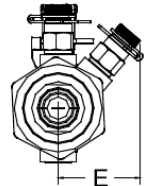
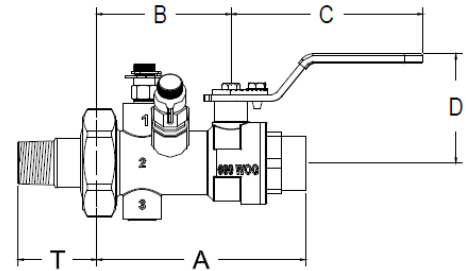


Model MB is a venturi style manual balancing valve with 100% positive shut-off full port plated ball. Permanently installed venturi section, Teflon seats, double o-ring shaft seals, Pressure/Temperature readout ports, adjustable memory stop with position indicator and union end with o-ring seal. Available with multiple combinations of end connection types and sizes.

SPECIFICATIONS

Pressure Ratings:	600 PSI (4140 kPa)
Temperature Ratings:	250°F (120°C)
Accuracy:	± 3% of flow rate
Body Material:	Forged Brass
End Connections:	Brass - Fixed End: SWT, FNPT Union End: SWT, FNPT & MNPT
Flow Element:	Brass Venturi, Permanently installed
Seals:	EPDM
Seats:	Teflon
Ball:	Chrome Plated Brass. <i>Optional 316 Stainless Steel.</i>
Stem:	Brass. <i>Optional 316 Stainless Steel.</i>
Handle:	Full size Zinc Plated lever with Vinyl Grip
Memory Stop:	Zinc Plated Steel
Available Options:	"PTV" combination PT & Air Vent, hose end Drain Valve & Extensions



NOMINAL DIMENSIONS & WEIGHTS

MODEL	SIZE		Flow Range GPM (10"-100")		A		B	C	D	E	*T SWT	Cv	WEIGHT	
	in	mm			FNPT	SWT							lbs	kg
MB1A-050-L	1/2"	15	(L) 0.4 - 1.3	in	3.46	3.55	2.30	3.66	1.98	1.82	1.50	(L) 2.0	1.31	0.59
MB1B-050-H			(H) 1.3 - 4.0	mm	87.88	90.17	58.42	93.02	50.29	46.20	38.10	(H) 5.9		
MB1A-075-L	3/4"	20	(L) 0.4 - 1.3	in	3.60	3.67	2.30	3.66	1.98	1.82	1.55	(L) 2.0	1.34	0.61
MB1B-075-H			(H) 1.3 - 4.0	mm	91.44	93.22	58.42	93.02	50.29	46.20	39.37	(H) 5.9		
MB2A-075-L	3/4"	20	(L) 1.6 - 5.0	in	3.87	3.98	2.56	3.66	2.08	2.05	1.56	(L) 7.6	1.81	0.82
MB2B-075-H			(H) 4.0 - 13.0	mm	98.30	101.12	65.03	93.01	52.83	52.07	39.62	(H) 13.0		
MB2A-100-L	1"	25	(L) 1.6 - 5.0	in	4.00	4.14	2.56	3.66	2.08	2.05	1.75	(L) 7.6	1.81	0.82
MB2B-100-H			(H) 4.0 - 13.0	mm	101.60	105.16	65.03	92.96	52.83	52.07	44.45	(H) 13.0		
MB3A-125	1-1/4"	32	7.25 - 23.0	in	5.39	5.56	3.70	5.03	2.44	2.43	1.80	29.00	4.59	2.08
				mm	136.91	141.22	93.98	127.76	61.98	61.74	45.72			
MB3B-150	1-1/2"	40	9.5 - 30.0	in	6.06	6.38	4.16	5.66	2.83	2.43	1.80	45.00	4.97	2.25
				mm	153.92	162.05	105.66	143.76	71.88	61.74	45.72			
MB4A-200	2"	50	15.0 - 50.0	in	6.57	7.36	4.45	5.66	2.83	2.74	1.98	77.40	7.10	3.20
				mm	166.88	186.94	113.03	143.76	71.83	69.67	50.29			

* Please reference the tailpiece data sheet #Bulletin-MB-TP for other sizes and connections.

Dimensions not for construction purposes unless certified by factory.

STANDARD COMPONENTS



Pressure / Temperature test port with brass body, dual durometer EPDM core, brass cap with O-ring seal and neoprene retainer strap. Accepts standard 1/8" (4mm) gauge adapter or thermometer stem. Rated to 500 PSI (3450 kPa) and 275°F (135°C)



Memory stop with position indicator, zinc coated steel.

Please reference data sheet #Bulletin-MB-Accessories for optional accessories.

Differential Pressure Table - *Model MB*

Model MB Venturi Type Balancing Valve 0.50" - 2.00"

Differential Pressure: Inches W.C.

Flow GPM	MB1A- 050-L 075-L	MB1B- 050-H 075-H	MB2A- 075-L 100-L	MB2B- 075-H 100-H	MB3A- 3A 125	MB3B- 3B 150	Flow GPM	MB3A- 3A 125	MB3B- 3B 150	MB4A- 4A 200
0.10	1						18.00	62	36	14
0.20	2						19.00	69	41	15
0.30	5						20.00	76	45	17
0.42	10	1					21.00	84	50	19
0.50	14	1.5	1				22.00	92	54	21
0.75	31	3	2				23.00	101	60	23
1.00	55	6	4				24.00	110	65	25
1.25	86	9	6				25.00	119	70	27
1.35	101	11	7	1			26.00	129	76	29
1.50	124	13	9	1.4			27.00	139	82	31
2.00	221	23	16	2.5			28.00	149	88	34
2.25		29	21	3			29.00	160	95	36
2.50		36	25	4	1.2		30.00	171	101	39
3.00		52	36	6	1.7		31.00	183	108	41
3.50		71	50	8	2.3	1.4	32.00	195	115	44
4.00		92	65	10	3	1.8	33.00	207	122	47
4.50		117	82	13	4	2.3	34.00	220	130	50
5.00		144	101	15	5	3	35.00	233	138	53
5.50		175	123	19	6	3.4	36.00		146	56
6.00		208	146	22	7	4	37.00		154	59
6.50		244	171	26	8	5	39.00		171	65
7.25			213	33	10	6	40.00		180	69
7.50			228	35	11	6.4	41.00		189	72
8.00				40	12	7	42.00		198	76
8.50				45	14	8	43.00		208	79
9.00				50	15	9	44.00		218	83
9.50				56	17	10	45.00		228	87
10.00				62	19	11	48.50			101
10.50				68	21	12	55.00			130
11.00				75	23	14	60.00			154
11.50				82	25	15	65.00			181
12.00				89	27	16	70.00			210
12.50				97	30	18	75.00			241
13.00				105	32	19				
14.00				121	37	22				
15.00				139	43	25				
16.00				159	49	29				
17.00				179	55	33				
FF	0.1346	0.4163	0.4967	1.2704	2.2921	2.9816		2.2921	2.9816	4.8274

Flow Formulas

$$\text{GPM} = \text{FF} \times (\sqrt{\text{DP}})$$

$$\text{DP} = (\text{GPM}/\text{FF})^2$$

$$\text{PPL} = \text{DP} \times 0.12$$

Notes:

- 1) Accuracy $\pm$ 3% of flow rate.
- 2) Repeatability $\pm$ 0.25% of rate.
- 3) Values in **BOLD** type represents traditional 10" to 100" sizing range.
- 4) All valves will function above and below ranges shown. Pressure drop and readability should be taken into account.

Optional features and accessories available for this Macon product are an extra charge, and not included in the standard model price.

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