

DM4LL2A33FTTF1 Series

Four Way Ball Valves

Features & Benefits

- Available in stainless steel or carbon steel
- Body and end are investment cast
- Self adjusting stem packing
- Available in 4 way
- Available in X-port or LL-port
- 4 piece ball seats (PTFE + 15% C.F.)
- Blow-out proof stem design
- 100% air tested under water at 100 psi
- Working pressure 150 lbs, PN16
- Temperature range: -20°F to +450°F
- ISO 5211 mounting pad / connection DIN 3337
- End cap type: flange end (ANSI 150), (DIN PN16)
- Locking device
- Silicone free



Technical Specifications

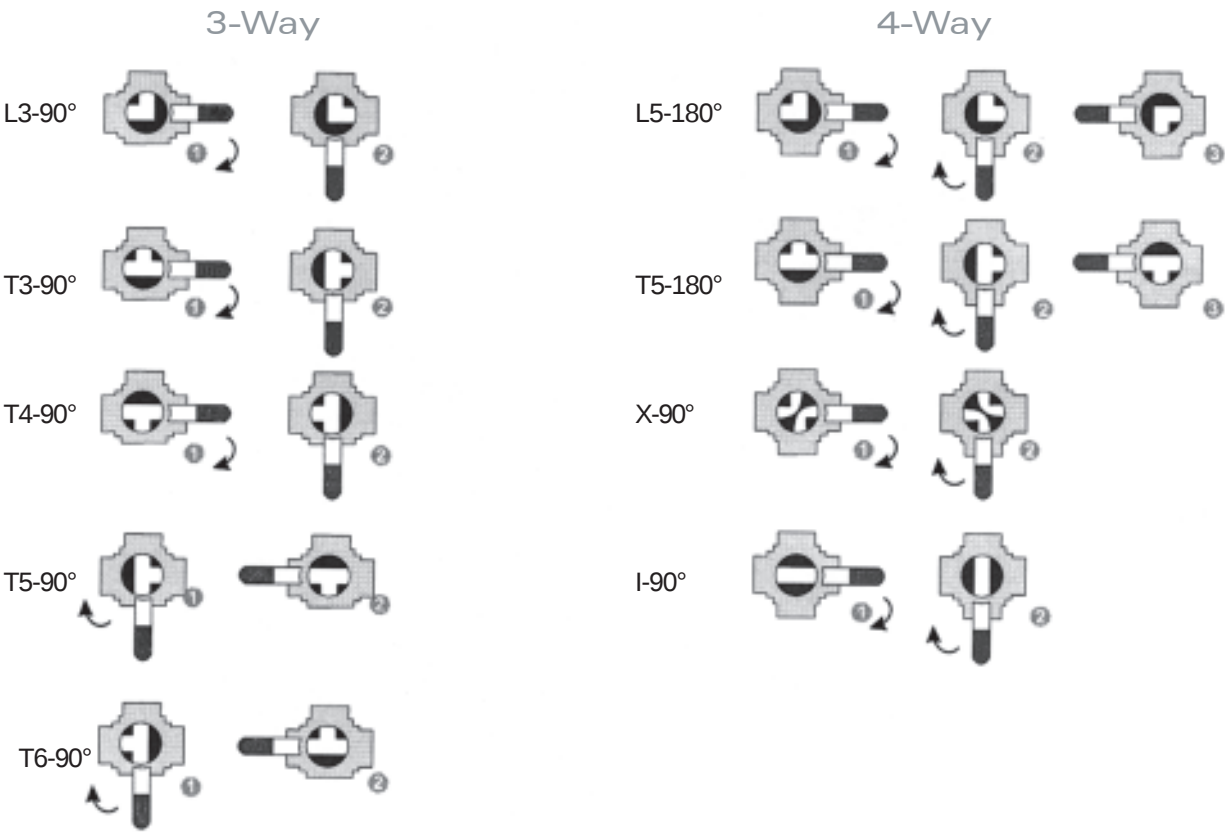
Size	Breakaway Torque (in-lb)	Cv L-Port	Cv T-Port 90°	Cv T-Port Straight-Thru	Cv LL-Port	Wt. Class 150 3-Way (Lb)	Wt. Class 300 3-Way (Lb)	Wt. Extended Weld Ends (Lb)	Wt. SCR Ends (Lb)
2"	518	110	100	430	118	35	44	29	26
2-1/2"	785	160	150	670	138	58	69	46	—
3"	1300	260	260	1170	166	71	93	63	—
4"	2400	430	430	2070	230	133	155	110	—
6"	5000	980	980	5000	1089	318	372	316	—

Ordering Schematic

						
Series	Body Material	Trim Material	Port	Packing	Seats	Ends
DM4X2A T-Port	2 Carbon	3 Stainless	F Full	T Teflon	T Teflon	S Threaded
DM4LL2A L-Port	3 Stainless	4 Alloy 20		Carbon	TM Super Teflon	SW Socket Weld
	4 Alloy 20	5 Monel			TC Carbon-Super Teflon	BW Butt Weld
	5 Monel	7 Hastelloy C				F1 Flanged 150
	7 Hastelloy C	9 Duplex				F3 Flanged 300
	9 Duplex					

Engineering

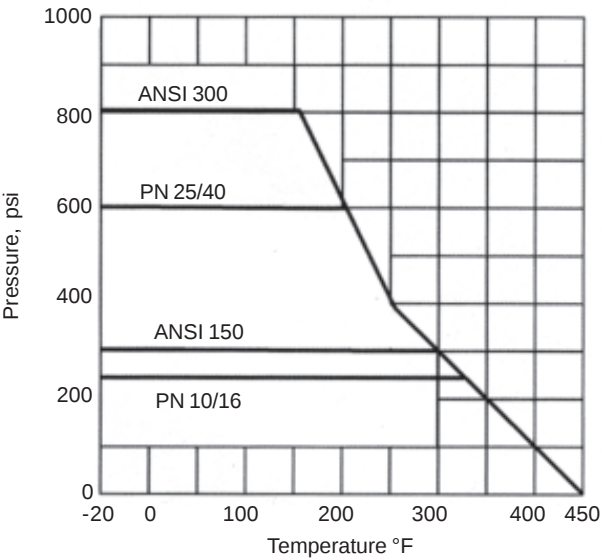
Flow Pattern



Cv Factor

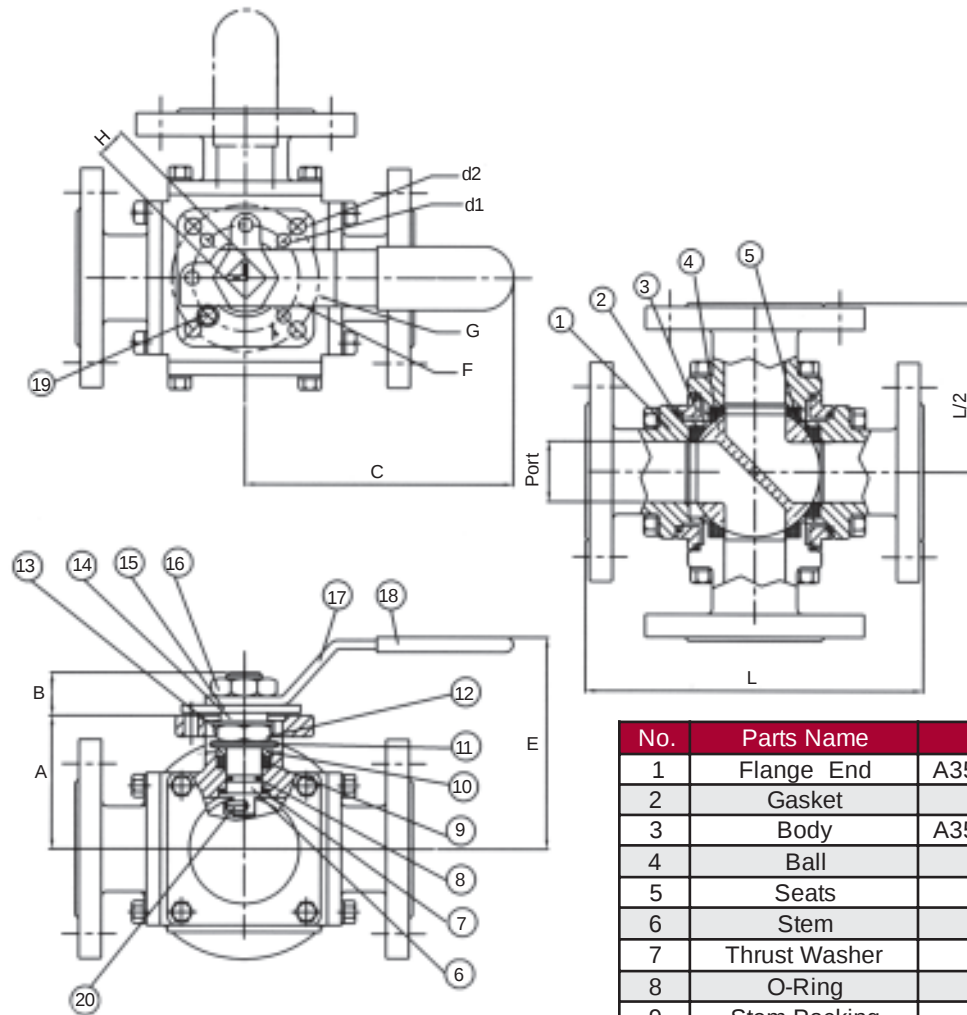
Size	Cv Factor
	LL-Port/Side Entry
1/2"	9
3/4"	12
1"	28
1-1/4"	36
1-1/2"	65
2"	118
2-1/2"	138
3"	166
4"	230
6"	1089

Temperature Chart



Engineering

Dimensions (1/2" - 2")

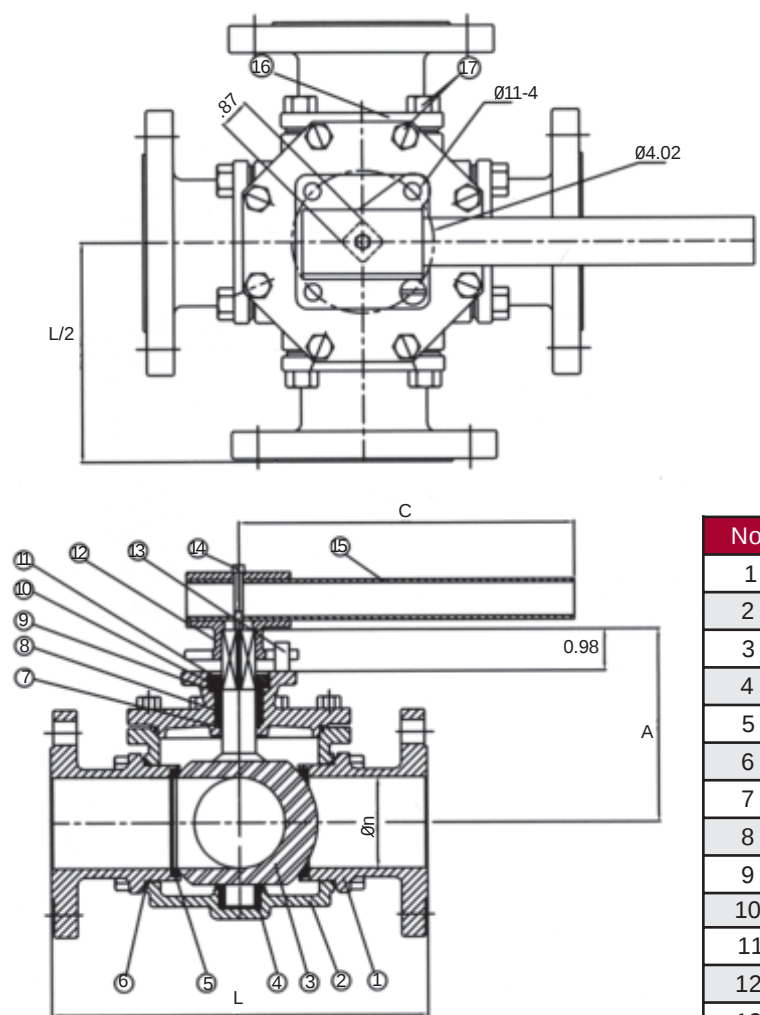


No.	Parts Name	Materials Option	
1	Flange End	A351 Gr. CF8M	A216 Gr. WCB
2	Gasket	PTFE	—
3	Body	A351 Gr. CF8M	A216 Gr. WCB
4	Ball	SS 316	—
5	Seats	PTFE	—
6	Stem	SS 316	—
7	Thrust Washer	RPTFE	—
8	O-Ring	Viton	—
9	Stem Packing	PTFE	—
10	Gland	SS 304	—
11	Disk Washer	SS 301	—
12	Stem Nut	SS 304	—
13	Nut Stop	SS 304	—
14	Space Washer	SS 304	—
15	Plater	SS 304	—
16	Handle Nut	SS 304	—
17	Handle	SS 304	—
18	Cover	Plastisol	—
19	Stop Pin	SS 304	—
20	Insert Pin	SS 316	—

Size	A	B	C	d1	d2	E	F	G	H	Port	L		L		L	
											150lbs	300lbs	PN16	PN40	J10k	J20k
1/2"	1.61	0.43	5.12	0.24	0.24	2.44	1.42	1.65	0.35	0.59	5.98	6.30	6.30	6.30	5.98	6.30
3/4"	1.93	0.55	6.50	0.24	0.28	3.23	1.65	1.97	0.43	0.79	6.57	6.97	6.97	6.97	6.57	6.97
1"	2.17	0.55	6.50	0.24	0.28	3.50	1.65	1.97	0.43	1.00	7.48	7.87	7.48	7.87	7.48	7.87
1-1/4"	2.48	0.71	8.07	0.28	0.36	3.86	1.97	2.76	0.55	1.25	8.19	8.58	8.19	8.58	8.19	8.58
1-1/2"	2.91	0.71	8.07	0.28	0.36	4.25	1.97	2.76	0.55	1.50	8.66	9.21	9.21	9.21	8.66	9.21
2"	3.66	0.91	12.80	0.36	0.45	5.51	2.76	4.02	0.67	2.0	9.96	10.75	10.75	10.75	10.00	10.75

Engineering

Dimensions (2-1/2" - 4")

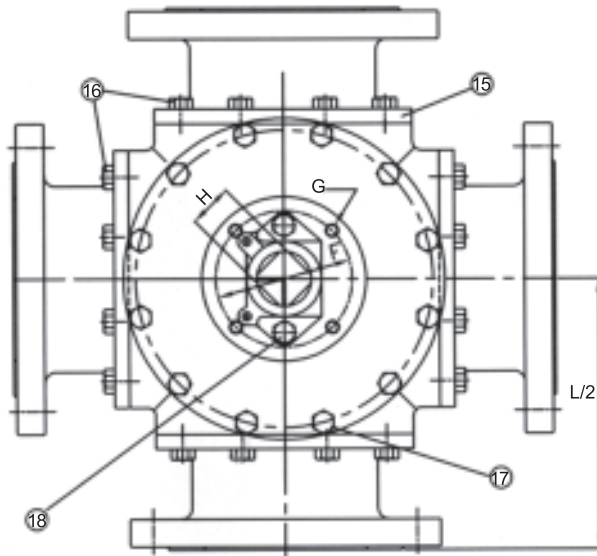


No.	Parts Name	Materials Option
1	Flange End	A351 Gr. CF8M
2	Body	A351 Gr. CF8M
3	Ball & Stem	SS 316
4	Housing	RPTFE + SS
5	Seats	PTFE
6	Gasket	PTFE
7	O-Ring	Viton
8	Stem Packing	PTFE
9	Gland Washer	SS 304
10	Disk Washer	SS 301
11	Gland	SS 304
12	Handle Head	A351 Gr. CF8
13	Stop Pin	SS 304
14	Bolt	SS 304
15	Lever	Carbon Steel
16	Blank End	A351 Gr. CF8M
17	Connection Bolts	SS 304

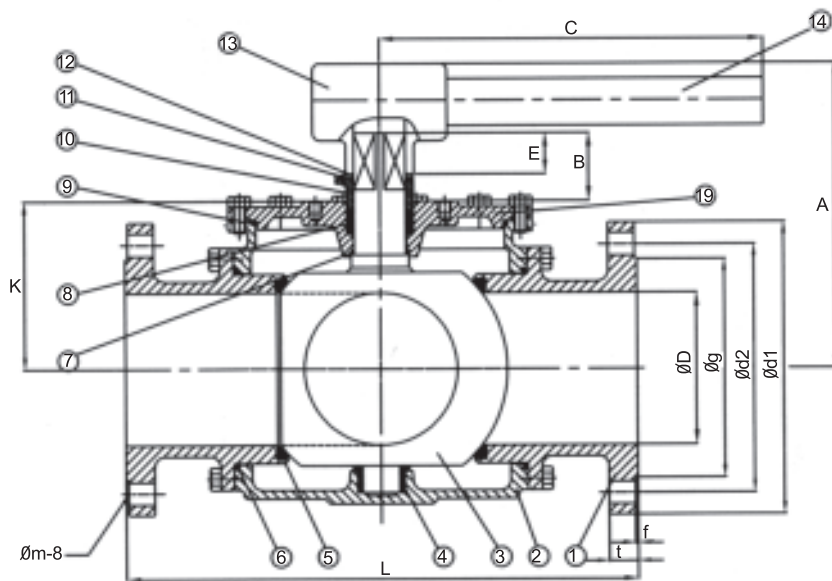
Size	A	C	D	L		L		L	
				150lbs	300lbs	PN16	PN40	J10k	J20k
2-1/2"	5.67	15.75	2.44	11.81	11.81	11.81	11.81	11.81	11.81
3"	6.38	19.68	2.99	12.00	13.00	12.00	13.00	12.00	13.00
4"	7.17	25.59	3.78	14.50	15.50	14.50	15.50	14.50	15.00

Engineering

Dimensions (6" - 8")



No.	Parts Name	Materials Option		Qty
1	Flange End	A351 Gr. CF8M	A216 Gr. WCB	4
2	Body	A351 Gr. CF8M	A216 Gr. WCB	1
3	Ball & Stem	SS 316	SS 304	1
4	Housing	PTFE + SS	PTFE + SS	1
5	Seats	PTFE	PTFE	4
6	Gasket	PTFE	PTFE	4
7	O-Ring	Viton	Viton	1
8	Stem Packing	PTFE	PTFE	1
9	Bonnet Gasket	PTFE	PTFE	1
10	Gland	A351 Gr. CF8	A216 Gr. WCB	1
11	Stop	SS 304	SS 304	1
12	Stop Ring	SS 304	SS 304	1
13	Handle Head	Ductile Cast	Ductile Iron	1
14	Lever	Carbon Steel	Carbon Steel	1
15	Blank End	A351 Gr. CF8	A216 Gr. WCB	1
16	Flange End Bolts	SS 304	Carbon Steel (B7)	32
17	Bonnet Bolts	SS 304	Carbon Steel (B7)	12
18	Gland Bolts	SS 304	Carbon Steel (B7)	2
19	Bonnet	A351 Gr. CF8	A216 Gr. WCB	1



Size	A	B	C	D	E	F	G	H	K	L	d1	d2	g	m	t	f
6"	8.60	2.40	47.25	5.90	1.42	4.921	—	1.417	6.28	16.809	11.0	9.5	8.5	0.866	1.00	0.06
8"	10.30	2.40	59.00	7.88	1.42	4.921	—	1.417	7.91	20.94	13.5	11.75	10.63	0.866	1.125	0.06