DATA SHEET

Variable Area Flow Meters

2500 Series

2500 Series

Precision-Machined Acrylic Variable Area Flow (Purge) Meters for Gases & Liquids

Series 2500 is a standard precision-machined acrylic flow meter for liquids and gases, with direct reading air or water scales and is available in either English or metric scales.

Models 2510/2520/2530 can be configured with a control valve on the inlet or no valve. Fittings and valve can be specified in either brass or stainless steel. O-rings are available in Buna-N, Viton® fluoroelastomer or other optional elastomers.

Model 2540 flowmeters have standard 1" FNPT PVC fittings with either an in-line Model 2540-I or panel mount Model 2540-S configuration. The panel mount version is available with an integral valve on the inlet Model 2540-V or no valve.

Typical applications include:

- Air sampling equipment aquaculture
- Gas analysers
- Photo processing equipment systems
- Desalinisation equipment
- Medical systems
- Water treatment and distribution

Features:

- Easy-to-read English or metric scales
- Air ranges from 40 ccm to 4000 LPM
- Easy disassembly/assembly for installation
- Stable easy-to-read float
- Water ranges from 4 ccm to 20 GPM
- Threaded brass inserts for quick maintenance

Product Specifications

	2510	2520	2530	2540
PERFORMANCE				
Accuracy	±5% full scale[1]	±3% full scale[1]		±2% full scale[1]
Flow Rates	See Table A	See Table B	See Table C	See Tables D & E
Floats	Black Glass, 316 Stainless Steel		Stainless Steel	
Body	Clear Acrylic			
Seals	Buna-N O-rings with Brass fittings; Viton® O-rings with 303 Stainless Steel fittings			Buna-N O-rings w/Brass or PVC fittings Viton O-rings w/Stn Stl fittings
Pressure	100 PSI G Max.			
Temperature	150°F/65°C Max.			
Fittings	Brass, 303 Stainless Steel			PVC FNPT Pipe Connections (Std.)
Valves	Brass or Stainless Steel			Integral Valve on "V" models Inline Gate Valve is available for "Sand I" models
Certifications	International Calibration Certificate (ICC); Pressure Equipment Directive (97/23/EC); RoHS			

[1] At reference conditions of 70°F(21.1°C)/14.7 psia (1 Bar A)

View 2500 Series Product Page

Model 2510 Flow Rates- Table A

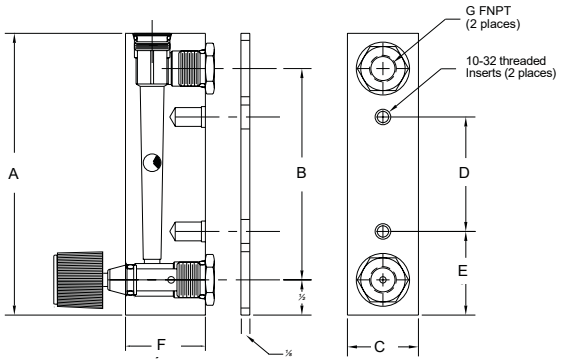
Range SCFH of Air	Tube Code	Range LPM of Air	Tube Code
.1-1	2A00	0.04-0.5	2A12
.2-2	2A01	.1-1	2A13
.4-5	2A02	.2-2.5	2A29
0.5-10	2A03	.4-5	2A14
4-50	2A06	1-10	2A15
10-100	2A07	2-25	2A16
20-200	2A08	6-50	2A17
		10-100	2A18
CCM of Water	**Tube Code**	**GPH of Water**	**Tube Code**
10-100	2L10	.2-2	2L28
20-240	2L11	.4-5	2L19
		1-10	2L20
		2-20	2L21
		4-40	2L22

Model 2520 Flow Rates- Table B

Range SCFH of Air	Tube Code	Range CCM of Water	Tube Code
.4-5	4A30	4-50	4L38
1-10	4A31	10-120	4L56
4-40	4A33	25-225	4L51
10-100	4A34	40-400	4L50
20-200	4A36	40-660	4L52
		100-1500	4L53
CCM of Air	Tube Code	200-3000	4L54
100-1000	4A39*	300-3700	4L55
LPM of Air	Tube Code	GPH of Water	Tube Code
.4-5	4A40	1-10	4L45
1-10	4A41	2-25	4L48
2-20	4A42	6-60	4L46
3-30	4A43		
4-50	4A44	SCFM of Air	Tube Code
10-100	4A47	.3-3	4A37

* Uses Delrin® float.

Dimensions: Models 2510, 2520 & 2530



Dimensions - Inches (MM)

Model	A	B	C	D	E	F	G
2510	4" (102)	3" (76.2)	1" (25.4)	1-5/8" (41.3)	1-3/16" (30.2)	1-1/8" (28.6)	1/8" FNPT
2520	6-1/2" (165)	5-1/2" (140)	1-3/8" (34.9)	3-1/2" (88.9)	1-1/2" (38.10)	1-1/8" (28.6)	1/8" FNPT
2530*	6-5/8" (168)	5-1/2" (140)	1-1/8" (28.6)	3-1/2" (88.9)	1-1/2" (38.1)	1-3/8" 34.9)	1/4" FNPT

* Does not include 1/8" back plate

Model 2530 Flow Rates- Table C

Range SCFM of Air	Tube Code	Range GPM of Water	Tube Code
.5-5	4A67	.25-2.5	4L64
1-10	4A65	.5-5	4L66
4-20	4A68	LPM of Water	Tube Code
LPM of Air	Tube Code	1-10	4L69
14-140	4A72	2-20	4L71
30-300	4A70	Dual Scales: SCFM/SCFH, GPM/GPH and LPM/LPH	
100-560	4A73		

Ordering Information / Typical Model Code for Models 2510, 2520 & 2530

Code	Description	Code	Option Description[1]
I.	Base Model Number	2510	Acrylic Flowmeter: ±5% Full Scale
		2520	Acrylic Flowmeter: ±3% Full Scale
		2530	Acrylic Flowmeter: ±3% Full Scale
II.	Revision	A	Revision Level
III.	Tube Code	XXXX	From Table A, B or C
IV.	Fittings	B	Brass
		S	Stainless Steel
V.	Valves	N	No Valve
		V	Standard Inlet Valve
		O	Outlet Valve (Vacuum service 2510 & 2520 only)
VI.	Seals	BN	Buna N (Standard with brass fittings) Brass only
		VT	Viton® fluoroelastomer (Std. with SS) SS only
VII.	Options	-NL	No Logo

Additional Options
- Certificate of Conformance
- ICC
- Paper Tag
- Stainless Steel Tag
- Degrease for O_2 Cleaning

Sample Standard Model Code

I	II	III	IV	V	VI	VII
2510	A	2A03	B	V	BN	-NL

Model 2540 - Sor V Flow Rates - Table D

Range SCFM of Air	Tube Code	Range GPM of Water	Tube Code
3-25	5A50	.4-5	5L56
4-50	5A51	1-10	5L57
10-100	5A52	2-20	5L58
LPM of Air	**Tube Code**	**LPM of Water**	**Tube Code**
100-700	5A53	3-19	5L59
100-1400	5A54	6-36	5L60
400-3000	5A55	10-75	5L61

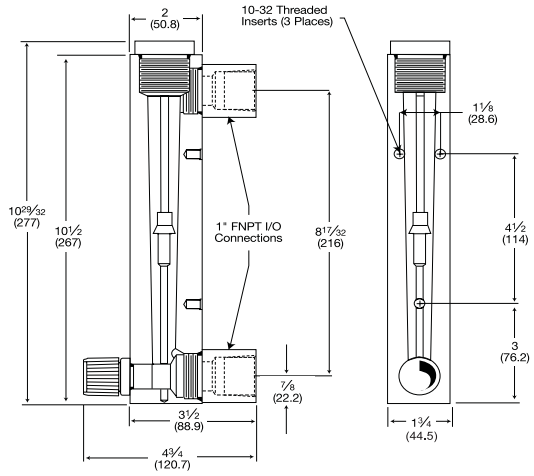
Model 2540 - I Flow Rates - Table E

Range SCFM of Air	Tube Code	Range GPM of Water	Tube Code
3-25	5A50	.4-5	5L56
4-50	5A51	1-10	5L57
10-100	5A52	2-20	5L58
LPM of Air	**Tube Code**	**LPM of Water**	**Tube Code**
100-700	5A53	1-19*	5L59
100-1400	5A54	4-36**	5L60
400-4000	5A55	5-75***	

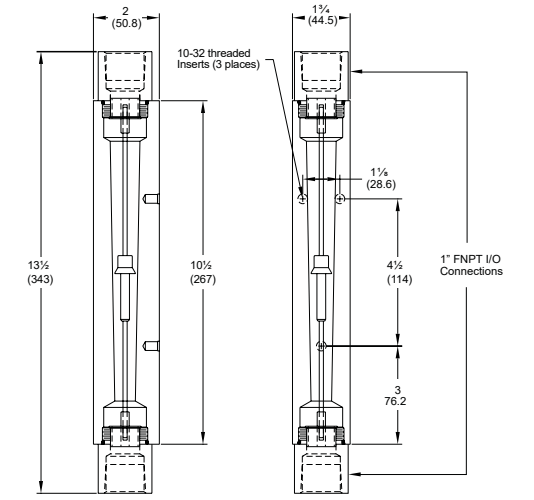
*3-19 LPM with valve option
**6-36 LPM with valve option
***10-75 LPM with valve option

Periodically product revisions occur. Please consult the factory for the latest specifications.

Dimensions: Model 2540 S,V & I



Model 2540-S or V



Model 2540-I

Ordering Information / Typical Model Code for Models 2510, 2520 & 2530

Code	Description	Code Option	Option Description1
I.	Base Model Number	2540	Acrylic Flowmeter: ±2% Full Scale
II.	Revision	A	Revision Level
III.	Tube Code	XXXX	From Table D or E
IV.	Fitting Material	P	PVC (Standard)
		S	Stainless Steel
V.	Fitting / Valve	S	Back Connections (Standard)
		I	End Connection
		V	Valve (Back connection only)
VII.	Options	-NL	No Logo

Additional Options
- Certificate of Conformance
- ICC
- Paper Tag
- Stainless Steel Tag
- Degrease for O_2 Cleaning

Sample Standard Model Code

I	II	III	IV	V	VI
2540	A	5A53	P	V	-NL

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