



### DESCRIPTION

- 3 - Piece Ball Valve
- Direct Mount
- Full Port
- 1/4" - 3"
- 2160 (1/4" - 2") / 2000 (2-1/2" - 3") PSI (WOG)

# DM4600 Series

### CERTIFICATIONS

- Valve Test: API 598
- Anti-Static: API 608
- Direct Mount: ISO 5211
- Steel Casting: MSS SP-55
- Valve Marking: MSS SP-25
- Valve Design: ASME B16.34
- Face to Face: ASME B16.10
- Class (Pressure Rating): Class 900
- Material Certification: EN10204-3.1 MTR
- Sulfide Stress Cracking: NACE MR-01-75
- Quality Assurance: ISO 9001:2008 Certified
- End Connection: ASME B1.20.1, ASME B16.11, ASME B16.25, ASME B16.5

### FEATURES AND BENEFITS

- Body and End Caps Quality Investment Casting
- With ISO 5211 Direct Mounting Pad
- Adjustable Stem Packing
- Standard in Stainless Steel or Carbon Steel
- Blow-Out Proof Stem Design
- 100% Air Tested Under Water at 100 PSI
- Working Pressure of 2160 psi
- Temperature Range from -320°F to 800°F
- With Locking Function
- End Connection: Butt Weld, Flanged, Socket Weld, and Threaded

### OPTIONS

- Fire-Safe: API 607 - 6th Edition Certified
- Spring Return (Dead-Man) Handle
- Extended Stem for Isolation
- V-Ball for Control Valve in 15°, 30°, 45°, 60°, 90°, Slot, or Custom
- Automation Applicable
- Fugitive Emissions Bonnet
- PTFE / PFA Coating (40-70 um)
- Alloy 20 / Monel / Hastelloy C276 / Titanium / Duplex 2507
- Cryogenic Valve

#### FULL PORT VALVE

### FLOW COEFFICIENT

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

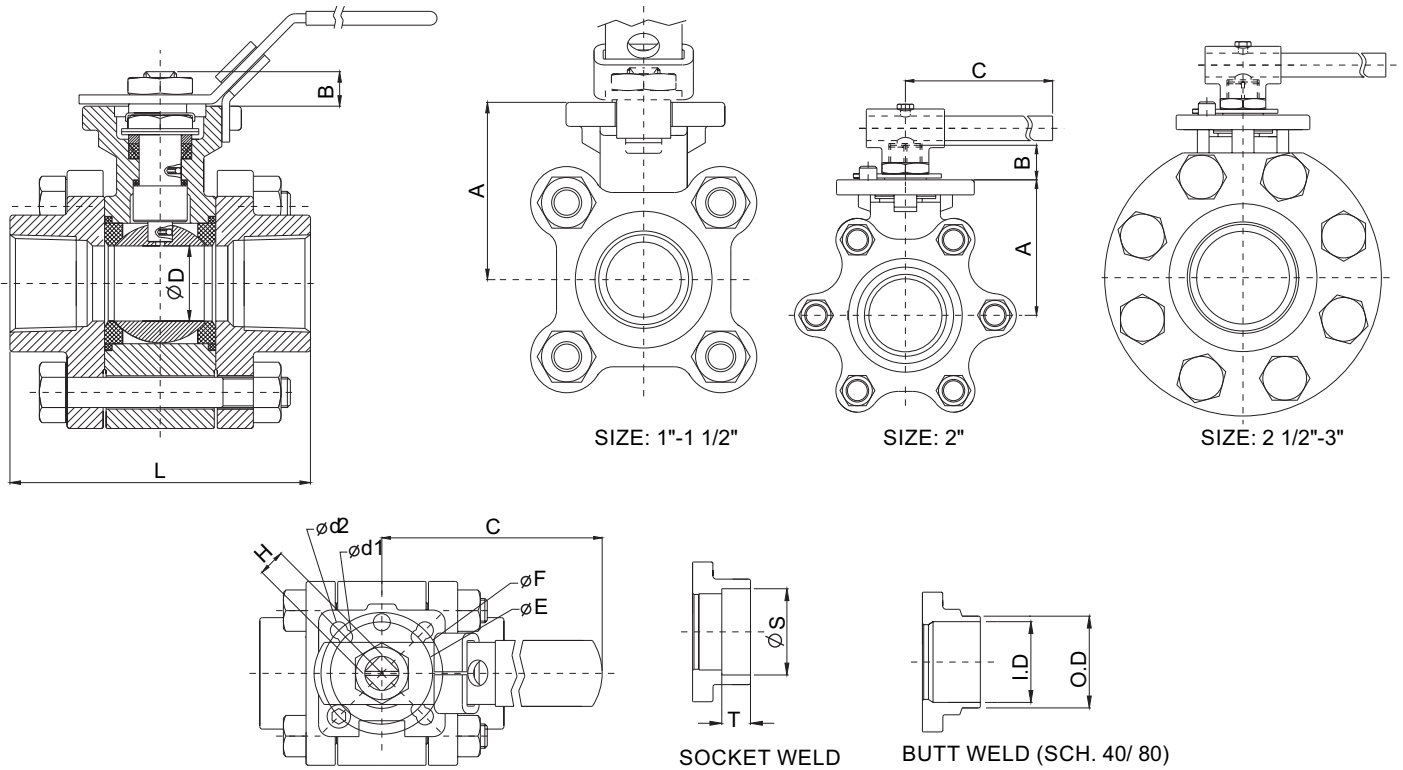
### BREAK-TORQUE VALUE (in-lb at 0 psi)

SIZE	1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"
SEAT	TFM	TFM	TFM	TFM	TFM	TFM	TFM	TFM	DELRIN	DELRIN
GREASE	71	71	106	133	159	221	416	735	1460	2213

Note 1: The greases J Flow Controls uses include lubricants and anti-seize grease 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.

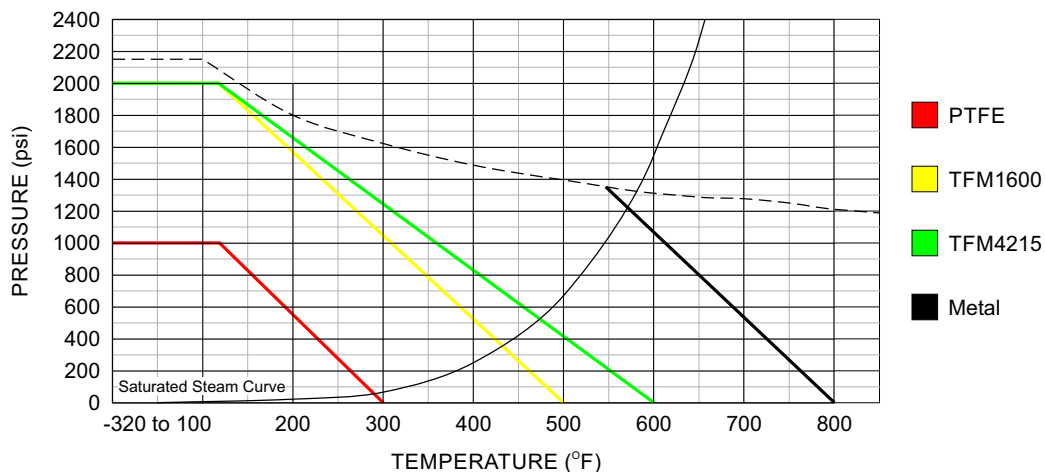
# DM4600 Series Valves



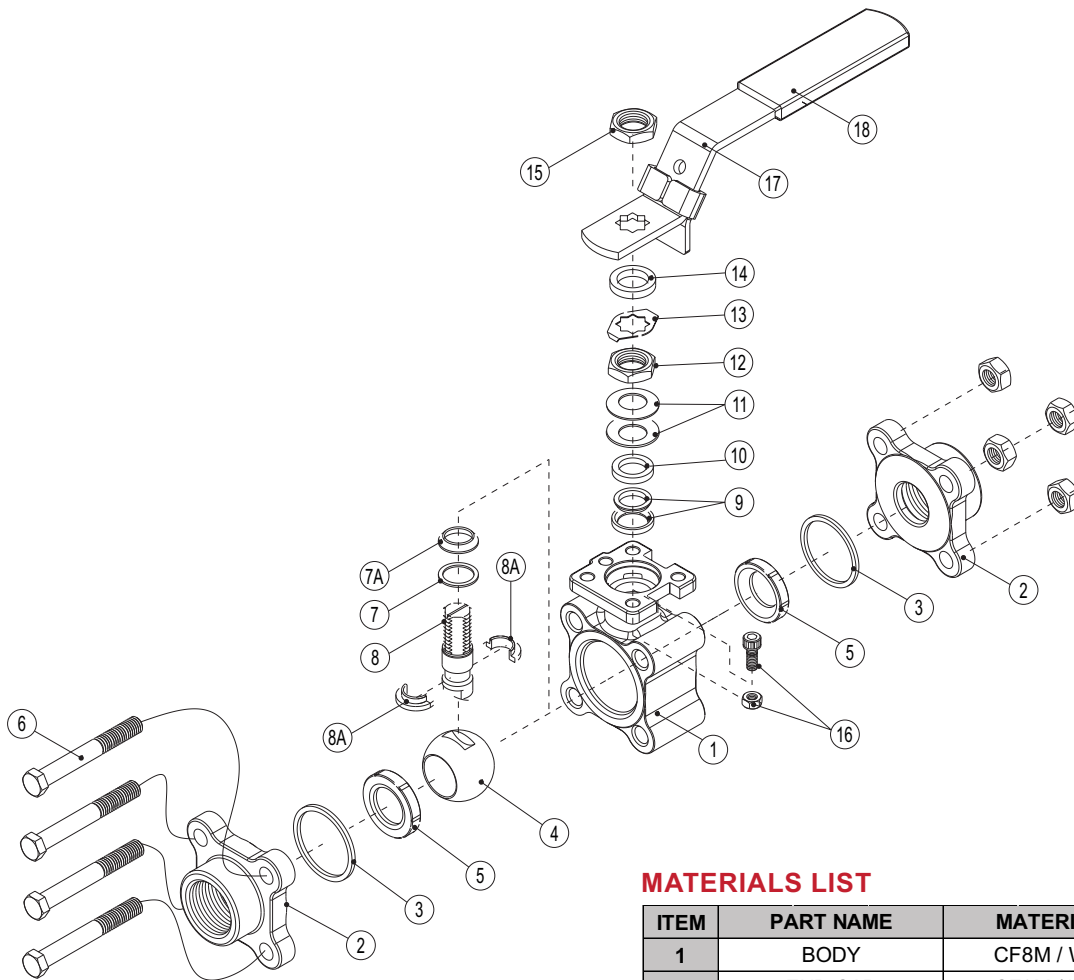
## DIMENSIONS (in)

SIZE	A	B	C	D	d1	d2	E	F	H	L	SW		BW(40#)		BW(80#, std)	
											S	T	OD	ID	OD	ID
1/4"	1.81	0.37	5.12	0.43	0.24	0.24	1.42	1.65	0.35	2.62	0.56	0.44	0.55	0.36	0.55	0.30
3/8"	1.81	0.37	5.12	0.49	0.24	0.24	1.42	1.65	0.35	2.62	0.69	0.44	0.67	0.50	0.67	0.43
1/2"	1.89	0.37	5.12	0.59	0.24	0.24	1.42	1.65	0.35	2.76	0.86	0.50	0.84	0.63	0.84	0.54
3/4"	2.09	0.47	6.10	0.79	0.24	0.24	1.65	1.97	0.43	3.62	1.07	0.56	1.05	0.81	1.05	0.74
1"	2.32	0.47	6.10	0.98	0.24	0.28	1.65	1.97	0.43	4.13	1.33	0.63	1.31	1.05	1.31	0.96
1-1/4"	2.44	0.57	8.07	1.26	0.28	0.36	1.97	2.76	0.55	4.37	1.67	0.69	1.66	1.38	1.66	1.28
1-1/2"	2.76	0.57	8.07	1.50	0.28	0.36	1.97	2.76	0.55	4.88	1.92	0.72	1.92	1.59	1.92	1.50
2"	3.54	0.75	12.60	1.97	0.36	0.45	2.76	4.02	0.67	5.91	2.41	0.84	2.41	2.06	2.41	1.94
2-1/2"	4.13	0.71	13.78	2.50	0.36	0.45	2.76	4.02	0.67	6.50	2.91	0.87	2.91	2.47	2.91	2.32
3"	4.69	0.98	20.47	3.07	0.45	0.53	4.02	4.92	0.87	7.68	3.54	1.00	3.54	3.07	3.54	2.90

## PRESSURE/TEMPERATURE CHART



# DM4600 Series Valves



## MATERIALS LIST

ITEM	PART NAME	MATERIALS
1	BODY	CF8M / WCB
2	END CAP	CF8M / WCB
3	GASKET (BODY)	TFM
4	BALL	SS 316
5	BALL SEATS	TFM / TCC / PEEK
6	BOLTS	SS 304
7	THRUST WASHER	TFM
7A	THRUST WASHER	PEEK
8	STEM	SS 316
8A	HALF SPLIT RING	SS 316
9	STEM PACKING	TFM
10	GLAND WASHER	SS 304
11	DISK WASHER	SS 301
12	STEM NUT	SS 304
13	NUT STOP	SS 304
14	SPACE WASHER	SS 304
15	HANDLE NUT	SS 304
16	STOP PIN	SS 304
17	HANDLE	SS 304
18	HANDLE COVER	PLASTIC

# DM4600 Series Valves

## HOW TO ORDER

VALVE SIZE		PRODUCT SERIES	BODY MATERIAL	BALL/STEM MATERIAL	PORT	PACKING / BODY SEAL MATERIAL
<b>025</b> 1/4"	<b>125</b> 1-1/4"	<b>DM46</b>	<b>2</b> WCB	<b>3</b> CF8M	<b>FP</b> Full Port	<b>TM</b> TFM1600
<b>038</b> 3/8"	<b>150</b> 1-1/2"		<b>3</b> CF8M	<b>4</b> ALLOY 20	<b>15</b> 15° V-Ball	<b>TC</b> TFM4215
<b>050</b> 1/2"	<b>200</b> 2"		<b>4</b> ALLOY 20	<b>5</b> MONEL	<b>30</b> 30° V-Ball	<b>GG</b> Graphite
<b>075</b> 3/4"	<b>250</b> 2-1/2"		<b>7</b> HASTELLOY C276	<b>7</b> HASTELLOY C276	<b>60</b> 60° V-Ball	
<b>100</b> 1"	<b>300</b> 3"		<b>8</b> TITANIUM	<b>8</b> TITANIUM	<b>90</b> 90° V-Ball	
			<b>9</b> DUPLEX 2507	<b>9</b> DUPLEX 2507		

SEAT MATERIAL	END CONNECTIONS		MATERIAL OPTIONS	DESIGN OPTIONS
<b>TM</b> TFM1600	<b>F15</b> ANSI 150 RF Flange	<b>W80</b> Butt Weld sch 80	<b>NA</b> Standard (TFM1600)	<b>NA</b> Standard
<b>TC</b> TFM4215	<b>F30</b> ANSI 300 RF Flange	<b>E10</b> Extended Butt Weld sch 10	<b>BC</b> TFM4215 Body Seal	
<b>M3</b> CF8M	<b>F60</b> ANSI 600 RF Flange	<b>E40</b> Extended Butt Weld sch 40	<b>BG</b> Graphite Body Seal	
	<b>SCW</b> Socket Weld	<b>E80</b> Extended Butt Weld sch 80		
	<b>FPT</b> Femal NPT	<b>E16</b> Extended Butt Weld sch 160		
	<b>W10</b> Butt Weld sch 10	<b>FSW</b> Female NPT X Socket Weld		
	<b>W40</b> Butt Weld sch 40	<b>ESW</b> Extended Socket Weld		

Example: 100-DM4633FPTMTMFPTNANA

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