Dwyer

SERIES RM

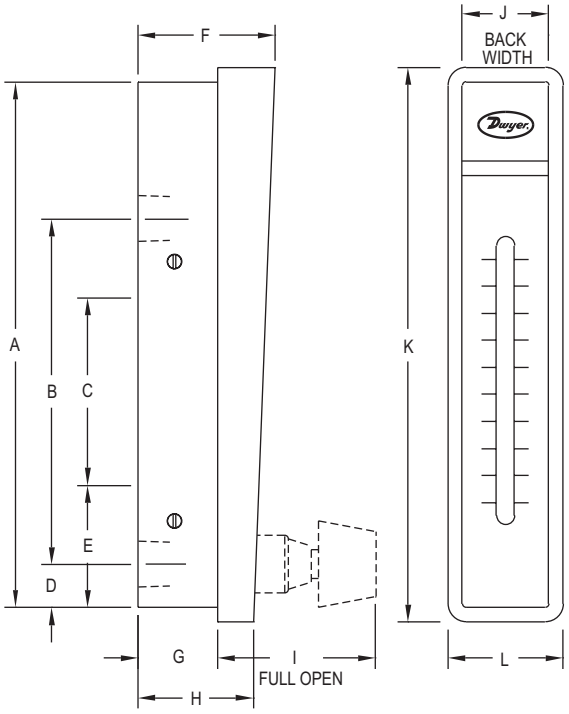
RATE-MASTER® POLYCARBONATE FLOWMETERS

2″, 5″ or 10″ Scale, Interchangeable Bodies

Model RMC
10″ scale, 15-3/8″ high

Model RMB-SSV
5″ scale, 8-3/4″ high

Model RMA-TMV
2″ scale, 4-13/16″ high



DIMENSIONS - FLOWMETER			
	Model RMA	**Model RMB**	**Model RMC**
A	4-9/16 [115.90]	8-1/2 [215.90]	15-1/8 [384.20]
B	3 [76.20]	6-7/16 [163.50]	12-1/4 [311.20]
	1/8 NPT conn.	1/4 NPT conn.	1/2 NPT conn.
C	1-5/8 [41.28]	3-15/16 [100.00]	8-3/4 [222.30]
	10-32 mtg. holes	1/4-20 mtg. holes	3/8-24 mtg. holes
D	3/8 [9.525]	5/8 [15.88]	1 [25.40]
E	1-1/16 [26.99]	1-7/8 [47.63]	2-3/4 [69.85]
F	1-3/16 [30.16]	1-3/4 [44.45]	2-1/2 [63.50]
G	11/16 [17.46]	1 [25.40]	1-7/16 [36.51]
H	61/64 [24.21]	1-7/16 [36.51]	1-31/32 [50.00]
I	1-3/8 [34.92]	1-13/16 [46.04]	2-1/2 [63.50]
J	3/4 [19.05]	1-1/4 [31.75]	2 [50.80]
K	4-13/16 [122.20]	8-3/4 [222.30]	15-3/8 [390.50]
L	1 [25.40]	1-1/2 [38.10]	2-1/4 [57.15]

VIDEO ONLINE

The **Series RM Rate-Master® Polycarbonate Flowmeters** are a line of general use, direct reading precision flowmeters suitable for both gas and liquid applications. This Series consists of 2″ (51 mm), 5″ (127 mm) and 10″ (254 mm) scales that can be panel or surface mounted with optional precision metering valves. Within a given Series, the Rate-Master® flowmeter bodies can be instantly interchanged, allowing the piping to remain undisturbed, interchangeability of the ranges, and easy cleaning.

FEATURES/BENEFITS

- Direct reading scales eliminate the need for troublesome conversions
- Stainless steel backbone absorbs piping torque reducing installation damage and cost
- Shatter-proof polycarbonate allows for long operation life
- Precision injection molding around a precision tapered pin enables high repeatability
- Increased reading accuracy with special integral flow guides that stabilize float movement
- Scale graduations on both side of the indicating tube allow for instantaneous flow reading saving time

APPLICATIONS

- Medical equipment
- Air samplers
- Gas analyzers
- Pollution monitors
- Chemical injectors
- Cabinet purging

SPECIFICATIONS

Service: Compatible gases and liquids.
Wetted Materials: Body: Polycarbonate; O-ring: Neoprene and Buna-N; Metal parts: SS (except for optional brass valve); Float: SS, black glass, aluminum, K monel, tungsten carbide depending on range.
Temperature Limit: 130°F (54°C).
Pressure Limit: 100 psi (6.9 bar).
Accuracy: RMA: 4%; RMB: 3%; RMC: 2% of FS.
Process Connection: RMA: 1/8″; RMB: 1/4″; RMC: 1/2″ female NPT.
Weight: RMA: 4 oz (113.4 g); RMB: 13 oz (368.5 g); RMC: 39 oz (1105.6 g).
Agency Approvals: Meets the technical requirements of EU Directive 2011/65/EU (RoHS II).

CAUTION: Dwyer® Rate-Master® flowmeters are designed to provide satisfactory long term service when used with air, water, or other compatible media. Refer to factory for information on questionable gases or liquids. Caustic solutions, anti-freeze (ethylene glycol) and aromatic solvents should definitely not be used.

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SERIES RM

RATE-MASTER® POLYCARBONATE FLOWMETERS

Gas Flow from 0.05 to 1800 SCFH, Water Flow to 10 GPM

RANGE CHART - RMA 2˝ SCALE - POPULAR RANGES			
Range No.	**SCFH Air**	**Range No.**	**LPM Air**
1	.05 to .4	26	.5 to 5
2	.1 to 1	21	1 to 10
3	.2 to 2	22	2 to 25
4	.5 to 5	23	5 to 50
5	1 to 10	24	5 to 70
6	2 to 20	25	10 to 100
7	5 to 50	**Range No.**	**CC/Min. Water**
8	10 to 100	32	5 to 50
9	15 to 150	33	10 to 110
10	20 to 200	34	20 to 300
Range No.	**CC/Min. Air**	**Range No.**	**GPH Water**
151*	5 to 50	42	1 to 11
150*	10 to 100	43	2 to 24
11	30 to 200	44	4 to 34
12	50 to 500	45	5 to 50
13	100 to 1000		
14	200 to 2500		
*Accuracy ±8%			

RANGE CHART - RMB 5˝ SCALE - POPULAR RANGES			
Range No.	**SCFH Air**	**Range No.**	**SCFH & LPM Air**
49*	0.5 to 5	50D	1.2 to 10/0.6 to 5
50	1 to 10	51D	2 to 20/1 to 9.5
51	3 to 20	52D	4 to 50/2 to 23
52	4 to 50	53D	10 to 100/5 to 50
53	10 to 100	54D	20 to 200/10 to 95
54	20 to 200	**Range No.**	**GPH & LPM Water**
55	40 to 400	82D	1 to 12/0.06 to 0.76
56	50 to 500	83D	1 to 20/0.065 to 1.25
57	60 to 600	85D	10 to 100/0.8 to 6.2
Range No.	**GPH Water**		
82	1 to 12		
83	1 to 20		
84	4 to 40		
85	10 to 100		
*Accuracy ±5%			

RANGE CHART - RMC 10˝ SCALE - POPULAR RANGES			
Range No.	**SCFH Air**	**Range No.**	**GPH Water**
101	5 to 50	134	2 to 20
102	10 to 100	135	8 to 90
103	20 to 200	**Range No.**	**GPM Water**
104	40 to 400	141	.1 to 1
105	60 to 600	142	.2 to 2.2
106	100 to 1000	143	.4 to 4
107	120 to 1200	144	.8 to 7
108	200 to 1800	145	1.2 to 10
Range No.	**SCFM Air**		
121	1 to 10		
122	2 to 20		
123	4 to 30		

MODEL CHART	
Model	**Description**
RMA-X	Standard RMA
RMA-X-BV+	RMA with brass valve
RMA-X-SSV+	RMA with stainless steel valve
RMA-X-TMV*+	RMA with top mounted valve
RMB-X	Standard RMB
RMB-X-BV+	RMB with brass valve
RMB-X-SSV+	RMB with stainless steel valve
RMC-X	Standard RMC
RMC-X-BV+	RMC with brass valve
RMC-X-SSV+	RMC with stainless steel valve
How To Order: Series-Range No.(“X”)-Valve-Option **Example:** RMA-2-SSV (Series RMA with .1-1 SCFH air range & stainless steel valve)	
*Provide same precision construction but for vacuum applications. +Valve is designed for flow adjustment only, not intended to be used as an open/shut-off valve.	

OPTIONS	
To order add suffix:	**Description**
-NIST	NIST traceable calibration certificate
-APF	Adjustable pointer flag for Series RMA
-BPF	Adjustable pointer flag for Series RMB
-CPF	Adjustable pointer flag for Series RMC
Note: Special ranges, scales, mounting arrangements, etc., are available on special order, or in OEM quantities.	

Adjustable pointer flags
Red lined pointer flags provide quick visual reference to a required flow level. Of clear plastic, they snap into place inside bezel and slide to desired level.

ACCESSORIES	
Model	**Description**
RKA	Regulator kit for Series RMA
RK-RMB	Regulator kit for Series RMB

Regulator kits
Available as optional extras for both Rate-Master® Flowmeters and Visi-Float® Flowmeters models. This view shows Model VFA Visi-Float® flowmeter with integrally connected constant differential pressure regulator. Recommended for use where inlet air pressure fluctuates widely and constant flow is required. The regulator maintains a constant pressure differential of approximately 3 ±.15 psig. Supply pressure must be at least 3 psig above the flowmeter discharge to operate. The standard regulator may be used with any Dwyer Series RM or VF flowmeter up to 200 scfh. For higher flow rates consult the factory.