SERIES RM | RATE-MASTER® POLYCARBONATE FLOWMETER

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

BENEFITS/FEATURES

- **Eliminate the need for troublesome conversions with direct reading scales**
- **Reduce installation damage and cost due to stainless steel backbone that absorbs piping torque**
- **Long operation life with durable, shatter-proof polycarbonate body**
- **High repeatability enabled by precision injection molding around a precision tapered pin**
- **Increased reading accuracy with special integral flow guides that stabilize float movement**
- **Save time with instantaneous flow reading with the presence of scale graduations on both side of the indicating tube**

APPLICATIONS

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

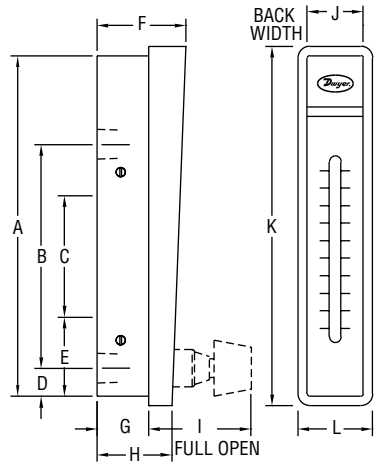
DESCRIPTION

The **Series RM Rate-Master® Polycarbonate Flowmeter** is 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. With 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.

SPECIFICATIONS

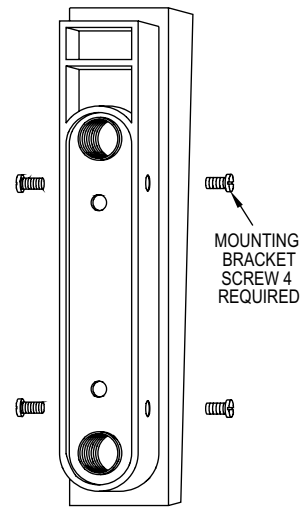
Service	Compatible gases and liquids.
Wetted Materials	Body: Polycarbonate; O-ring: Neoprene and Buna-N; Metal parts: SS; Float: SS, black glass, aluminum, K monel, tungsten carbide depending on range.
Temperature Limit	130°F (54°C).
Pressure Limit	100 psi (6.9 bar).
Accuracy	RMA: 4% FS; RMB: 3% FS; RMC: 2% FS.
Process Connection	RMA: 1/8″ female NPT; RMB: 1/4″ female NPT; RMC: 1/2″ female NPT.
Weight	RMA: 4 oz (113.4 g); RMB: 13 oz (368.5 g); RMC: 29 oz (1105.6 g).
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.	

DIMENSIONS



DIMENSIONS in [mm]			
	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] 1/8″ NPT conn.	6-7/16 [163.50] 1/4″ NPT conn.	12-1/4 [311.20] 1/2″ NPT conn.
C	1-5/8 [41.28] 10-32 mtg. holes	3-15/16 [100.00] 1/4-20 mtg. holes	8-3/4 [222.30] 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]

MOUNTING DIAGRAM



ACCESSORIES

Model	Description
RKA	Regulator kit for Series VFA
RK-RMB	Regulator kit for Series VFB

Regulator Kits
Available as optional extras for the Visi-Float® Flowmeter models. Recommended for use where inlet air pressure fluctuates widely and constant flow is required. The regulator maintains a constant pressure differential of approximately 3 ±0.15 psig. Supply pressure must be at least 3 psig above the flowmeter discharge to operate. The standard regulator may be used up to 200 scfh.

HOW TO ORDER

Use the **bold** characters from the chart below to construct a product code.

RMA **-1** **-SSV** **-ARB**

SERIES

RMA: 2″ (51 mm) scale
RMB: 5″ (127 mm) scale
RMC: 10″ (254 mm) scale

RANGE

RMA
-1: 0.05 to 0.4 SCFH air
-2: 0.1 to 1 SCFH air
-3: 0.2 to 2 SCFH air
-4: 0.5 to 5 SCFH air
-5: 1 to 10 SCFH air
-6: 2 to 20 SCFH air
-7: 5 to 50 SCFH air
-8: 10 to 100 SCFH air
-9: 15 to 150 SCFH air
-10: 20 to 240 SCFH air
-151: 5 to 50 CC/min air
-150: 10 to 100 CC/min air
-11: 30 to 200 CC/min air
-12: 50 to 500 CC/min air
-13: 100 to 1000 CC/min air
-14: 200 to 2500 CC/min air
-15: 400 to 5000 CC/min air
-16: 1000 to 10000 CC/min air
-26: 0.5 to 5 LPM air
-21: 1 to 10 LPM air
-22: 2 to 25 LPM air
-23: 5 to 50 LPM air
-24: 5 to 70 LPM air
-25: 10 to 100 LPM air
-32: 5 to 50 CC/min water
-33: 10 to 110 CC/min water
-34: 20 to 300 CC/min water
-42: 1 to 11 GPH water
-43: 2 to 24 GPH water
-44: 4 to 34 GPH water
-45: 5 to 50 GPH water

RMB
-49: 0.5 to 5 SCFH air
-50: 1 to 10 SCFH air
-51: 2 to 20 SCFH air
-52: 5 to 50 SCFH air
-53: 10 to 100 SCFH air
-54: 20 to 200 SCFH air
-55: 40 to 400 SCFH air
-56: 50 to 500 SCFH air
-57: 60 to 600 SCFH air
-82: 1 to 12 GPH water
-83: 1 to 20 GPH water
-84: 4 to 40 GPH water
-85: 10 to 100 GPH water
-50D: 1.2 to 10 SCFH and 0.6 to 5 LPM air
-51D: 2 to 20 SCFH and 1.5 to 9.5 LPM air
-52D: 4 to 50 SCFH and 2 to 23 LPM air
-53D: 10 to 100 SCFH and 5 to 50 LPM air
-54D: 20 to 200 SCFH and 10 to 95 LPM air
-82D: 1 to 12 GPH and 0.06 to 0.76 LPM water
-83D: 1 to 20 GPH and 0.065 to 1.25 LPM water
-85D: 10 to 100 GPH and 0.5 to 6.2 LPM water

RMC
-101: 5 to 50 SCFH air
-102: 10 to 100 SCFH air
-103: 20 to 200 SCFH air
-104: 40 to 400 SCFH air
-105: 60 to 600 SCFH air
-106: 100 to 1000 SCFH air
-107: 120 to 1200 SCFH air
-108: 200 to 1800 SCFH air
-121: 1 to 10 SCFM air
-122: 2 to 20 SCFM air
-123: 3 to 30 SCFM air
-134 2 to 20 GPH water
-135: 8 to 90 GPH water
-141: 0.1 to 1 GPM water
-142: 0.2 to 2.2 GPM water
-143: 0.4 to 4 GPM water
-144: 0.8 to 7 GPM water
-145: 1.2 to 10 GPM water

VALVE

BLANK: Standard (no valve)
-SSV: Stainless steel valve
-TMV: Top mounted valve (RMA only)

OPTIONS

-APF: Adjustable pointer flag (RMA only)
-ARB: Arbitrary scale
-AT: Aluminum tag
-BO: Body only
-BOV: Body only valve unit
-BPF: Adjustable pointer flag (RMB only)
-CPF: Adjustable pointer flag (RMC only)
-NIST: NIST traceable calibration certificate
-PTFE: PTFE valve seat
-SPCL: Special cleaning
-VIT: Fluoroelastomer O-rings
-WL: Without logo

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DS-RM Rev. 3

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