



3, 4, 5-Way Direct Mount

SERIES M302

Multi-port Ball Valve



3 Way(M302W) | 4 Way(M302X) | 5 Way(M302Y)

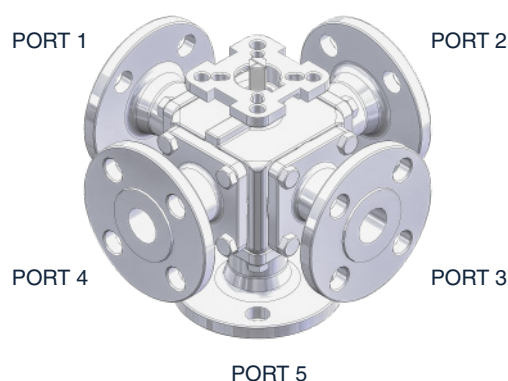
V2.0

INTRODUCTION

The Series M302 is a direct mount, full-bore ball valve that supports diverting and mixing flow configurations. Designed for use with liquids, gases, vapors, and oils, it features a floating ball design that facilitates in-line maintenance. The construction allows for quick removal of end caps, streamlining gasket and seat replacement. Available in both L and T port configurations, this valve ensures low-torque operation and reliable performance across various applications.

TECHNICAL SUMMARY

- ATEX
- Full Port with Various Port Arrangements
- Semi-Trunnion Ball Design
- Blow-out Proof Stem Design
- Easy-to-Maintain Construction



MODEL

SIZE RANGE

PRESSURE RATING

VALVE TYPE

BODY & END CAP MATERIAL (ASTM)

BODY & END CAP MATERIAL (EN)

SEAT MATERIAL

HANDLE TYPE

V-PORT OPTION

OPTION

3 Way (M302W) ; 4 Way (M302X) ; 5 Way (M302Y)

Threaded, SW, BW Ends for 1/4" to 4" (DN8 to 100)

Class 150 Flanged Ends for 1/2" to 4" (DN15 to 100)

Class 300 Flanged Ends for 1/2" to 2" (DN15 to 50)

PN16, PN40 Flanged Ends for 1/2" to 4" (DN15 to 100)

Sanitary Ends (Clamp, Tube) for 1/2" to 4" (DN15 to 100)

1000 WOG : 1/4" to 1" (DN8 to 25)

800 WOG : 1-1/4" to 2" (DN32 to 50)

600 WOG : 2-1/2" to 3" (DN65 to 80)

300 WOG : 4" (DN100)

Class 150, 300, PN16, 40 for Flanged Ends

Full Bore

CF8M, CF3M, CF8, CF3, WCB

1.4408, 1.4409, 1.4308, 1.4309, 1.0619

PTFE, RTFE, CTFE, TFM1600, MG1241, STFE

Flat, T-Bar

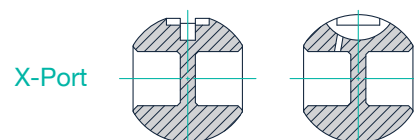
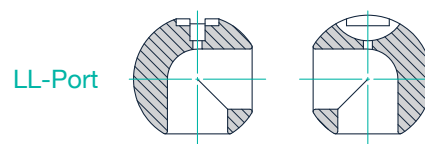
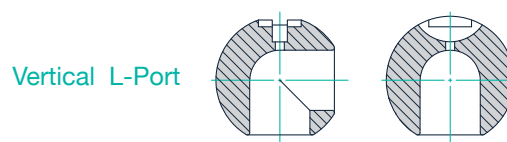
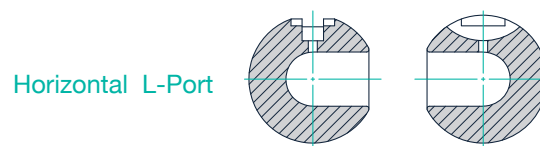
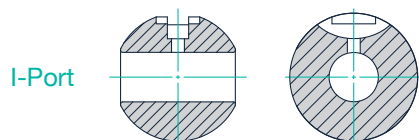
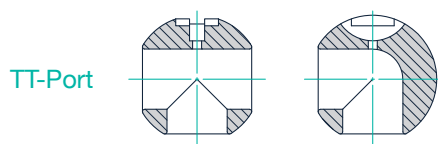
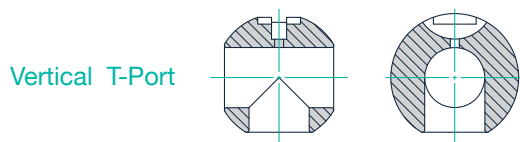
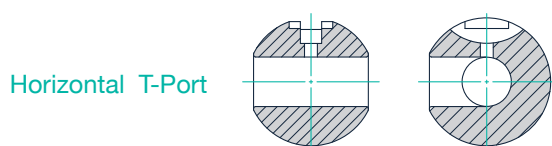
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NACE MR-0175

STANDARD OF COMPLIANCE

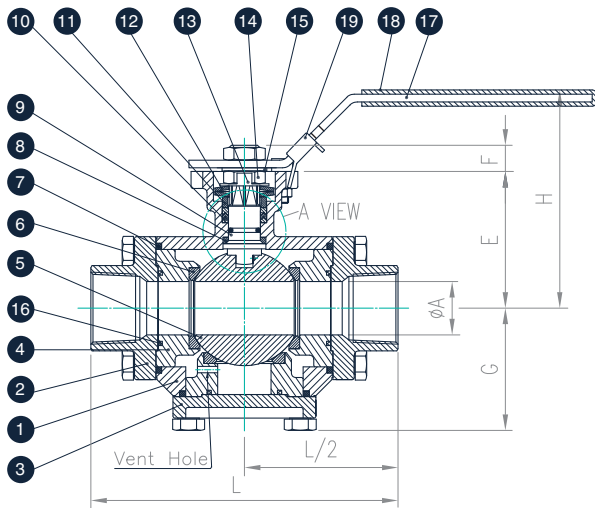
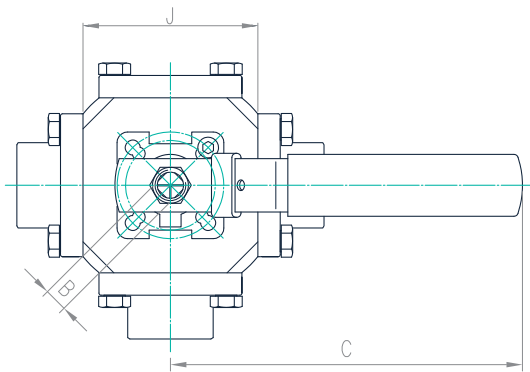
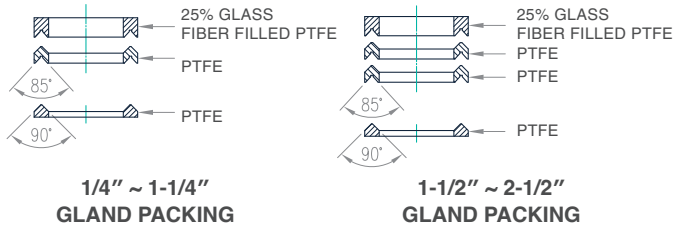
MATERIAL CERTIFICATION	EN 10204-3.1
DESIGN	ASME B16.34 / EN12516
END CONNECTIONS	Threaded : NPT ASME B1.20.1 / BSPP ISO 228-1 / BSPT ISO 7-1 / DIN 2999 Socket Weld : ANSI B16.11 Butt Weld : ANSI B16.25 Flanged : ANSI B16.5 / EN 1092-1
PRESSURE TESTING	API 598
MARKING	ISO 5209
CE APPROVAL	2014 / 68 / EU Module H
QUALITY ASSURANCE	ISO 9001:2015

Flow Patterns and Multi-port Ball Options

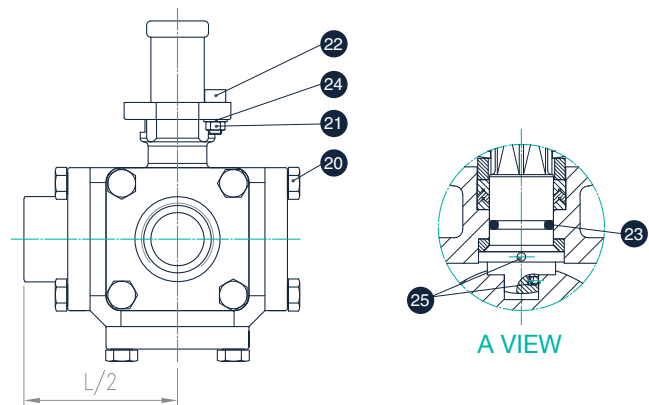


CONSTRUCTION-BILL OF MATERIAL

SERIES M302W-10 1/4" ~ 2-1/2"



NO.	Parts	Material	Qty
1	Body	CF8M	1
2	End cap - A	CF8M	3
3	End cap - B	CF8M	2
4	Seat Retainer	CF8M	5
5	Ball	SS316 / CF8M	1
6	Seat	RTFE	5
7	Joint Gasket	PTFE	5
8	Thrust Washer	RTFE	1
9	Stem	SS316	1
10	Gland Packing	25% GLASS FIBER FILED+PTFE	1 set
11	Gland Bush	SS304	1
12	Belleville Washer	SS301	2
13	Stop Washer	SS304	1
14	Stem Nut	SS304	2
15	Stem Washer	SS304	1
16	Retainer Seal	PTFE	5
17	Handle	SS304	1
18	Handle Cover	VINYL	1
19	Locking Device	SS304	1
20	Bolt nut	SS304	20
21	Pin Nut	SS304	1
22	Stop Pin	SS304	1
23	O-Ring	VITON	1
24	Washer	SS304	1
25	Anti-static Device	SS316	2

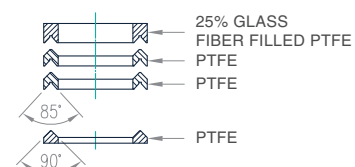
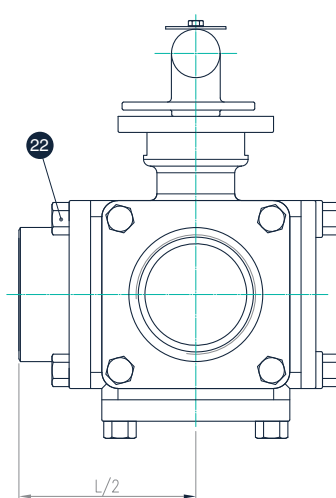
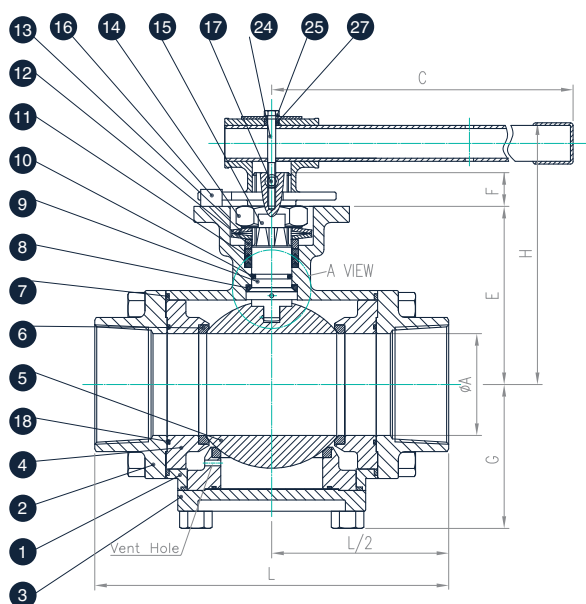
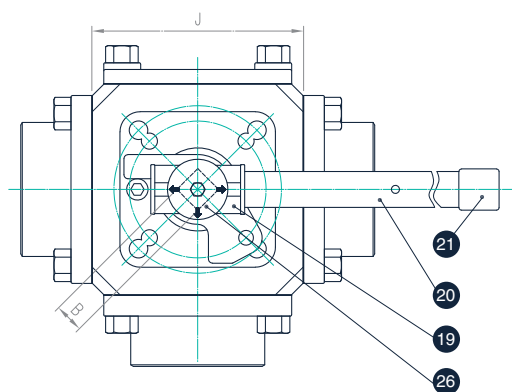
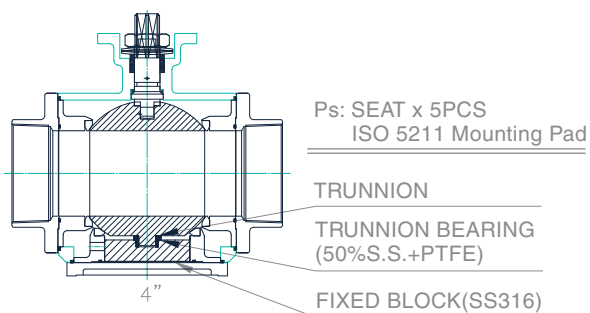


DIMENSIONS(mm)

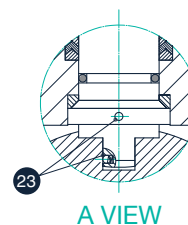
SIZE	ØA	B	C	E	F	G	H	J	L	ISO 5211
1/4"	11.6	9	150	43.9	9	35.1	85	50.6	92	FOR F03 / F04 / F05
3/8"	12.7	9	150	43.9	9	35.1	85	50.6	92	FOR F03 / F04 / F05
1/2"	15	9	150	43.9	9	35.1	85	50.6	92	FOR F03 / F04 / F05
3/4"	20	11	165	54.2	10.5	45.3	93	67	110	FOR F04 / F05
1"	25	11	180	64.1	10.5	56.8	108	83	144	FOR F04 / F05 / F07
1-1/4"	32	14	215	78.5	13	59.8	127	89	146	FOR F05 / F07
1-1/2"	38	17 / 19	263	94.9	18	72.3	152	109	164	FOR F07 / F10
2"	50	17 / 19	313	101.6	18	80.5	159	121	184	FOR F07 / F10
2-1/2"	65	17 / 19	344	120	18	96.8	177	146	228	FOR F07 / F10

CONSTRUCTION-BILL OF MATERIAL

SERIES M302W-10 3", 4"



3" ~ 4"
GLAND PACKING



NO.	Parts	Material	Qty
1	Body	CF8M	1
2	End cap - A	CF8M	3
3	End cap - B	CF8M	2
4	Seat Retainer	CF8M	5
5	Ball	CF8M	1
6	Seat	RTFE	5
7	Joint Gasket	PTFE	5
8	Thrust Washer	RTFE	1
9	Stem	SS316	1
10	O-Ring	VITON	1
11	Gland Packing	25% GLASS FIBER FILED+PTFE	1 set
12	Gland Bush	SS304	1
13	Belleville Washer	SS301	2
14	Stem Nut	SS304	1
15	Stop Washer	SS304	1
16	Stop Pin	SS304	1
17	Handle Screw	SS304	1
18	Retainer Seal	PTFE	5
19	Handle-A	SS304	1
20	Handle-B	SS304	1
21	Handle Cover	VINYL	1
22	Bolt nut	SS304	20
23	Anti-static Device	SS316	2
24	Handle Bolt	SS304	1
25	Washer	SS304	1
26	Position Indication	SS304	1
27	Handle Bush	SS316	1

DIMENSIONS(mm)

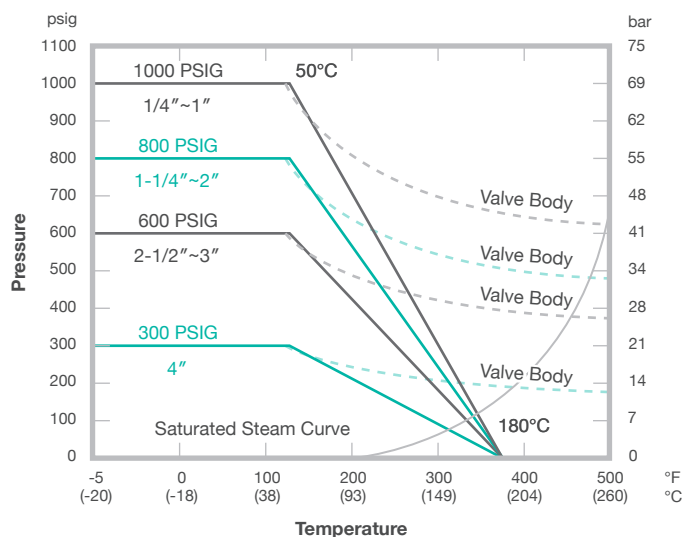
SIZE	øA	B	C	E	F	G	H	J	L	ISO 5211
3"	76	22	370	132.9	23	105	195	158	265	FOR F10 / F12
4"	100	22	510	164	23	131.5	226	209	317	FOR F10 / F12

TECHNICAL DATA | Breakaway torque / Cv and Kv values / Weight

Size	Torque		Cv values						Kv values (M ³ /h)						Weight (Kg)
	N.m	lbs.in	L-Port	T-Port Through	T-Port Branch	LL-Port Horizontal	LL-Port Vertical	VL-Port	L-Port	T-Port Through	T-Port Branch	LL-Port Horizontal	LL-Port Vertical	VL-Port	M302W-10
1/4"	9	80	4.0	7.0	4.0	3.0	3.0	4.0	3.4	6.0	3.4	2.6	2.6	3.4	1.6
3/8"	9	80	5.0	9.0	4.0	4.0	4.0	5.0	4.3	7.7	3.4	3.4	3.4	4.3	1.6
1/2"	9	80	6.0	10.0	5.0	6.0	5.0	6.0	5.1	8.5	4.3	5.1	4.3	5.1	1.6
3/4"	17	151	16.0	21.0	13.0	15.0	13.0	16.0	13.6	17.9	11.1	12.8	11.1	13.6	2.8
1"	29	257	31.0	36.0	22.0	27.0	30.0	31.0	26.4	30.6	18.7	23.0	25.5	26.4	4.9
1-1/4"	35	310	32.0	58.0	25.0	28.0	33.0	32.0	27.2	49.3	21.3	23.8	28.1	27.2	6.5
1-1/2"	59	523	75.0	90.0	55.0	65.0	75.0	75.0	63.8	76.5	46.8	55.3	63.8	63.8	11.8
2"	72	638	140.0	175.0	100.0	120.0	145.0	140.0	119.0	148.8	85.0	102.0	123.3	119.0	13.6
2-1/2"	92	815	210.0	235.0	149.0	175.0	220.0	210.0	178.5	199.8	126.7	148.8	187.0	178.5	22.5
3"	198	1754	375.0	450.0	270.0	300.0	375.0	375.0	318.8	382.5	229.5	255.0	318.8	318.8	29.0
4"	250	2215	670.0	800.0	475.0	353.0	675.0	670.0	569.5	680.0	403.8	300.1	573.8	569.5	57.7

TECHNICAL DATA | Pressure - Temperature Diagram | 1/4" ~ 4"

M302 (FULL PORT)
Seat material : PTFE / RTFE



OPTIONAL ACCESSORIES

| Handle Options



Spring Return Sliding Lock



T-Bar Handle

| Accessories



TSM



TSM with Handle



Actuator



Transworld Steel Enterprise Co., Ltd.

Tel +886 4 2271 6107 **Fax** +886 4 2271 6127

Address No. 34, Gongye 14th Rd., Dali Dist.,
Taichung City, 412038, Taiwan (R.O.C.)



Established in 1992
TAWD has dedicated over 30 years to
manufacturing premium ball valves

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