



3-Way/4-Way
Ball Valve

DIRECT MOUNT 4-SEATED 3-WAY / 4-WAY FLANGE END BALL VALVE

Series M4F(b)

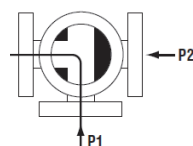
ANSI CLASS 150

- **Body Material**
ASTM CF8M, A216 WCB
- **Size Range**
1/2" - 6" (DN15-DN150)
- **Pressure Rating**
ANSI Class 150
- **End Connection**
Flanged
- **Standards**
Flange acc. to ANSI B16.5
- **Temperature Range**
-4°F to 350°F (-20°C to 180°C) with PTFE seats

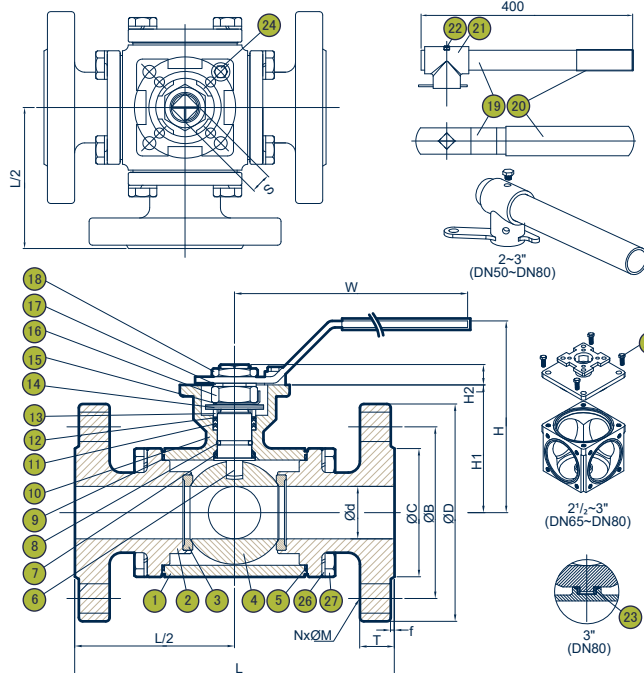


Application Limitation

Referring to below diagram, there is a limitation to the differential pressure between flow P2 and P1. Where P2 > P1, leakage from P2 to P1 could occur. The same logic follows for other L/T flow patterns.



TURN PORT	TURN			
	0°	90°	180°	270°
L				
T				



Material List		
No.	PARTS NAME	MATERIALS
1	BODY	CF8M/WCB
2	END CAP	CF8M/WCB
3	BALL SEAT	RTFE
4	BALL	ASTM A351 CF8M / CF8
5	BODY SEAL	PTFE
6	STEM	SS316/SS304
7	THRUST WASHER	RTFE
8	O-RING	VITON
9	TOP SEAL	PTFE
10	TOP CAP	CF8M/WCB
11	STEM PACKING	RTFE
12	UPPER THRUST WASHER	PTFE + 25% G.F.
13	GLAND	SS304
14	BELLEVILLE WASHER	SUS301
15	LOCK SADDLE	SS304
16	STEM NUT	SS304
17	HANDLE WASHER	SS304
18	HANDLE NUT	SS304
19	HANDLE	SS304
20	HANDLE SLEEVE	VINYL
21	HANDLE ADAPTOR	ASTM A351 CF8
22	ADAPTOR BOLT	SS304
23	BALL BUSHING	PTFE
24	STOP PIN	SS304
25	BOLT & WASHER	SS304
26	BOLT WASHER	SS304
27	BODY BOLT	SS304

* Enclosed is a condensed table. For complete options, contact PVS FLOW CONTROL directly.

Class 150 Dimensions inch/mm

Size Inch DN	d	L	H	W	D	B	C	T	f	H1	H2	S	N	M	ISO 5211	Torque in.lbs N.m	Weight lbs kg
1/2" 15	0.63 16	5.8 147.4	3.5 89	7.34 186.5	3.5 89	2.38 60.5	1.38 35	0.44 11.2	0.06 1.6	1.88 47.8	0.35 9	9	4	16	F04	150.5 17	6.39 2.9
3/4" 20	0.79 20	6.13 155.8	3.86 98	8.58 218	3.88 98.6	2.76 70	1.69 43	0.5 12.7	0.06 1.6	2.29 58.2	0.43 11	11	4	16	F05	221.3 25	10.3 4.67
1" 25	0.98 25	6.65 168.8	4.02 102	8.58 218	4.25 108	3.12 79.2	2.01 51	0.56 14.3	0.06 1.6	2.52 64	0.45 11.5	11	4	16	F05	354 40	12.79 5.8
1 1/4" 32	1.26 32	7.79 197.9	4.67 118.5	9.25 235	4.63 117.5	3.5 88.9	2.5 63.5	0.63 15.9	0.06 1.6	3.11 79	0.6 15.2	14	4	16	F05/F07	663.8 75	19.62 8.9
1 1/2" 40	1.5 38	8.72 221.4	5 127	9.25 235	5 127	3.88 98.6	2.88 73.2	0.69 17.5	0.06 1.6	3.48 88.5	0.56 14.3	14	4	16	F05/F07	858.5 97	27.56 12.5
2" 50	1.97 50	9.63 244.6	5.47 139	9.92 252	6 152.5	4.75 120.7	3.62 92	0.75 19.1	0.06 1.6	4.17 105.8	0.7 17.8	17	4	19	F07/F10	1717.1 194	36.38 16.5
2 1/2" 65	2.56 65	10.63 270	6.52 165.7	11.89 302	7 177.8	5.5 139.7	4.12 104.7	0.92 23.3	0.06 1.6	4.62 117.3	0.69 17.5	17	4	19	F07/F10	2434 275	57.76 26.2
3" 80	2.99 76	11.5 292.2	6.69 170	11.89 302	7.5 190.5	6 152.4	5 127	0.94 23.9	0.06 1.6	5.04 128	0.69 17.5	17	4	19	F07/F10	2726.1 308	77.6 35.2

Note: Torque measured at ambient temperature with no loading, safety factor is not included.
Select size(s) may be under development, please consult with us for details.

DIRECT MOUNT 4-SEATED 3-WAY / 4-WAY FLANGE END BALL VALVE

Series M4F(b)

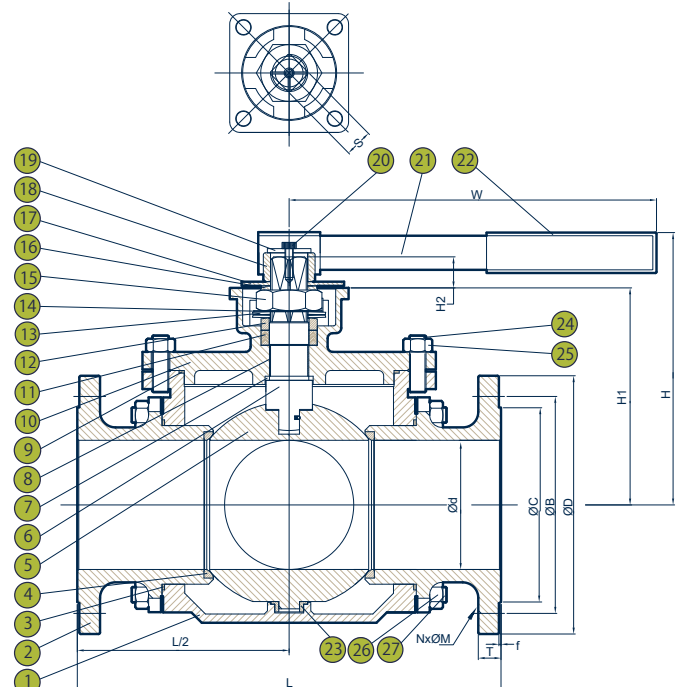
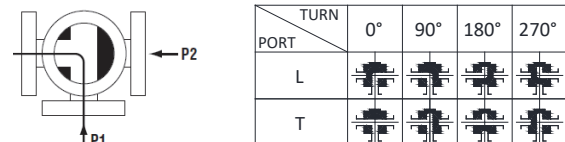
ANSI CLASS 150

- **Body Material**
ASTM CF8M, A216 WCB
- **Size Range**
1/2" - 6" (DN15-DN150)
- **Pressure Rating**
ANSI Class 150
- **End Connection**
Flanged
- **Standards**
Flange acc. to ANSI B16.5
- **Temperature Range**
-4°F to 350°F (-20°C to 180°C) with PTFE seats
- **Port**
T-port, L-port



Application Limitation

Referring to below diagram, there is a limitation to the differential pressure between flow P2 and P1. Where $P2 > P1$, leakage from P2 to P1 could occur. The same logic follows for other L/T flow patterns.



Material List

No.	PARTS NAME	MATERIALS
1	BODY	CF8M/WCB
2	END CAP	CF8M/WCB
3	BODY SEAL	PTFE
4	BALL SEAT	RTFE
5	BALL	ASTM A351 CF8M / CF8
6	STEM	SS316/SS304
7	THRUST WASHER	PTFE
8	STEM BUSHING	PTFE
9	TOP SEAL	PTFE
10	TOP CAP	CF8M/WCB
11	STEM PACKING	PTFE
12	GLAND	SS304
13	BELLEVILLE WASHER	SUS301
14	LOCK SADDLE	SS304
15	STEM NUT	SS304
16	HANDLE WASHER	SS304
17	TRIANGLE STOPPER	SS304
18	HANDLE ADAPTOR	ASTM A351 CF8
19	ADAPTOR WASHER	SS304
20	ADAPTOR BOLT	SS304
21	HANDLE	IRON TUBE
22	HANDLE SLEEVE	VINYL
23	BALL BUSHING	PTFE
24	TOP CAP BOLT	SS304
25	TOP CAP NUT	SS304
26	BODY NUT	SS304
27	BODY BOLT	SS304

* Enclosed is a condensed table. For complete options, contact PVS FLOW CONTROL directly.

Class 150 Dimensions inch/mm

Size Inch DN	d	L	W	D	B	C	T	f	H1	H2	S	N	M	ISO 5211	Torque in.lbs N.m	Weight lbs kg
4"	3.94	14.5	23.6	9	7.5	6.19	0.94	0.06	6.26	1.18	27	8	19	F12	2920.8 330	108.05 49.01
5"	4.92	16.5	23.6	10	8.5	7.32	0.94	0.06	8.27	1.18	27	8	22.3	F12	5089.3 575	216.05 98
6"	5.91	18.9	31.5	11	9.5	8.5	1	0.06	9.41	1.42	36	8	22.3	F14	8098.7 915	319.67 145

Note: Torque measured at ambient temperature with no loading; safety factor is not included.
Select size(s) may be under development, please consult with us for details.



3-Way/4-Way
Ball Valve



DIRECT MOUNT 4-SEATED 3-WAY / 4-WAY FLANGE END BALL VALVE

Series M4F(b)

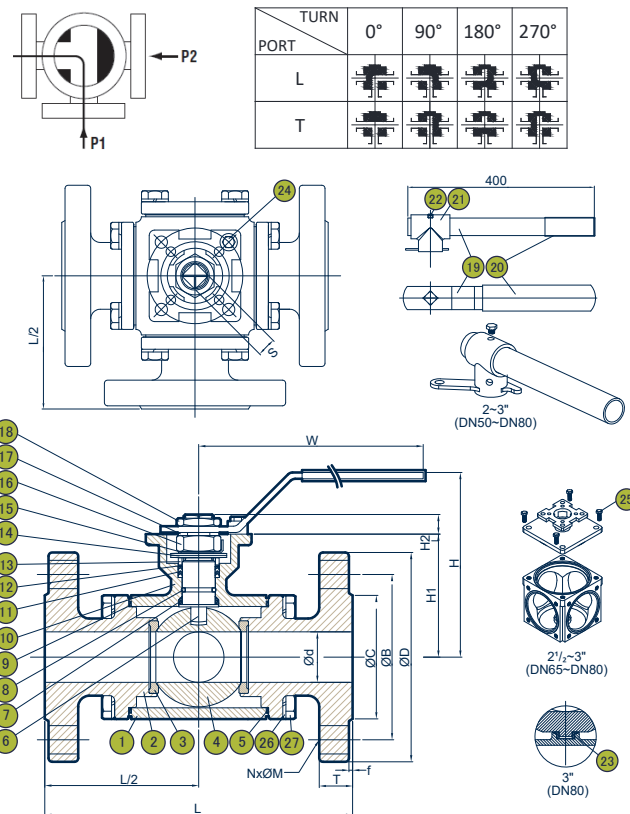
DIN PN16

- **Body Material**
DIN 1.4408, 1.0619
- **Size Range**
DN15-DN150
- **Pressure Rating**
DIN PN16
- **End Connection**
Flanged
- **Standards**
Flange acc. to EN 1092-1:2001
- **Temperature Range**
-4°F to 350°F (-20°C to 180°C) with PTFE seats



Application Limitation

Referring to below diagram, there is a limitation to the differential pressure between flow P2 and P1. Where $P2 > P1$, leakage from P2 to P1 could occur. The same logic follows for other L/T flow patterns.



Material List		
No.	PARTS NAME	MATERIALS
1	BODY	1.4408/1.0619
2	ENDCAP	1.4408/1.0619
3	BALL SEAT	RTFE
4	BALL	ASTMA351 CF8M/CF8
5	BODY SEAL	PTFE
6	STEM	SS316/SS304
7	THRUST WASHER	RTFE
8	O-RING	VITON
9	TOP SEAL	PTFE
10	TOP CAP	1.4408/1.0619
11	STEM PACKING	RTFE
12	UPPER THRUST WASHER	PTFE + 25% G.F.
13	GLAND	SS304
14	BELLEVILLE WASHER	SUS301
15	LOCK SADDLE	SS304
16	STEM NUT	SS304
17	HANDLE WASHER	SS304
18	HANDLE NUT	SS304
19	HANDLE	SS304
20	HANDLE SLEEVE	VINYL
21	HANDLE ADAPTOR	ASTM A351 CF8
22	ADAPTOR BOLT	SS304
23	BALL BUSHING	PTFE
24	STOP PIN	SS304
25	BOLT & WASHER	SS304
26	BOLT WASHER	SS304
27	BODY BOLT	SS304

* Enclosed is a condensed table. For complete options, contact PVS FLOW CONTROL directly.

PN16 Dimensions inch/mm

Size Inch DN	d	L	H	W	D	B	C	T	f	H1	H2	S	N	M	ISO 5211	Torque in.lbs N.m	Weight lbs kg
1/2" 15	0.63 16	6.22 158	3.50 89	7.34 186.5	3.74 95	2.56 65	1.77 45	0.63 16	0.08 2	1.88 47.8	0.35 9	9	4	14	F04	150.5 17	8.38 3.8
3/4" 20	0.79 20	6.65 169	3.86 98	8.58 218	4.13 105	2.95 75	2.28 58	0.71 18	0.08 2	2.29 58.2	0.43 11	11	4	14	F05	221.3 25	12.57 5.7
1" 25	0.98 25	7.28 185	4.02 102	8.58 218	4.53 115	3.35 85	2.68 68	0.71 18	0.08 2	2.52 64	0.45 11.5	11	4	14	F05	354.0 40	16.76 7.6
1 1/4" 32	1.26 32	7.68 195	4.67 118.5	9.25 235	5.51 140	3.94 100	3.07 78	0.71 18	0.08 2	3.11 79	0.60 15.2	14	4	18	F05/F07	663.8 75	24.03 10.9
1 1/2" 40	1.50 40	9.13 232	5.00 127	9.25 235	5.91 150	4.33 110	3.46 88	0.71 18	0.08 2	3.48 88.5	0.56 14.3	14	4	18	F05/F07	858.5 97	33.07 15
2" 50	1.97 50	9.96 253	6.09 154.8	9.92 252	6.50 165	4.92 125	4.02 102	0.79 20	0.08 2	4.17 105.8	0.70 17.8	17	4	18	F07/F10	1717.1 194	43.21 19.6
2 1/2" 65	2.56 65	10.63 270	6.54 166.2	11.89 302	7.28 185	5.71 145	4.80 122	0.71 18	0.08 2	4.62 117.3	0.69 17.5	17	4	18	F07/F10	2434.0 275	52.47 23.8
3" 80	2.99 76	11.50 292.2	6.84 173.8	11.89 302	7.87 200	6.30 160	5.43 138	0.79 20	0.08 2	5.04 128	0.69 17.5	17	8	18	F07/F10	2726.1 308	74.96 34

Note: Torque measured at ambient temperature with no loading, safety factor is not included.
Select size(s) may be under development, please consult with us for details.

DIRECT MOUNT 4-SEATED 3-WAY / 4-WAY FLANGE END BALL VALVE

Series M4F(b)

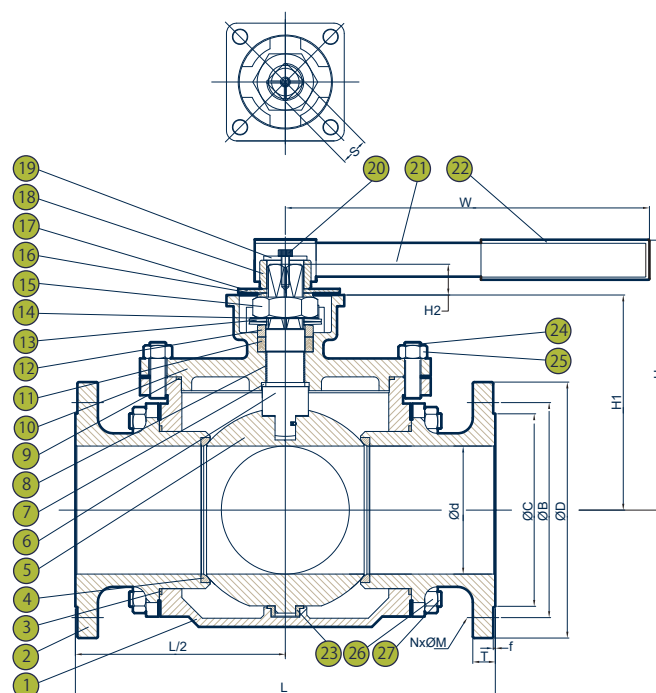
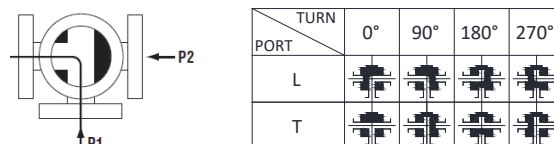
DIN PN16

- **Body Material**
DIN 1.4408, 1.0619
- **Size Range**
DN15-DN150
- **Pressure Rating**
DIN PN16
- **End Connection**
Flanged
- **Standards**
Flange acc. to EN 1092-1:2001
- **Temperature Range**
-4°F to 350°F (-20°C to 180°C) with PTFE seats
- **Port**
T-port, L-port



Application Limitation

Referring to below diagram, there is a limitation to the differential pressure between flow P2 and P1. Where $P2 > P1$, leakage from P2 to P1 could occur. The same logic follows for other L/T flow patterns.



Material List

No.	PARTS NAME	MATERIALS
1	BODY	1.4408/1.0619
2	END CAP	1.4408/1.0619
3	BODY SEAL	PTFE
4	BALL SEAT	RTFE
5	BALL	ASTM A351 CF8M/CF8
6	STEM	SS316/SS304
7	THRUST WASHER	PTFE
8	STEM BUSHING	PTFE
9	TOP SEAL	PTFE
10	TOP CAP	1.4408/1.0619
11	STEM PACKING	PTFE
12	GLAND	SS304
13	BELLEVILLE WASHER	SUS301
14	LOCK SADDLE	SS304
15	STEM NUT	SS304
16	HANDLE WASHER	SS304
17	TRIANGLE STOPPER	SS304
18	HANDLE ADAPTOR	ASTM A351 CF8
19	ADAPTOR WASHER	SS304
20	ADAPTOR BOLT	SS304
21	HANDLE	IRON TUBE
22	HANDLE SLEEVE	VINYL
23	BALL BUSHING	PTFE
24	TOP CAP BOLT	SS304
25	TOP CAP NUT	SS304
26	BODY NUT	SS304
27	BODY BOLT	SS304

* Enclosed is a condensed table. For complete options, contact PVS FLOW CONTROL directly.

PN16 Dimensions inch/mm

Size Inch DN	d	L	W	D	B	C	T	f	H1	H2	S	N	M	ISO 5211	Torque in.lbs N.m	Weight lbs kg
4" 100	3.94 100	14.17 360	23.62 600	8.66 220	7.09 180	6.22 158	0.79 20	0.08 2	6.26 159	1.18 30	27	8	18	F12	2920.8 330	116.84 53
5" 125	4.92 125	16.38 416	23.62 600	9.84 250	8.27 210	7.40 188	0.87 22	0.08 2	8.27 210	1.18 30	27	8	18	F12	5089.3 575	200.62 91
6" 150	5.91 150	18.61 472.6	31.50 800	11.22 285	9.45 240	8.35 212	0.87 22	0.08 2	9.41 239	1.42 36	36	8	22	F14	8098.7 915	291.01 132

Note: Torque measured at ambient temperature with no loading; safety factor is not included.
Select size(s) may be under development, please consult with us for details.



3-Way/4-Way
Ball Valve



DIRECT MOUNT 4-SEATED 3-WAY / 4-WAY FLANGE END BALL VALVE

Series M4F(b)

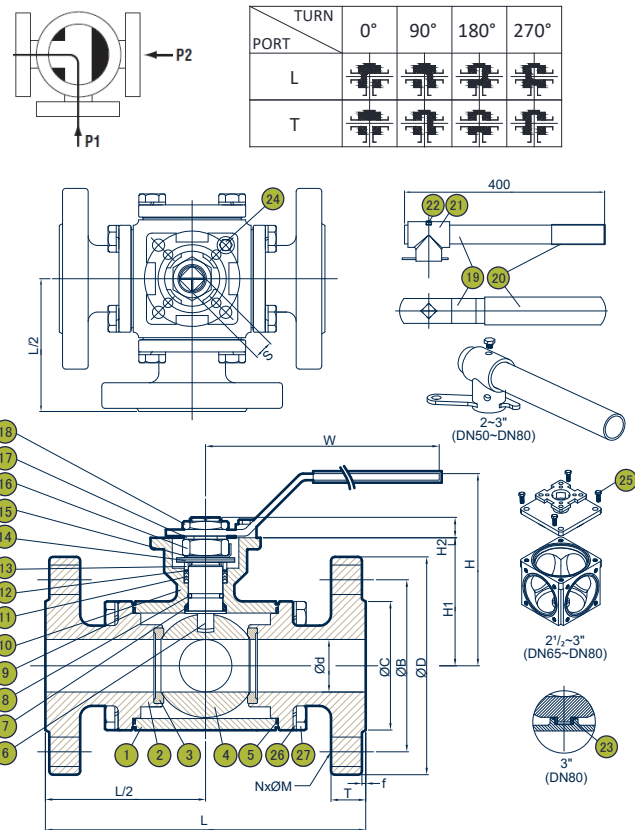
DIN PN40

- **Body Material**
DIN 1.4408, 1.0619
- **Size Range**
DN15-DN150
- **Pressure Rating**
DIN PN40
- **End Connection**
Flanged
- **Standards**
Flange acc. to EN 1092-1:2001
- **Temperature Range**
-4°F to 350°F (-20°C to 180°C) with PTFE seats



Application Limitation

Referring to below diagram, there is a limitation to the differential pressure between flow P2 and P1. Where $P2 > P1$, leakage from P2 to P1 could occur. The same logic follows for other L/T flow patterns.



Material List		
No.	PARTS NAME	MATERIALS
1	BODY	1.4408/1.0619
2	END CAP	1.4408/1.0619
3	BALL SEAT	RTFE
4	BALL	ASTMA351 CF8M/CF8
5	BODY SEAL	PTFE
6	STEM	SS316/SS304
7	THRUST WASHER	RTFE
8	O-RING	VITON
9	TOP SEAL	PTFE
10	TOP CAP	1.4408/1.0619
11	STEM PACKING	RTFE
12	UPPER THRUST WASHER	PTFE + 25% G.F.
13	GLAND	SS304
14	BELLEVILLE WASHER	SUS301
15	LOCK SADDLE	SS304
16	STEM NUT	SS304
17	HANDLE WASHER	SS304
18	HANDLE NUT	SS304
19	HANDLE	SS304
20	HANDLE SLEEVE	VINYL
21	HANDLE ADAPTOR	ASTM A351 CF8
22	ADAPTOR BOLT	SS304
23	BALL BUSHING	PTFE
24	STOP PIN	SS304
25	BOLT & WASHER	SS304
26	BOLT WASHER	SS304
27	BODY BOLT	SS304

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PN40 Dimensions inch/mm

Size Inch DN	d	L	H	W	D	B	C	T	f	H1	H2	S	N	M	ISO 5211	Torque in.lbs N.m	Weight lbs kg
1/2" 15	0.63 16	6.22 158	3.50 89	7.34 186.5	3.74 95	2.56 65	1.77 45	0.63 16	0.08 2	1.88 47.8	0.35 9	9	4	14	F04	150.5 17	8.38 3.8
3/4" 20	0.79 20	6.65 169	3.86 98	8.58 218	4.13 105	2.95 75	2.28 58	0.71 18	0.08 2	2.29 58.2	0.43 11	11	4	14	F05	221.3 25	12.57 5.7
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2 1/2" 65	2.56 65	11.42 290	6.54 166.2	11.89 302	7.28 185	5.71 145	4.80 122	0.87 22	0.08 2	4.62 117.3	0.69 17.5	17	8	18	F07/F10	2434.0 275	54.67 24.8
3" 80	2.99 76	11.85 301	6.84 173.8	11.89 302	7.87 200	6.30 160	5.43 138	0.94 24	0.08 2	5.04 128	0.69 17.5	17	8	18	F07/F10	2726.1 308	77.16 35

Note: Torque measured at ambient temperature with no loading; safety factor is not included.
Select size(s) may be under development, please consult with us for details.

DIRECT MOUNT 4-SEATED 3-WAY / 4-WAY FLANGE END BALL VALVE

Series M4F(b)

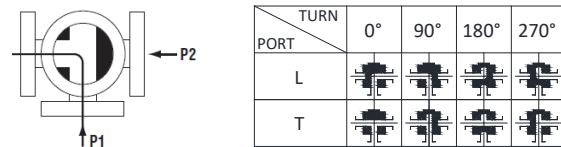
DIN PN40

- **Body Material**
DIN 1.4408, 1.0619
- **Size Range**
DN15-DN150
- **Pressure Rating**
DIN PN40
- **End Connection**
Flanged
- **Standards**
Flange acc. to EN 1092-1:2001
- **Temperature Range**
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- **Port**
T-port, L-port



Application Limitation

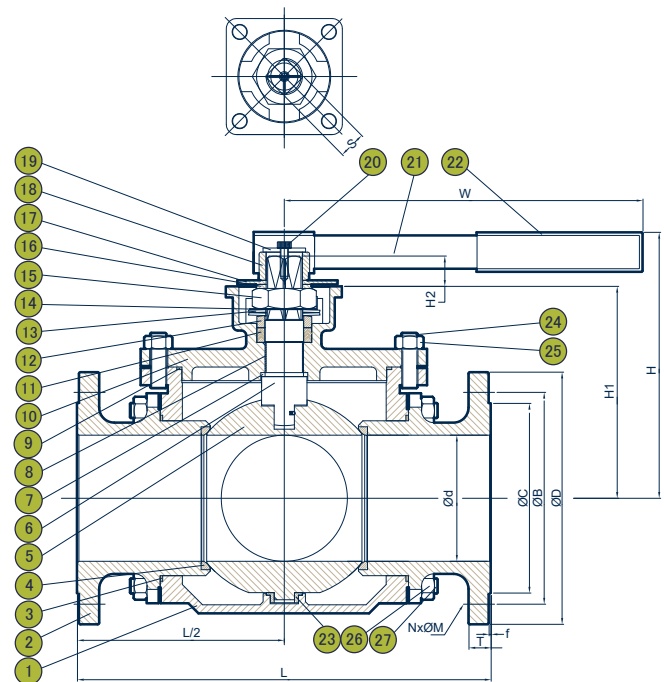
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3	BODY SEAL	PTFE
4	BALL SEAT	RTFE
5	BALL	ASTM A351 CF8M/CF8
6	STEM	SS316/SS304
7	THRUST WASHER	PTFE
8	STEM BUSHING	PTFE
9	TOP SEAL	PTFE
10	TOP CAP	1.4408/1.0619
11	STEM PACKING	PTFE
12	GLAND	SS304
13	BELLEVILLE WASHER	SUS301
14	LOCK SADDLE	SS304
15	STEM NUT	SS304
16	HANDLE WASHER	SS304
17	TRIANGLE STOPPER	SS304
18	HANDLE ADAPTOR	ASTM A351 CF8
19	ADAPTOR WASHER	SS304
20	ADAPTOR BOLT	SS304
21	HANDLE	IRON TUBE
22	HANDLE SLEEVE	VINYL
23	BALL BUSHING	PTFE
24	TOP CAP BOLT	SS304
25	TOP CAP NUT	SS304
26	BODY NUT	SS304
27	BODY BOLT	SS304

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PN40 Dimensions inch/mm

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4" 100	3.94 100	14.17 360	23.62 600	9.25 235	7.48 190	6.22 158	0.94 24	0.08 2	6.26 159	1.18 30	27	8	22	F12	2920.8 330	126.77 57.5
5" 125	4.92 125	16.69 424	23.62 600	10.63 270	8.66 220	7.40 188	1.02 26	0.08 2	8.27 210	1.18 30	27	8	26	F12	5089.3 575	222.67 101
6" 150	5.91 150	19.41 493	31.50 800	11.81 300	9.84 250	8.35 212	1.10 28	0.08 2	9.41 239	1.42 36	36	8	26	F14	8098.7 915	321.87 146

Note: Torque measured at ambient temperature with no loading; safety factor is not included.
Select size(s) may be under development, please consult with us for details.