and reduced bore models are offered.
- Raimondi Ball valves are firesafe tested according to BS 6755, API 6FA and API 607.
- Available with electric, pneumatic and hydraulic actuators.



Technical data

Pressure ratings : ANSI/ASME: from 150# to 2500#. API 6A: from 2000 to 10000 PSI.

Body materials : carbon, alloy and duplex stainless steels, duplex steels, special alloys. All available cast and forged.

Temperature (°C) : -196 to + 400.

Sizes : 2" to 60".

Connections standards

Flanges : ASME B16.5.

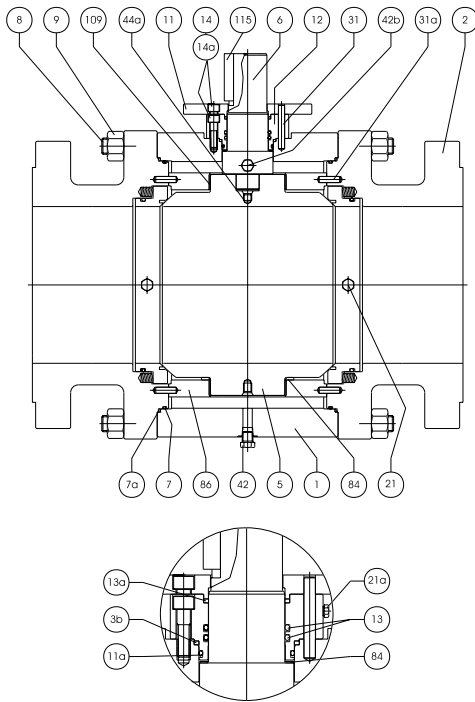
Buttweld : ASME B16.25.

Other connections on request.

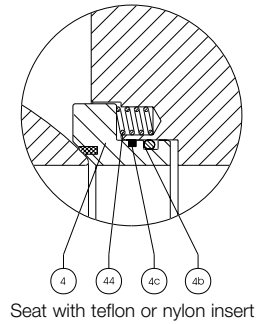
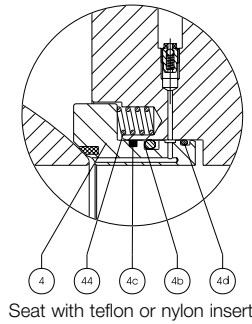
General application

The Raimondi trunnion mounted ball valves are suitable to stand the harsh service conditions often present in the hydrocarbon industry and in the gas storage and transportation field. In general, they are recommended for tight shut-off in high pressure and arduous fluid applications.

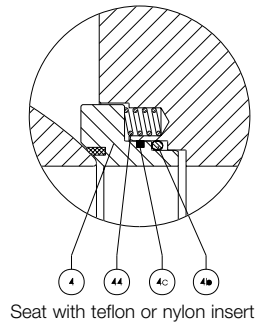
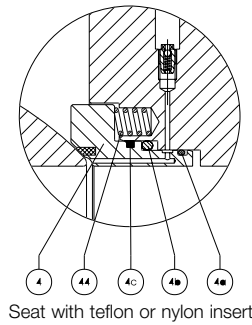
Ball Valve - Side Entry Configuration



Self Relieving Seats



Double Piston Effect



Materials of construction

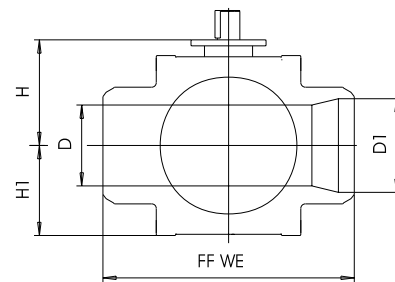
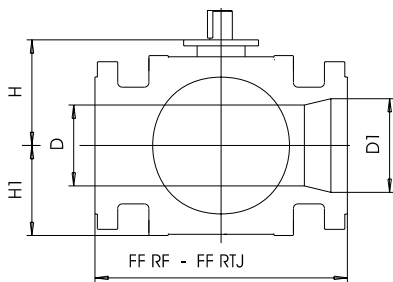
Item	Description	Body in A 105	Body in A 350 LF2	Body in A 182 F316
1	Body	A 105	A 350 LF2	A 182 F316
2	Closure	A 105	A 350 LF2	A 182 F316
3b	Firesafe Gasket	Graphite	Graphite	Graphite
4	Seat Ring	A 105 (1-2)	A 350 LF2 (1-2)	A 182 F316 (3)
4a	Grease Retainer O-ring	Viton	Viton	Viton
4b	O-ring	Viton	Viton	Viton
4d	Firesafe Gasket	Graphite	Graphite	Graphite
5	Ball	A 105 (1)	A 350 LF2 (1)	A 182 F316 (1)
6	Stem	AISI 4140 (1)	A 182 F51	A 182 F51
7	O-ring	Viton	Viton	Viton
7a	Firesafe Gasket	Graphite	Graphite	Graphite
8	Studs	A 103 B7	A 320 L7	A 193 B8M
9	Stud Nuts	A 194 2H	A 194 gr.4	A 194 8M
11	Flange	A 105	A 350 LF2	A 182 F316
11a	O-ring	Viton	Viton	Viton
12	Bonnet	A 105 (1)	A 350 LF2 (1)	A 182 F316
13	Stem O-rings	Viton	Viton	Viton
13a	Firesafe Gasket	Graphite	Graphite	Graphite
14	Capscrew	A 193 B8	A 193 B8	A 193 B8M
14a	Capscrew	A 193 B8	A 193 B8	A 193 B8M
21	Seat Injector	AISI 316	AISI 316	AISI 316
21a	Seat Injector	AISI 316	AISI 316	AISI 316
31	Pin	AISI 4140	AISI 4140	AISI 4140
31a	Pin	AISI 4140	AISI 4140	AISI 4140
42	Drain Plug	A 105	A 182 F316	A 182 F316
42b	Vent Plug	A 105	A 182 F316	A 182 F316
44	Spring	Inconel X-750	Inconel X-750	Inconel X-750
44a	Antistatic Device	Inconel X-750	Inconel X-750	Inconel X-750
84	Thrust Bearings	C. Steel/DU-DRY	C. Steel/DU-DRY	S. Steel/DU-DRY
86	Ball Trunnion	A 105	A 350 LF2	A 182 F316
109	Thrust Bearings	C. Steel/DU-DRY	C. Steel/DU-DRY	S. Steel/DU-DRY
115	Key	AISI 4140	AISI 4140	AISI 4140

Notes

1. ENP (Electroless Nickel Plated), 0,003" Min. thickness.
2. Seat soft insert.
3. ENP (Electroless Nickel Plated), 0,001" Min. thickness.

Ball Valves

dimensions & weight - side entry configuration



ANSI class 150 (Fig. 5505)

Size inch	Weight							
	FF RF	FF RTJ	FF WE	D	D1	H	H1	kg
2	178	190	216	51	51	105	100	32
3x2	203	216	283	51	77	105	100	36
3	203	216	283	77	77	160	130	53
4x3	229	241	305	77	102	160	130	63
4	229	241	305	102	102	205	170	100
6x4	394	406	457	102	152	205	170	105
6	394	406	457	152	152	245	190	157
8x6	457	470	521	152	203	245	190	200
8	457	470	521	203	203	280	230	250
10x8	533	546	559	203	254	280	230	300
10	533	546	559	254	254	326	280	390
12x10	610	622	635	254	305	326	280	470
14x10	686	698	762	254	337	320	280	530
12	610	622	635	305	305	350	300	578
14x12	685	698	762	305	337	350	300	630
16x12	762	775	838	305	387	350	300	700
14	686	698	762	337	337	380	330	770
16x14	762	775	838	337	387	380	330	830
16	762	775	838	387	387	415	350	1100
18x16	864	876	914	387	438	415	350	1100
20x16	914	927	991	387	489	415	350	1200
18	864	876	914	438	438	440	400	1250
20x18	914	927	991	438	489	440	400	1300
20	914	927	991	489	489	500	440	1800
24x20	1067	1079	1143	489	591	500	440	2100
22	991	-	1092	540	540	520	470	2400
24	1067	1079	1143	591	591	585	530	3100
30x24	1295	-	1397	591	737	585	530	3400
26	1143	-	1245	635	635	630	570	3700
28	1244	-	1347	686	686	645	650	4500
30	1295	-	1397	736	736	700	700	5300
36x30	1524	-	1728	736	876	700	700	6400
32	1371	-	1524	781	781	740	750	6900
34	1473	-	1626	832	832	770	780	8200
36	1524	-	1728	876	876	820	800	9700
40	1753	-	1956	978	978	900	900	13000
42	1855	-	2083	1022	1022	960	950	15000
48	2134	-	2388	1168	1168	1100	1100	23000
56	2489	-	2489	1384	1384	1400	1300	37000

ANSI class 300 (Fig. 5510)

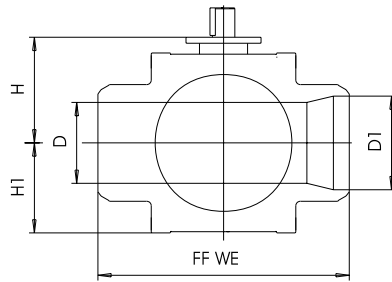
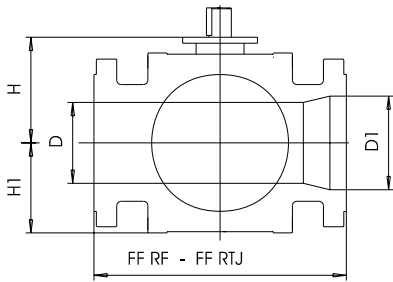
Size inch	Weight							
	FF RF	FF RTJ	FF WE	D	D1	H	H1	kg
2	216	232	216	51	51	105	100	31
3x2	283	298	283	51	77	105	100	34
3	283	298	283	77	77	160	130	58
4x3	305	321	305	77	102	160	130	70
4	305	321	305	102	102	205	170	110
6x4	403	419	457	102	152	205	170	120
6	403	419	457	152	152	245	190	180
8x6	502	517	521	152	203	245	190	220
8	502	517	521	203	203	280	230	280
10x8	568	584	559	203	254	280	230	320
10	568	584	559	254	254	326	280	410
12x10	648	664	635	254	305	326	280	600
14x10	762	778	762	254	337	320	280	660
12	648	664	635	305	305	350	300	760
14x12	762	778	762	305	337	350	300	850
16x12	838	854	838	305	387	350	300	1000
14	762	768	762	337	337	380	330	1100
16x14	838	854	838	337	387	380	330	1200
16	838	854	838	387	387	415	350	1600
18x16	914	930	914	387	438	415	350	1700
20x16	991	1010	991	387	489	415	350	1700
18	914	930	914	438	438	440	400	1700
20x18	991	1010	991	438	489	440	400	1850
20	991	1010	991	489	489	500	440	2300
24x20	1143	1165	1143	489	591	500	440	2700
22	1092	1114	1092	540	540	520	470	2900
24	1143	1165	1143	591	591	585	530	3500
30x24	1397	1422	1397	591	736	585	530	4600
26	1245	1270	1245	635	635	630	570	4900
28	1346	1372	1346	686	686	645	650	6000
30	1397	1422	1397	736	736	700	700	6800
36x30	1727	1756	1727	736	876	700	700	8000
32	1524	1553	1524	781	781	740	750	8000
34	1626	1654	1626	832	832	770	780	9100
36	1727	1756	1727	876	876	820	800	11000
40	1956	-	1956	978	978	900	900	14000
42	2083	-	2083	1022	1022	960	950	17000
48	2170	-	2170	1168	1168	1100	1100	25000
56	2743	-	2743	1384	1384	1400	1300	39500

Notes

1. For DN up to 24" (except DN 22"), flanges are according to ANSI B16.5.
2. For DN 22" and over 24", flanges are according to MSS SP 44.
3. Butt welding ends are according to ANSI B16.25
4. Face to face and end dimensions are according to API 6D.
5. Dimensions are in mm.
6. Other sizes are available on request. Please consult supplier.

Ball Valves

dimensions & weight - side entry configuration



Notes

1. For DN up to 24" (except DN 22"), flanges are according to ANSI B16.5.
2. For DN 22" and over 24", flanges are according to MSS SP 44.
3. Buttwelding ends are according to ANSI B16.25.
4. Face to face and end dimensions are according to API 6D.
5. Dimensions are in mm.
6. Other sizes are available on request. Please consult supplier.

ANSI class 600 (Fig. 5520)

Size inch								Weight
	FF RF	FF RTJ	FF WE	D	D1	H	H1	kg
2	292	295	292	51	51	105	100	35
3x2	356	359	356	51	77	105	100	42
3	356	359	356	77	77	160	130	66
4x3	432	435	432	77	102	160	130	90
4	432	435	432	102	102	205	170	118
6x4	559	562	559	102	152	205	170	160
6	559	562	559	152	152	245	190	270
8x6	660	664	660	152	203	245	190	300
8	660	664	660	203	203	280	230	500
10x8	787	791	787	203	254	280	230	560
10	787	791	787	254	254	326	280	780
12x10	838	841	838	254	305	326	280	820
14x10	889	892	889	254	337	320	280	920
12	838	841	838	305	305	350	300	1100
14x12	889	892	889	305	337	350	300	1200
16x12	991	994	991	305	387	350	300	1400
14	889	892	889	337	337	380	330	1100
16x14	991	994	991	337	387	380	330	1400
16	991	994	991	387	387	415	350	1600
18x16	1092	1095	1092	387	438	415	350	1700
20x16	1194	1200	1194	387	489	415	350	2100
18	1092	1095	1092	438	438	440	400	2160
20x18	1194	1200	1194	438	489	440	400	2400
20	1194	1200	1194	489	489	500	440	2700
24x20	1397	1406	1397	489	591	500	440	3300
22	1296	1305	1296	540	540	520	470	3900
24	1397	1406	1397	591	591	585	530	5000
30x24	1651	1664	1651	591	736	585	530	5900
26	1448	1460	1448	635	635	630	570	5700
28	1549	1562	1549	686	686	645	650	7000
30	1651	1664	1651	736	736	700	700	9000
36x30	2083	2098	2083	736	876	700	700	11000
32	1778	1794	1778	781	781	740	750	9800
34	1930	1946	1930	832	832	770	780	12000
36	2083	2098	2083	876	876	820	800	14000
40	2337	2337	2337	978	978	900	900	19000
42	2437	2437	2437	1022	1022	960	950	22000
48	2540	2540	2540	1168	1168	1100	1100	32000
56	2949	2949	2949	1384	1384	1400	1300	49000

ANSI class 900 (Fig. 5525)

							Weight
FF RF	FF RTJ	FF WE	D	D1	H	H1	kg
216	232	216	51	51	105	100	50
283	298	283	51	77	105	100	55
283	298	283	77	77	160	130	80
305	321	305	77	102	160	130	100
305	321	305	102	102	205	170	150
403	419	457	102	152	205	170	220
403	419	457	152	152	245	190	360
502	517	521	152	203	245	190	450
502	517	521	203	203	280	230	620
568	584	559	203	254	280	230	730
568	584	559	254	254	326	280	1100
648	664	635	254	305	326	280	1200
762	778	762	254	337	320	280	1360
648	664	635	305	305	350	300	1600
762	778	762	305	337	350	300	1700
838	854	838	305	387	350	300	1850
762	768	762	337	337	380	330	1450
838	854	838	337	387	380	330	1980
838	854	838	387	387	415	350	2200
914	930	914	387	438	415	350	2500
991	1010	991	387	489	415	350	2300
914	930	914	438	438	440	400	2800
991	1010	991	438	489	440	400	3200
991	1010	991	489	489	500	440	4250
1143	1165	1143	489	591	500	440	5500
1092	1114	1092	540	540	520	470	6500
1143	1165	1143	591	591	585	530	7000
1397	1422	1397	591	736	585	530	8900
1245	1270	1245	635	635	630	570	8000
1346	1372	1346	686	686	645	650	9500
1397	1422	1397	736	736	700	700	12500
1727	1756	1727	736	876	700	700	16000
1524	1553	1524	781	781	740	750	12000
1626	1654	1626	832	832	770	780	18000
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-

ANSI Class 1500 (Fig. 5530)

Size inch								Weight
	FF RF	FF RTJ	FF WE	D	D1	H	H1	kg
2	368	371	368	51	51	110	105	60
3x2	470	473	470	51	77	110	105	70
3	470	473	470	77	77	165	130	100
4x3	546	549	546	77	102	165	130	130
4	546	549	546	102	102	220	170	210
6x4	705	711	705	102	146	220	170	300
6	705	711	705	146	146	260	230	500
8x6	832	841	832	146	194	260	230	580
8	832	841	832	194	194	310	290	850
10x8	991	1000	991	194	241	310	290	1100
10	991	1000	991	241	241	370	360	1600
12x10	1130	1146	1130	241	289	370	360	1800
14x10	1257	1276	1257	241	317	370	360	2200
12	1130	1146	1130	289	289	430	440	2300
14x12	1257	1276	1257	289	317	430	440	2600
16x12	1384	1406	1384	289	362	430	440	2900
14	1257	1276	1257	317	317	450	450	2950
16x14	1384	1406	1384	317	362	450	450	3300
16	1384	1406	1384	362	362	500	600	4200
18x16	1537	1559	1537	362	407	500	600	5000
20x16	1664	1686	1664	362	457	500	600	5600

ANSI Class 2500 (Fig. 5535)

							Weight
FF RF	FF RTJ	FF WE	D	D1	H	H1	kg
451	454	451	44.5	44.5	120	130	100
578	584	578	44.5	63.5	120	130	170
578	584	578	63.5	63.5	180	200	200
673	683	673	63.5	89	180	200	280
673	683	673	89	89	230	250	390
914	927	914	89	133	260	250	520
914	927	914	133	133	260	250	790
1022	1038	1022	133	181	400	250	1100
1022	1038	1022	181	181	400	350	1400
1270	1292	1270	181	226	450	350	1700
1270	1292	1270	226	226	450	420	2200
1422	1445	1422	226	267	450	420	2600
-	-	-	-	-	-	-	-
1422	1445	1422	267	267	520	510	3400