

Flo-Rite™ Series FR Flowmeters



KEY INSTRUMENTS

250 Andrews Road, Treose, PA 19053

800.356.7483 • 215.357.0893
Fax:215.357.9239

www.keyinstruments.com
e-mail:sales@keyinstruments.com

Series FR Flowmeters

FEATURES

- Easy-to-read English or Metric Scales
- Water ranges from 4 CCM to 20 GPM
Air ranges from 40 CCM to 4000 LPM
- Threaded brass inserts for quick installation
- Easy disassembly and assembly for maintenance
- Durable one-piece clear acrylic construction
- Stable, easy-to-read float
- Superior quality

APPLICATIONS

- Air sampling equipment
- Aquaculture
- Desalinization equipment
- Gas analyzers
- Medical systems
- Photoprocessing equipment
- Water treatment and distribution systems

SERIES FR2000 FLOW RATES

TABLE A **

RANGE	MODEL	RANGE	MODEL
SCFH OF AIR	CODE	LPM OF AIR	CODE
.1-1	2A00	.04-.5	2A12
.2-2	2A01	.1-1	2A13
.4-5	2A02	.2-2.5	2A29
1-10	2A03	.4-5	2A14
2-20	2A04	1-10	2A15
3-30	2A05	2-25	2A16
4-50	2A06	4-50	2A17
10-100	2A07	10-100	2A18
20-200	2A08	GPH OF WATER	
CCM OF WATER		.2-2	2L28
5-50	2L09	.4-5	2L19
10-100	2L10	1-10	2L20
20-240	2L11	2-20	2L21
		4-40	2L22

SERIES FR4000 FLOW RATES

TABLE B **

RANGE	MODEL	RANGE	MODEL
SCFH OF AIR	CODE	CCM OF WATER	CODE
.4-5	4A30	4-50	4L38
1-10	4A31	10-120	4L56
2-20	4A32	25-225	4L51
4-40	4A33	40-400	4L50
10-100	4A34	40-660	4L52
14-150	4A35	100-1500	4L53
20-200	4A36	200-3000	4L54
CCM OF AIR		300-3700	4L55
100-1000	4A39	GPH OF WATER	
LPM OF AIR		1-10	4L45
.4-5	4A40	2-25	4L48
1-10	4A41	4-50	4L49
2-20	4A42	6-60	4L46
3-30	4A43	SCFM OF AIR	
4-50	4A44	.3-3	4A37
10-100	4A47		

SERIES FR4500 FLOW RATES

TABLE C

RANGE	MODEL	RANGE	MODEL
SCFM OF AIR	CODE	GPM OF WATER	CODE
.5-5	4A67	.2-2.5	4L64
1-10	4A65	.4-5	4L66
*2-20	4A68	LPM OF WATER	
LPM OF AIR		.8-9	4L69
14-140	4A72	1.5-20	4L71
30-300	4A70	Dual scales: SCFM/SCFH, GPM/GPH, and LPM/LPH	
*60-560	4A73		

* Not Available with Valves

SERIES FR5000-S or V FLOW RATES

TABLE D

RANGE	MODEL	RANGE	MODEL
SCFM OF AIR	CODE	GPM OF WATER	CODE
3-25	5A50	.4-5	5L56
4-50	5A51	1-10	5L57
10-100	5A52	2-20	5L58
LPM OF AIR		LPM OF WATER	
100-700	5A53	1-19	5L59
100-1400	5A54	4-36	5L60
400-3400	5A55	5-75	5L61

SERIES FR5000-I FLOW RATES

TABLE E

RANGE	MODEL	RANGE	MODEL
SCFM OF AIR	CODE	GPM OF WATER	CODE
3-25	5A50	.4-5	5L56
4-50	5A51	1-10	5L57
10-100	5A52	2-20	5L58
LPM OF AIR		LPM OF WATER	
100-700	5A53	1-19	5L59
100-1400	5A54	4-36	5L60
400-4000	5A55	5-75	5L61

** Available with millimeter scales. Flow curves for a variety of gases and liquids for specific applications may also be ordered.

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



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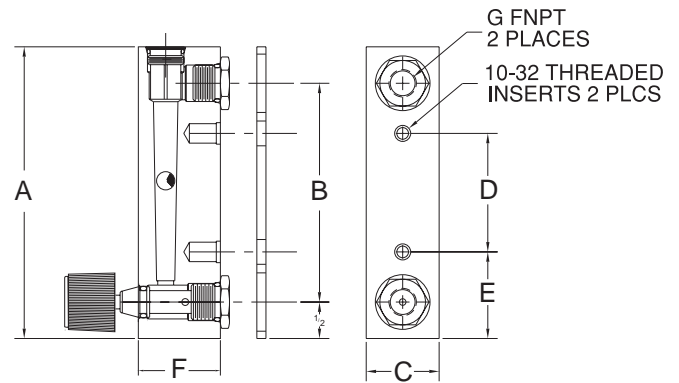
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Series FR Flowmeters

SPECIFICATIONS

ACCURACY:	MODEL FR2000 $\pm 5\%$ F.S. MODEL FR4000 & FR4500 $\pm 3\%$ F.S. MODEL FR5000 $\pm 2\%$ F.S.
FLOAT:	BLACK GLASS STAINLESS STEEL
BODY:	CLEAR ACRYLIC
SEALS:	BUNA-N "O" RINGS WITH BRASS OR PVC FITTINGS VITON "O" RINGS WITH STAINLESS STEEL FITTINGS
PRESSURE:	100 PSIG MAX
TEMPERATURE:	150°F/65°C MAX
FITTINGS:	BRASS, STAINLESS STEEL OR PVC FNPT PIPE CONNECTIONS
VALVES: (OPTIONAL)	MODEL FR2000/4000/4500 BRASS OR STAINLESS STEEL CARTRIDGE TYPE MODEL FR5000 INTEGRAL VALVE ON "V" MODELS INLINE GATE VALVE ON "S" & "I"

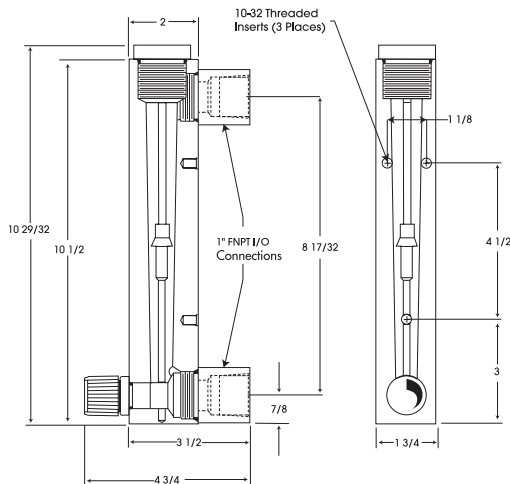
Series FR2000/FR4000/FR4500



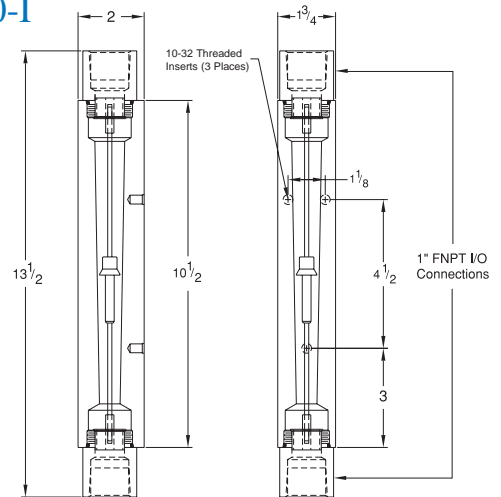
DIMENSIONS	INCHES MILLIMETERS (MM)						
	A	B	C	D	E	F	G
MODEL	4"	3"	1"	1-5/8"	1-3/16"	1-1/8"	1/8"
FR2000	(102)	(76.2)	(25.4)	(41.3)	(30.2)	(28.6)	
FR4000	6-1/2"	5-1/2"	1-3/8"	3-1/2"	1-1/2"	1-1/8"	1/8"
FR4500*	(165)	(140)	(34.9)	(88.9)	(38.1)	(28.6)	
FR4500*	6-5/8"	5-1/2"	1-1/8"	3-1/2"	1-1/2"	1-3/8"	1/4"
FR4500*	(168)	(140)	(28.6)	(88.9)	(38.1)	(34.9)	

* DOES NOT INCLUDE 1/8" BACK PLATE!

Series FR5000-S or V



Series FR5000-I



FR5000-S or V	PANEL MOUNT									
Inches	10-29/32	10-1/2	2	3-1/2	1"	8-17/32	7/8	1-1/8	4-1/2	3
Millimeters	273	267	50.8	88.9	1"	216	22.2	28.6	114	76.2

FR5000-I	IN-LINE							
Inches	13-1/2	2	10-1/2	1"	1-1/8	1-3/4	4-1/2	3
Millimeters	343	50.8	267	1"	28.6	44.5	114	76.2



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Ordering Chart

2 INCH / 4 INCH SCALE ORDERING EXAMPLE - FR2A04BVBN • FR4A39SNVT

FR	MODEL CODE FROM TABLES A, B & C	FITTINGS ¹	VALVE ²	SEALS ³

5 INCH SCALE ORDERING EXAMPLE - FR5A52PS • FR5A50PI • FR5A51PV

FR	MODEL CODE FROM TABLES D & E	FITTINGS MATERIAL ⁴	FITTING/VALVE ⁵

FITTINGS¹

B - Brass (std)
S - Stainless Steel

VALVE²

N - None
V - Valve

SEALS³

BN - Buna N (std with brass PVC fittings)
VT - Viton (std with stainless steel)
S - Special (specify compound)

**FITTING
MATERIAL⁴**

P - PVC (std)

FITTING/VALVE⁵

S - Back connections (std)
I - End connection
V - Valve(Back Connection Only)

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

FLO-RITE™ FLOWMETERS- OEM APPLICATIONS

KEY INSTRUMENTS offers a wide variety of precision rotameters for use in medical, industrial, chemical, and laboratory applications. Over twenty years of experience in the manufacture of acrylic flowmeters enables us to provide a large assortment of standard styles from stock at economical prices. Our production and engineering processes are flexible enough to allow us to meet most OEM and end user requirements.

We use a primary flow standard directly traceable to the NIST (National Institute of Standards and Technology), and have implemented stringent quality control procedures to assure you of receiving a quality product that is accurate and repeatable, yet economical.

Key Instrument's flowmeters have been engineered with built-in quality, designed for economy, and stocked in sufficient quantity to meet your immediate needs as well as your long term requirements.

For additional information regarding current prices, discounts or delivery status, call Customer Service at 1-800-356-7483.



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