



Description

1. Series 7000/8000 ball valves offer the convenience of a three piece body design at an economical price.
2. The 3 Piece design with a swing out center section allows for ease of in-line and out-of-line maintenance
3. Offer quarter turn operation and low operating torque.
4. 1/2"– 12" valve bodies are investment cast and solution annealed/normalized for the highest quality and added strength. All body castings are marked with a foundry heat number for full traceability.
5. All resilient seats feature relief slots or seat O.D. clearance to relieve pressure past the upstream seat, and positive preloading to ensure low pressure/vacuum sealing.

Selection of possible applications

Car Wash, Tank Farm Transfer, Metal and Steel Industry, Toxic Services, Chemical Processing, General Purpose, Mineral Processing, Utility, Water Cooling, Cooling Water, Industrial Plant Services, Safety Systems, Water Pollution, Dewatering, Industrial Waste, Sewage, Water Treatment, Difficult-to-Seal Liquids, Inorganic Chemicals, Sludge Recirculation, Acid Transfer, Drainage, Irrigation, Soap, Agriculture, Effluent, Light Oils, Solids Handling, Air Pollution, Filtration, Light Slurries, Sump Drain Off, Aromatics, Fine Chemicals, Low Pressure Safety Injection, Synthetic Fuels, CO2 Injection, Fuel, Low Shear Services, General Processing Industry

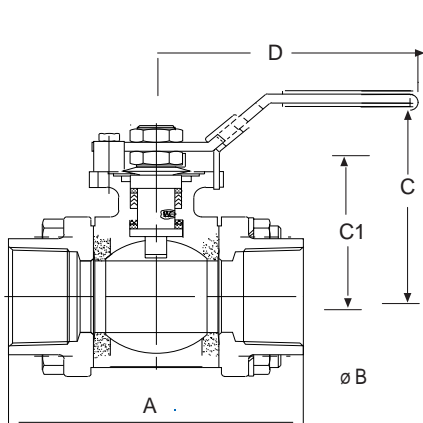
Selection of possible flow media

Steam, air, water, oil, other fluid ,etc.

MODEL BR7000(316SS) BR8000(WCB)

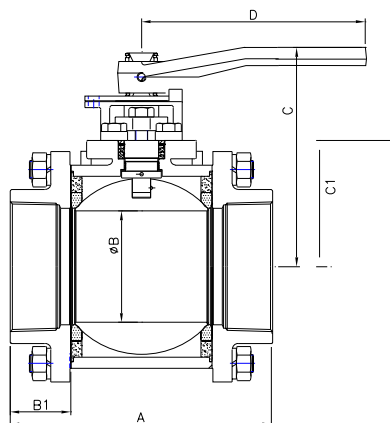
Dimensions and Weights

Size ins mm	A1	A3	A5	A6	øB	C	C1	D	H	J	K	L	M	P	U (UNC)	C _v	Torque lbs-in Nm	Weight lbs. kg.
1/4 8	2.84 72.1	—	—	—	0.37 9.5	2.60 66	1.54 39	6.50 165	1.17 29.7	1.17 29.7	0.32 8	0.55 14	0.25 6.4	0.37 9.3	10-24	8	60 6.8	1.8 0.8
3/8 10	2.84 72.1	—	—	—	0.50 12.7	2.60 66	1.54 39	6.50 165	1.17 29.7	1.17 29.7	0.32 8	0.55 14	0.25 6.4	0.37 9.3	10-24	8	60 6.8	1.8 0.8
1/2 15	2.84 72.1	4.39 111.5	10.04 254.9	9.04 229.5	0.59 15	2.60 66	1.54 39	6.50 165	1.17 29.7	1.17 29.7	0.32 8	0.55 14	0.25 6.4	0.37 9.3	10-24	32	60 6.8	1.8 0.8
3/4 20	3.35 85	5.80 147.2	10.43 264.8	9.30 236.2	0.79 20	2.91 74	1.66 42.1	6.50 165	1.17 29.7	1.17 29.7	0.32 8	0.55 14	0.25 6.4	0.37 9.3	10-24	54	95 10.7	2.3 1.1
1 25	3.62 92	5.97 151.7	10.71 271.9	9.48 240.7	1.00 25.4	3.43 87	2.05 52	7.87 200	1.39 35.7	1.39 35.7	0.43 11	0.75 19	0.32 8	0.43 10.9	1/4-20	105	140 15.8	3.4 1.5
1¼ 32	4.33 110	—	11.21 284.8	9.84 249.8	1.26 32	3.62 92	2.21 56	7.87 200	1.39 35.7	1.39 35.7	0.43 11	0.75 19	0.32 8	0.43 10.9	1/4-20	200	195 22.0	4.9 2.2
1½ 40	4.84 123	8.03 204	11.78 299.2	10.28 261	1.50 38	4.13 105	2.60 66	9.84 250	1.95 49.5	1.95 49.5	0.55 14	0.91 23	0.37 9.5	0.62 15.7	5/16-18	275	315 35.6	7.6 3.5
2 50	5.59 142	9.04 229.6	12.48 317	10.73 272.6	2.00 50.8	4.53 115	2.95 75	9.84 250	1.95 49.5	1.95 49.5	0.55 14	0.91 23	0.37 9.5	0.62 15.7	5/16-18	500	510 57.6	11.4 5.2
2½ 65	7.26 184.5	—	—	12.00 304.8	2.56 65	5.04 128	3.39 86	9.84 250	2.84 72.1	2.84 72.1	0.69 17.5	1.14 29	0.47 12	0.75 19	5/16-18	780	800 90.4	21.8 9.9
3 80	7.95 202	10.10 256.5	—	12.00 304.8	2.99 76	6.42 163	3.72 94.5	15.35 390	3.54 90	1.87 47.6	1.75 44.5	3.07 78	0.67 17	1.10 28	1/2-13	1150	1100 124.3	34.6 15.7
4 100	9.06 230	13.90 353	—	12.00 304.8	4.02 102	7.087 180	4.35 110.5	15.35 390	3.54 90	1.87 47.6	1.75 44.5	3.07 78	0.67 17	1.10 28	1/2-13	2100	3600 406.7	54.7 24.8
6 150	18.00 457.2	15.50 394	—	—	5.98 152	12.21 310	7.17 182	43.31 1100	3.38 85.7	3.38 85.7	1.65 42	3.54 90	1.02 26	1.71 43.5	1/2-13	5000	4150 469	233.7 106
8 200	20.50 520.7	18.00 457	—	—	7.87 200	13.50 343	8.47 215	43.31 1100	3.38 85.7	3.38 85.7	1.65 42	3.54 90	1.02 26	1.71 43.5	1/2-13	9600	6200 700.5	377 171
10 250	22.00 558.8	21.00 533	—	—	9.84 250	14.69 373	9.96 253	43.31 1100	4.53 115	4.53 115	1.97 50	3.78 96	1.38 35	2.17 55	5/8-11	15000	14700 1661	632.7 287
12 300	25.00 635	24.00 610	—	—	11.81 300	16.26 413	11.54 293	43.31 1100	4.53 115	4.53 115	1.97 50	3.78 96	1.38 35	2.17 55	5/8-11	21000	22000 2486	



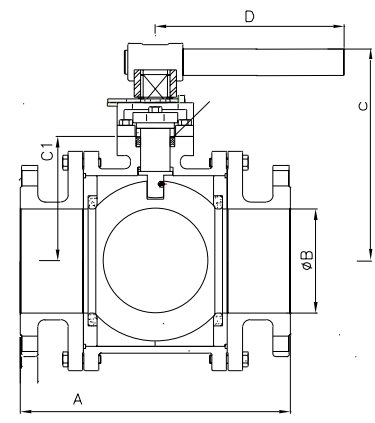
1/2" - 2 1/2"

1" - 2" Valves

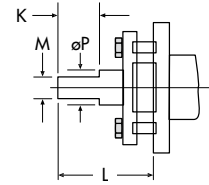
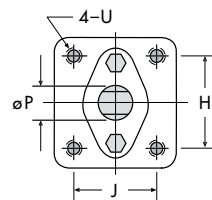
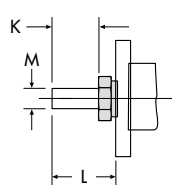
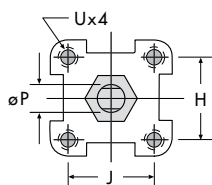


3" - 4"

3" - 12" Valves



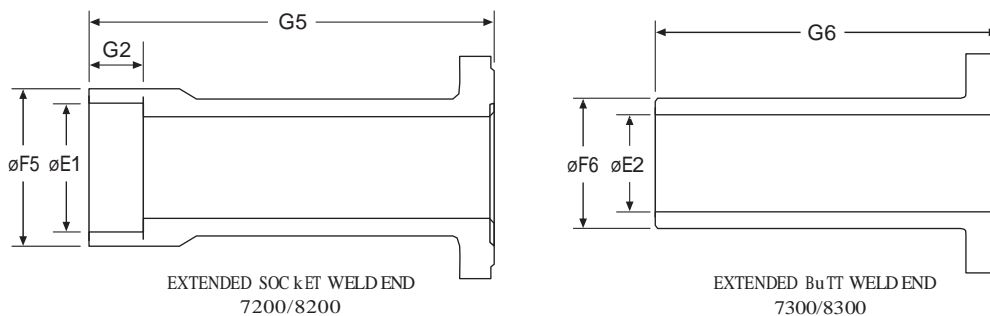
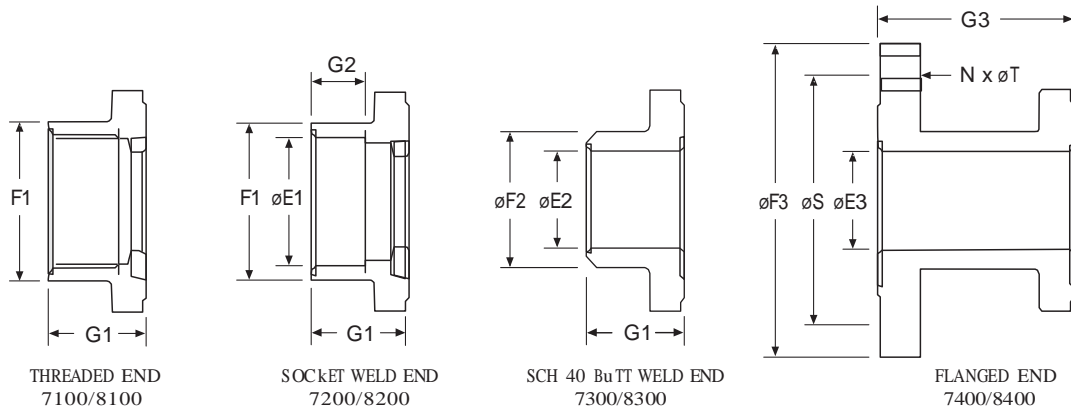
6" - 12"



MODEL BR7000(316SS) BR8000(WCB)

Dimensions (EXXxtended)

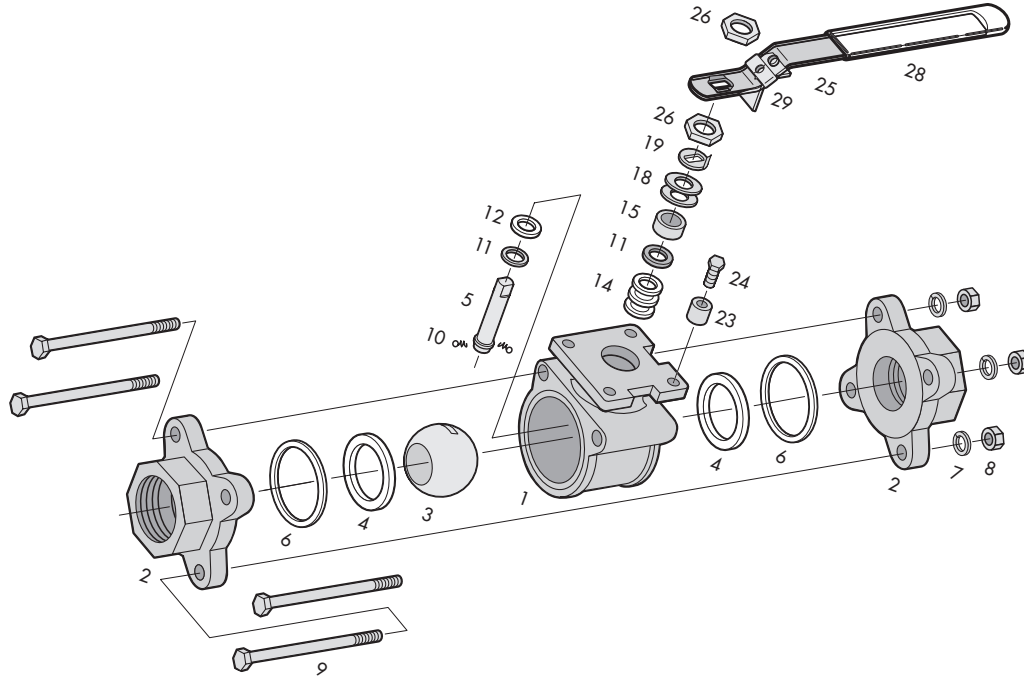
Size ins mm	E1	E2	E3	F1	F2	F3	F5	F6	G1	G2	G3	G5	G6	N	S	T
1/4 8	0.55 14	0.36 9.25	—	0.98 25	0.54 13.7	—	—	—	0.90 22.8	0.500 12.7	—	—	—	—	—	—
3/8 10	0.69 17.5	0.49 12.5	—	0.98 25	0.68 17.2	—	—	—	0.90 22.8	0.500 12.7	—	—	—	—	—	—
1/2 15	0.85 21.7	0.62 15.8	0.57 14.4	1.10 28	0.84 21.3	3.50 88.9	1.14 29	0.87 22	0.90 22.8	0.500 12.7	1.67 42.5	4.50 114.2	4.00 101.5	4	2.38 60.5	0.62 15.6
3/4 20	1.07 27.1	0.82 20.93	0.79 20	1.39 35	1.05 26.7	3.88 98.6	1.46 37	1.10 28	1.02 25.9	0.560 14.3	2.24 57	4.56 115.8	4.00 101.5	4	2.75 69.9	0.62 15.6
1 25	1.33 33.8	1.05 26.6	0.98 25	1.65 42	1.32 33.4	4.25 107	1.77 45	1.34 34	1.07 27.1	0.63 15.9	2.24 57	4.61 117.1	4.00 101.5	4	3.12 79.3	0.62 15.6
1 1/4 32	1.67 42.6	1.38 35.1	—	2.05 52	1.66 42.2	—	2.17 55	1.69 43	1.24 31.6	0.69 17.5	—	4.69 119	4.00 101.5	—	—	—
1 1/2 40	1.91 48.6	1.61 40.9	1.50 38	2.36 60	1.90 48.3	5.00 127	2.44 62	1.93 49	1.28 32.5	0.75 19.1	2.87 73	4.75 120.6	4.00 101.5	4	3.88 98.6	0.62 15.6
2 50	2.41 61.1	2.07 52.5	2.00 50.8	2.91 74	2.38 60.3	6.00 152.4	2.91 74	2.40 61	1.43 36.2	0.87 22.2	3.15 80	4.87 123.7	4.00 101.5	4	4.75 120.7	0.75 19.1
2 1/2 65	2.91 73.8	2.46 62.5	—	3.39 86	2.87 73	—	—	—	1.95 49.5	0.98 25	—	—	—	—	—	—
3 80	3.54 89.8	2.99 76	2.99 76	4.17 106	3.62 92	7.50 190.5	—	—	1.97 50	0.98 25	3.04 77.3	—	—	4	6.00 152.4	0.75 19.1
4 100	4.54 115.4	4.02 102	3.40 101.5	5.32 135	4.78 121.5	9.00 228.6	—	—	2.09 53	1.18 30	4.51 114.5	—	—	8	7.50 190.5	0.75 19.1
6 150	—	6.07 154.1	5.98 152	—	6.63 168.3	11.0 279.4	—	—	4.87 123.6	—	3.62 92	—	—	8	9.50 241.3	0.88 22.4
8 200	—	7.98 202.7	7.87 200	—	8.63 219.1	13.5 342.9	—	—	5.23 132.9	—	3.98 101	—	—	8	11.75 298.5	0.88 22.4
10 250	—	10.02 254.5	9.84 250	—	10.75 273.1	16.0 406.4	—	—	4.94 125.4	—	4.43 112.5	—	—	12	14.25 362	1.00 25.4
12 300	—	11.94 303.2	11.81 300	—	12.75 323.6	19.0 482.6	—	—	5.14 130.5	—	4.65 118	—	—	12	17.00 431.8	1.00 25.4



MODEL BR7000(316SS) BR8000(WCB)

Components & Materials

For Valve Sizes 1/4" through 2-1/2"



Item	Name	Stainless Steel	Carbon Steel	Qty.
1	Body	ASTM A351 Gr CF8M	ASTM A216 Gr WCB	1
2	End Cap	ASTM A351 Gr CF8M*	ASTM A216 Gr WCB	2
3	Ball	ASTM A351 Gr CF8M	ASTM A351 Gr CF8M	1
4	Seat	15% RPTFE	15% RPTFE	2
5	Stem	ASTM A479 Type316	ASTM A479 Type316	1
6	Body Seal	TFM	TFM	2
7	Spring Washer	SS304	SS304	†
8	Body Nut	SS304	SS304	†
9	Body Bolt / Stud	SS304	SS304	4
10	Anti-Static Device	SS316	SS316	2
11	Thrust Washer Protector	PEEK	PEEK	2
12	Thrust Washer	50% SS316 + 50% PTFE	50% SS316 + 50% PTFE	1
14	Stem Packing	15% RPTFE	15% RPTFE	3
15	Packing Gland Sleeve	SS304	SS304	1
18	Belleville Washer	SS301	SS301	2
19	Lock Washer	SS304	SS304	1
23	Travel Stop Set Sleeve	SS304	SS304	1
24	Travel Stop Bolt	SS304	SS304	1
25	Handle	SS304	SS304	1
26	Lock Nut	SS304	SS304	2
28	Handle Sleeve	Vinyl	Vinyl	1
29	Locking Device	SS304	SS304	1

Size and connections

Design meets MSS-SP-110.
Threaded End Connections meet ASME B1.20.1 NPT.
Socket Weld End Connections meet ASME B16.11.
Butt Weld End Connections meet MSS SP-72 / ASME B16.25.
Flanged End Connections meet ASME Class 150.

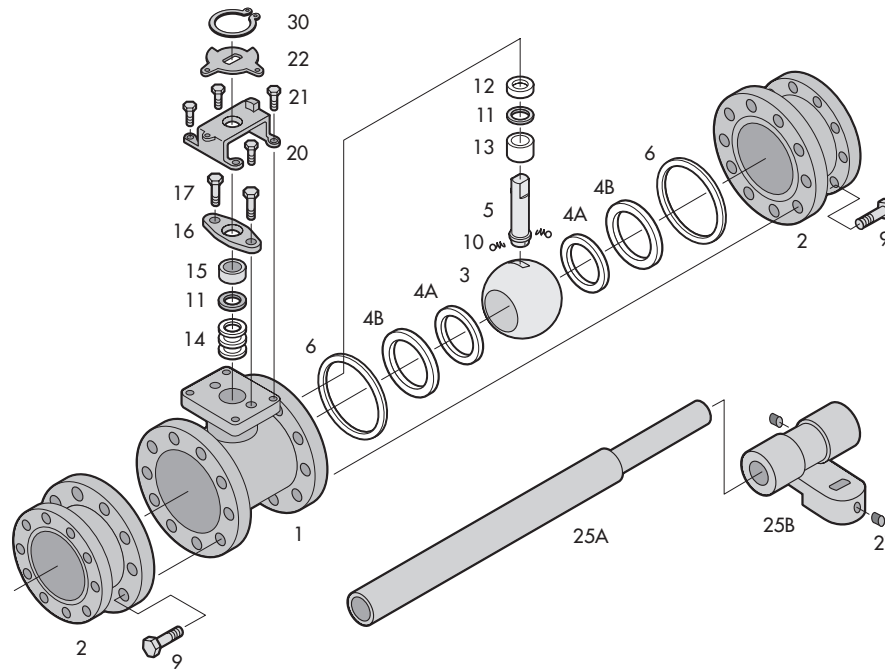
Valve body and end cap connections are high quality investment cast and solution annealed/normalized. Body and end cap wall thickness meets ASME B16.34.

Valve stems are blow-out proof for maximum safety and meet ASME B16.34 specification.

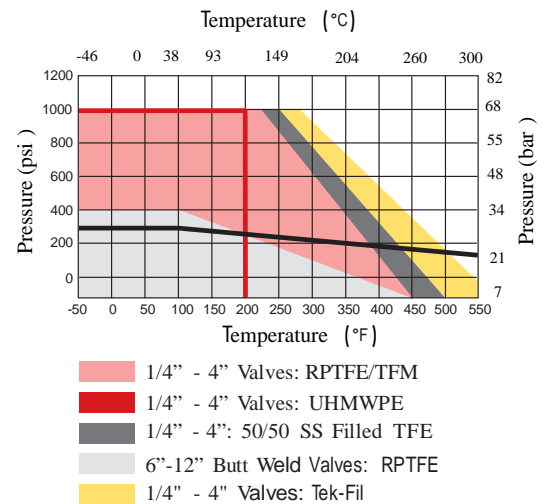
MODEL BR7000(316SS) BR8000(WCB)

Components & Materials

For Valve Sizes 3" through 12"



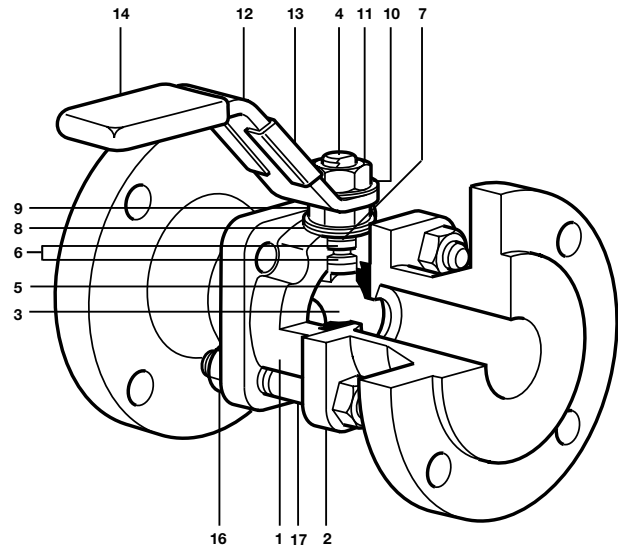
Item	Name	Stainless Steel	Carbon Steel	Qty.
1	Body	ASTM A351 Gr CF8M	ASTM A216 Gr WCB	1
2	End Cap	ASTM A351 Gr CF8M†	ASTM A216 Gr WCB	2
3	Ball	ASTM A351 Gr CF8M	ASTM A351 Gr CF8M	1
4A	Seat	15% RPTFE	15% RPTFE	2
4B	Seat Support	ASTM A351 Gr CF8M	ASTM A216 Gr WCB	2
5	Stem	ASTM A479 Type316	ASTM A479 Type316	1
6	Body Seal	PTFE	PTFE	2
9	Body Bolt	SS304	SS304	*
10	Anti-Static Device	SS316	SS316	2
11	Thrust Bearing	50% SS316 + 50% PTFE	50% SS316 + 50% PTFE	2
12	Thrust Washer	15% RPTFE	15% RPTFE	1
13	Stem Bearing	15% RPTFE	15% RPTFE	1
14	Stem Packing	15% RPTFE	15% RPTFE	**
15	Packing Gland	SS304	Carbon Steel	1
16	Packing Follower	ASTM A351 Gr CF8M	ASTM A216 Gr WCB	1
17	Gland Bolt	SS304	Carbon Steel	2
20	Stop Housing	ASTM A351 Gr CF8M	ASTM A216 Gr WCB	1
21	Housing Bolt	SS304	Carbon Steel	4
22	Travel Stop	SS304	Carbon Steel, Zinc Plated	1
25A	Handle	Ductile Iron/Carbon Steel	Ductile Iron/Carbon Steel	1
25B	Handle Junction	Ductile Iron	Ductile Iron	1
27	Handle Bolt	Carbon Steel	Carbon Steel	2
30	Snap Ring	Nickel Plated Carbon Steel	Nickel Plated Carbon Steel	1



BR845F

Benefits at a Glance

- ANSI classes 900 1200 1500
- Standard NACE MR-01-03 compliant
- WCB,304, and 316 316L body material
- ISO actuator mounting pad
- Full port and Reduced port
- 1/2” thru 2-1/2” size range
- Adjustable stem packing
- Blow out proof stem
- RPTFE seats
- Locking device
- Anti static ground
- Stainless steel trim
- 3 piece body design
- Fire tested to API 607 rev 4



Meets/exceeds CSA requirements. Fire safe design

Basic Design	ASME B16.34/API 608
Flange Surface Finish	125-250 AARH Serrated
Face-to-Face Dimension	ASME B16.10 / API 6D
Flanged End Dimension	ASME B16.5
Inspected & Tested to	API 598 & 607
Certifications	ISO 9001/Canadian CRN

Pattern Descriptions

Class and Port	B16.10 / API 6D Long Pattern	B16.10 / API 6D Short Pattern
900# Full	✓	
1200# Full	✓	
1500# Full	✓	
900# Reduced		✓
1200# Reduced		✓
1500# Reduced	✓	

Materials

Item	Material
1 Body	ASTM A216-WCB / ASTM A313-304444 / ASTM A313-316
2 Cap	ASTM A216-WCB / ASTM A313-30444 / ASTM A313-316
3 Ball	ASTM A351-CF8M
4 Stem	ASTM A313-302 ASTM A276-316
5 Seat	Stainless - Commercial
6 Seat ring	Teflon - Glass Filled 25%
7 Separator	ASTM A276-316
8 Spring Washer	ASTM A313-302
9 nut	ASTM A313-304446
10 NNname platel	ASTM A276-316
11 Sten nut	ASTM A351-CF8
12 Lever	ASTM A276-316
13 NNname platel	Stainless - Commercial
14 grip	Vvinyi
15 Bolts	ASTM A276-316
16 Nuts	SS - 316
17 Studs	ASTM A193-B7M / A193-B8A / A320-L7M

Dimensions <(approximate) in mm

Size	A	A1	A2	A3	A4	B	B1	C	C1	D	D1	D2	D3	E
¼"	63	60	-	-	-	120	-	61	-	22	-	-	-	11
⅜"	63	63	-	-	-	120	-	61	-	22	-	-	-	11
½"	63	51	108	130	140	120	120	61	87	24	89	95	95	11
¾"	68	59	117	150	152	120	120	63	89	26	98	105	117	14
1"	86	84	127	160	165	157	157	91	91	31	108	115	124	21
1¼"	97	93	140	180	178	157	157	95	95	37	118	140	133	25
1½"	106	102	165	200	190	180	180	109	109	41	127	150	156	31
2"	124	118	178	230	216	180	180	115	115	48	152	165	165	38
2½"	152	152	191	-	241	245	-	132	132	57	-	-	190	51

Full bore

Size	A	A1	A2	A3	A4	B	B1	C	C1	D	D1	D2	D3	E
¼"	63	60	-	-	-	120	-	61	-	24	-	-	-	11
⅜"	63	63	-	-	-	120	-	61	-	24	-	-	-	11
½"	68	68	-	130	140	120	120	63	89	26	-	95	95	14
¾"	86	86	-	150	152	157	157	91	91	31	-	105	117	21
1"	97	97	-	160	165	157	157	95	95	37	-	115	124	25
1¼"	106	106	-	180	178	180	180	109	109	41	-	140	133	31
1½"	124	124	-	200	190	180	180	115	115	48	-	150	156	38
2"	152	152	-	230	216	245	245	132	132	57	-	165	165	51

Weights (approximate) in kg

Size	Scrd / BW / SW	Reduced bore			Scrd / BW / SW	Full bore	
		ASME 900	ASME 1200	ASME 1500		ASME1200	ASME 1500
¼"	0.61	-	-	-	0.61	-	-
⅜"	0.61	-	-	-	0.61	-	-
½"	0.61	2.2	1.65	2.2	0.70	2.3	2.5
¾"	0.70	2.9	2.20	2.9	1.27	3.5	4.2
1"	1.27	3.9	3.38	4.5	1.77	4.4	5.1
1¼"	1.77	5.4	4.44	7.0	2.50	6.2	7.5
1½"	2.50	6.5	5.84	8.36	3.50	7.5	10.0
2"	3.50	8.8	8.99	11.2	6.90	12.2	13.4
2½"	6.90	-	-	17.5	-	-	-

