



SERIES M202/M203

Three-Way Ball Valve



INTRODUCTION

The Series M202 is a direct-mount, three-way ball valve engineered for broad industrial and chemical use, providing a simple and efficient solution for flow diversion. With versatility and performance at its core, it features a patented semi-trunnion ball design for enhanced stability during operation. Available in both reduced and full bore configurations with L or T port options, it is well-suited for a wide range of operational needs.

The Series M203, designed as a reduced-bore version of the M202, maintains the durable construction and innovative design of the M202 while offering enhanced precision for flow control. Both models ensure dependable performance and adaptability across a wide range of industrial applications.

TECHNICAL SUMMARY

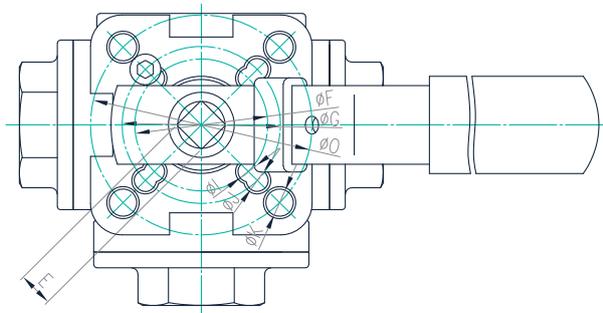
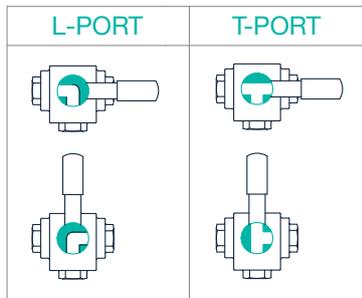
SIZE RANGE	Full Port	1/4" to 2" (DN8 to 50)
	Reduced Port	1/2" to 2" (DN15 to 50)
PRESSURE RATING	Full Port	1000 WOG : 1/4" to 2" (DN8 to 50)
	Reduced Port	1000 WOG : 1/2" to 2" (DN15 to 50)
VALVE TYPE	Full Bore	
BODY & END CAP MATERIAL (ASTM)	CF8M, CF3M, CF8, CF3, WCB	
BODY & END CAP MATERIAL (EN)	1.4408, 1.4409, 1.4308, 1.4309, 1.0619	
SEAT MATERIAL	PTFE, RTFE, CTFE, TFM1600, MG1241, STFE	
HANDLE TYPE	Flat (with / without SR Lock), Economical Stem Extension	
HANDLE MATERIAL	Flat - 304, 316	
V-PORT OPTION	N/A	
WITH ANTI-STATIC DEVICE OPTION	Yes	

STANDARD OF COMPLIANCE

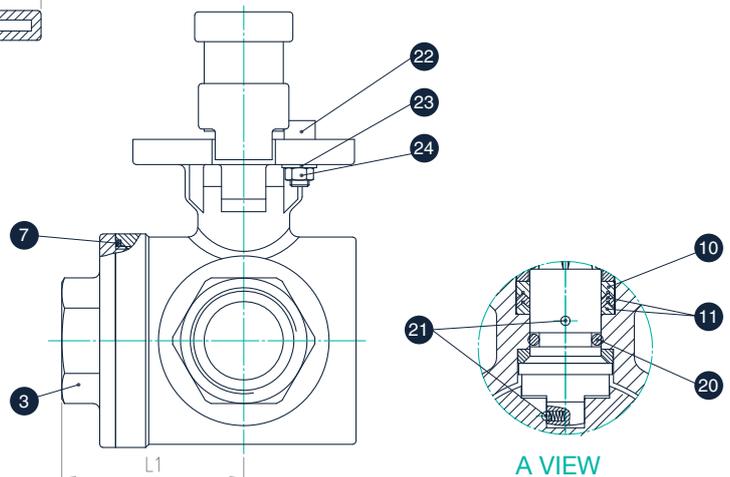
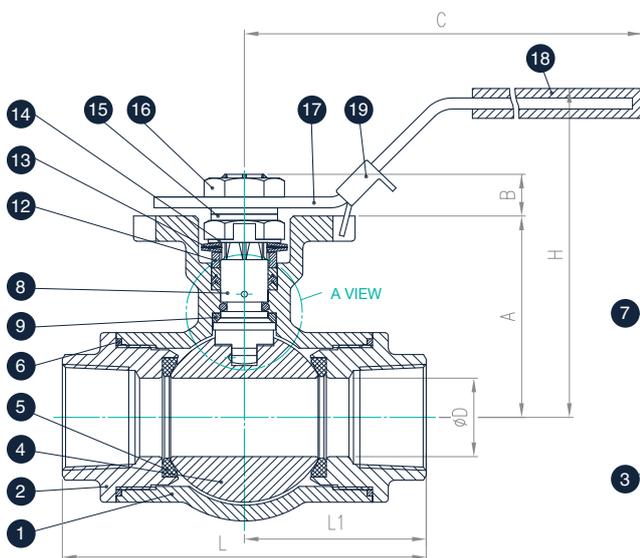
MATERIAL CERTIFICATION	EN 10204-3.1
THREADED END CONNECTIONS	NPT ASME B1.20.1 BSPP ISO 228-1 BSPT ISO 7-1 DIN 2999
PRESSURE TESTING	API 598
MOUNTING PAD	ISO 5211
MARKING	ISO 5209
CE APPROVAL	2014 / 68 / EU Module H
QUALITY ASSURANCE	ISO 9001:2015
EUROPEAN DIRECTIVES APPLIED	ATEX, 2014/34/EU
SAFETY INTEGRITY LEVEL, SIL	IEC 61508

CONSTRUCTION-BILL OF MATERIAL

SERIES M202/M203
1/4"~ 2"



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



DIMENSIONS(mm)

SIZE		A	B	C	øD	E	øF	øG	øO	H	øI	øJ	øK	L		L1		ISO 5211
F	R													F	R	F	R	
1/4"	-	38.1	9	140	11	9	36	42	-	75	6	6	-	72	-	36	-	FOR F03/F04
3/8"	1/2"	38.1	9	140	12.5	9	36	42	-	75	6	6	-	72	72	36	36	FOR F03/F04
1/2"	3/4"	43.9	9	151	15	9	36	42	50	88	6.5	7	-	83	83	41.5	41.5	FOR F03/F04/F05
3/4"	1"	54.2	10.5	166	20	11	42	50	-	93	6	7	-	99	110	55	55	FOR F04/F05
1"	1-1/4"	64.1	10.5	183	25	11	42	50	70	109	6.5	7	9	112	125	62.5	62.5	FOR F04/F05/F07
1-1/4"	1-1/2"	78.5	13.5	216	32	14	50	70	-	128	7.5	9	-	125	125	62.5	62.5	FOR F05/F07
1-1/2"	2"	94.9	18.5	163	38	17 / 19	70	102	-	154	10	12	-	149	149	74.5	74.5	FOR F07/F10
2"	-	101.6	19.5	313	50	17 / 19	70	102	-	161	10	12	-	174	-	-	-	FOR F07/F10

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

M202								
Size	Torque		Cv values		Kv values (M ³ /h)		Weight (Kg)(259)	
	N.m	lbs.in	L-Port	T-Port	L-Port	T-Port	T-PORT	T-PORT
1/4"	9	80	4	4	3.4	3.4	0.8	0.8
3/8"	9	80	5	4	4.3	3.4	0.7	0.7
1/2"	12	106	6	5	5.1	4.3	1.0	1.0
3/4"	17	151	16	13	13.6	11.1	1.7	1.7
1"	36	319	31	22	26.4	18.7	2.6	2.6
1-1/4"	42	372	32	25	27.2	21.3	3.8	3.8
1-1/2"	51	452	75	55	63.8	46.8	6.5	6.5
2"	94	833	140	100	119	85	8.9	8.9

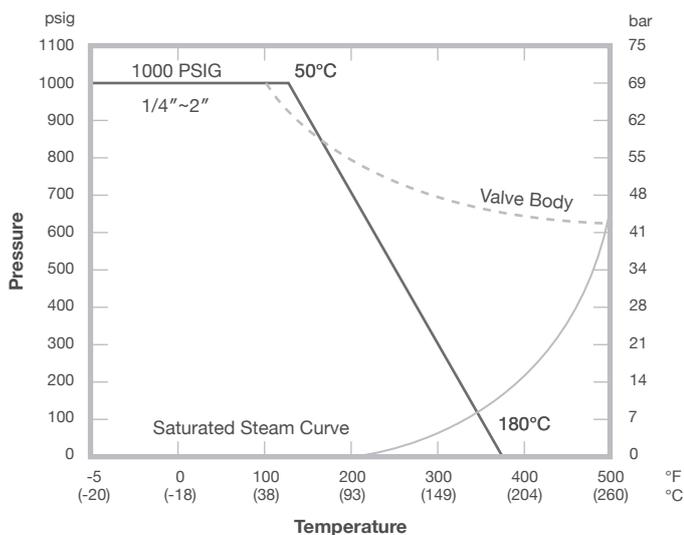
With Grease

M203								
Size	Torque		Cv values		Kv values (M ³ /h)		Weight (Kg)(259)	
	N.m	lbs.in	L-Port	T-Port	L-Port	T-Port	T-PORT	T-PORT
1/2"	9	80	5	4	4.3	3.4	0.7	0.7
3/4"	12	106	6	5	5.1	4.3	1.0	1.0
1"	17	151	16	13	13.6	11.1	1.7	1.7
1-1/4"	36	319	31	22	26.4	18.7	2.7	2.7
1-1/2"	42	372	32	25	27.2	21.3	3.7	3.7
2"	51	452	75	55	63.8	46.8	6.3	6.3

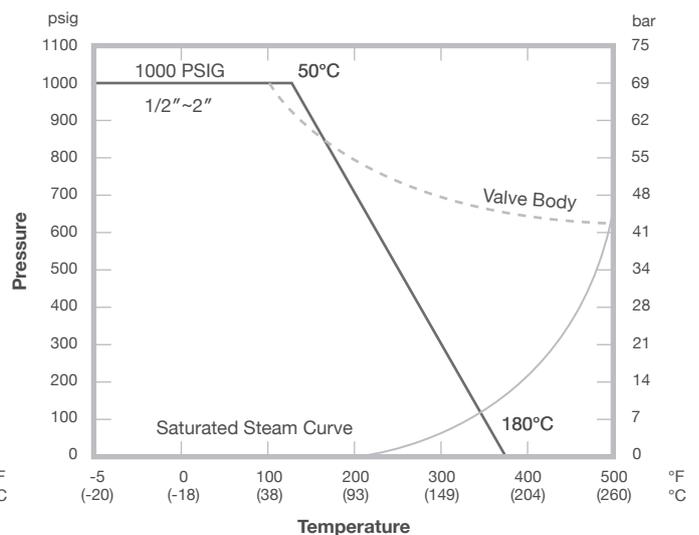
With Grease

TECHNICAL DATA | Pressure - Temperature Diagram | 1/4" ~ 2"

M202 (FULL PORT)
Seat material : PTFE / RTFE



M203 (REDUCED PORT)
Seat material : PTFE / RTFE



OPTIONAL ACCESSORIES

| Handle Options



Flat (with / without Spring Return Lock)



Economical Stem Extension

| Accessories



Actuator



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

INNOVATION

INTEGRITY

STRICT SELECTION