

# VISI-FLOAT® ACRYLIC FLOWMETERS

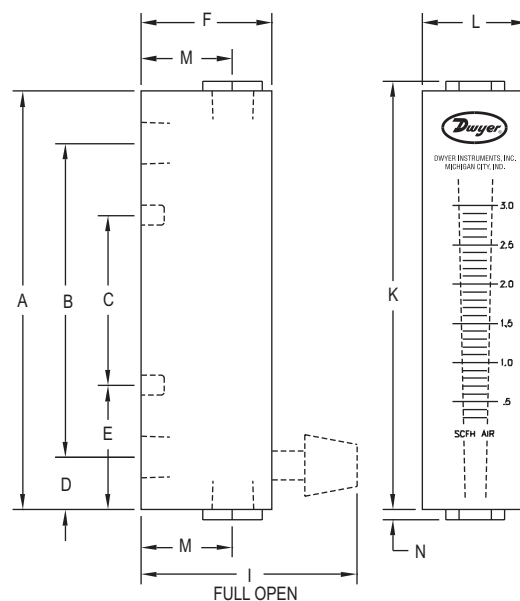
Hot-Stamped Scales, Multi-Angle Views of Flow



Model VFB



Model VFA-SSV



## DIMENSIONS - FLOWMETER

	Model VFA	Model VFB
A	4 [101.6]	6-1/2 [165.1]
B	3 [76.20]; 1/8 NPT conn.	5-1/2 [139.7]; 1/8 NPT conn.
C	1-5/8 [41.28]; 10-32 thd	3-1/2 [88.90]; 10-32 thd
D	1/2 [12.70]	1/2 [12.70]
E	1-3/16 [30.16]	1-1/2 [38.10]
F	1-1/4 [31.75]	1-1/4 [31.75]
I	2-1/16 [52.39]; Open	2-1/16 [52.39]; Open
K	4-3/32 [104.0]	6-11/16 [169.9]
L	1 [25.40]	1-3/8 [34.93]
M	7/8 [22.23]; 1/8 NPT	7/8 [22.23]; 1/8 NPT
N	3/32 [2.381]	3/32 [2.381]

The **SERIES VF** Visi-Float® Flowmeters are a line of direct reading, precision machined, clear acrylic body flowmeters suitable for both gas and liquid applications. The fabrication of the Visi-Float® Flowmeters is backed by over 60 years of experience in acrylic instrument machining. This Series consists of 2" (51 mm) and 4" (102 mm) scales with optional precision metering valves.

### FEATURES/BENEFITS

- Bodies are cut and precision machined from solid, clear acrylic blocks allowing for complete visual inspection
- White background allows for better visibility of the float increasing reading accuracy
- Direct reading scales are hot stamped into the plastic eliminating the need for troublesome conversions and increasing product operating life
- Precision machined tapered bore enables high repeatability
- Low installation costs with back or end connection options with metal mounting inserts that can be supported directly by system piping

### APPLICATIONS

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

### SPECIFICATIONS

**Service:** Compatible gases & liquids.

**Wetted Materials:** Body: Acrylic plastic; O-ring: Buna-N (fluoroelastomer available); Metal parts: Brass standard, SS optional; Float: SS, black glass, aluminum, K monel depending on range.

**Temperature & Pressure Limits:** Without valve: 100 psig (6.9 bar) @ 150°F (65°C); 150 psig (10 bar) @ 100°F (38°C); With valve: 100 psig (6.9 bar) @ 120°F (48°C).

**Accuracy:** VFA = 5% of FS; VFB = 3% of FS.

**Process Connection:** 1/8" female NPT. VFB ranges 85 and 86 have 1/4" NPT back connections or 3/8" NPT end connections. These ranges not available with brass valves.

**Scale Length:** VFA 2" typical length; VFB 4" typical length.

**Mounting Orientation:** Mount in vertical position.

**Weight:** VFA: 4.0 to 4.8 oz (.11 to .14 kg); VFB: 7.2 to 8.8 oz (.20 to .25 kg).

**Agency Approvals:** Meets the technical requirements of EU Directive 2011/65/EU (RoHS II).



# VISI-FLOAT® ACRYLIC FLOWMETERS

Used to Indicate or Manually Control Air or Water Flow

RANGE CHART - VFA 2" SCALE - POPULAR RANGES			
Range No.	SCFH Air	Range No.	LPM Air
1	.1 to 1	21	.06 to 0.5
2	.2 to 2	22	.15 to 1
3	.6 to 5	23	.6 to 5
4	1 to 10	24	1 to 10
5	2 to 20	25	3 to 25
6	4 to 30	26	6 to 50
7	5 to 50	27	10 to 100
8	10 to 100		
9	20 to 200		
Range No.	CC/Min. Water	Range No.	GPH Water
32	6 to 50	41	.6 to 5
33	10 to 100	42	2 to 10
34	20 to 200	43	3 to 20
		44	8 to 40

RANGE CHART - VFB 4" SCALE - POPULAR RANGES			
Range No.	SCFH Air	Range No.	LPM Air
50	.3 to 3	65	.2 to 4
91*	1 to 10	66	1 to 10
51*	2 to 20	67	1 to 20
52	4 to 40	68	3 to 30
53*	10 to 100	69	4 to 40
54*	10 to 150	Range No.	CC/Min. Water
55*	20 to 200	82	2 to 30
Range No.	SCFM Air	Range No.	GPH Water
90	.3 to 3	80*	.5 to 12
Range No.	CC/Min. Air	83*	1 to 20
60	100 to 1000	84	6 to 40
		81	6 to 60
		Range No.	GPM Water
		85	.2 to 2
		86	.6 to 5

\*For dual range models in English and Metric add "D" to end of Range No.

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



## 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  $3 \pm .15$  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.

MODEL CHART	
Model	Description
VFA-X	Standard VFA
VFA-X-SS	VFA with stainless metal wetted parts
VFA-X-BV+	VFA with brass valve
VFA-X-SSV+	VFA with stainless steel valve
VFA-X-EC	VFA with end connections
VFA-X-EC-SS	VFA with end connections and stainless steel metal wetted parts
VFB-X	Standard VFB
VFB-X-SS	VFB with stainless metal wetted parts
VFB-X-BV+	VFB with brass valve
VFB-X-SSV+	VFB with stainless steel valve
VFB-X-EC	VFB with end connections
VFB-X-EC-SS	VFB with end connections and stainless steel metal wetted parts
<b>How To Order:</b> Series—Range No. ("X")—Valve—Option	
<b>Example:</b> VFA-9-BV	
(Series VFA with 20-200 SCFH air range & brass valve)	
+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
-PF	Red ABS plastic pointer flag
-VIT	Fluoroelastomer O-rings



## Special Multi-Column Visi-Float® Flowmeters

Perfect for OEM applications, Visi-Float® Flowmeters can be custom made with up to 10 columns in a single block of acrylic plastic.

Available with or without valves. Consult factory for more information.

## OEM Specials

Special flowmeter designs can be supplied to meet a wide range of requirements and specific applications. These include: on-off plunger and push-to-test valves, special gas or fluid calibration, special ranges, scales, name brand or other identification. Pointer flags can be furnished for instant visual reference. For specific information, please supply an outline of your requirements.