

VALTORC

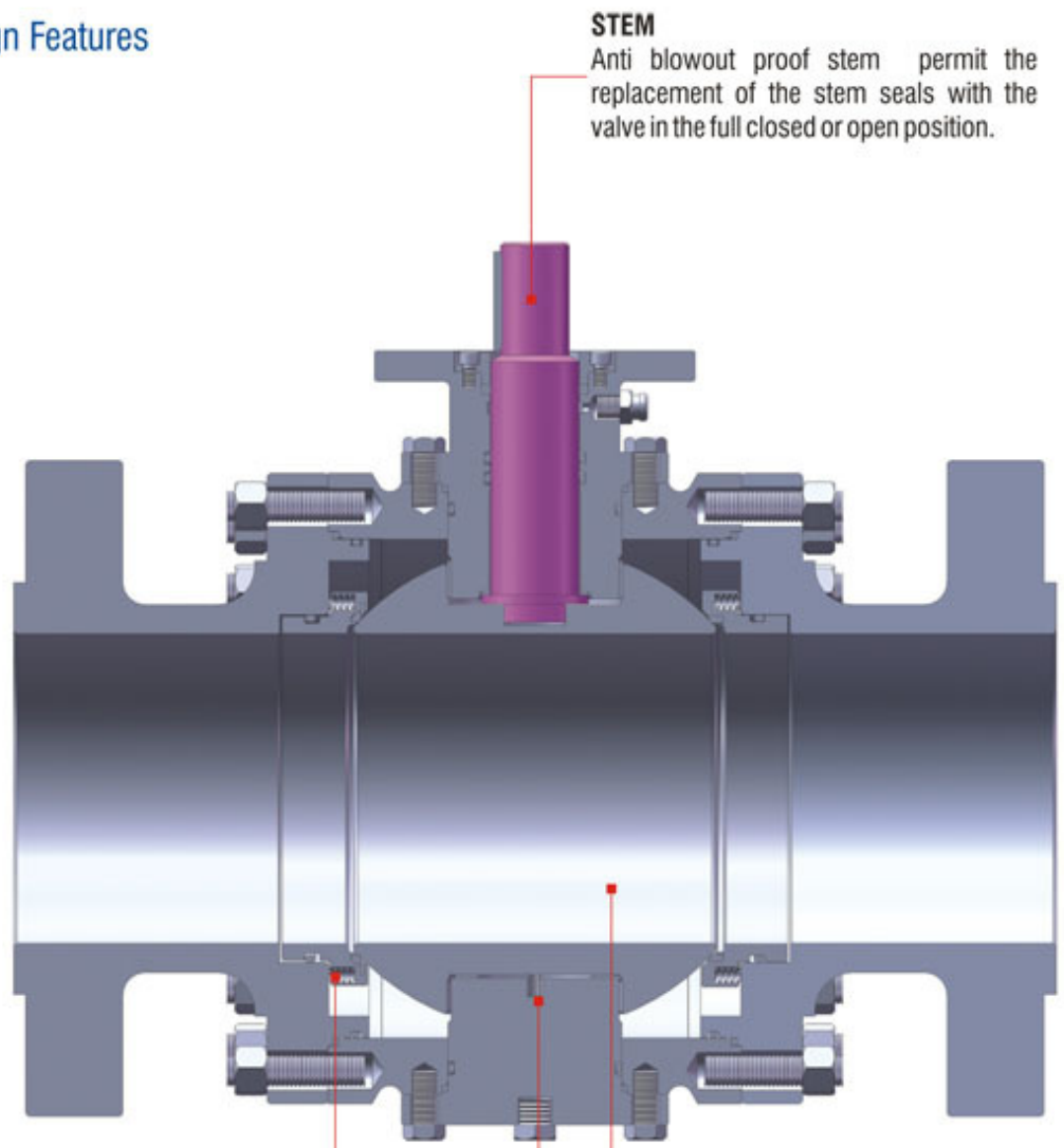
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THREE PIECE TRUNNION MOUNTED BALL VALVES

SERIES 310



Design Features



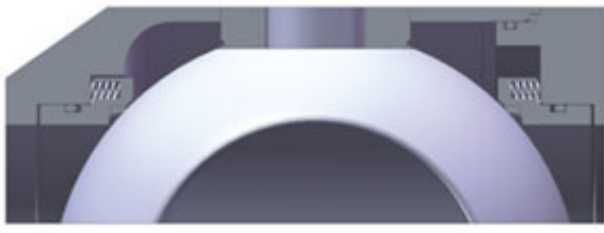
STEM
Anti blowout proof stem permit the replacement of the stem seals with the valve in the full closed or open position.

FLOATING SEAT RING
Two independent floating seat rings assure the bi-directional tightness of the valve from zero differential pressure to the maximum rated pressure.

TRUNNION-MOUNTED BALL
The ball is fixed and the seat rings are floating, free to move along the valve axis. As the pressure increases the fluid pressure pushes the seat rings against the ball.

SELF RE-LEANING SEAT DESIGN
When the body cavity pressure exceeds the down stream seat spring preloaded force, the differential force in the cavity area pushes the downstream seat away from the ball, the body cavity pressure will automatically relived. And then seat returns to the ball under spring loaded action.

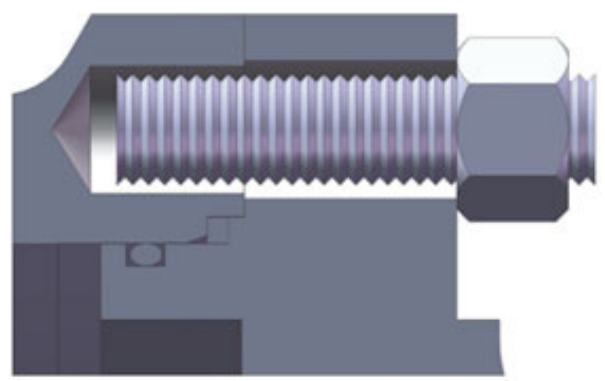
ANTI-STATIC DESIGN
The electric conductance between all the metallic components.



DOUBLE BLOCK AND BLEED

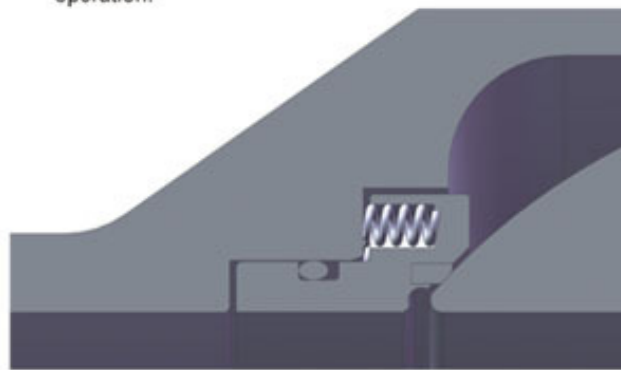
Independent spring loaded floating seats maintain contact with the ball and provide an effective tight shut off at low pressure differential.

Independent upstream and down stream seats permit raining of fluids from the body cavity, allowing double block and bleed operation.



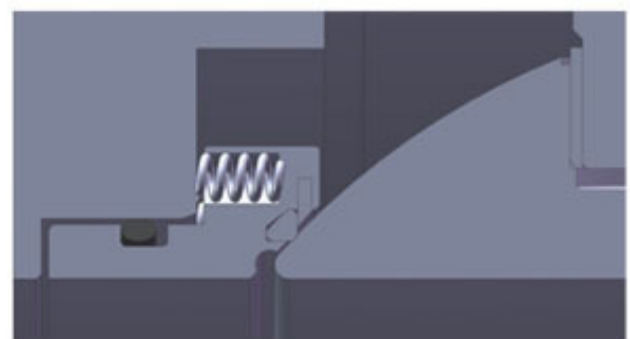
BODY JOINTS

The double body seals O-rings and fire safe graphite gasket in all static joints of the body components ensures protection against external leakage and fugitive emission requirements.



FIRE SAFE , PRIMARY SOFT SECONDARY METAL SEAT.

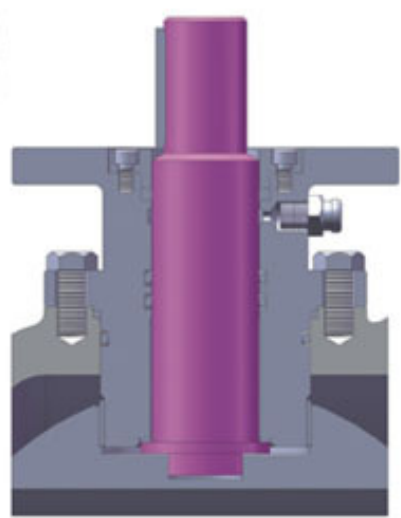
A resilient material is inserted into the metal seat holder to provide a soft action in addition to the metal sealing between the ball and the seat rings. In case of fire soft insert goes burnt and spring loaded seats insure metal to metal sealing.



FIRE SAFE , PRIMARY METAL SECONDARY SOFT SEAT.

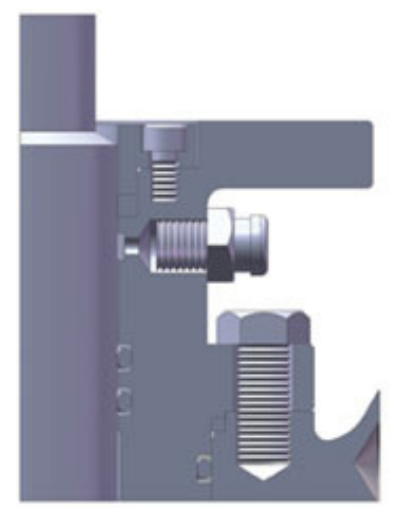
Range

Size		Pressure Class				
Inch	MM	150	300	600	900	1500
8"	200					•
10"	250					•
12"	300					•
14"	350	•	•	•	•	
16"	400	•	•	•	•	
18"	450	•	•	•	•	
20"	500	•	•	•		
24"	600	•	•	•		



STEM SEALING

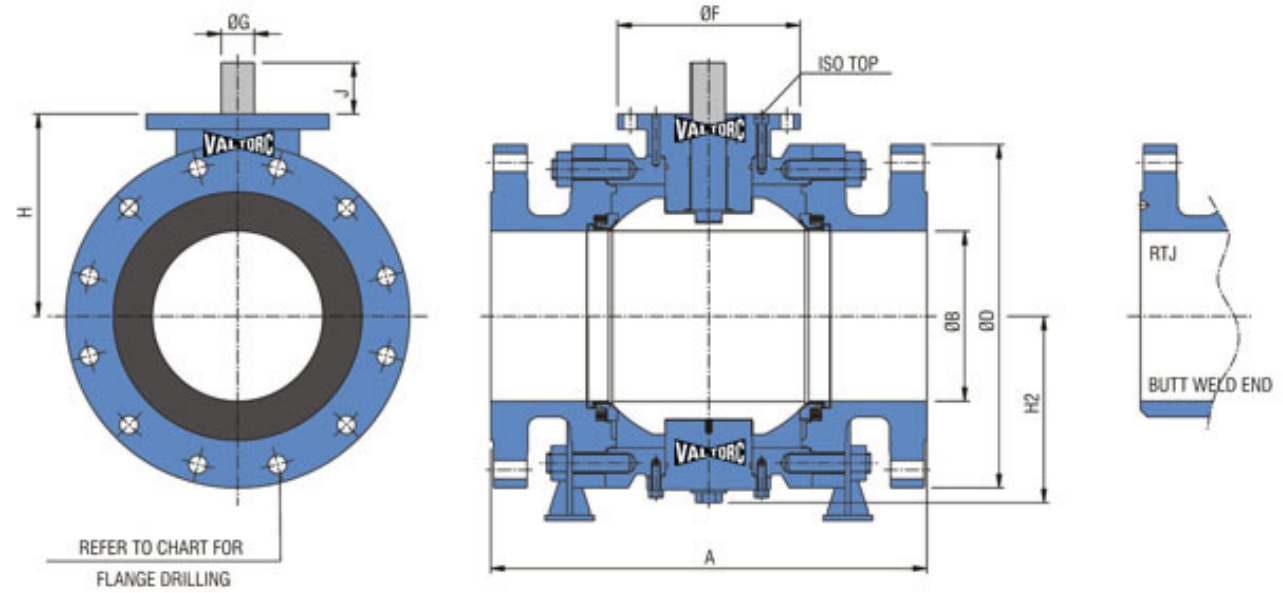
The stem seal integrity is achieved by the use of two O-rings And one graphite gasket, retained by gland ensure the stem Seal.



EMERGENCY SEAT AND STEM SEAL.

An emergency sealant injection system is available on request For 6" and above valve. Each valve has port for sealant injection feature.

Engineering



FB CLASS 150

Valve Size		ØB	A			H	H2	ØF	ISO TOP			ØG	J	KEY SIZE	ØD	FLANGE DRILLING			Wt. (Kg)
INCH	MM		RF	RTJ	BWE				PCD	HOLEØ	NOS					BC	HOLEØ	NOS	
14"	350	340	686	699	762	625	400	300	254	18	8	75	110	20x12	535	476.3	28.5	12	
16"	400	387	762	775	838	700	420	300	254	18	8	75	110	20x12	595	539.8	28.5	16	
18"	450	440	864	877	914	795	465	300	254	18	8	90	135	25x14	635	577.9	31.8	16	
20"	500	490	914	927	991	795	505	350	298	24	8	90	135	25x14	700	635	31.8	20	
24"	600	595	1067	1080	1143	800	635	415	356	32	8	140	210	36x20	815	749.2	35	20	

FB CLASS 300

DIMENSIONS (mm)

Valve Size		ØB	A			H	H2	ØF	ISO TOP			ØG	J	KEY SIZE	ØD	FLANGE DRILLING			Wt. (Kg)
INCH	MM		RF	RTJ	BWE				PCD	HOLEØ	NOS					BC	HOLEØ	NOS	
14"	350	340	762	778	762	635	405	300	254	18	8	75	110	20x12	585	514.4	31.8	20	
16"	400	387	838	854	838	700	440	300	254	18	8	75	110	20x12	650	571.4	35	20	
18"	450	440	914	930	914	795	475	350	298	24	8	90	135	25x14	710	628.6	35	24	
20"	500	490	991	1010	991	800	505	350	298	24	8	90	135	25x14	775	685.8	35	24	
24"	600	595	1143	1165	1143	815	735	415	356	32	8	140	210	36x20	915	812.8	41.3	24	

FB CLASS 600

Valve Size		ØB	A			H	H2	ØF	ISO TOP			ØG	J	KEY SIZE	ØD	FLANGE DRILLING			Wt. (Kg)
INCH	MM		RF	RTJ	BWE				PCD	HOLEØ	NOS					BC	HOLEØ	NOS	
14"	350	340	889	892	889	640	415	350	298	24	8	75	110	20x12	605	527	38.1	20	
16"	400	387	991	994	991	705	445	350	298	24	8	75	110	20x12	685	603.2	41.3	20	
18"	450	440	1092	1095	1092	805	500	415	356	32	8	90	135	25x14	745	654	44.5	20	
20"	500	490	1194	1200	1194	805	510	415	356	32	8	90	135	25x14	815	723.9	44.5	24	
24"	600	595	1397	1407	1397	825	745	475	406	39	8	140	210	36x20	940	838.2	50.8	24	

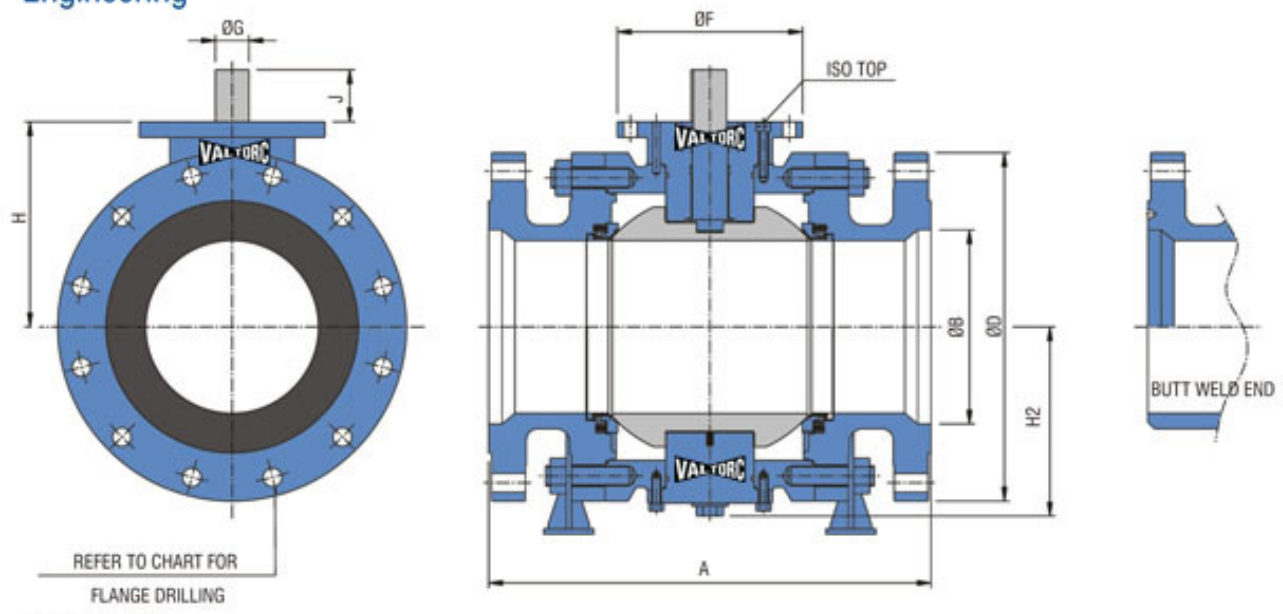
FB CLASS 900

Valve Size		ØB	A			H	H2	ØF	ISO TOP			ØG	J	KEY SIZE	ØD	FLANGE DRILLING			Wt. (Kg)
INCH	MM		RF	RTJ	BWE				PCD	HOLEØ	NOS					BC	HOLEØ	NOS	
14"	350	340	1029	1039	1029	655	425	415	356	32	8	90	135	25x14	640	558.8	41.3	20	
16"	400	387	1130	1140	1130	715	520	415	356	32	8	90	135	25x14	705	616	44.5	20	
18"	450	440	1219	1232	1219	815	600	475	406	39	8	120	180	32x18	785	685.8	50.8	20	

FB CLASS 1500

Valve Size		ØB	A			H	H2	ØF	ISO TOP			ØG	J	KEY SIZE	ØD	FLANGE DRILLING			Wt. (Kg)
INCH	MM		RF	RTJ	BWE				PCD	HOLEØ	NOS					BC	HOLEØ	NOS	
8"	200	203	832	842	832	450	525	300	254	18	8	75	110	20x12	485	393.7	44.5	12	
10"	250	254	991	1001	991	535	595	350	298	24	8	75	110	20x12	585	482.6	50.8	12	
12"	300	305	1130	1146	1130	545	600	415	356	32	8	90	135	25x14	675	571.5	54	16	

Engineering



RB CLASS 150

Valve Size		ØB	A			H	H2	ØF	ISO TOP			ØG	J	KEY SIZE	ØD	FLANGE DRILLING			Wt. (Kg)
INCH	MM		RF	RTJ	BWE				PCD	NOS	HOLEØ					BC	HOLEØ	NOS	
14"x12"	350x300	337	686	699	762	365	330	300	254	18	8	55	80	16x10	535	476.3	28.5	12	
16"x14"	400x350	387	762	775	838	625	400	300	254	18	8	75	110	20x12	595	539.8	28.5	16	
18"x16"	450x400	438	864	876	914	700	420	300	254	18	8	75	110	20x12	635	577.9	31.8	16	
20"x18"	500x450	489	914	927	991	795	465	300	254	18	8	90	135	25x14	700	635	31.8	20	
24"x20"	600x500	591	1067	1080	1143	795	505	350	298	24	8	90	135	25x14	815	749.2	35	20	

RB CLASS 300

DIMENSIONS (mm)

Valve Size		ØB	A			H	H2	ØF	ISO TOP			ØG	J	KEY SIZE	ØD	FLANGE DRILLING			Wt. (Kg)
INCH	MM		RF	RTJ	BWE				PCD	NOS	HOLEØ					BC	HOLEØ	NOS	
14"x12"	350x300	337	762	778	762	365	330	300	254	18	8	55	80	16x10	585	514.4	31.8	20	
16"x14"	400x350	387	838	854	838	635	405	300	254	18	8	75	110	20x12	650	571.4	35	20	
18"x16"	450x400	438	914	930	914	700	440	300	254	18	8	75	110	20x12	710	628.6	35	24	
20"x18"	500x450	489	991	1010	991	795	475	350	298	24	8	90	135	25x14	775	685.8	35	24	
24"x20"	600x500	591	1143	1165	1143	800	505	350	298	24	8	90	135	25x14	915	812.8	41.3	24	

RB CLASS 600

Valve Size		ØB	A			H	H2	ØF	ISO TOP			ØG	J	KEY SIZE	ØD	FLANGE DRILLING			Wt. (Kg)
INCH	MM		RF	RTJ	BWE				PCD	NOS	HOLEØ					BC	HOLEØ	NOS	
14"x12"	350x300	337	889	892	889	365	330	350	298	24	8	75	110	20x12	605	527	38.1	20	
16"x14"	400x350	387	991	994	991	640	415	350	298	24	8	75	110	20x12	685	603.2	41.3	20	
18"x16"	450x400	438	1092	1095	1092	705	445	350	298	24	8	75	110	20x12	745	654	44.5	20	
20"x18"	500x450	489	1194	1200	1194	805	500	415	356	32	8	90	135	25x14	815	723.9	44.5	24	
24"x20"	600x500	591	1397	1407	1397	805	510	415	356	32	8	90	135	25x14	940	838.2	50.8	24	

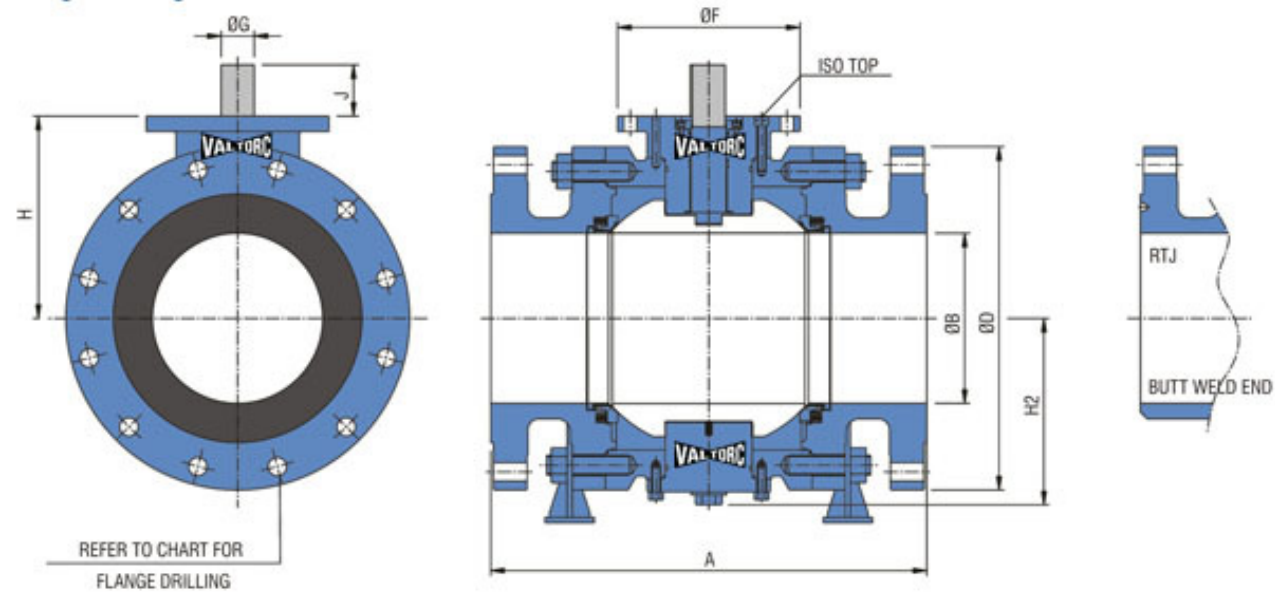
RB CLASS 900

Valve Size		ØB	A			H	H2	ØF	ISO TOP			ØG	J	KEY SIZE	ØD	FLANGE DRILLING			Wt. (Kg)
INCH	MM		RF	RTJ	BWE				PCD	NOS	HOLEØ					BC	HOLEØ	NOS	
14"x12"	350x300	337	1029	1038	1029	390	350	415	356	32	8	75	110	20x12	640	558.8	41.3	20	
16"x14"	400x350	387	1130	1140	1130	655	425	415	356	32	8	90	135	25x14	705	616	44.5	20	
18"x16"	450x400	438	1219	1232	1219	715	520	415	356	32	8	90	135	25x14	785	685.8	50.8	20	

RB CLASS 1500

Valve Size		ØB	A			H	H2	ØF	ISO TOP			ØG	J	KEY SIZE	ØD	FLANGE DRILLING			Wt. (Kg)
INCH	MM		RF	RTJ	BWE				PCD	NOS	HOLEØ					BC	HOLEØ	NOS	
8"x6"	200x150	203	832	841	832	280	230	300	254	18	8	55	80	16x10	485	393.7	44.5	12	
10"x8"	250x200	254	991	1000	991	450	525	300	254	18	8	75	110	20x12	585	482.6	50.8	12	
12"x10"	300x250	305	1130	1146	1130	535	595	350	298	24	8	75	110	20x12	675	571.5	54	16	

Engineering



FB CLASS 150

Valve Size		ØB	A			H	H2	ØF	ISO TOP			ØG	J	KEY SIZE	ØD	FLANGE DRILLING			Wt. (Kg)
INCH	MM		RF	RTJ	BWE				PCD	HOLEØ	NOS					BC	HOLEØ	NOS	
14"	350	13.38	27.0	27.51	30.0	24.60	15.74	11.81	10.00	0.70	8	2.95	4.33	0.78x0.47	21.06	18.75	1.12	12	
16"	400	15.23	30.0	30.51	33.0	27.55	16.53	11.81	10.00	0.70	8	2.95	4.33	0.78x0.47	23.42	21.25	1.12	16	
18"	450	17.32	34.0	34.52	36.0	31.29	18.30	11.81	10.00	0.70	8	3.54	5.31	0.98x0.55	25.00	22.75	1.25	16	
20"	500	19.29	36.0	36.50	39.0	31.29	19.88	13.77	11.73	0.94	8	3.54	5.31	0.98x0.55	27.55	25.00	1.25	20	
24"	600	23.42	42.0	42.52	45.0	31.49	25.00	16.33	14.01	1.25	8	5.51	8.26	1.41x0.78	32.08	29.49	1.37	20	

FB CLASS 300

Valve Size		ØB	A			H	H2	ØF	ISO TOP			ØG	J	KEY SIZE	ØD	FLANGE DRILLING			Wt. (Kg)
INCH	MM		RF	RTJ	BWE				PCD	HOLEØ	NOS					BC	HOLEØ	NOS	
14"	350	13.38	30.0	30.6	30.0	25.00	15.94	11.81	10.00	0.70	8	2.95	4.33	0.78x0.47	23.03	20.25	1.25	20	
16"	400	15.23	33.0	33.6	33.0	27.55	17.32	11.81	10.00	0.70	8	2.95	4.33	0.78x0.47	25.59	22.49	1.37	20	
18"	450	17.32	36.0	36.6	36.0	31.29	18.70	13.77	11.73	0.94	8	3.54	5.31	0.98x0.55	28.00	24.75	1.37	24	
20"	500	19.29	39.0	39.8	39.0	31.49	19.88	13.77	11.73	0.94	8	3.54	5.31	0.98x0.55	30.51	27.00	1.37	24	
24"	600	23.42	45.0	45.9	45.0	32.08	28.93	16.33	14.01	1.25	8	5.51	8.26	1.41x0.78	36.02	32.00	1.62	24	

DIMENSIONS (Inch)

FB CLASS 600

Valve Size		ØB	A			H	H2	ØF	ISO TOP			ØG	J	KEY SIZE	ØD	FLANGE DRILLING			Wt. (Kg)
INCH	MM		RF	RTJ	BWE				PCD	HOLEØ	NOS					BC	HOLEØ	NOS	
14"	350	13.38	35.0	35.12	35.0	25.19	16.33	13.77	11.73	0.94	8	2.95	4.33	0.78x0.47	23.81	20.74	1.50	20	
16"	400	15.23	39.0	39.13	39.0	27.75	17.51	13.77	11.73	0.94	8	2.95	4.33	0.78x0.47	26.96	23.74	1.62	20	
18"	450	17.32	43.0	43.11	43.0	31.69	19.68	16.33	14.01	1.25	8	3.54	5.31	0.98x0.55	29.33	25.74	1.75	20	
20"	500	19.29	47.0	47.24	47.0	31.69	20.07	16.33	14.01	1.25	8	3.54	5.31	0.98x0.55	32.08	28.5	1.75	24	
24"	600	23.42	55.0	55.39	55.0	32.48	29.33	18.70	15.98	1.53	8	5.51	8.26	1.41x0.78	37.00	33.00	2.00	24	

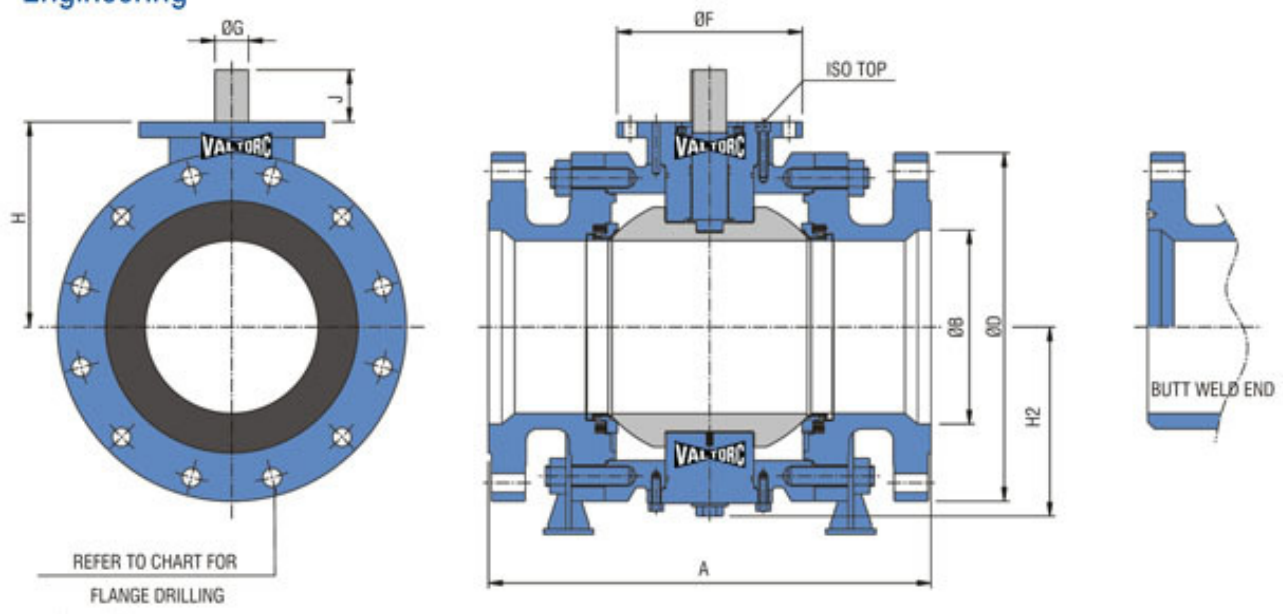
FB CLASS 900

Valve Size		ØB	A			H	H2	ØF	ISO TOP			ØG	J	KEY SIZE	ØD	FLANGE DRILLING			Wt. (Kg)
INCH	MM		RF	RTJ	BWE				PCD	HOLEØ	NOS					BC	HOLEØ	NOS	
14"	350	13.38	40.5	40.90	40.5	25.78	16.73	16.33	14.01	1.25	8	3.54	5.31	0.98x0.55	25.19	21.98	1.62	20	
16"	400	15.23	44.5	44.88	44.5	28.14	20.47	16.33	14.01	1.25	8	3.54	5.31	0.98x0.55	27.75	24.25	1.75	20	
18"	450	17.32	48.0	48.50	48.0	32.08	23.62	18.70	15.98	1.53	8	4.72	7.08	1.25x0.78	30.90	27.00	2.00	20	

FB CLASS 1500

Valve Size		ØB	A			H	H2	ØF	ISO TOP			ØG	J	KEY SIZE	ØD	FLANGE DRILLING			Wt. (Kg)
INCH	MM		RF	RTJ	BWE				PCD	HOLEØ	NOS					BC	HOLEØ	NOS	
8"	200	7.99	32.8	33.14	32.8	17.71	20.66	11.81	10.00	0.70	8	2.95	4.33	0.78x0.47	19.09	15.50	1.75	12	
10"	250	10.00	39.0	39.40	39.0	21.06	23.42	13.77	11.73	0.94	8	2.95	4.33	0.78x0.47	23.03	19.00	2.00	12	
12"	300	12.00	44.5	45.11	44.5	21.45	23.62	16.33	14.01	1.25	8	3.54	5.31	0.98x0.55	26.57	22.50	2.12	16	

Engineering



RB CLASS 150

Valve Size		ØB	A			H	H2	ØF	ISO TOP			ØG	J	KEY SIZE	ØD	FLANGE DRILLING			Wt. (Kg)
INCH	MM		RF	RTJ	BWE				PCD	NOS	HOLEØ					BC	HOLEØ	NOS	
14"x12"	350x300	13.27	27.0	27.51	30.0	14.37	13.00	11.81	10.00	0.70	8	2.16	3.14	0.62x0.39	21.06	18.75	1.12	12	
16"x14"	400x350	15.24	30.0	30.51	33.0	24.60	15.74	11.81	10.00	0.70	8	2.95	4.33	0.78x0.47	23.42	21.25	1.12	16	
18"x16"	450x400	17.24	34.0	34.52	36.0	27.55	16.53	11.81	10.00	0.70	8	2.95	4.33	0.78x0.47	25.00	22.75	1.25	16	
20"x18"	500x450	19.25	36.0	36.50	39.0	31.29	18.30	11.81	10.00	0.70	8	3.54	5.31	0.98x0.55	27.55	25.00	1.25	20	
24"x20"	600x500	23.27	42.0	42.52	45.0	31.29	19.88	13.77	11.73	0.94	8	3.54	5.31	0.98x0.55	32.08	29.49	1.37	20	

RB CLASS 300

Valve Size		ØB	A			H	H2	ØF	ISO TOP			ØG	J	KEY SIZE	ØD	FLANGE DRILLING			Wt. (Kg)
INCH	MM		RF	RTJ	BWE				PCD	NOS	HOLEØ					BC	HOLEØ	NOS	
14"x12"	350x300	13.27	30.0	30.6	30.0	14.37	13.00	11.81	10.00	0.70	8	2.16	3.14	0.62x0.39	23.03	20.25	1.25	20	
16"x14"	400x350	15.24	33.0	33.6	33.0	25.00	15.94	11.81	10.00	0.70	8	2.95	4.33	0.78x0.47	25.59	22.49	1.37	20	
18"x16"	450x400	17.24	36.0	36.6	36.0	27.55	17.32	11.81	10.00	0.70	8	2.95	4.33	0.78x0.47	28.00	24.75	1.37	24	
20"x18"	500x450	19.25	39.0	39.8	39.0	31.29	18.70	13.77	11.73	0.94	8	3.54	5.31	0.98x0.55	30.51	27.00	1.37	24	
24"x20"	600x500	23.27	45.0	45.9	45.0	31.49	19.88	13.77	11.73	0.94	8	3.54	5.31	0.98x0.55	36.02	32.00	1.62	24	

DIMENSIONS (inch)

RB CLASS 600

Valve Size		ØB	A			H	H2	ØF	ISO TOP			ØG	J	KEY SIZE	ØD	FLANGE DRILLING			Wt. (Kg)
INCH	MM		RF	RTJ	BWE				PCD	NOS	HOLEØ					BC	HOLEØ	NOS	
14"x12"	350x300	13.27	35.0	35.12	35.0	14.37	13.00	13.77	11.73	0.94	8	2.95	4.33	0.78x0.47	23.81	20.74	1.50	20	
16"x14"	400x350	15.24	39.0	39.13	39.0	25.19	16.33	13.77	11.73	0.94	8	2.95	4.33	0.78x0.47	26.96	23.74	1.62	20	
18"x16"	450x400	17.24	43.0	43.11	43.0	27.75	17.51	13.77	11.73	0.94	8	2.95	4.33	0.78x0.47	29.33	25.74	1.75	20	
20"x18"	500x450	19.25	47.0	47.24	47.0	31.69	19.68	16.33	14.01	1.25	8	3.54	5.31	0.98x0.55	32.08	28.5	1.75	24	
24"x20"	600x500	23.27	55.0	55.39	55.0	31.69	20.07	16.33	14.01	1.25	8	3.54	5.31	0.98x0.55	37.00	33.00	2.00	24	

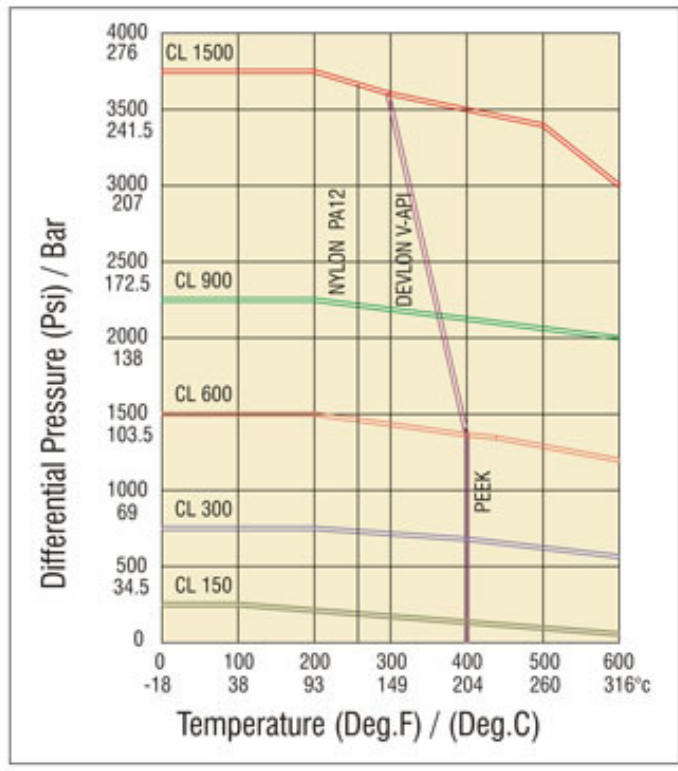
RB CLASS 900

Valve Size		ØB	A			H	H2	ØF	ISO TOP			ØG	J	KEY SIZE	ØD	FLANGE DRILLING			Wt. (Kg)
INCH	MM		RF	RTJ	BWE				PCD	NOS	HOLEØ					BC	HOLEØ	NOS	
14"x12"	350x300	13.27	40.5	40.90	40.5	15.35	13.77	16.33	14.01	1.25	8	2.95	4.33	0.78x0.47	25.19	21.98	1.62	20	
16"x14"	400x350	15.24	44.5	44.88	44.5	25.78	16.73	16.33	14.01	1.25	8	3.54	5.31	0.98x0.55	27.75	24.25	1.75	20	
18"x16"	450x400	17.24	48.0	48.50	48.0	28.14	20.47	16.33	14.01	1.25	8	3.54	5.31	0.98x0.55	30.90	27.00	2.00	20	

RB CLASS 1500

Valve Size		ØB	A			H	H2	ØF	ISO TOP			ØG	J	KEY SIZE	ØD	FLANGE DRILLING			Wt. (Kg)
INCH	MM		RF	RTJ	BWE				PCD	NOS	HOLEØ					BC	HOLEØ	NOS	
8"x6"	200x150	7.99	32.8	33.14	32.8	11.02	9.05	11.81	10.00	0.70	8	2.16	3.14	0.62x0.39	19.09	15.50	1.75	12	
10"x8"	250x200	10.00	39.0	39.40	39.0	17.71	20.66	11.81	10.00	0.70	8	2.95	4.33	0.78x0.47	23.03	19.00	2.00	12	
12"x10"	300x250	12.01	44.5	45.11	44.5	21.06	23.42	13.77	11.73	0.94	8	2.95	4.33	0.78x0.47	26.57	22.50	2.12	16	

Pressure Temperature Ratings & Torque Values



P.T. Ratings

Pressure - temperature seat ratings of valves are as given in the graph for body material ASTM A 216 - Gr. WCB. With the exception of body seat rings and primary soft seals, all valve components are capable of withstanding the pressure - temperature ratings as specified in ASME B 16.34, BS 1560: Part II, BS 4504 : Part I or BS 5351 as applicable.

Temperature Limits :

		Lower limit		Upper limit	
		Deg. F / Deg.C	Deg. F / Deg.C	Deg. F / Deg.C	Deg. F / Deg.C
Body Matl.	WCB	-20	-29	1000	538
	LCB	-50	-46	650	343
	CF8	-425	-254	1500	816
	CF8M	-425	-254	1500	816
Seat	NYLON	-50	-46	As per Graph	
	DEVLON	-50	-46	As per Graph	
	PEEK**	-50	-46	As per Graph	

Torque Values (Nm / in -lbs.)

SIZE		TORQUE TYPE	PRESSURE CLASS									
			150		300		600		900		1500	
			Nm	In-lbs	Nm	In-lbs	Nm	In-lbs	Nm	In-lbs	Nm	In-lbs
8"	200	BTO									5293	46847
		ETC									4216	37315
10"	250	BTO									6766	59884
		ETC									5413	47909
12"	300	BTO									12300	108864
		ETC									9840	87091
14"	350	BTO	2614	23136	3852	34093	6923	61274	12982	114900		
		ETC	2091	18507	3083	27287	5538	49015	10446	92455		
16"	400	BTO	3545	31376	5305	46953	8850	78329	18867	166987		
		ETC	2835	25092	4245	37571	7081	62672	15122	133841		
18"	450	BTO	4905	43413	7757	68655	13599	120361	22983	203417		
		ETC	3944	34907	6205	54919	10879	96287	18386	162730		
20"	500	BTO	5968	52821	10268	90880	19696	174324				
		ETC	4774	42253	8215	72709	15756	139452				
24"	600	BTO	11571	102412	18253	161553	31622	279878				
		ETC	9256	81923	14601	129230	25297	223897				

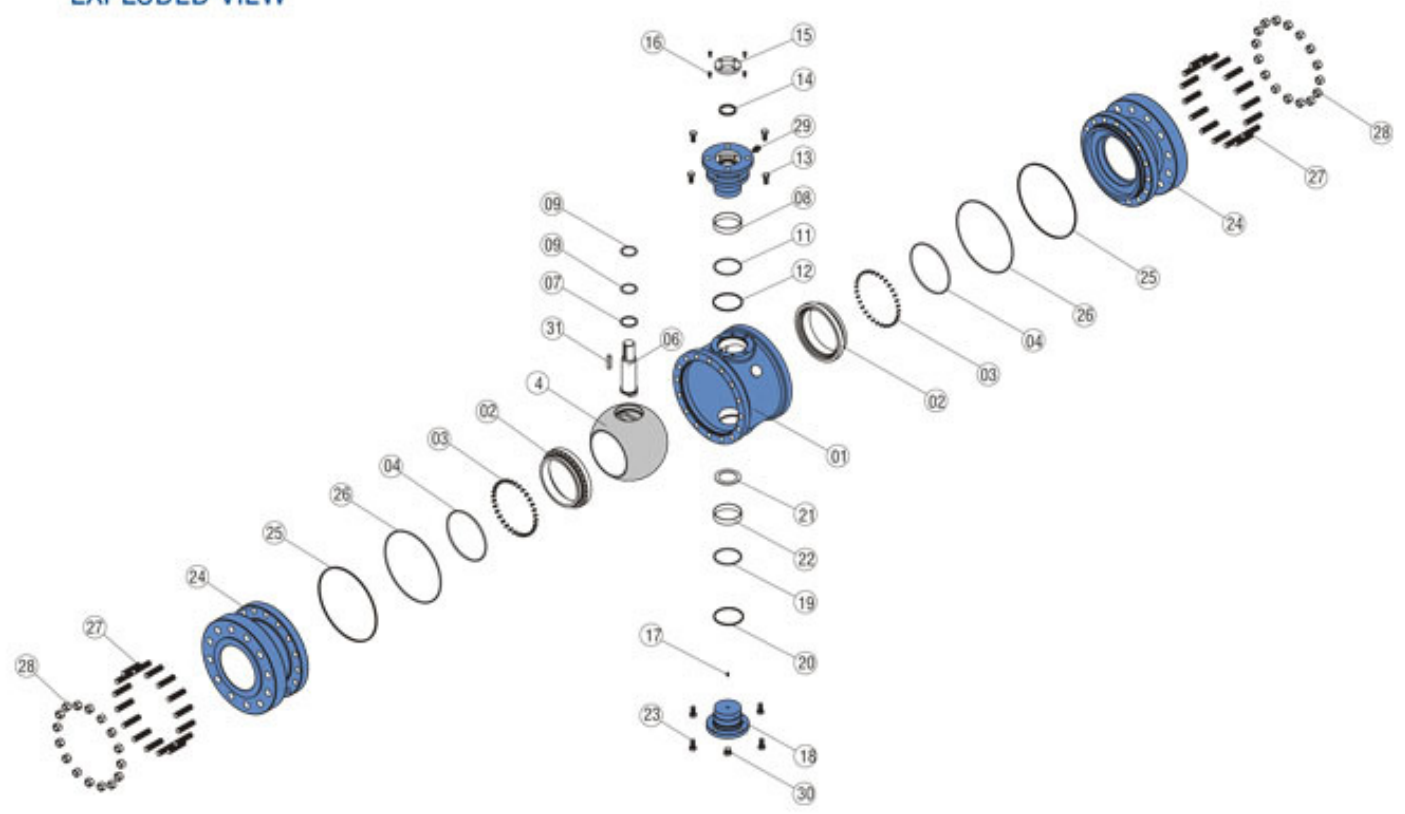
MATERIAL OF CONSTRUCTION / EXPLODED VIEW

- ❖ **BODY / END CONNECTOR :-**
 A351 CF8M / A 351 CF3M / A 351 CF3 / A 351 CF8 / ASTM A216 WCB
 A 352 LCB / A 352 LCC / A 217 CA15 / DUPLEX SS
- ❖ **BALL :-**
 A 216 WCB / A351 CF8 / A 351 CF8M / A 351 CF3M
 A 182 A105 / A 217 CA15 / DUPLEX SS
- ❖ **STEM :-**
 A479 SS304 / A 479 SS316 / A 479 SS316L / A 479 SS410
 A 182 F51 / A 182 F316 / A 182 F304 / A 182 F316L
- ❖ **SEAT :-**
 A182 A105 + ENP / A 182 F316 / A 182 F6A / DUPLEX SS
- ❖ **SEAT INSERT :-**
 DEVLON / NYLON (PA12) / DELRIN / RPTFE / PEEK / PCTFE / CGFT / VITON
- ❖ **STUD / BOLT :-**
 ASTM - A 193 B7 / A 193 B7M / A 193 B8M / B8 / ASTM A 320 L7, L7M
- ❖ **NUT :-**
 A 194 2H / A 194 2HM / A 194 7M / A 194 8M

PART LIST

SR.NO	DESCRIPTION
01	BODY
02	SEAT + INSERT
03	SPRING (SEAT)
04	SEAT O-RING
05	BALL
06	STEM
07	THRUST WASHER (STEM)
08	STEM BEARING
09	STEM O-RING
10	STEM HOUSING
11	STEM HOUSING GASKET
12	STEM HOUSING O-RING
13	HEX BOLTS (STEM HOUSING)
14	STEM GASKET
15	GLAND
16	CAP SCREW (GLAND)
17	ANTISTATIC SPRING
18	TRUNNION
19	TRUNNION GASKET
20	TRUNNION O-RING
21	THRUST WASHER (TRUNNION)
22	TRUNNION BEARING
23	HEX BOLTS (TRUNNION)
24	END CONNECTOR
25	BODY GASKET
26	END CONNECTOR O-RING
27	STUDS
28	NUTS
29	INJECTION FITTING
30	DRAIN PLUG
31	STEM KEY

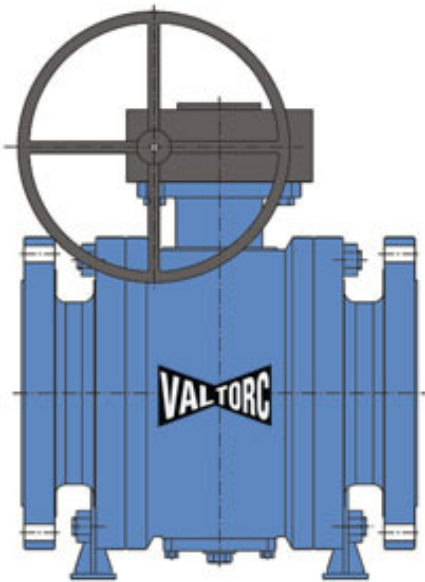
EXPLODED VIEW



CODES & STANDARDS

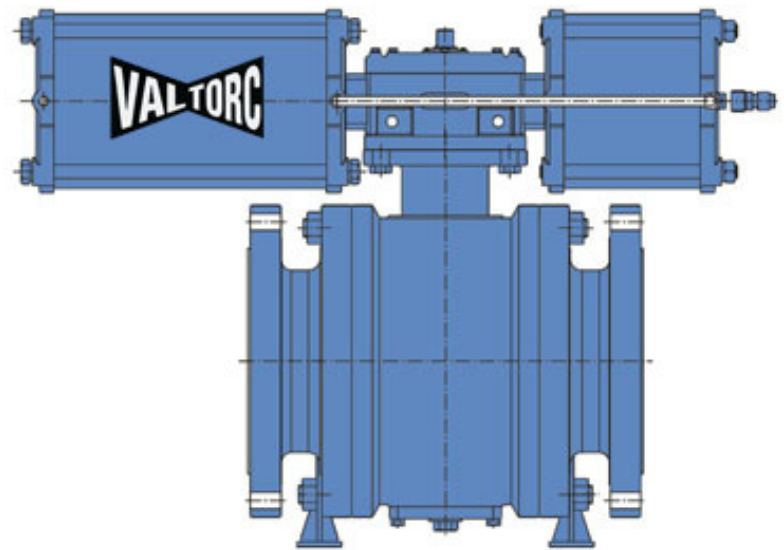
- ❖ **Design Standards** :- API 6D / ASME 16.34 / EN ISO 17292 (BS 55351)
- ❖ **Face TO Face** :- API 6D / ASME 16.10 / EN ISO 17292
- ❖ **Inspection & Testing** :- API 598 / EN 12266-1
- ❖ **Pressure Temperature** :- ASME B 16.34
- ❖ **Flange Dimensions** :- ASME B 16.5 / MSS-SP - 44 / ASME B 16.1
- ❖ **Fire Safe Test** :- API 607 / ISO 10497/ API 6FA / EN 12266-2

OPERATOR



Gear Box Operated

All Valves with gear operator for manual operation, pad locking arrangement is provided as an option to prevent unauthorized operation.



Actuator Operated

All valves can be direct mounted with pneumatic actuators or electric actuators and accessories for complete automation options such as fail open/close and positioner controlled. Valves can be mounted with manual overrides.