



STANDARDS

- Valve design: ASME B16.34
- Material certification: EN10204-3.1 MTR
- End connections: ASME B16.11, ASME B1.20.1, ASME B16.25
- Steel casting: MSS SP-55
- Valve marking: MSS SP-25
- Direct mount: ISO 5211
- Stem Connection: DIN 3337
- Class / Pressure Rating: 800/1000 psi
- Sulphide stress cracking: NACE MR-01-75

J Flow Controls DM4500 Series Three Piece Direct Mount Ball Valves

FEATURES & BENEFITS

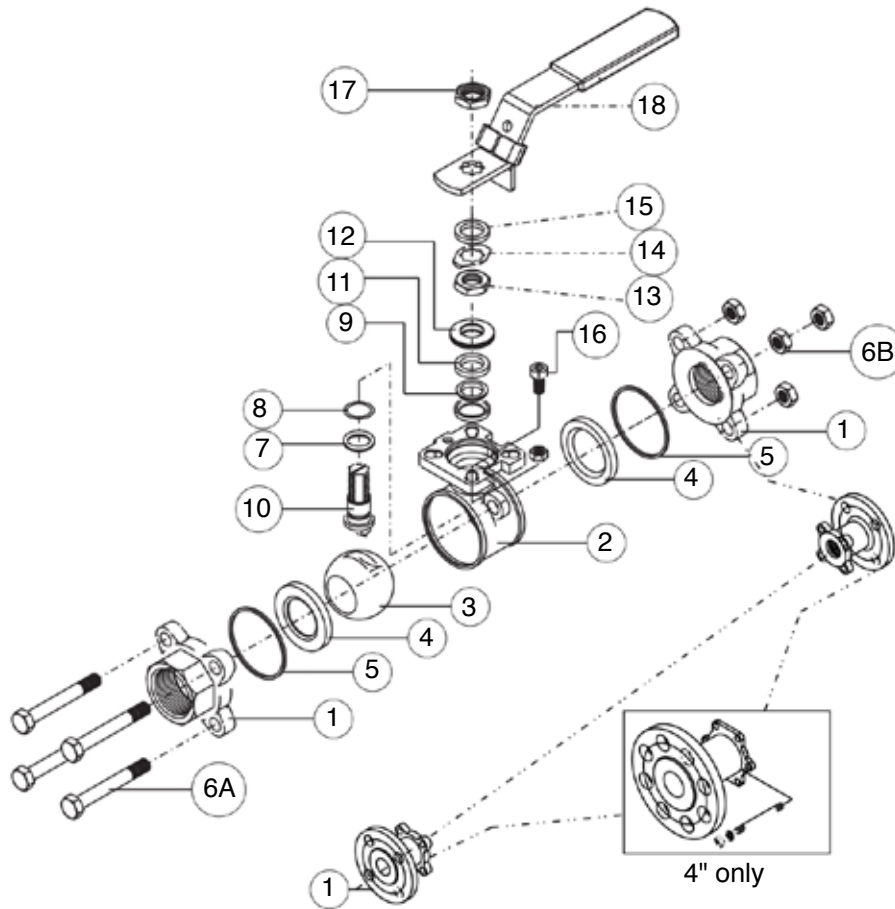
- Body and end caps quality investment casting
- With ISO 5211 mounting pad
- With locking function
- Adjustable Stem Packing
- Available in Stainless Steel or Carbon Steel
- Blow-out proof stem design
- 100% air tested under water at 100 psi
- Working pressure: Class 150 / 800 1000 psi
- End type: threaded, socket weld, butt weld or flanged end ANSI 150
- MTR Reports available

OPTIONS

- Spring return (dead man) handle
- Oval handle
- Automation applicable
- Handle with limit switch box
- Extended stem for isolation
- V-ball for control valve in 25°, 30°, 45°, 60°, 90°, slot or custom
- PTFE cavity filler
- Hastalloy C, Super Duplex, Alloy 20 and Monel
- Extended stem for isolation

DM4500 Series Ball Valves

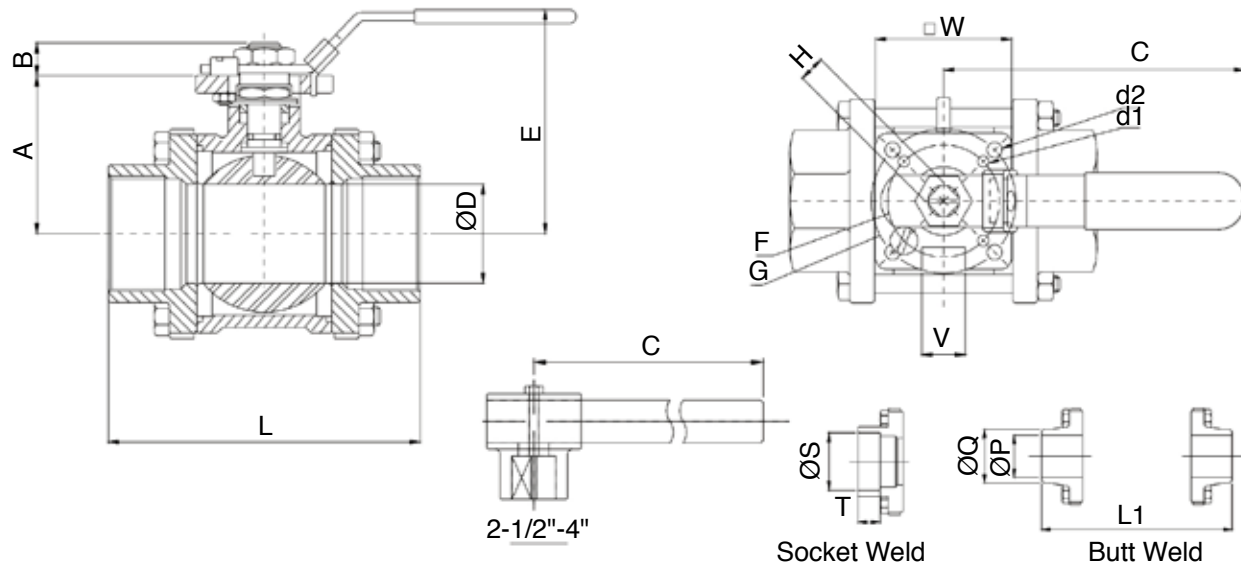
BILL OF MATERIALS



No	Part Name	Materials	No	Part Name	Materials
1	End Cap	CF8M/WCB	13	Stem Nut	SS304
2	Body	CF8M/WCB	14	Nut Stop	SS304
3	Ball	SS316	15	Space Washer	SS304
4	Seat	TFM	16	Plater	SS304
5	Gasket	TFM	17	Stop Pin	SS304
6A	Bolts	SS304	18	Handle Nut	SS304
6B	Nuts	SS304	19	Handle	SS304
7	Thrust Washer	TFM	20	Handle Cover	Plastic
8	O-Ring	Viton	21	Set Bolt	SS304
9	Stem Packing	TFM	22	Lever Head	CF8
10	Stem	SS316	23	Lever	Steel Pipe
11	Gland	SS304	24		
12	Disk Washer	SS301			

DM4500 Series Ball Valves

DIMENSIONS (THREADED)

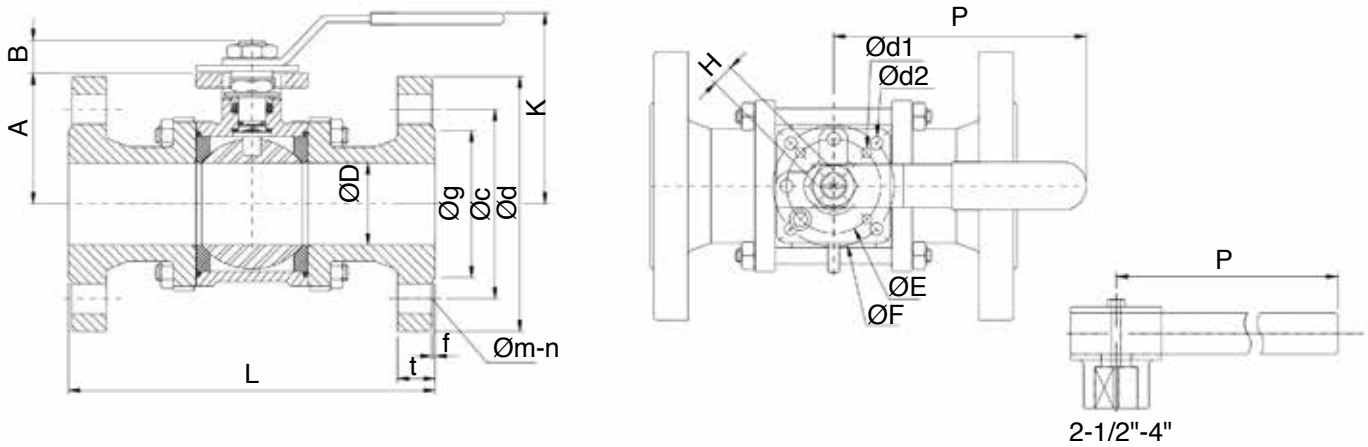


Size	A	B	C	D	d1	d2	E	F	G	H	L
1/4"	1.46	0.43	5.12	0.43	0.24	0.24	2.28	1.42	1.65	0.35	2.38
3/8"	1.46	0.43	5.12	0.49	0.24	0.24	2.28	1.42	1.65	0.35	2.38
1/2"	1.46	0.43	5.12	0.59	0.24	0.24	2.28	1.42	1.65	0.35	2.5
3/4"	1.57	0.43	5.12	0.79	0.24	0.24	2.52	1.42	1.65	0.35	2.97
1"	1.89	0.55	6.10	0.98	0.24	0.28	3.03	1.65	1.97	0.43	3.39
1-1/4"	2.11	0.55	6.10	1.26	0.24	0.28	3.26	1.65	1.97	0.43	3.78
1-1/2"	2.50	0.71	8.07	1.50	0.28	0.35	3.62	1.97	2.76	0.55	4.37
2"	2.83	0.71	8.07	1.97	0.28	0.35	3.94	1.97	2.76	0.55	5.08
2-1/2"	3.62	0.87	11.42	2.56	0.35	0.44	5.51	2.76	4.02	0.67	6.00
3"	4.02	0.87	11.42	3.15	0.35	0.44	5.91	2.76	4.02	0.67	6.63
4"	5.20	1.02	13.20	3.94	0.44	0.53	7.68	4.02	4.92	0.87	8.37

Size	S	T	P	Q	L1	V	W
1/4"	0.56	0.44	0.39	0.67	2.38	0.75	1.73
3/8"	0.69	0.44	0.52	0.75	2.38	0.75	1.73
1/2"	0.86	0.50	0.61	0.85	2.50	0.75	1.73
3/4"	1.07	0.56	0.81	1.08	2.97	0.75	1.73
1"	1.33	0.63	1.05	1.36	3.39	0.94	2.05
1-1/4"	1.67	0.69	1.38	1.69	4.09	0.94	2.05
1-1/2"	1.92	0.75	1.59	1.93	4.61	1.10	2.09
2"	2.41	0.87	2.06	2.40	5.43	1.10	2.09
2-1/2"	2.91	0.87	2.56	3.03	6.69	-	-
3"	3.54	1.00	3.15	3.58	7.56	-	-
4"	4.54	1.26	3.94	4.53	8.90	-	-

DM4500 Series Ball Valves

DIMENSIONS (FLANGED)



Size	A	B	D	d1	d2	K	E	F	H	P	L
1/2"	1.46	0.43	0.59	0.24	0.24	3.86	1.42	1.65	0.35	5.00	5.12
3/4"	1.57	0.43	0.79	0.24	0.24	3.98	1.42	1.65	0.35	5.00	5.91
1"	1.89	0.55	0.98	0.24	0.28	3.70	1.65	1.97	0.43	6.30	6.30
1-1/4"	2.09	0.55	1.26	0.24	0.28	3.90	1.65	1.97	0.43	6.30	7.09
1-1/2"	2.48	0.71	1.50	0.28	0.35	4.53	1.97	2.76	0.55	8.07	7.87
2"	2.83	0.71	1.97	0.28	0.35	4.88	1.97	2.76	0.55	8.07	9.06
2-1/2"	3.62	0.87	2.56	0.35	0.44	5.51	2.76	4.02	0.67	11.81	11.42
3"	4.02	0.87	3.07	0.35	0.44	5.91	2.76	4.02	0.67	11.81	12.20
4"	5.20	1.02	3.94	0.44	0.53	7.48	4.02	4.92	0.87	11.81	13.78

Size	Class 150 Flange Dimensions						
	g	c	d	f	t	m	n
1/2"	1.77	2.56	3.74	0.08	0.55	0.55	4
3/4"	2.28	2.95	4.13	0.08	0.63	0.55	4
1"	2.68	3.35	4.53	0.08	0.63	0.55	4
1-1/4"	3.07	3.94	5.51	0.08	0.63	0.71	4
1-1/2"	3.46	4.33	5.91	0.12	0.63	0.71	4
2"	4.02	4.92	6.50	0.12	0.71	0.71	4
2-1/2"	4.80	5.71	7.28	0.12	0.71	0.71	4
3"	5.43	6.30	7.87	0.12	0.79	0.71	8
4"	6.22	7.09	8.66	0.12	0.79	0.71	8

BREAK-TORQUE VALUE (IN-LB AT 0 PSI)

Size	1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"
Grease	31	31	44	49	62	97	150	204	310	407	637
Non-Grease	44	44	53	62	84	142	239	266	602	752	929

Note 1: The greases J Flow Controls uses include lubricants and anti-seize that are both SILICONE-FREE

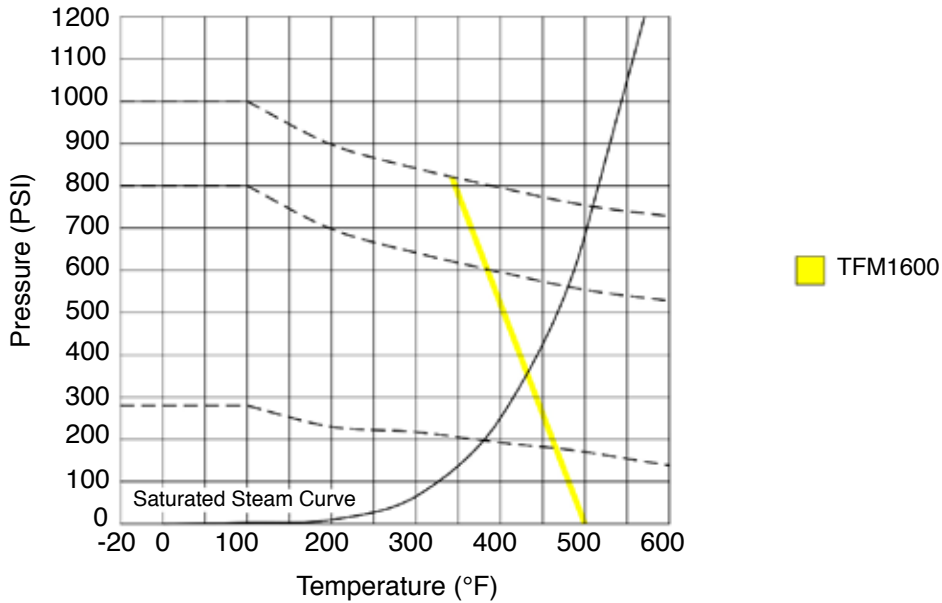
Note 2: J Flow Controls strongly suggests increasing the torque at least 30% - 40% for safety factor when mounting an actuator

FLOW COEFFICIENT (FULL PORT VALVE)

Size	Cv Factor
1/4"	8.5
3/8"	8.5
1/2"	21
3/4"	50
1"	90
1-1/4"	110
1-1/2"	240
2"	400
2-1/2"	700
3"	980
4"	1700

DM4500 Series Ball Valves

PRESSURE/TEMPERATURE CHART



HOW TO ORDER

Sizes	Series	Body, Ball & Stem	Port	Body Seal	Packing
1 1/4"	45	00 CF8	F Full Port	T TFM1600	T TFM1600
2 3/8"		0L CF3	1 15° V-Ball	G Graphite	
3 1/2"		23 WCB, CF8M Ball & Stem	3 30° V-Ball		
4 3/4"		33 CF8M	6 60° V-Ball		
5 1"		44 Alloy 20	9 90° V-Ball		
0 1-1/4"		55 Monel			
6 1-1/2"		6L CF3M			
7 2"		77 Hastelloy C			
8 2-1/2"		99 Duplex			
9 3"					
A 4"					

Seat	End Connections	Options
T TFM1600	F1 ANSI 150 RF Flange	LD Locking Handle
	F3 ANSI 300 RF Flange	SH Spring Handle
	SW Socket Weld	GO Gear Operator
	FT Female NPT	BS Bare Stem
	B1 Butt Weld Sch 10	SE Stem Extension
	B4 Butt Weld Sch 40	VB Vented Ball
	B8 Butt Weld Sch 80	
	TW Female NPT X Socket Weld	
	MT Female Metric THD	

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