

VALTORC

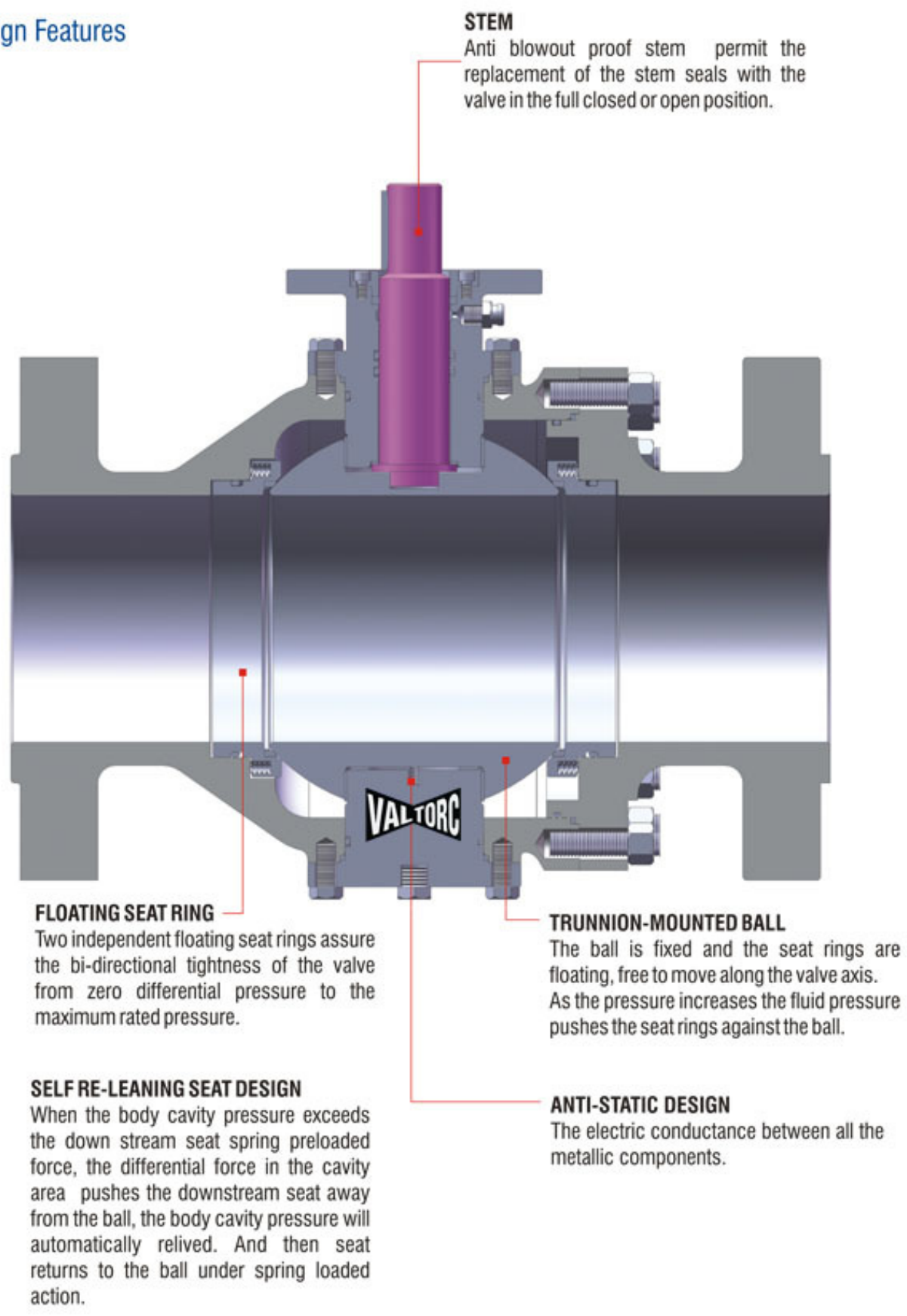
WWW.VALTORC.COM
AJBENTAL@VALTORC.COM
1 (866) VALTORC

TWO PIECE TRUNNION MOUNTED BALL VALVES

SERIES 300



Design Features



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

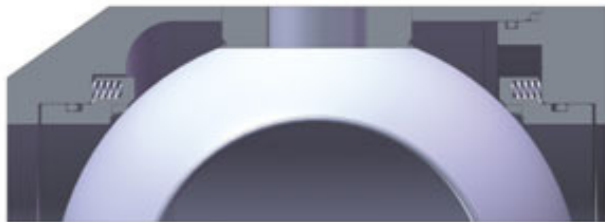
FLOATING SEAT RING
Two independent floating seat rings assure the bi-directional tightness of the valve from zero differential pressure to the maximum rated pressure.

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.

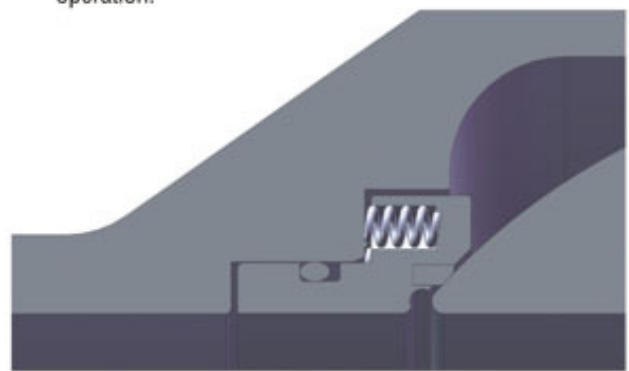
Design Features



DOUBLE BLOCK AND BLEED

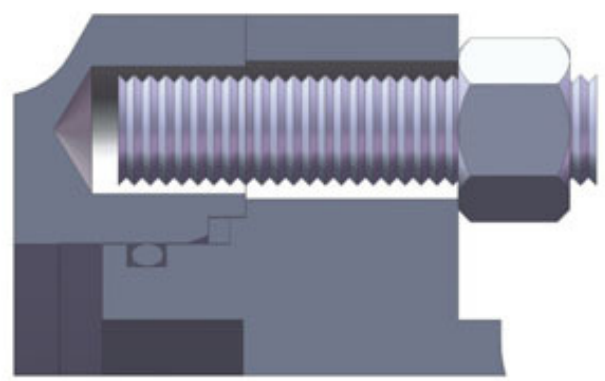
Independent spring loaded floating seats maintain contact with the ball and provide an effective tight shut off at low pressure differential.

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



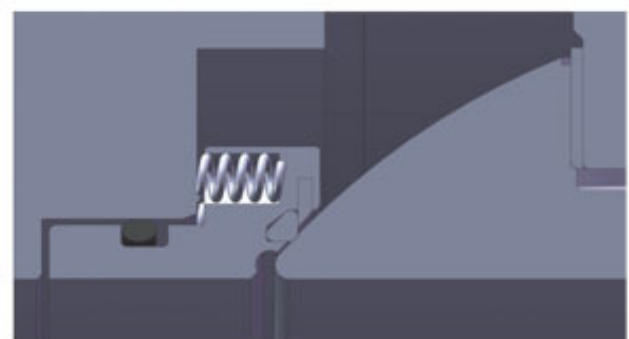
FIRE SAFE , PRIMARY SOFT SECONDARY METAL SEAT.

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.



BODY JOINTS

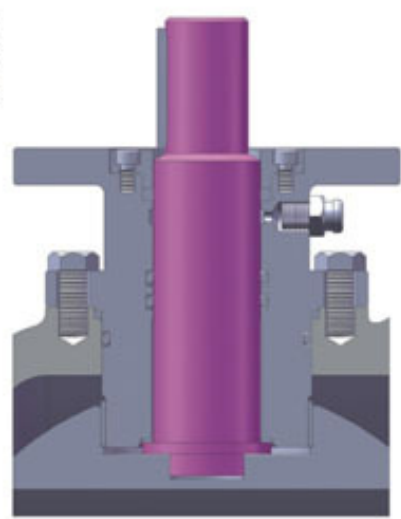
The double body seals O-rings and fire safe graphite gasket in all static joints of the body components ensures protection against external leakage and fugitive emission requirements.



FIRE SAFE , PRIMARY METAL SECONDARY SOFT SEAT.

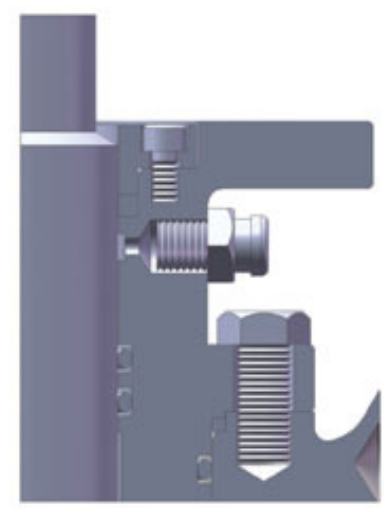
Range

Size		Pressure Class				
Inch	MM	150	300	600	900	1500
2"	50	●	●	●	●	●
3"	80	●	●	●	●	●
4"	100	●	●	●	●	●
6"	150	●	●	●	●	●
8"	200	●	●	●	●	
10"	250	●	●	●	●	
12"	300	●	●	●	●	



STEM SEALING

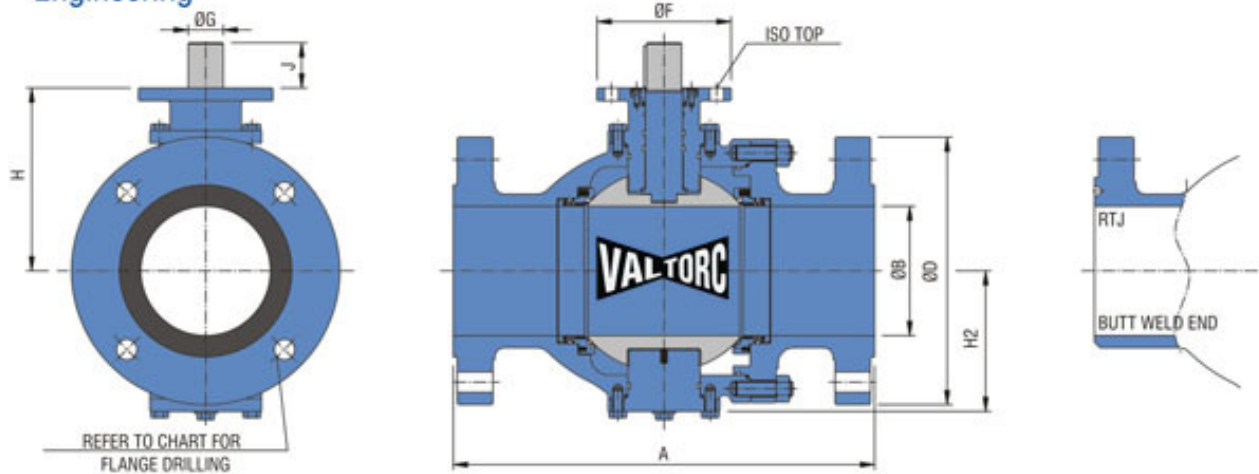
The stem seal integrity is achieved by the use of two O-rings And one graphite gasket, retained by gland ensure the stem Seal.



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	
2"	50	51	178	191	216	140	75	125	102	12	4	20	30	6x6	150	120.7	19	4	11
3"	80	76	203	216	282	190	120	150	125	14	4	28	40	8x7	190	152.4	19	4	25
4"	100	102	229	242	305	200	140	210	165	22	4	40	60	12x8	230	190.5	19	8	36
6"	150	152	394	407	457	240	190	210	165	22	4	45	65	14x9	280	241.3	22.2	8	130
8"	200	203	457	470	521	290	220	210	165	22	4	45	65	14x9	345	298.5	22.2	8	205
10"	250	254	533	546	559	330	260	300	254	18	8	45	65	14x9	405	362	25.4	12	285
12"	300	305	610	623	635	365	330	350	298	22	8	55	80	16x10	485	431.8	25.4	12	370

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	
2"	50	51	216	232	216	140	75	125	102	12	4	25	35	8x7	165	127	19	8	14
3"	80	76	282	298	282	190	120	150	125	14	4	28	40	8x7	210	168.3	22.2	8	37
4"	100	102	305	321	305	200	140	210	165	22	4	40	60	12x8	255	200	22.2	8	52
6"	150	152	403	419	457	240	190	210	165	22	4	45	65	14x9	320	269.9	22.2	12	145
8"	200	203	502	518	521	290	220	210	165	22	4	45	65	14x9	380	330.2	25.4	12	240
10"	250	254	568	584	559	330	260	300	254	18	8	45	65	14x9	445	387.4	28.5	16	360
12"	300	305	648	664	635	365	330	350	298	22	8	55	80	16x10	520	450.8	31.8	16	440

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	
2"	50	51	292	295	292	140	95	125	102	12	4	25	35	8x7	165	127	19	8	25
3"	80	76	356	359	356	190	140	150	125	14	4	40	60	12x8	210	168.3	22.2	8	65
4"	100	102	432	435	432	200	155	210	165	22	4	45	65	14x9	275	215.9	25.4	8	97
6"	150	152	559	562	559	240	190	210	165	22	4	45	65	14x9	355	292.1	28.5	12	210
8"	200	203	660	663	660	290	220	210	165	22	4	55	80	16x10	420	349.2	31.8	12	460
10"	250	254	787	790	787	330	260	300	254	18	8	55	80	16x10	510	431.8	35	16	785
12"	300	305	838	841	838	365	330	350	298	22	8	75	110	20x12	560	489	35	20	845

FB CLASS 900

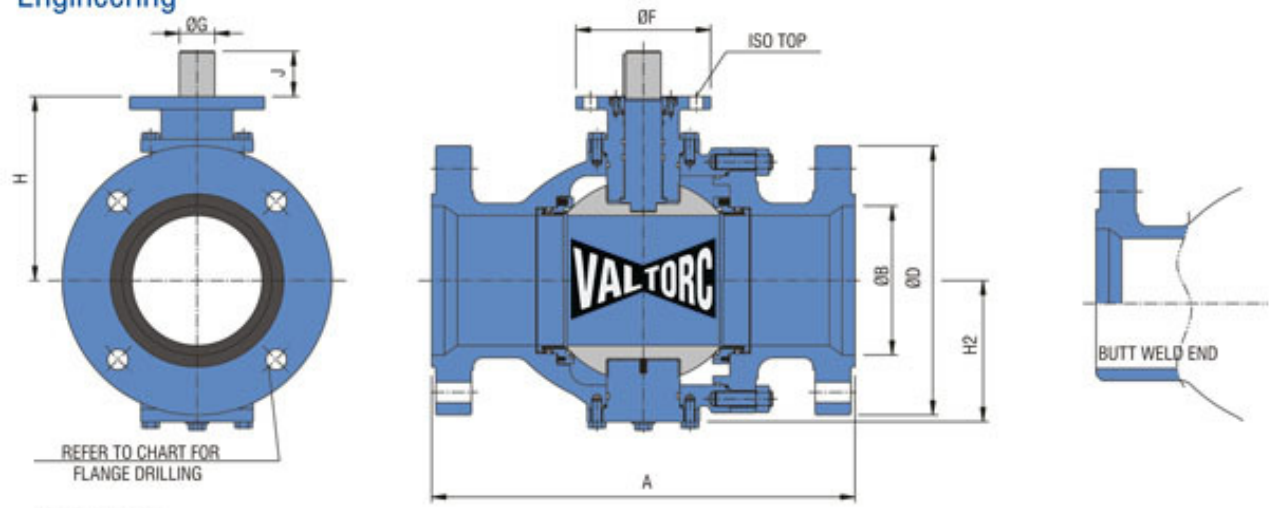
Valve Size		ØB	A			H	H2	ØF	ISO TOP			ØG	J	KEY SIZE	ØD	FLANGE DRILLING			Wt. (Kg)
INCH	MM		RF	RTJ	BWE				PCD	HOLEØ	NOS					BC	HOLEØ	NOS	
2"	50	51	368	371	368	150	120	125	102	12	4	30	45	8x7	215	165.1	25.4	8	55
3"	80	76	381	384	381	200	150	150	125	14	4	45	65	14x9	240	190.5	25.4	8	85
4"	100	102	457	460	457	215	180	210	165	22	4	45	65	14x9	290	235	31.8	8	127
6"	150	152	610	613	610	255	215	210	165	22	4	55	80	16x10	380	317.5	31.8	12	284
8"	200	203	737	740	737	300	250	300	254	18	8	55	80	16x10	470	393.7	38.1	12	400
10"	250	254	838	841	838	350	295	300	254	18	8	75	110	20x12	545	469.9	38.1	16	845
12"	300	305	965	968	965	390	350	350	298	22	8	75	110	20x12	610	533.4	38.1	20	1115

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	
2"	50	51	368	371	368	175	120	125	102	12	4	30	45	8x7	215	165.1	25.4	8	55
3"	80	76	470	473	470	225	150	150	125	14	4	45	65	14x9	265	203.2	31.8	8	110
4"	100	102	546	549	546	250	180	210	165	22	4	45	65	14x9	310	241.3	35	8	165
6"	150	146	705	711	705	280	230	210	165	22	4	55	80	16x10	395	317.5	38.1	12	565

DIMENSIONS (mm)

Engineering



RB CLASS 150

Valve Size		OB	A			H	H2	BF	ISO TOP			OG	J	KEY SIZE	OD	FLANGE DRILLING			Wt. (Kg)
INCH	MM		RF	RTJ	BWE				PCD	HOLED	NOS					BC	HOLED	NOS	
3"x2"	80x50		76	203	216				282	140	75					125	102	12	
4"x3"	100x80	102	229	241	305	190	120	150	125	14	4	28	40	8x7	230	190.5	19	8	45
6"x4"	150x100	152	394	406	457	200	140	210	165	22	4	40	60	12x8	280	241.3	22.2	8	70
8"x6"	200x150	203	457	470	521	240	190	210	165	22	4	45	65	14x9	345	298.5	22.2	8	170
10"x8"	250x200	254	533	546	559	290	220	210	165	22	4	45	65	14x9	405	362	25.4	12	255
12"x10"	300x250	305	610	622	635	330	260	300	254	18	8	45	65	14x9	485	431.8	25.4	12	335

RB CLASS 300

Valve Size		OB	A			H	H2	BF	ISO TOP			OG	J	KEY SIZE	OD	FLANGE DRILLING			Wt. (Kg)
INCH	MM		RF	RTJ	BWE				PCD	HOLED	NOS					BC	HOLED	NOS	
3"x2"	80x50		76	282	298				282	140	75					125	102	12	
4"x3"	100x80	102	305	321	305	190	120	150	125	14	4	28	40	8x7	255	200	22.2	8	55
6"x4"	150x100	152	403	419	457	200	140	210	165	22	4	40	60	12x8	320	269.9	22.2	12	100
8"x6"	200x150	203	502	518	521	240	190	210	165	22	4	45	65	14x9	380	330.2	25.4	12	185
10"x8"	250x200	254	568	584	559	290	220	210	165	22	4	45	65	14x9	445	387.4	28.5	16	295
12"x10"	300x250	305	648	664	635	330	260	300	254	18	8	45	65	14x9	520	450.8	31.8	16	440

DIMENSIONS (mm)

RB CLASS 600

Valve Size		OB	A			H	H2	BF	ISO TOP			OG	J	KEY SIZE	OD	FLANGE DRILLING			Wt. (Kg)
INCH	MM		RF	RTJ	BWE				PCD	HOLED	NOS					BC	HOLED	NOS	
2"x1-1/2"	50x40		51	292	295				292	120	88					125	70/102	10/12	
3"x2"	80x50	76	356	359	356	140	95	125	102	12	4	25	35	8x7	210	168.3	22.2	8	45
4"x3"	100x80	102	432	435	432	190	140	150	125	14	4	40	60	12x8	275	215.9	25.4	8	88
6"x4"	150x100	152	559	562	559	200	155	210	165	22	4	45	65	14x9	355	292.1	28.5	12	133
8"x6"	200x150	203	660	664	660	240	190	210	165	22	4	45	65	14x9	420	349.2	31.8	12	304
10"x8"	250x200	254	787	791	787	290	220	210	165	22	4	55	80	16x10	510	431.8	35	16	605
12"x10"	300x250	305	838	841	838	330	260	300	254	18	8	55	80	16x10	560	489	35	20	985

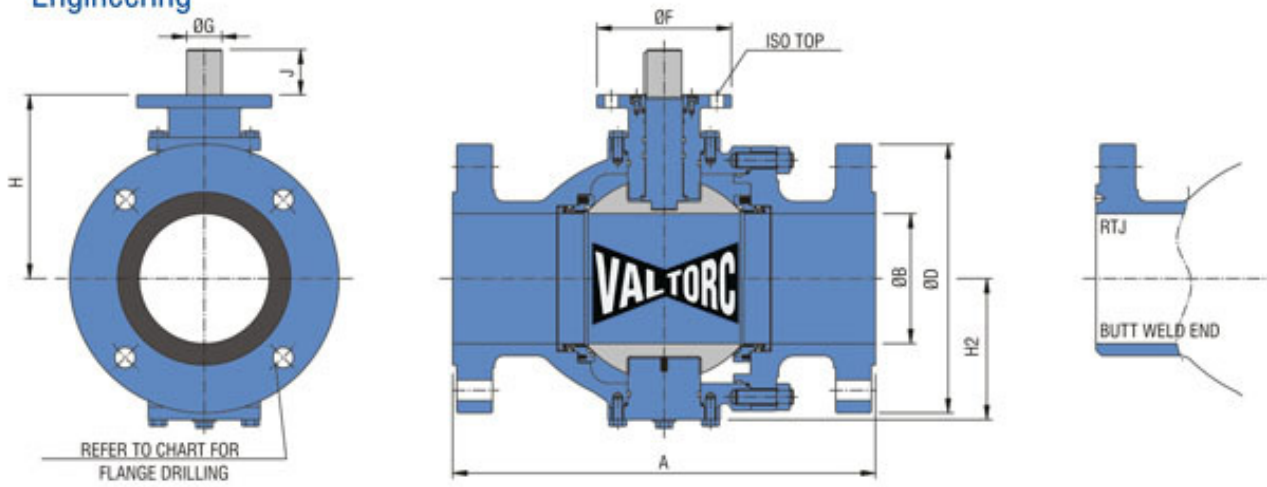
RB CLASS 900

Valve Size		OB	A			H	H2	BF	ISO TOP			OG	J	KEY SIZE	OD	FLANGE DRILLING			Wt. (Kg)
INCH	MM		RF	RTJ	BWE				PCD	HOLED	NOS					BC	HOLED	NOS	
2"x1-1/2"	50x40		51	368	371				368	120	88					125	70/102	10/12	
3"x2"	80x50	76	381	384	381	150	120	125	102	12	4	30	45	8x7	240	190.5	25.4	8	65
4"x3"	100x80	102	457	460	457	200	150	150	125	14	4	45	65	14x9	290	235	31.8	8	115
6"x4"	150x100	152	610	613	610	215	180	210	165	22	4	45	65	14x9	380	317.5	31.8	12	170
8"x6"	200x150	203	737	740	737	255	215	210	165	22	4	55	80	16x10	470	393.7	38.1	12	348
10"x8"	250x200	254	838	841	838	300	250	300	254	18	8	55	80	16x10	545	469.9	38.1	16	785
12"x10"	300x250	305	965	968	965	350	295	300	254	18	8	75	110	20x12	610	533.4	38.1	20	990

RB CLASS 1500

Valve Size		OB	A			H	H2	BF	ISO TOP			OG	J	KEY SIZE	OD	FLANGE DRILLING			Wt. (Kg)
INCH	MM		RF	RTJ	BWE				PCD	HOLED	NOS					BC	HOLED	NOS	
3"x2"	80x50		76	470	473				470	175	120					125	102	12	
4"x3"	100x80	102	546	559	546	225	150	150	125	14	4	45	65	14x9	310	241.3	35	8	150
6"x4"	150x100	152	705	711	705	250	180	210	165	22	4	45	65	14x9	395	317.5	38.1	12	280

Engineering



FB CLASS 150

Valve Size		ØB	A			H	H2	ØF	ISO TOP			ØG	J	KEY SIZE	ØD	FLANGE DRILLING			Wt. (Lbs)
INCH	MM		RF	RTJ	BWE				PCD	HOLEØ	NOS					BC	HOLEØ	NOS	
2"	50	2.00	7.00	7.51	8.50	5.51	2.95	4.92	4.01	0.47	4	0.787	1.18	0.23x0.23	6.00	4.75	0.75	4	25
3"	80	3.00	8.00	8.50	11.10	7.48	4.72	5.90	4.92	0.55	4	1.102	1.57	0.31x0.27	7.5	6.00	0.75	4	55
4"	100	4.00	9.00	9.52	12.00	7.87	5.51	8.27	6.50	0.87	4	1.574	2.36	0.47x0.31	9.00	7.50	0.75	8	80
6"	150	5.98	15.51	16.02	18.00	9.44	7.48	8.27	6.50	0.87	4	1.772	2.55	0.55x0.35	11.00	9.50	0.875	8	286
8"	200	7.99	18.00	18.50	20.50	11.41	8.66	8.27	6.50	0.87	4	1.772	2.55	0.55x0.35	13.50	11.75	0.875	8	451
10"	250	10.00	20.98	21.50	22.00	13.00	10.23	11.81	10.00	0.70	8	1.772	2.55	0.55x0.35	16.00	14.25	1.00	12	627
12"	300	12.00	24.00	24.52	25.00	14.37	13.00	13.77	11.73	0.87	8	2.165	3.15	0.63x0.39	19.00	17.00	1.00	12	814

FB CLASS 300

Valve Size		ØB	A			H	H2	ØF	ISO TOP			ØG	J	KEY SIZE	ØD	FLANGE DRILLING			Wt. (Lbs)
INCH	MM		RF	RTJ	BWE				PCD	HOLEØ	NOS					BC	HOLEØ	NOS	
2"	50	2.00	8.50	9.13	11.50	5.51	2.95	4.92	4.01	0.47	4	0.984	1.37	0.31x0.27	6.50	5.00	0.75	8	31
3"	80	3.00	11.10	11.73	11.10	7.48	4.72	5.90	4.92	0.55	4	1.102	1.57	0.31x0.27	8.25	6.62	0.875	8	82
4"	100	4.00	12.00	12.63	12.00	7.87	5.51	8.27	6.50	0.87	4	1.574	2.36	0.47x0.31	10.00	7.88	0.875	8	115
6"	150	5.98	15.88	16.50	18.00	9.44	7.48	8.27	6.50	0.87	4	1.772	2.55	0.55x0.35	12.50	10.62	0.875	12	319
8"	200	7.99	19.76	20.40	20.50	11.41	8.66	8.27	6.50	0.87	4	1.772	2.55	0.55x0.35	15.00	13.00	1.00	12	528
10"	250	10.00	22.36	23.00	22.00	13.00	10.23	11.81	10.00	0.70	8	1.772	2.55	0.55x0.35	17.50	15.25	1.125	16	792
12"	300	12.00	25.51	26.14	25.00	14.37	13.00	13.77	11.73	0.87	8	2.165	3.15	0.63x0.39	20.50	17.75	1.25	16	968

DIMENSIONS (Inch)

FB CLASS 600

Valve Size		ØB	A			H	H2	ØF	ISO TOP			ØG	J	KEY SIZE	ØD	FLANGE DRILLING			Wt. (Lbs)
INCH	MM		RF	RTJ	BWE				PCD	HOLEØ	NOS					BC	HOLEØ	NOS	
2"	50	2.00	11.50	11.61	11.50	5.51	3.74	4.92	4.01	0.47	4	0.984	1.37	0.31x0.27	6.50	5.00	0.75	8	55
3"	80	3.00	14.00	14.13	14.00	7.48	5.51	5.90	4.92	0.55	4	1.574	2.36	0.47x0.31	8.25	6.62	0.875	8	143
4"	100	4.00	17.00	17.12	17.00	7.87	6.10	8.27	6.50	0.87	4	1.772	2.55	0.55x0.35	10.75	8.50	1.00	8	214
6"	150	5.98	22.00	22.12	22.00	9.44	7.48	8.27	6.50	0.87	4	1.772	2.55	0.55x0.35	14.00	11.50	1.12	12	462
8"	200	7.99	26.00	26.10	26.00	11.41	8.66	8.27	6.50	0.87	4	2.165	3.15	0.63x0.39	16.50	13.75	1.25	12	1012
10"	250	10.00	31.00	31.10	31.00	13.00	10.23	11.81	10.00	0.70	8	2.165	3.15	0.63x0.39	20.00	17.00	1.38	16	1727
12"	300	12.00	33.00	33.11	33.00	14.37	13.00	13.77	11.73	0.87	8	2.953	4.33	0.78x0.47	22.00	19.25	1.38	20	1859

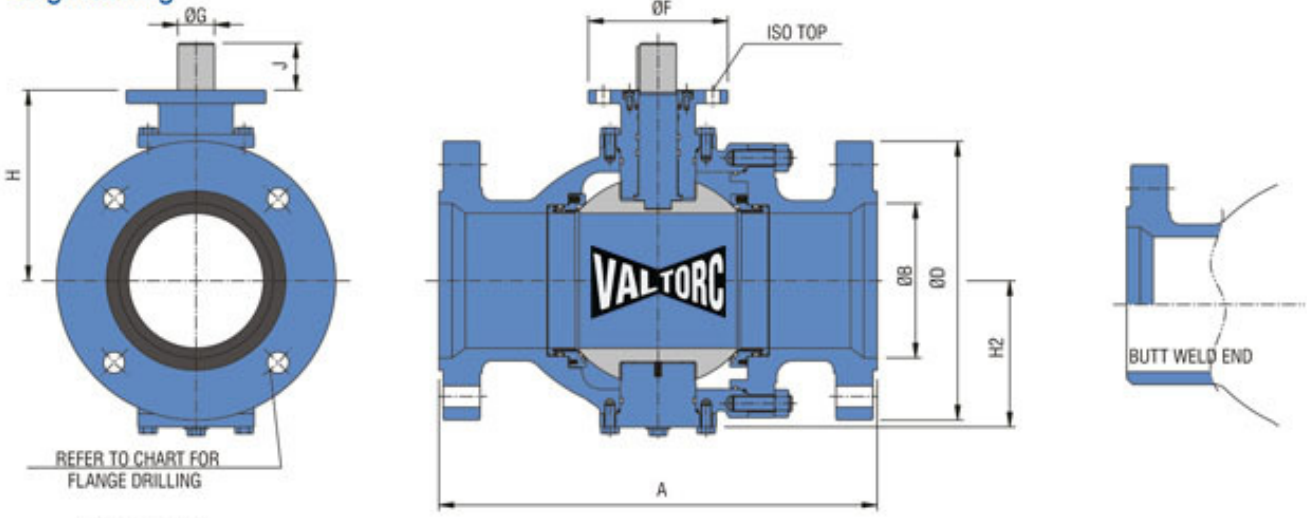
FB CLASS 900

Valve Size		ØB	A			H	H2	ØF	ISO TOP			ØG	J	KEY SIZE	ØD	FLANGE DRILLING			Wt. (Lbs)
INCH	MM		RF	RTJ	BWE				PCD	HOLEØ	NOS					BC	HOLEØ	NOS	
2"	50	2.00	14.48	14.60	14.48	5.90	4.72	4.92	4.01	0.47	4	1.181	1.77	0.31x0.27	8.50	6.50	1.00	8	121
3"	80	3.00	15.00	15.11	15.00	7.87	5.90	5.90	4.92	0.55	4	1.772	2.55	0.55x0.35	9.50	7.50	1.00	8	187
4"	100	4.00	18.00	18.11	18.00	8.46	7.08	8.27	6.50	0.87	4	1.772	2.55	0.55x0.35	11.50	9.25	1.25	8	280
6"	150	5.98	24.00	24.13	24.00	10.00	8.46	8.27	6.50	0.87	4	2.165	3.15	0.63x0.39	15.00	12.50	1.25	12	625
8"	200	7.99	29.00	29.13	29.00	11.81	9.84	11.81	10.00	0.70	8	2.165	3.15	0.63x0.39	18.50	15.50	1.50	12	880
10"	250	10.00	33.00	33.11	33.00	13.77	11.61	11.81	10.00	0.70	8	2.952	4.33	0.78x0.47	21.50	18.50	1.50	16	1859
12"	300	12.00	38.00	38.11	38.00	15.35	13.77	13.77	11.73	0.87	8	2.952	4.33	0.78x0.47	24.00	21.00	1.50	20	2453

FB CLASS 1500

Valve Size		ØB	A			H	H2	ØF	ISO TOP			ØG	J	KEY SIZE	ØD	FLANGE DRILLING			Wt. (Lbs)
INCH	MM		RF	RTJ	BWE				PCD	HOLEØ	NOS					BC	HOLEØ	NOS	
2"	50	2.00	14.48	14.60	14.48	6.88	4.72	4.92	4.01	0.47	4	1.181	1.77	0.31x0.27	8.50	6.50	1.00	8	121
3"	80	3.00	18.50	18.62	18.50	8.85	5.90	5.90	4.92	0.55	4	1.772	2.55	0.55x0.35	10.50	8.00	1.25	8	242
4"	100	4.00	21.50	21.61	21.50	9.84	7.08	8.27	6.50	0.87	4	1.772	2.55	0.55x0.35	12.25	9.50	1.375	8	363
6"	150	5.98	27.75	28.00	27.75	11.02	9.05	8.27	6.50	0.87	4	2.165	3.15	0.63x0.39	15.50	12.50	1.50	12	1243

Engineering



RB CLASS 150

Valve Size		ØB	A			H	H2	ØF	ISO TOP			ØG	J	KEY SIZE	ØD	FLANGE DRILLING			Wt. (Lbs)
INCH	MM		RF	RTJ	BWE				PCD	HOLEØ	NOS					BC	HOLEØ	NOS	
3"x2"	80x50	3.00	8.00	8.50	11.10	5.51	2.95	4.92	4.01	0.47	4	0.787	1.18	0.23x0.23	7.5	6.00	0.75	4	44
4"x3"	100x80	4.00	9.00	9.52	12.00	7.48	4.72	5.90	4.92	0.55	4	1.102	1.57	0.31x0.27	9.00	7.50	0.75	8	99
6"x4"	150x100	5.98	15.51	16.02	18.00	7.87	5.51	8.27	6.50	0.87	4	1.574	2.36	0.47x0.31	11.00	9.50	0.875	8	154
8"x6"	200x150	7.99	18.00	18.50	20.50	9.44	7.48	8.27	6.50	0.87	4	1.772	2.55	0.55x0.35	13.50	11.75	0.875	8	374
10"x8"	250x200	10.00	20.98	21.50	22.00	11.41	8.66	8.27	6.50	0.87	4	1.772	2.55	0.55x0.35	16.00	14.25	1.00	12	561
12"x10"	300x250	12.00	24.00	24.52	25.00	13.00	10.23	11.81	10.00	0.70	8	1.772	2.55	0.55x0.35	19.00	17.00	1.00	12	737

RB CLASS 300

Valve Size		ØB	A			H	H2	ØF	ISO TOP			ØG	J	KEY SIZE	ØD	FLANGE DRILLING			Wt. (Lbs)
INCH	MM		RF	RTJ	BWE				PCD	HOLEØ	NOS					BC	HOLEØ	NOS	
3"x2"	80x50	3.00	11.10	11.73	11.10	5.51	2.95	4.92	4.01	0.47	4	0.984	1.37	0.31x0.27	6.50	6.62	0.875	8	49
4"x3"	100x80	4.00	12.00	12.63	12.00	7.48	4.72	5.90	4.92	0.55	4	1.102	1.57	0.31x0.27	8.25	7.88	0.875	8	121
6"x4"	150x100	5.98	15.86	16.50	18.00	7.87	5.51	8.27	6.50	0.87	4	1.574	2.36	0.47x0.31	10.00	10.62	0.875	12	220
8"x6"	200x150	7.99	19.76	20.40	20.50	9.44	7.48	8.27	6.50	0.87	4	1.772	2.55	0.55x0.35	12.50	13.00	1.00	12	407
10"x8"	250x200	10.00	22.36	23.00	22.00	11.41	8.66	8.27	6.50	0.87	4	1.772	2.55	0.55x0.35	15.00	15.25	1.125	16	649
12"x10"	300x250	12.00	25.51	26.14	25.00	13.00	10.23	11.81	10.00	0.70	8	1.772	2.55	0.55x0.35	17.50	17.75	1.25	16	968

DIMENSIONS (Inch)

RB CLASS 600

Valve Size		ØB	A			H	H2	ØF	ISO TOP			ØG	J	KEY SIZE	ØD	FLANGE DRILLING			Wt. (Lbs)
INCH	MM		RF	RTJ	BWE				PCD	HOLEØ	NOS					BC	HOLEØ	NOS	
2"x1-1/2"	50x40	2.00	11.50	11.61	11.50	4.72	3.46	4.92	2.75/4.01	4.00/0.47	4	0.787	1.18	0.23x0.23	6.50	5.00	0.75	8	48
3"x2"	80x50	3.00	14.00	14.13	14.00	5.51	3.74	4.92	4.01	0.47	4	0.984	1.37	0.31x0.27	8.25	6.62	0.875	8	99
4"x3"	100x80	4.00	17.00	17.12	17.00	7.48	5.51	5.90	4.92	0.55	4	1.574	2.36	0.47x0.31	10.75	8.50	1.00	8	194
6"x4"	150x100	5.98	22.00	22.12	22.00	7.87	6.10	8.27	6.50	0.87	4	1.772	2.55	0.55x0.35	14.00	11.50	1.12	12	293
8"x6"	200x150	7.99	26.00	26.10	26.00	9.44	7.48	8.27	6.50	0.87	4	1.772	2.55	0.55x0.35	16.50	13.75	1.25	12	669
10"x8"	250x200	10.00	31.00	31.10	31.00	11.41	8.66	8.27	6.50	0.87	4	2.165	3.15	0.63x0.39	20.00	17.00	1.38	16	1331
12"x10"	300x250	12.00	33.00	33.11	33.00	13.00	10.23	11.81	10.00	0.70	8	2.165	3.15	0.63x0.39	22.00	19.25	1.38	20	2167

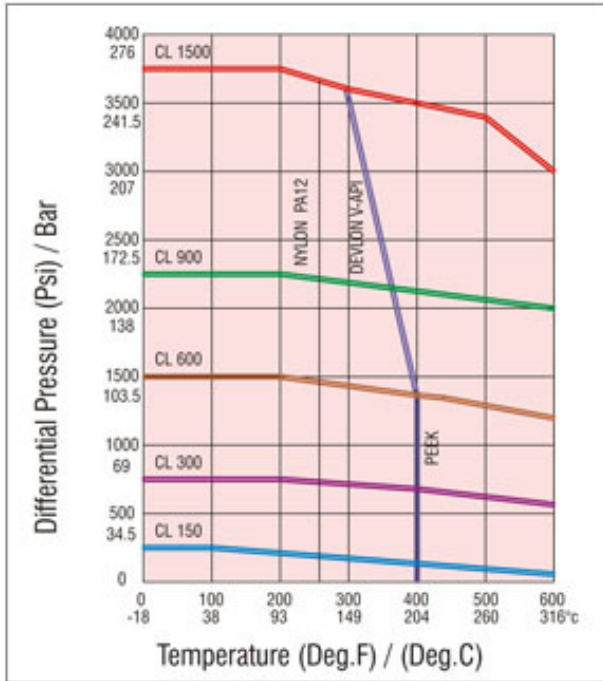
RB CLASS 900

Valve Size		ØB	A			H	H2	ØF	ISO TOP			ØG	J	KEY SIZE	ØD	FLANGE DRILLING			Wt. (Lbs)
INCH	MM		RF	RTJ	BWE				PCD	HOLEØ	NOS					BC	HOLEØ	NOS	
2"x1-1/2"	50x40	2.00	14.48	14.60	14.48	4.72	3.46	4.92	2.75/4.01	4.00/0.47	4	0.787	1.18	0.23x0.23	8.50	6.50	1.00	8	80
3"x2"	80x50	3.00	15.00	15.11	15.00	5.90	4.72	4.92	4.01	0.47	4	1.181	1.77	0.31x0.27	9.50	7.50	1.00	8	143
4"x3"	100x80	4.00	18.00	18.11	18.00	7.87	5.90	5.90	4.92	0.55	4	1.772	2.55	0.55x0.35	11.50	9.25	1.25	8	253
6"x4"	150x100	5.98	24.00	24.13	24.00	8.46	7.08	8.27	6.50	0.87	4	1.772	2.55	0.55x0.35	15.00	12.50	1.25	12	374
8"x6"	200x150	7.99	29.00	29.13	29.00	10.00	8.46	8.27	6.50	0.87	4	2.165	3.15	0.63x0.39	18.50	15.50	1.50	12	765
10"x8"	250x200	10.00	33.00	33.11	33.00	11.81	9.84	11.81	10.00	0.70	8	2.165	3.15	0.63x0.39	21.50	18.50	1.50	16	1727
12"x10"	300x250	12.00	38.00	38.11	38.00	13.77	11.61	11.81	10.00	0.70	8	2.952	4.33	0.78x0.47	24.00	21.00	1.50	20	2178

RB CLASS 1500

Valve Size		ØB	A			H	H2	ØF	ISO TOP			ØG	J	KEY SIZE	ØD	FLANGE DRILLING			Wt. (Lbs)
INCH	MM		RF	RTJ	BWE				PCD	HOLEØ	NOS					BC	HOLEØ	NOS	
3"x2"	80x50	3.00	18.50	18.62	18.50	6.88	4.72	4.92	4.01	0.47	4	1.181	1.77	0.31x0.27	10.50	8.00	1.25	8	176
4"x3"	100x80	4.00	21.50	21.61	21.50	8.85	5.90	5.90	4.92	0.55	4	1.772	2.55	0.55x0.35	12.25	9.50	1.375	8	330
6"x4"	150x100	5.98	27.75	28.00	27.75	9.84	7.08	8.27	6.50	0.87	4	1.772	2.55	0.55x0.35	15.50	12.50	1.50	12	616

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	
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.)

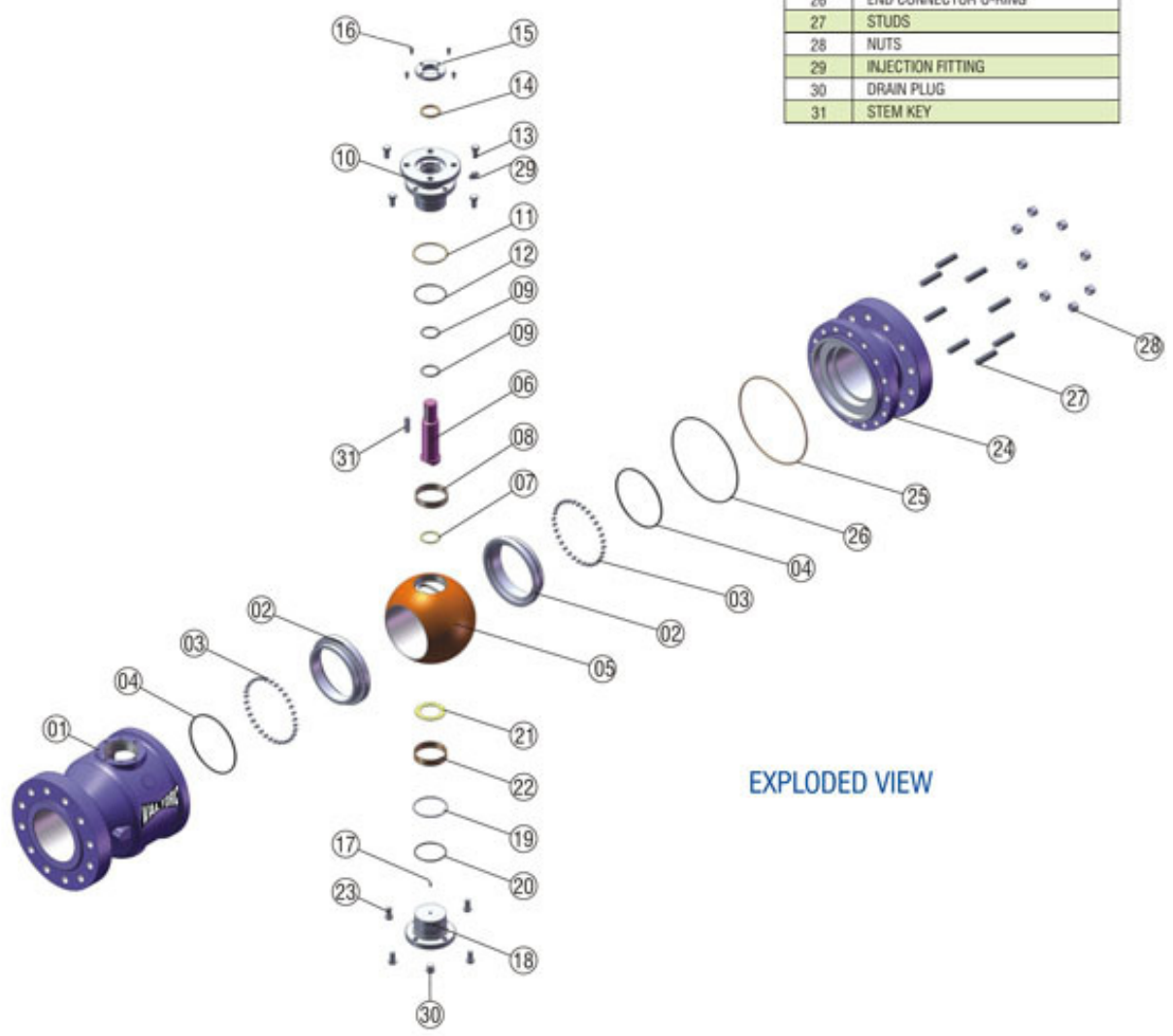
SIZE		TORQUE TYPE	PRESSURE CLASS									
			150		300		600		900		1500	
			Nm	In-lbs	Nm	In-lbs	Nm	In-lbs	Nm	In-lbs	Nm	In-lbs
2"	50	BTO	68	602	84	743	108	956	133	1177	281	2487
		ETC	54	478	67	593	87	770	106	938	225	1991
3"	80	BTO	168	1487	234	2071	316	2797	427	3779	593	5248
		ETC	135	1195	187	1655	253	2239	342	3027	474	4195
4"	100	BTO	272	2407	359	3177	460	4071	599	5302	922	8160
		ETC	218	1929	287	2540	368	3257	479	4239	737	6523
6"	150	BTO	468	4142	745	6594	1193	10559	1639	14506	2541	22490
		ETC	374	3310	596	5275	953	8435	1311	11603	2033	17994
8"	200	BTO	871	7709	1382	12232	2392	21170	3289	29110		
		ETC	698	6178	1105	9780	1914	16940	2632	23295		
10"	250	BTO	1177	10417	1823	16135	3105	27482	4234	37474		
		ETC	942	8337	1445	12789	2459	21764	3387	29977		
12"	300	BTO	1467	12984	2208	19542	3687	32633	5442	48166		
		ETC	1174	10391	1766	15630	2949	26101	4354	38536		

MATERIAL OF CONSTRUCTION / EXPLODED VIEW

- ❖ **BODY / END CONNCTOR :-**
 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

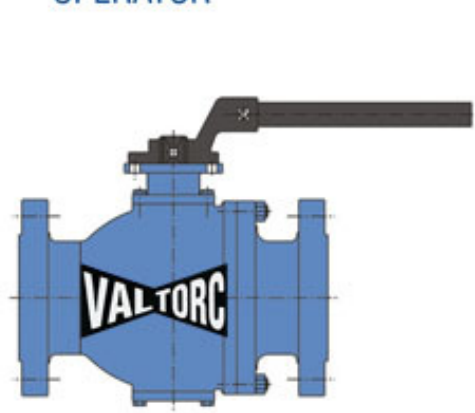


EXPLODED VIEW

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 / API 6FA / EN 12266-2

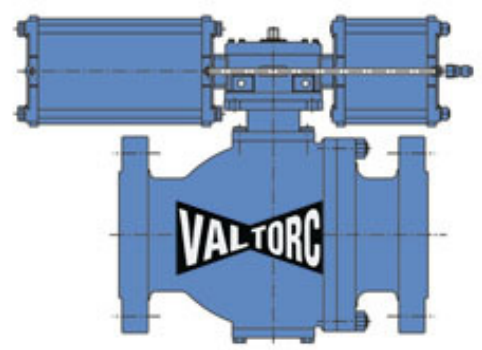
OPERATOR



Lever Operated



Gear Box Operated



Actuator Operated