



STANDARDS

- Valve body: ASME B16.34
- Material certification: EN10204-3.1 MT
- Quality assurance: ISO 9001:2008
- Steel casting: MSS SP-55
- Valve marking: MSS SP-25
- Valve test: API 598
- Direct mount: ISO 5211
- End connection: ASME B1.20.1, ASME B16.11, ASME B16.25, ASME B16.5
- Sulfide stress cracking: NACE MR-01-7

JFlow Controls **DM3(4)L(T)2A00 Series** Direct Mount Three Way Ball Valves

FEATURES & BENEFITS

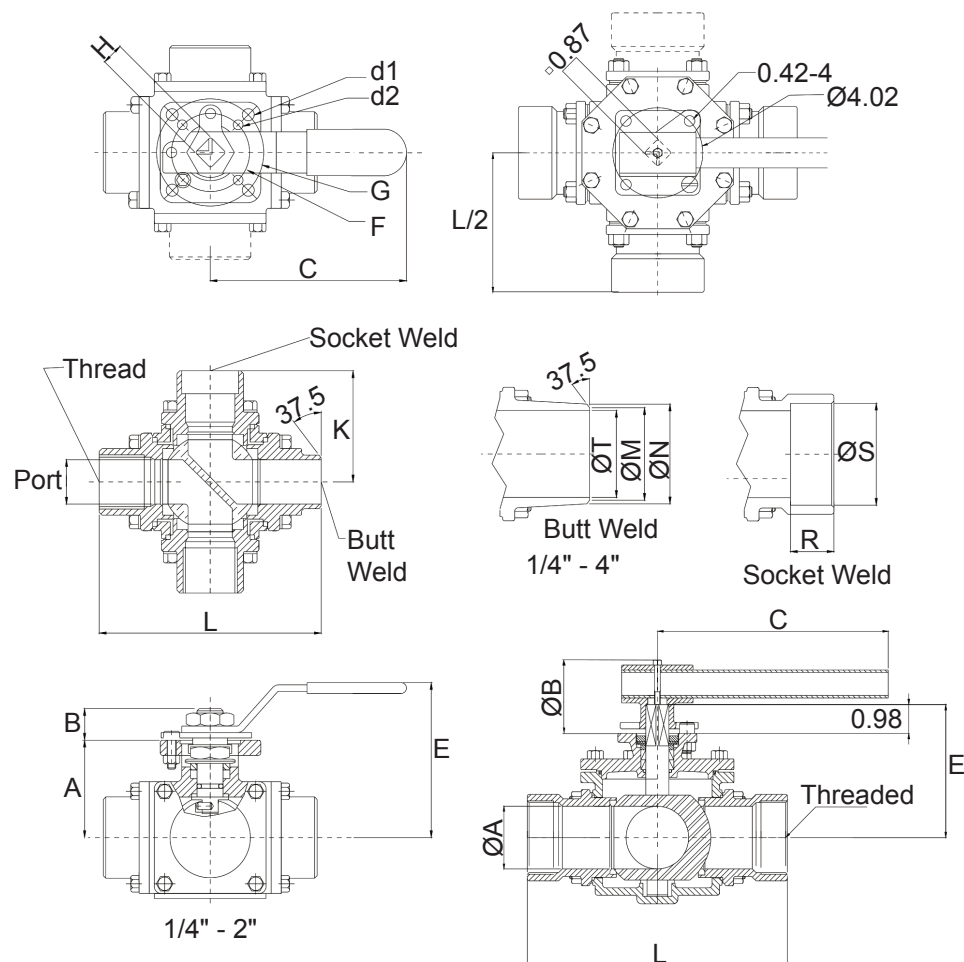
- Body and end caps quality investment casting (1/4" - 4") / Sand Casting (5" - 8")
- Available in Stainless Steel and Carbon Steel
- With ISO 5211 direct mounting pad (1/4" - 4")
- Floating (1/4" - 2") / Trunnion (2-1/2"+) design
- Available in L / T / X / I-Port
- Available in 3 / 4 / 5 -way in block body type
- 100% air tested under water at 80 - 100 psi
- Temperature range from -20°F to 600°F
- End type: butt weld, flanged, socket weld threaded
- Locking function
- Adjusting stem packing

OPTIONS

- Automation applicable
- PTFE / PFA coating (40 - 70 um)
- TFM1600 / TFM4215 / PTFE
- PTFE Cavity Filler
- 180 degree operation stop plate
- Hastalloy C / Alloy 20 / Super Duplex / Monel
- Fire safe design
- Refer to DMHP3(4)L(T)2A00 Series for high pressure

DM3(4)L(T)2A00 Series Ball Valves

DIMENSIONS (THREADED)



1/4" - 2"

Size	A	B	C	d1	d2	E	F	G	H	K	L	R	S	Port	T	M	N
1/4"	1.48	0.37	5.12	0.24	0.24	2.44	1.42	1.65	0.35	1.73	3.43	0.44	0.56	0.39	0.39	0.49	0.67
3/8"	1.48	0.37	5.12	0.24	0.24	2.44	1.42	1.65	0.35	1.73	3.43	0.44	0.69	0.49	0.47	0.57	0.75
1/2"	1.65	0.43	5.12	0.24	0.24	2.52	1.42	1.65	0.35	2.07	4.09	0.50	0.85	0.59	0.59	0.69	0.85
3/4"	1.93	0.55	6.50	0.24	0.28	3.23	1.65	1.97	0.43	2.19	4.37	0.56	1.07	0.79	0.79	0.89	1.08
1"	2.17	0.55	6.50	0.24	0.28	3.50	1.65	1.97	0.43	2.52	5.00	0.63	1.33	0.98	0.98	1.10	1.36
1-1/4"	2.48	0.67	8.07	0.28	0.36	3.86	1.97	2.76	0.55	2.72	5.43	0.69	1.67	1.26	1.26	1.38	1.69
1-1/2"	2.91	0.63	8.07	0.28	0.36	4.25	1.97	2.76	0.55	3.11	6.22	0.75	1.91	1.50	1.50	1.61	1.93
2"	3.66	0.83	12.8	0.36	0.45	5.51	2.76	4.02	0.67	3.74	7.48	0.87	2.41	1.97	1.97	2.13	2.40

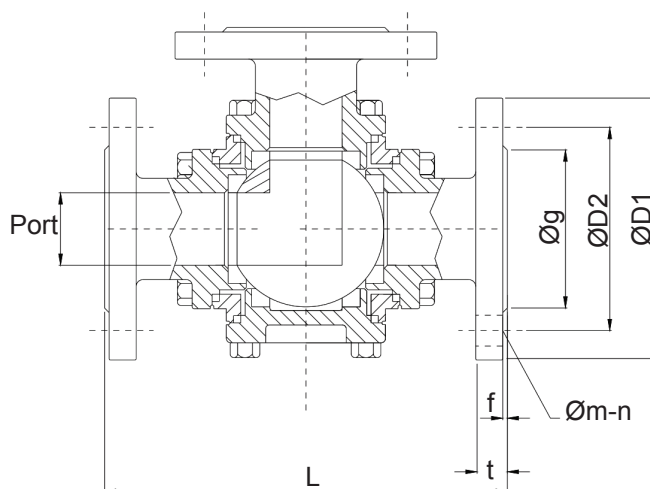
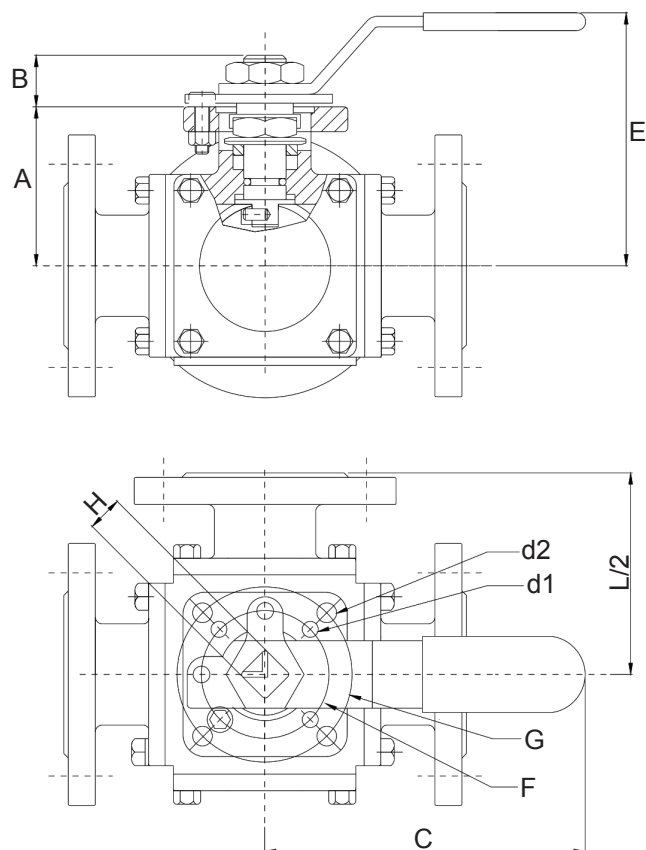
2-1/2" - 4"

Size	A	B	C	E	L	L (BW)	R	S	T	M	N
2-1/2"	2.44	2.56	15.75	5.67	11.57	10.43	0.91	2.91	2.56	2.76	3.03
3"	2.99	3.15	19.69	6.38	12.48	11.44	0.91	3.53	3.15	3.35	3.58
4"	3.78	3.94	25.59	7.17	14.53	13.58	1.14	4.53	3.94	3.94	4.53



DM3(4)L(T)2A00 Series Ball Valves

DIMENSIONS (FLANGED)



Size	A	B	C	d1	d2	E	F	G	H	Port
1/2"	1.61	0.43	5.12	.24	0.24	2.44	1.42	1.65	0.35	0.59
3/4"	1.93	0.55	6.50	0.24	0.28	3.23	1.65	1.97	0.43	0.79
1"	2.17	0.55	6.50	0.24	0.28	3.50	1.65	1.97	0.43	0.98
1-1/4"	2.48	0.67	8.07	0.28	0.36	3.86	1.97	2.76	0.55	1.26
1-1/2"	2.91	0.63	8.07	0.28	0.36	4.25	1.97	2.76	0.55	1.50
2"	3.66	0.63	12.80	0.36	0.45	5.51	2.76	4.02	0.67	1.97

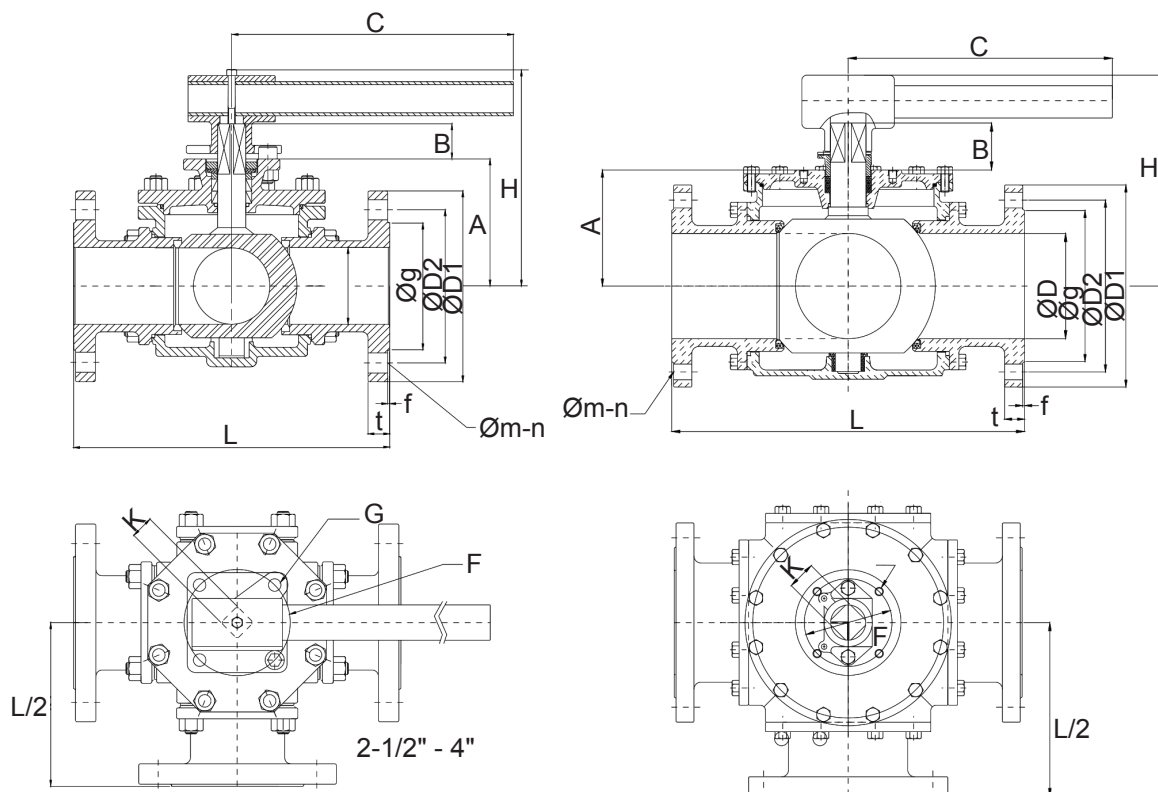
Size	CLASS 150								CLASS 300							
	D1	D2	g	t	f	m	n	L	D1	D2	g	t	f	m	n	l
1/2"	3.50	2.38	1.38	0.44	0.06	0.63	4	5.98	3.74	2.62	1.38	0.57	0.06	0.63	4	6.30
3/4"	3.86	2.76	1.69	0.44	0.06	0.63	4	6.57	4.61	3.25	1.69	0.63	0.06	0.75	4	6.97
1"	4.25	3.13	2.01	0.44	0.06	0.63	4	7.48	4.88	3.50	2.01	0.69	0.06	0.75	4	7.87
1-1/4"	4.61	3.50	2.52	0.50	0.06	0.63	4	8.19	5.28	3.88	2.52	0.81	0.06	0.75	4	8.19
1-1/2"	5.00	3.88	2.87	0.56	0.06	0.63	4	8.66	6.14	4.51	2.87	0.89	0.06	0.87	4	9.21
2"	5.98	4.74	3.62	0.62	0.06	0.63	4	9.96	6.50	5.00	3.62	1.00	0.06	0.75	8	10.75



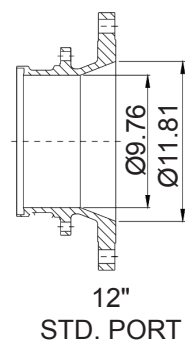


DM3(4)L(T)2A00 Series Ball Valves

DIMENSIONS (THREADED)



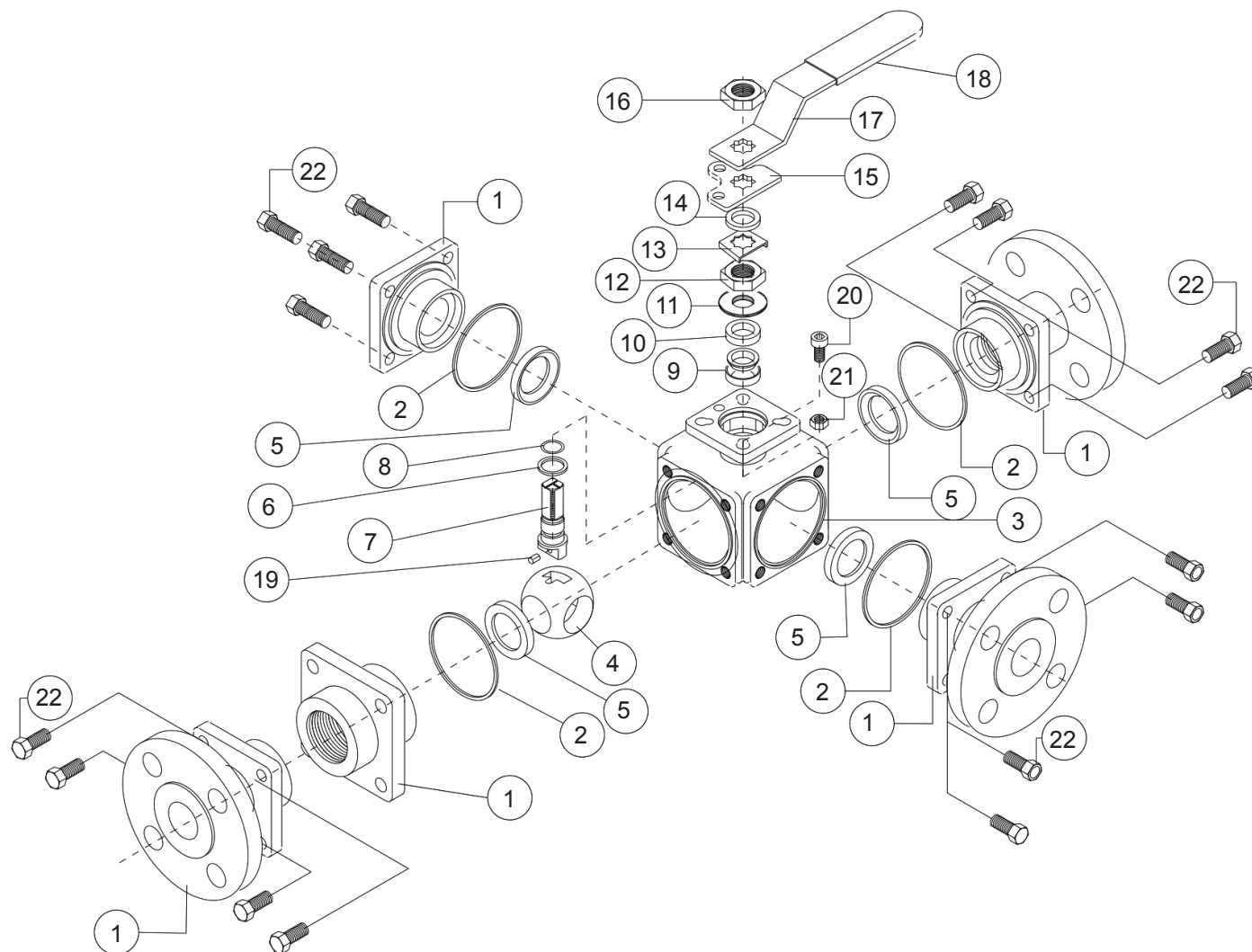
Size	A	B	C	D	F	G	H	K
2-1/2"	4.67	0.98	15.8	2.44	4.02	0.43	8.27	0.87
3"	5.37	0.98	19.7	2.99	4.02	0.43	8.98	0.87
4"	6.16	0.98	25.6	3.78	4.02	0.43	9.76	0.87
5"	5.53	2.32	33.9	4.92	4.92	M12	10.0	1.06
6"	6.28	2.44	47.2	5.91	4.92	M12	11.6	1.42
8"	7.91	2.44	59.1	7.87	4.92	M12	13.2	1.42
10"	9.92	3.66	78.7	9.76	5.51	M16	16.1	1.42
12"	9.92	3.66	78.7	9.76	5.51	M16	16.1	1.42



Size	CLASS 150								CLASS 300							
	D1	D2	g	t	f	m	n	L	D1	D2	g	t	f	m	n	l
2-1/2"	7.01	5.49	4.13	0.70	0.06	0.75	4	11.8	7.48	5.87	4.13	1.00	0.06	0.87	8	11.81
3"	7.48	6.00	5.00	0.75	0.06	0.75	4	12.0	8.27	6.61	5.00	1.13	0.06	0.87	8	13.01
4"	9.02	7.50	6.18	0.94	0.06	0.75	8	14.5	10.0	7.87	6.18	1.26	0.06	0.87	8	15.50
5"	10.0	8.50	7.32	0.94	0.06	0.87	8	16.5	-	-	-	-	-	-	-	-
6"	11.0	9.51	8.50	1.00	0.06	0.87	8	16.8	12.5	10.6	8.50	1.46	0.06	0.87	12	18.43
8"	13.5	11.8	10.6	1.13	0.06	0.87	8	20.9	-	-	-	-	-	-	-	-
10"	16.0	14.3	12.8	1.19	0.06	1.00	12	26.0	-	-	-	-	-	-	-	-
12"	19.0	17.0	15.0	1.28	0.06	1.02	12	26.0	-	-	-	-	-	-	-	-

DM3(4)L(T)2A00 Series Ball Valves

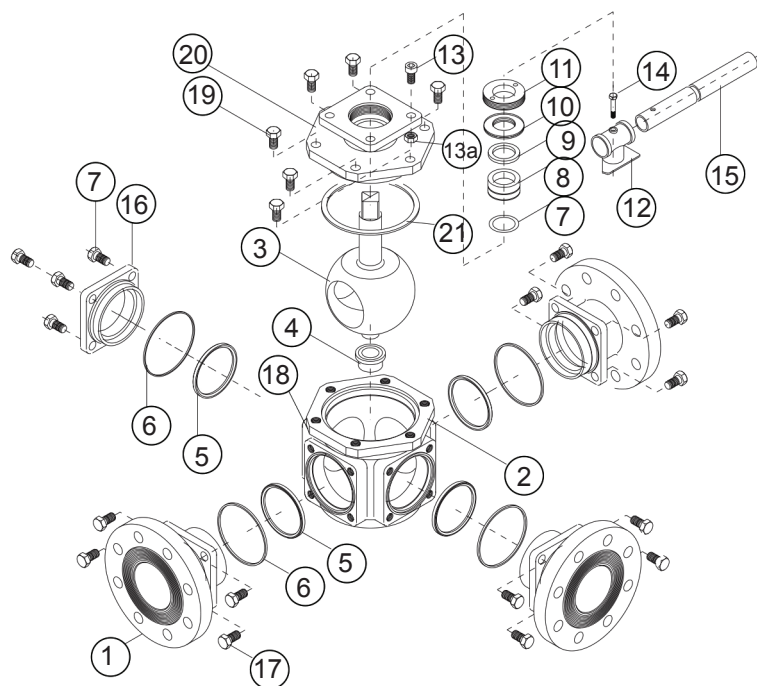
BILL OF MATERIALS (1/4" - 2")



No	Part Name	Materials	No	Part Name	Materials
1	End Cap	CF8M/WCB	12	Stem Nut	SS304
2	Gasket	PTFE	13	Nut Stop	SS304
3	Body	CF8M/WCB	14	Space Washer	SS304
4	Ball	SS316	15	Stopper Plate	SS304
5	Seat	PTFE	16	Handle Nut	SS304
6	Thrust Washer	RPTFE	17	Handle	SS304
7	Stem	SS316	18	Sleeve	Plastic
8	O-Ring	Viton	19	Insert Pin	SS304
9	Stem Packing	SS304	20	Stop Pin	SS316
10	Gland	SS301	21	Stop Pin Nut	SS304
11	Disk Washer	SS304	22	Bolts	SS304

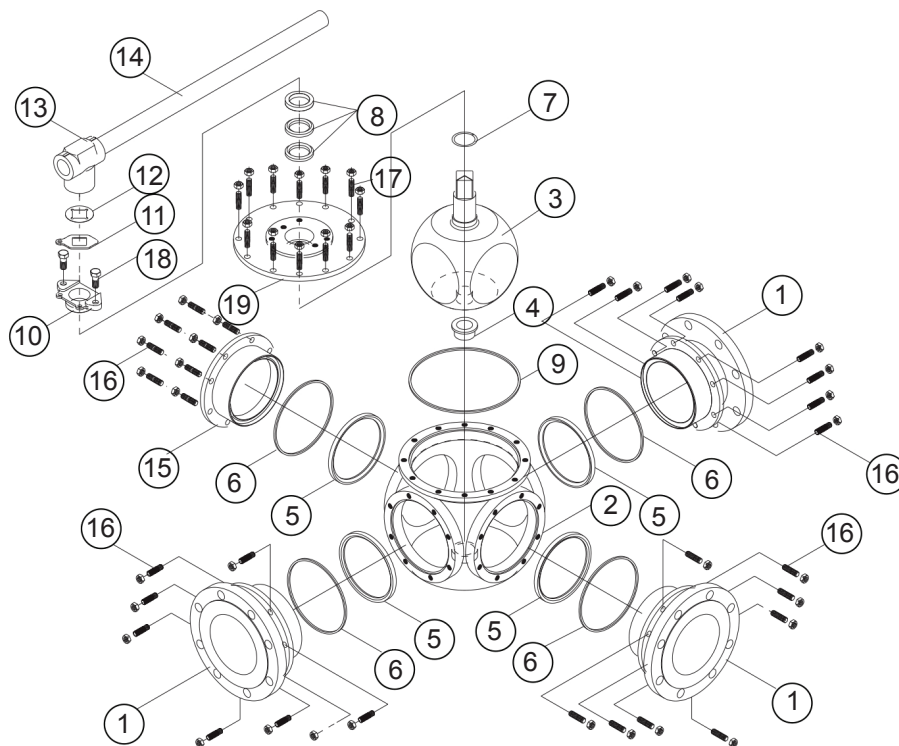
DM3(4)L(T)2A00 Series Ball Valves

BILL OF MATERIALS



No	Part Name	Materials
1	End Cap	CF8M/WCB
2	Body	CF8M/WCB
3	Ball & Stem	SS316
4	Housing	PTFE + Stainless
5	Seats	PTFE
6	Gasket	PTFE
7	O-Ring	Viton
8	Stem Packing	PTFE
9	Gland Washer	SS304
10	Disk Washer	SS301
11	Gland	SS304
12	Handle Head	CF8M/WCB
13	Stop Pin	SS304
13a	Stop Pin Nut	SS304
14	Bolt	SS304
15	Handle	Steel Pipe
16	Blank Cap	CF8M/WCB
17	Bolt	SS304
18	Bolt Nuts	SS304
19	Bonnet Bolt	SS304
20	Bonnet	CF8M/WCB
21	Bonnet Gasket	PTFE

No	Part Name	Materials
1	End Cap	CF8M/WCB
2	Body	CF8M/WCB
3	Ball & Stem	SS316
4	Housing	PTFE + Stainless
5	Seats	PTFE
6	Gasket	PTFE
7	O-Ring	Viton
8	Stem Packing	PTFE
9	Bonnet Gasket	PTFE
10	Gland	SS304
11	Stop	SS304
12	Stop Ring	SS304
13	Handle Head	Ductile Iron
14	Handle	Steel Pipe
15	Blank Cap	CF8M/WCB
16	Flange End Bolt	SS304
17	Bonnet Bolt	SS304
18	Gland Bolt	SS304
19	Bonnet	CF8M/WCB

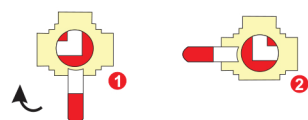


DM3(4)L(T)2A00 Series Ball Valves

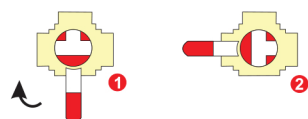
FLOW PATTERN

3-WAY

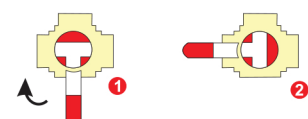
L3-90°
STANDARD



T3-90°
STANDARD



T4-90°



T5-90°

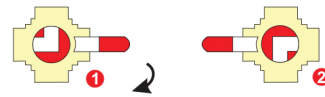


T6-90°

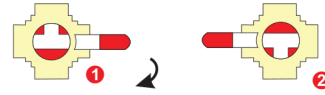


4-WAY

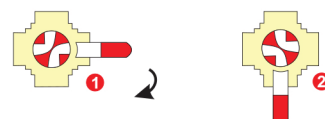
L5-180°



T5-180°



X-90°



I-90°



T-Port 90° operation (T3 / T4 / T5 / T6) can be suitable for 4-way valve

FLOW COEFFICIENT

Size	3-Way, L-Port, Full Bore	3-Way, T-Port (Through), Full Bore	3-Way, T-Port (Branch), Full Bore	4-Way, X-Port, Full Bore
1/4"	7	15	6	-
3/8"	7	15	6	-
1/2"	13	25	9	7
3/4"	23	46	20	12
1"	35	70	25	18
1-1/4"	54	109	47	28
1-1/2"	81	162	62	42
2"	153	309	112	80
2-1/2"	186	376	140	97
3"	290	589	248	151
4"	466	941	414	243
6"	1595	3222	1140	832
8"	2162	4368	1751	1128
10"	3105	6272	2585	1620

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

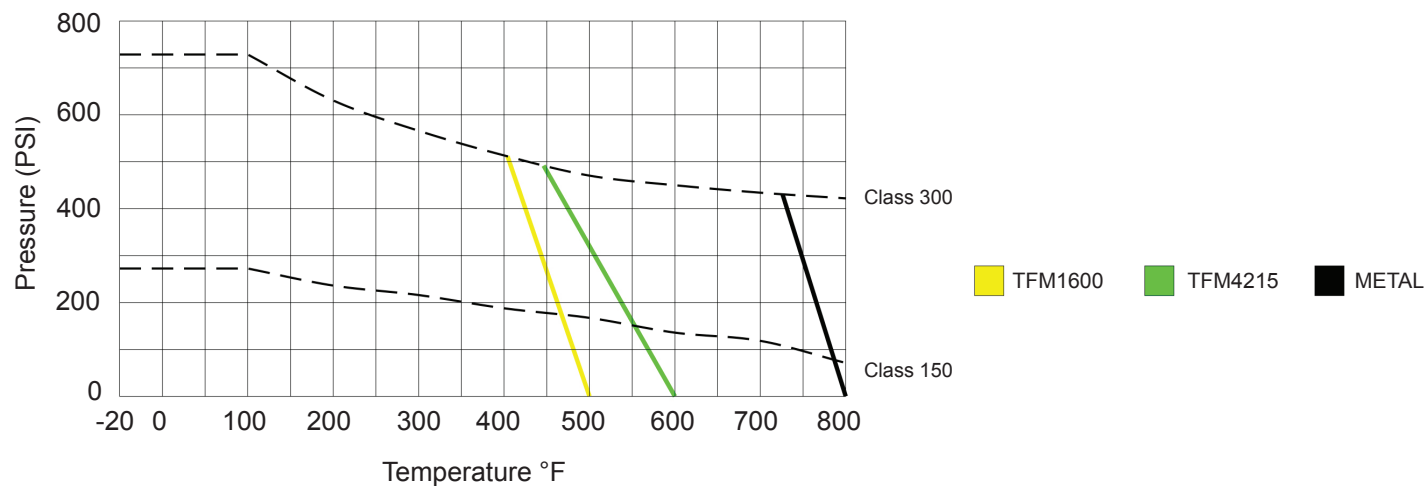
Size	1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"	5"	6"	8"	12"
Grease	91	91	113	136	221	306	489	635	1192	1305	2100	3983	4222	5160	7789
Non-Grease	136	136	142	170	266	363	545	851	1133	2214	2838	-	-	-	12834

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

DM3(4)L(T)2A00 Series Ball Valves

PRESSURE/TEMPERATURE CHART



HOW TO ORDER

Series	Body ¹	Ball & Stem	Port	Packing/Body Seal Material	Seat
DM3L2A	2 WCB/A015	3 316	FP Full Port	TT PTFE	CF Cavity Filled (PTFE)
DM3T2A	3 316	4 Alloy 20	RP Red. Port	TM TFM1600	TM TFM1600
DM4LL2A	A 304	5 Monel		TC TFM4215	TC TFM4215
	AL 304L	7 Hastelloy C276			
	3L 316L	9 Duplex 2507			

End Connections	Material Options	Design Options
F15 ANSI 150 RF Flange	NA Standard	NA Standard
F30 ANSI 300 RF Flange	BC TFM4215 Body Seal	L2 3-Way Port L2 - 90°
F60 ANSI 600 RF Flange	BG Graphite Body	L3 3-Way Port L3 - 90°
F90 ANSI 900 RF Flange	SF Self Flushing	T3 3-Way Port T3 - 90°
F1X ANSI 1500 RF Flange		T4 3-Way Port T4 - 90°
F2X ANSI 2500 RF Flange		T5 3-Way Port T5 - 90°
SCW Socket Weld		T6 3-Way Port T6 - 90°
FPT Female NPT		
W10 Butt Weld Sch 10		
W40 Butt Weld Sch 40		
W80 Butt Weld Sch 80		

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¹ Please see the J Flow Controls Configurator for a full list of body materials

Class 600 / 900 / 1500 / 2500 valves are available, factory will advise on sizes and dimensions

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