



## Acrylic Variable-Area Flowmeters

- Max. operating pressure: 100 psi
- Max. operating temp.: 150°F
- Max. viscosity: 16.4 CST

Clear acrylic meters have stable, easy-to-read floats with English or metric scales. They are integral-valved to permit individual flow control in air-sampling equipment, desalinization equipment, medical systems, water treatment and distribution systems, swimming pools, and aquaculture systems. Back-mounted meters (see Model-Accuracy-Dimensions chart) have standard 10-32 brass inserts for quick installation.

Model Accuracy	W	H	D	Center-to-Center Fittings*	Inserts
2510 ±5%	1	4	1 1/8	3	1 1/8
2520 ±3%	1 1/8	6 1/2	1 1/8	5 1/2	3 1/2
2530 ±3%	1 1/8	6 3/4	1 1/8	5 1/2	3 1/2
2540 ±2%	1 3/4	10 29/32	2	8 1/2	4 1/2

\* Back connection mounting.



Connc. Size	Flow Range†	Center-Center Fitting Size	O-Ring	Fitting	Includes	Mfr. Model	Item No.
Air	.04 to .5 lpm	3 in	Buna-N	Brass	One Valve on Inlet	2510A2A12BVBVN	16X850
	.1 to 1 lpm	3 in	Viton	Stainless Steel	Valves	2510A2A13SVVT	16X851
	.1 to 1 gpm	3 in	Buna	Brass	Flowmeter Only	2510A2A13BNBN	16X852
	.0.3 to 3 scfm	5 1/2 in	Viton	Stainless Steel	Valves	2520A4A37SVVT	5P364
	.0.3 to 3 scfm	5 1/2 in	Nitrile	Brass	Valves	2520A4A37BVBVN	5P348
	.4 to 5 lpm	3 in	Viton	Stainless Steel	Valves	2510A2A14SVVT	16X853
	.4 to 5 lpm	3 in	Buna	Brass	Flowmeter Only	2510A2A14BNBN	16X854
	.2 to 25 lpm	3 in	Viton	Stainless Steel	Valves	2510A2A16SVVT	16X855
	.2 to 25 lpm	3 in	Buna	Brass	Flowmeter Only	2510A2A16BNBN	16X856
	10 to 100 lpm	3 in	Viton	Stainless Steel	Valves	2510A2A18SVVT	16X857
	10 to 100 scfh	5 1/2 in	Viton	Stainless Steel	Valves	2520A4A34SVVT	5P361
	10 to 100 scfh	5 1/2 in	Nitrile	Brass	Valves	2520A4A34BVBVN	5P345
1/2 in	11 to 100 lpm	3 in	Buna	Brass	Flowmeter Only	2510A2A18BNBN	16X858
	20 to 200 scfh	5 1/2 in	Viton	Stainless Steel	Valves	2520A4A36SVVT	5P363
	20 to 200 scfh	5 1/2 in	Nitrile	Brass	Valves	2520A4A36BVBVN	5P347
	0.5 to 5 scfm	5 1/2 in	Viton	Stainless Steel	Valves	2530A4A67SVVT	4UN01
	0.5 to 5 scfm	5 1/2 in	Nitrile	Brass	Valves	2530A4A67BVBVN	4UM99
	1 to 10 scfm	5 1/2 in	Viton	Stainless Steel	Valves	2530A4A65SVVT	4UM98
	1 to 10 scfm	5 1/2 in	Nitrile	Brass	Valves	2530A4A65BVBVN	4UM97
	3 to 25 scfm	8 1/2 in	Nitrile	PVC	—	2540A5A50PS	4UN06
	4 to 50 scfm	8 1/2 in	Nitrile	PVC	—	2540A5A51PS	4UN07
	10 to 100 scfm	—	Nitrile	PVC	—	2540A5A52PS	4UN08

Connc. Size	Flow Range†	Center-Center Fitting Size	O-Ring	Fitting	Includes	Mfr. Model	Item No.	
Water	0.2 to 2.5 gpm	5 1/2 in	Nitrile	Brass	—	2520Z-001021	5P321	
	1 to 10 gph	5 1/2 in	Viton	Stainless Steel	Valves	2520A4L45SVVT	5P349	
	1 to 10 gph	3 in	Viton	Stainless Steel	Valves	2510A2L20SVVT	16X863	
	1 to 10 gph	5 1/2 in	Nitrile	Brass	Valves	2520A4L45BVBVN	5P333	
	1 to 10 gph	3 in	Buna	Brass	Flowmeter Only	2510A2L20BNBN	16X864	
	2 to 25 gph	5 1/2 in	Viton	Stainless Steel	Valves	2520A4L48SVVT	5P350	
	2 to 25 gph	5 1/2 in	Nitrile	Brass	Valves	2520A4L48BVBVN	5P334	
	4 to 40 gph	3 in	Viton	Stainless Steel	Valves	2510A2L22SVVT	16X865	
	4 to 40 gph	3 in	Buna	Brass	Flowmeter Only	2510A2L22BNBN	16X866	
	4 to 50 ccm	5 1/2 in	Viton	Stainless Steel	Valves	2520A4L38SVVT	5P353	
	4 to 50 ccm	5 1/2 in	Nitrile	Brass	Valves	2520A4L38BVBVN	5P337	
	1/4 in	6 to 60 gph	5 1/2 in	Viton	Stainless Steel	Valves	2520A4L38SVVT	5P352
6 to 60 gph		5 1/2 in	Nitrile	Brass	Valves	2520A4L46BVBVN	5P336	
10 to 120 ccm		5 1/2 in	Viton	Stainless Steel	Valves	2520A4L56SVVT	5P354	
20 to 240 ccm		3 in	Viton	Stainless Steel	Valves	2510A2L11SVVT	16X861	
20 to 240 ccm		3 in	Buna	Brass	Flowmeter Only	2510A2L11BNBN	16X862	
25 to 225 ccm		5 1/2 in	Nitrile	Brass	Valves	2520A4L51BVBVN	5P339	
40 to 400 ccm		5 1/2 in	Viton	Stainless Steel	Valves	2520A4L50SVVT	5P356	
40 to 660 ccm		5 1/2 in	Viton	Stainless Steel	Valves	2520A4L52SVVT	5P357	
100 to 1500 ccm		5 1/2 in	Viton	Stainless Steel	Valves	2520A4L53SVVT	5P358	
200 to 3000 ccm		5 1/2 in	Viton	Stainless Steel	Valves	2520A4L54SVVT	5P359	
1/2 in		0.25 to 2.5 gpm	5 1/2 in	Viton	Stainless Steel	Valves	2530A4L64SVVT	4UN03
		0.25 to 2.5 gpm	5 1/2 in	Nitrile	Brass	Valves	2530A4L64BVBVN	4UN02
	0.4 to 5 gpm	5 1/2 in	Viton	Stainless Steel	Valves	2530A4L66SVVT	4UN05	
	0.5 to 5 gpm	5 1/2 in	Nitrile	Brass	Valves	2530A4L66BVBVN	4UN04	
	0.4 to 5 gpm	—	Nitrile	PVC	—	2540A5L56PI	4UN11	
	1 to 10 gpm	—	Nitrile	PVC	—	2540A5L57PI	4UN09	
1 in	2 to 20 gpm	—	Nitrile	PVC	—	2540A5L58PI	4UN10	

† ccm = cubic centimeters per min. (metric); gph = gal. per hr. (English); gpm = gal. per min. (English); lpm = liters per min. (metric); scfh = standard cu. ft. per hr. (English); scfm = standard cu. ft. per min. (English).

## Air and Liquid Flow Switches



- Single-pole, double-throw snap switch
  - Sensitivity flow adjustment screw
  - 120/240VAC operation
  - Full load amps: 7.4 at 115V, 3.7 at 230V
- Additional flow range information is available on Grainger.com, or call 1-800-GRAINGER (472-4643).

**Air Flow General-Purpose**—For applications with medium- and high-velocity requirements. Paddle fits 8" minimum duct size (trim to fit 6" duct). Sensitivity flow adjustment screw.

**Liquid Flow General-Purpose**—Start or stop electrically operated equipment such as signal lights, alarms, motors, automatic burners, and metering devices. 2RUL3 and 2RUL4 have 4 stainless steel paddles that fit 1", 2", 3", and 6" pipe; paddle can be trimmed to fit incremental pipe sizes.

**Liquid Flow High-Sensitivity**—For heavy-duty applications that need instant switching such as water treatment systems, electronic circuit cooling systems, compressors, booster pumps, and bearings.

**Liquid Flow Industrial/Heavy-Duty**—Designed for large pipe applications, including heating and hydronic systems, air conditioning, refrigeration, and process work. Paddles can be trimmed to suit. Fit 2" to 16" pipe with flow rates up to 998 gpm.

**Paddle Kits**—Designed to replace damaged paddles and return flow switches to original flow-sensing capability.

Operating Velocity Range, Horizontal (fpm)	Max. Operating Velocity (fpm)	Material of Construc.	Switch Enclosure	Max. Air Temp.	Mfr. Model	Item No.		
<b>Air Flow General-Purpose</b>								
910 to 1610	2,500 fpm	Seal: Steel/PTFE, Vane: Steel/Brass	NEMA 1	300	AF-1	4RC76		
Min. Flow Rate (gpm)	Max. Flow Rate (gpm)	Wetted Materials	Max. Pressure (psi)	Max. Fluid Temp. (°F)	Switch Enclosure	Connection Size (in.)	Mfr. Model	Item No.
<b>Liquid Flow General-Purpose</b>								
1.5 gpm	15 gpm	Brass, BUNA, EPDM	150 psi	250 °F	NEMA 1	3/4 FNPT	FS5-3/4	4RC67
1.5 gpm	15 gpm	Brass, BUNA, EPDM	150 psi	250 °F	NEMA 1	1 FNPT	FS5-1	1RF63
5.8 gpm	131 gpm	Brass, EPDM, SS	160 psi	250 °F	NEMA 1	1 MNPT	FS251	2RUL3
5.8 gpm	131 gpm	Brass, EPDM, SS	160 psi	250 °F	NEMA 4	1 MNPT	FS254	2RUL4
<b>Liquid Flow High-Sensitivity</b>								
0.12 gpm	2.5 gpm	Brass, Buna-N, SS, Viton	100 psi	225 °F	NEMA 1	1 FNPT	FS6-1	4RC68
0.12 gpm	2.5 gpm	Brass, Buna-N, SS, Viton	100 psi	225 °F	NEMA 4X	1 FNPT	FS6-W-1	4RC69
0.12 gpm	2.5 gpm	Brass, SS, Viton	100 psi	225 °F	NEMA 1	3/4 FNPT	FS6-3/4	1RF64
0.12 gpm	2.5 gpm	Brass, SS, Viton	100 psi	225 °F	NEMA 4X	3/4 FNPT	FS6-W-3/4	1RF65
<b>Liquid Flow Industrial/Heavy-Duty</b>								
4.8 gpm	7.7 gpm	Brass, Bronze, PTFE, SS	300 psi	300 °F	NEMA 1	1 1/4 MNPT	FS7-4	4RC70
4.8 gpm	7.7 gpm	Brass, Bronze, PTFE, SS	300 psi	300 °F	NEMA 4X	1 1/4 MNPT	FS7-4W	4RC72
4.8 gpm	7.7 gpm	Brass, Bronze, PTFE, SS	300 psi	300 °F	NEMA 7.9	1 1/4 MNPT	FS7-4E	4RC74
4.8 gpm	7.7 gpm	PTFE, SS	1,000 psi	300 °F	NEMA 1	1 1/4 MNPT	FS7-4S	4RC71
4.8 gpm	7.7 gpm	PTFE, SS	1,000 psi	300 °F	NEMA 4X	1 1/4 MNPT	FS7-4SW	4RC73
Type	For Use With			Includes		Item No.		
Bronze	4RC70 to 4RC74			1 Each of 1 1/4 in and 6 in Paddles		2RUL6		
Stainless Steel	4RC70 to 4RC74			1 Each of 1 1/4 in and 6 in Paddles		2RUL7		
Stainless Steel	2RUL3, 2RUL4			1 Each of 1 in, 2 in, 3 in, and 6 in Paddles		2RUL5		

