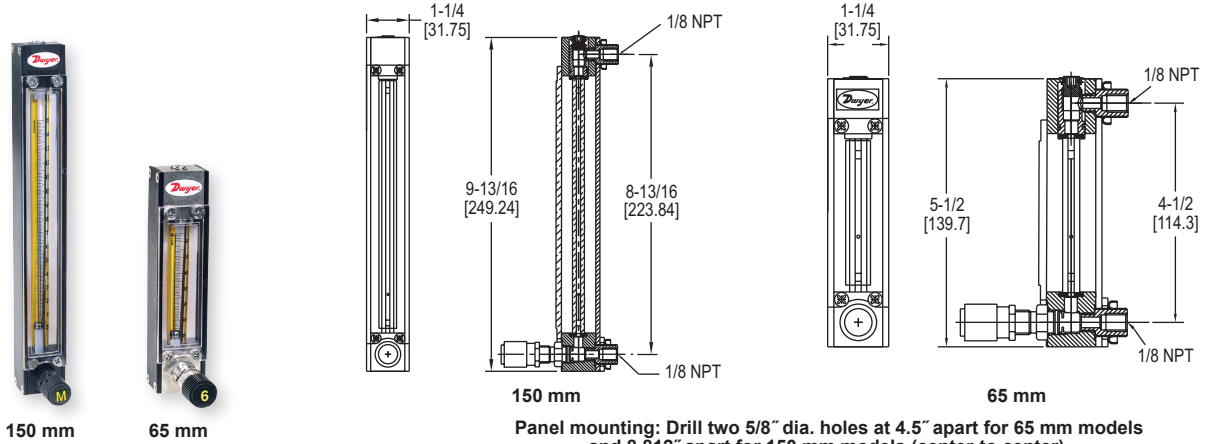


# VARIABLE AREA GLASS FLOWMETERS

65 mm and 150 mm, ±2% FS Accuracy, Interchangeable Flowtubes, PTFE Options, Universal mm Scale



The Series VA Variable Area Glass Flowmeters are designed with easy to read universal mm scale and supplied with correlation charts containing calibration data for air and water.

### FEATURES/BENEFITS

- Permanently fused ceramic scale with vertical locator line reduces parallax and eye fatigue saving time
- Long operating life with thick polycarbonate front shield that protects tube from breakage and serves as a magnifying lens to enhance reading resolution
- Standard 6-turn needle valve for flow rate control eliminating the need for a separate valve reducing cost
- No additional installation required with optional acrylic tripod base which allows for self-standing bench mounting
- High precision metering valves with non-rising stems are available for high sensitivity control and resolution for very low flow rate

### APPLICATIONS

- Gas or liquid metering
- Chemical processing
- Semiconductor systems
- Water and air pollution analysis systems
- Laboratory systems

### MODEL CHART - METAL 65 MM SCALE

Model				Max. Flow Rate	
Aluminum	SS	Brass	Float	Air SCFH (ml/min)	Water GPH (ml/min)
VA1043	VA1243	VA1343	Glass	0.104 (49)	0.009 (0.55)
VA1044	VA1244	-	SS	0.307 (145)	0.038 (2.38)
VA1045	VA1245	VA1345	Glass	0.220 (104)	0.028 (1.8)
VA1046	VA1246	-	SS	0.633 (299)	0.122 (7.7)
VA1047	VA1247	VA1347	Glass	0.43 (202)	0.041 (2.6)
VA1048	VA1248	-	SS	1.1 (522)	0.19 (12.0)
VA10423	VA12423	VA1349	Glass	2.29 (1081)	0.329 (20.8)
VA10424	VA12424	-	SS	4.51 (2129)	0.930 (58.7)
VA10411	VA12411	VA13411	Glass	2.65 (1249)	0.428 (27)
VA10412	VA12412	-	SS	5.34 (2520)	1.125 (71)
VA10413	VA12413	VA13413	Glass	4.32 (2040)	0.63 (40)
VA10414	VA12414	-	SS	8.45 (3990)	1.71 (108)
VA10417	VA12417	VA13417	Glass	13.4 (6318)	2.33 (147)
VA10418	VA12418	-	SS	25.5 (12058)	5.77 (364)
VA10419	VA12419	VA13419	Glass	27.9 (13153)	4.9 (309)
VA10420	VA12420	-	SS	52.3 (24680)	11.81 (745)
VA10421	VA12421	VA13421	Glass	49.1 (23169)	8.27 (522)
VA10422	VA12422	-	SS	89.2 (42094)	19.97 (1260)

### MODEL CHART - METAL 150 MM SCALE

Model				Max. Flow Rate	
Aluminum	SS	Brass	Float	Air SCFH (ml/min)	Water GPH (ml/min)
VA20429	VA22429	VA23429	Glass	0.792 (374)	0.087 (5.5)
VA20430	VA22430	-	SS	1.725 (814)	0.323 (20.4)
VA20433	VA22433	VA23433	Glass	4.9 (2313)	0.848 (54)
VA20434	VA22434	-	SS	9.67 (4562)	2.067 (130)
VA20435	VA22435	VA23435	Glass	8.07 (3807)	1.336 (84)
VA20436	VA22436	-	SS	16.08 (7590)	3.34 (217)
VA20437	VA22437	VA23437	Glass	18.38 (8678)	3.32 (210)
VA20438	VA22438	-	SS	35.5 (16737)	8.02 (506)
VA20439	VA22439	VA23439	Glass	49.9 (23564)	9.0 (568)
VA20440	VA22440	-	SS	93.9 (44336)	21.7 (1370)

### OPTIONS

Use order code:	Description
NISTCAL-FL1*	NIST traceable calibration certificate
*Specify media type (air or water) for NISTCAL option	

### SPECIFICATIONS

**Service:** Compatible gases or liquids.  
**Wetted Materials:** Flowtube: Borosilicate glass; Floats: Glass or SS (sapphire, Carboloy and tantalum are optional); Float stops: PTFE; End fittings: Anodized aluminum, 316 SS, brass or PTFE; Packings: Fluoroelastomer, none on VAX5XX models; O-rings: Buna-N on aluminum models and brass models, fluoroelastomer on SS models, PTFE on VAX5XX models.  
**Temperature Limits:** 250°F (121°C); VAX5XX: -15 to 150°F (-26 to 65°C).  
**Pressure Limits:** 200 psig (13.8 bar); VAX5XX: 100 psig (6.7 bar).  
**Accuracy:** ±2% FS @ 70°F (21.1°C) and 14.7 psia (1 atm absolute); VA1043, VA1243, VA1343, VA25425, VA25025: ±5% FS @ 70°F (21.1°C) and 14.7 psia (1 @ absolute).  
**Repeatability:** ±0.25% FS.  
**Leak Rate:** 1 x 10<sup>-7</sup> sccs of helium.  
**Scales:** Universal 65 mm or 150 mm with correlation charts.  
**Turn-Down Ratio:** 10:1.  
**Connections:** Two 1/8" female NPT.  
**Mounting:** Vertical.  
**Valve:** 6-turn needle (standard), optional 16-turn high precision valve.  
**Valve Orifice:** Acetal on aluminum models and brass models, PCTFE on stainless steel models, PTFE on VAX5XX models.

### MODEL CHART - PTFE 65 MM SCALE

Model			Max. Flow Rate	
With Valve	Without Valve	Float	Air SCFH (ml/min)	Water GPH (ml/min)
VA1545	VA1505	Glass	0.220 (104)	0.028 (1.8)
VA1547	VA1507	Glass	0.428 (202)	0.047 (2.95)
VA15411	VA15011	Glass	2.646 (1249)	0.428 (27)
VA15413	VA15013	Glass	4.322 (2040)	0.630 (39.7)
VA15417	VA15017	Glass	13.39 (6318)	2.33 (147)
VA15419	VA15019	Glass	27.9 (13153)	4.9 (309)
VA15421	VA15021	Glass	49 (23169)	8.27 (522)

Note: VAX5XX models indicate PTFE units.

### MODEL CHART - PTFE 150 MM SCALE

Model			Max. Flow Rate	
With Valve	Without Valve	Float	Air SCFH (ml/min)	Water GPH (ml/min)
VA25425	VA25025	Glass	0.104 (49)	0.01 (0.61)
VA25429	VA25029	Glass	0.792 (374)	0.087 (5.5)
VA25431	VA25031	Glass	1.75 (825)	0.262 (16.5)
VA25435	VA25035	Glass	8.07 (3807)	1.34 (84.3)
VA25437	VA25037	Glass	18.39 (8678)	3.32 (209)

Note: VAX5XX models indicate PTFE units.

### ACCESSORIES

Model	Description
VA81	High precision valve, 316 SS, 0.42 SCFH capacity
VA82	High precision valve, 316 SS, 0.85 SCFH capacity
VA83	High precision valve, 316 SS, 2.12 SCFH capacity
VA84	High precision valve, 316 SS, 4.87 SCFH capacity
VA85	High precision valve, 316 SS, 13.14 SCFH capacity
VA86	High precision valve, 316 SS, 45.55 SCFH capacity
VA7	Acrylic tripod for single meter

USA: California Proposition 65

⚠WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov