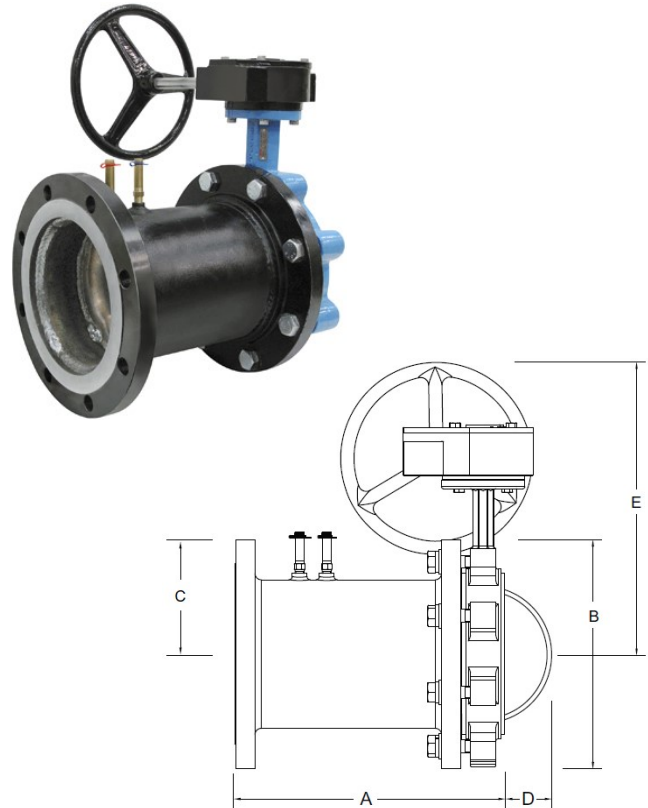


Model MBF Manual Balancing Valve features a fabricated steel venturi flow element. Mounted on the discharge is a ductile iron lug type butterfly valve with gear operator. ANSI 150# flanged end connections. Dual extended length Pressure / Temperature ports. Hanging I.D. Tag.



MANUAL

SPECIFICATIONS	
Pressure Ratings:	200 PSI (1380 kPa)
Temperature Ratings:	250°F (120°C)
Accuracy:	± 3% of flow rate
Body Material - Venturi:	ASTM A-126 Grade WCB
Butterfly Valve:	Ductile Iron A536 65-45-12
End Connections:	ANSI 125/150# Flanged
Disc:	Aluminum Bronze B148 C954
Stem:	Stainless Steel 416 A582
Seat:	EPDM with Phenolic Backing
Bushing:	Teflon/Fiberglass Backed
Seal:	EPDM
Metering Ports:	Extended Length Pressure/ Temperature test ports
Available Options:	"PTV" combination PT & Air Vent

NOMINAL DIMENSIONS & WEIGHTS										
MODEL	SIZE		A	B	C	D	E	Flow Range GPM (10"-100")	Weight	
									lbs	kg
MBF-800	in	8.0"	15.88	13.50	6.75	2.72	17.46	400.0 - 1800.0	145	65.77
	mm	200	403.35	342.90	171.45	69.15	443.50			
MBF-1000	in	10.0"	17.67	16.00	8.00	3.52	18.72	600.0 - 1700.0	200	90.71
	mm	250	448.82	406.40	203.20	89.31	475.50			
MBF-1200	in	12.0"	19.40	19.00	9.50	4.34	20.63	1000.0 - 3200.0	333	153.05
	mm	300	492.76	482.60	241.30	110.25	524.00			
MBF-1400	in	14.0"	26.99	21.00	10.50			1300.0 - 4600.0	480	217.72
	mm	350	685.54	533.40	266.70					
MBF-1600	in	16.0"	39.39	23.50	11.75			1900.0 - 6000.0	655	297.10
	mm	400	1000.50	596.90	298.45					

Dimensions not for construction purposes unless certified by factory.

STANDARD COMPONENTS		
	PT & PTE	Pressure / Temperature test port with brass body, dual durometer EPDM core, PTE Extender, 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)

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

Cv VALUE (US-GPM @ 1ΔP) Cv Value when valve is in different opening angle										
MODEL	SIZE	10°	20°	30°	40°	50°	60°	70°	80°	90°
MBF-800	8.0"	3	89	188	408	727	1202	1903	2854	3136
MBF-1000	10.0"	4	151	320	694	1237	2047	3240	4859	5340
MBF-1200	12.0"	5	234	495	1072	1911	3162	5005	7507	8250

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



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Section: Components Bulletin-MB-MBF-800-1200-0915.05

Differential Pressure Table - Model MBF - 8.00" to 16.00"

Model MBF / MF, MBG / MG Valves Size 8" - 12" / VF, VG & VW Valves Size 8" - 16"

Differential Pressure: Inches W.C.

	Models MBF/MF, MBG/MG VF, VG & VW			Models MBF/MF, MBG/MG, VF, VG & VW	Models VF, VG & VW		
Flow GPM	Model Size		Flow GPM	Model Size			
	800	1000		1200	1400	1600	
400.0	10		1000.0	10			
425.0	12		1100.0	12			
450.0	13		1200.0	14			
475.0	15		1300.0	16	7		
500.0	16		1400.0	19	8		
525.0	18		1500.0	22	9		
550.0	20		1600.0	25	11		
575.0	21		1700.0	28	12		
600.0	23	10	1800.0	32	13		
625.0	25	11	1900.0	35	15	8	
650.0	27	12	2000.0	39	17	9	
675.0	29	13	2200.0	47	20	11	
700.0	32	14	2400.0	56	24	13	
725.0	34	15	2600.0	66	28	16	
750.0	36	16	2800.0	77	33	18	
775.0	39	18	3000.0	88	37	21	
800.0	41	19	3200.0	100	43	24	
825.0	44	20	3400.0	113	48	27	
850.0	47	21	3600.0	127	54	30	
875.0	50	22	3800.0	141	60	34	
900.0	52	24	4000.0	156	67	37	
925.0	55	25	4200.0	172	73	41	
950.0	58	26	4400.0	189	81	45	
975.0	62	28	4500.0		84	47	
1000.0	65	29	4600.0		88	49	
1100.0	78	35	4700.0		92	51	
1200.0	93	42	4800.0		96	54	
1300.0	109	49	5000.0		104	58	
1400.0	127	57	5200.0			63	
1500.0	146	65	5400.0			68	
1600.0	166	74	5600.0			73	
1700.0	187	84	5800.0			78	
1800.0	210	94	6000.0			84	
1900.0		105	6400.0			95	
2000.0		116	6800.0			108	
2200.0		141					
2400.0		168					
Size	8"	10"	Size	12"	14"	16"	
FF	124.78	185.42	FF	320.04	490.29	655.0	

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.

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