
VTE®

SERIES 5000 | 6000

3 Piece Full Port Ball Valves



Series 5000/6000 ball valves offer the convenience of a three piece body design at an economical price. The three piece design with a swing out center section allows for ease of in-line and out-of-line maintenance. Standard valve bodies are investment cast CF8M Stainless Steel or WCB Carbon Steel. All body castings are marked with a foundry heat number for full traceability.

These valves offer quarter turn operation and low operating torque. Series 5000/ 6000 valves feature adjustable stem packing, stainless steel safety trigger locking handles and travel stops which limit handle movement to set 90° intervals. Flow-Tek's heavy duty, high quality stems are internal entry and blowout proof for maximum safety.

Each Series 5000/6000 valve features an integrally cast mounting pad complying with ISO 5211 that provides positive alignment when mounting actuators, gear operators or control accessories.

Size	Pressure Rating	Temp. Range	End Connections	Body Material
1/4" to 2" 8mm to 50mm	1000 psi WOG 69 bar	-50°F to +450°F -46°C to +232°C	Threaded (NPT): SS CF8M or CS WCB Socket Weld: SS CF3M or CS WCB	5000: Stainless Steel CF8M 6000: Carbon Steel WCB
2-1/2" to 4" 65mm to 100mm	800 psig WOG 55 bar			

COMPONENTS AND MATERIALS

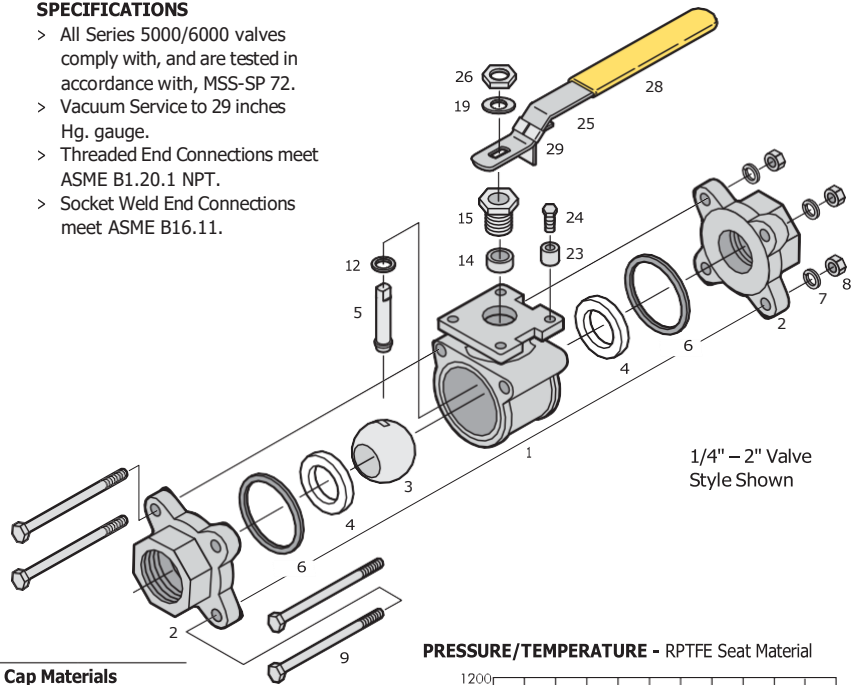
Item	Name	Material	Qty.
1	Body ^Δ	ASTM A351 Gr CF8M	1
2	End Cap ^Δ	ASTM A351 Gr CF8M	2
3	Ball	ASTM A479 Type 316	1
4	Seat ^{••}	RPTFE	2
5	Stem	ASTM A479 Type 316	1
6	Body Seal ^{••}	PTFE	2
7	Washer	SS304	*
8	Body Nut	SS304	*
9	Body Bolt / Stud	SS304	**
12	Thrust Washer ^{••}	PTFE	1
14	Stem Packing ^{••}	PTFE	1
15	Gland Nut	SS304	1
19	Handle Washer	SS304	1
23	Stop Set Sleeve	SS304	1
24	Stop Bolt	SS304	1
25	Handle	SS304***	1
26	Handle Nut	SS304	2
28	Handle Sleeve	Vinyl	1
29	Locking Device	SS304	1

* Number of Nuts & Lock Washers	
1/4"- 2" Valves	4
2-1/2" - 3" Valves	8
4" Valves	12
** Number of Body Bolts or Studs	
1/4"- 2"	4 (Bolts)
2-1/2" - 3"	4 (Studs)
4" Valves	6 (Studs)
*** Handles on 3" - 4" are Carbon Steel	
•• Parts included in the repair kits	

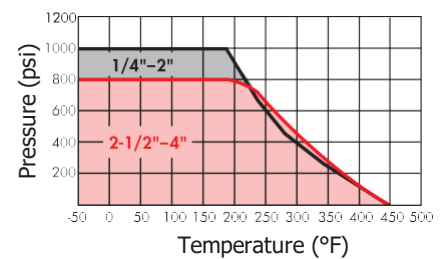
	Body and End Cap Materials		
5000^Δ	Body	CF8M	
	Threaded End	CF8M	
	Weld End	CF3M	
6000^Δ	Body & Ends	A216-WCB	

SPECIFICATIONS

- > All Series 5000/6000 valves comply with, and are tested in accordance with, MSS-SP 72.
- > Vacuum Service to 29 inches Hg. gauge.
- > Threaded End Connections meet ASME B1.20.1 NPT.
- > Socket Weld End Connections meet ASME B16.11.



PRESSURE/TEMPERATURE - RPTFE Seat Material



Note: Carbon Steel valves limited to -20°F.

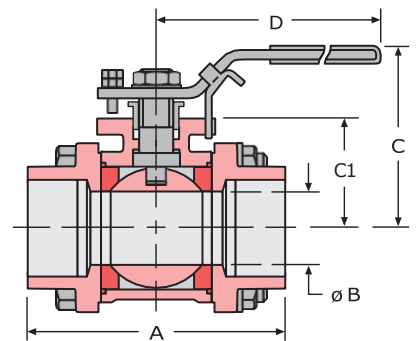
Dimensions (inch)

Size in	A	ØB Port	C	C1	D	ØE	F	M	ØP	U	Cv	Ød	Torque* lbs-in	Weight lb
1/4	2.4	0.46	2.6	1.5	4.7	0.57	0.5	0.20	0.31	M5	8	FO3 - 1.42	60	1.0
3/8	2.4	0.49	2.6	1.5	4.7	0.70	0.5	0.20	0.31	M5	8	FO3 - 1.42	60	1.0
1/2	3.0	0.59	2.9	1.8	4.7	0.87	0.5	0.20	0.37	M5	32	FO3 - 1.42	70	1.4
3/4	3.0	0.79	3.0	1.9	5.7	1.10	0.6	0.26	0.37	M5	54	FO3 - 1.42	95	1.75
1	3.4	0.98	3.3	2.3	6.1	1.34	0.6	0.31	0.45	M5	105	FO4 - 1.65	140	2.45
1-1/4	4.1	1.26	3.5	2.5	6.1	1.69	0.7	0.31	0.45	M5	200	FO4 - 1.65	195	4.0
1-1/2	4.7	1.50	4.1	3.0	6.7	1.93	0.7	0.33	0.63	M6	275	FO5 - 1.97	315	5.6
2	5.1	1.97	4.3	3.3	6.7	2.42	0.8	0.33	0.63	M6	500	FO5 - 1.97	510	8.7
2-1/2	6.5	2.56	5.2	4.5	9.1	3.03	0.9	0.47	0.79	M8	780	FO7 - 2.76	730	17.7
3	7.2	2.99	5.5	4.8	9.1	3.54	1.0	0.47	0.79	M8	1150	FO7 - 2.76	990	25.0
4	9.1	3.82	6.9	6.5	10.8	4.54	1.2	0.63	0.98	M10	1700	F10 - 4.02	3100	52.0

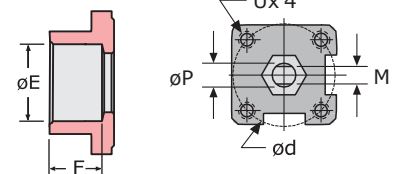
Dimensions (mm)

Size mm	A	ØB Port	C	C1	D	ØE	F	M	ØP	U	Cv	Ød	Torque* N m	Weight Kg
8	60	11.6	67	37.7	120	14.4	12	5	7.9	M5	8	36	7	0.45
10	60	12.5	67	37.7	120	17.8	12	5	7.9	M5	8	36	7	0.43
15	75	15	73	44.7	120	22	12	5	9.4	M5	32	36	8	0.6
20	77	20	76	48	145	27.4	14	6.5	9.4	M5	54	36	11	0.74
25	85	25	84	58.5	155	34.1	15	8	11.4	M5	105	42	16	1.04
32	104	32	89	63.1	155	42.9	17	8	11.4	M5	200	42	22	1.72
40	120	38	103	76.6	170	49	17	8.5	16	M6	275	50	36	2.46
50	130	50	109	83.5	170	61.5	20	8.5	16	M6	500	50	58	3.8
65	165	65	132	114.2	230	77	23.8	12	20	M8	780	70	82	8.2
80	182	76	140	122	230	90	25	12	20	M8	1150	70	112	11
100	230	97	176	164.3	275	115.4	30	16	25	M10	1700	102	350	23.5

*Torque based on RPTFE seats in clean water at full rated pressure.



Socket Weld End



Verify mounting dimensions before manufacturing mounting hardware. Automated valves may require periodic gland nut adjustments.

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