

Low Volume Rotameter Flow Meter

Variable Area Flow Meter for Liquid or Gas



measuring
•
monitoring
•
analyzing

KFS



- Measuring ranges:
Water: 0.08 ... 0.8 GPH to 16 ... 160 GPH
Air: 0.08 ... 1 SCFH to 200 ... 1400 SCFH
- Accuracy:
 $\pm 2\% \dots 5\%$ of full scale
- p_{\max} 90 PSI; t_{\max} 145°F
- Connection:
 $\frac{1}{8} \dots 1$ " NPT female
- Material:
acrylic / stainless steel / PVC
- Needle valve (Standard with smaller sizes)



KOBOLD companies worldwide:

AUSTRALIA, AUSTRIA, BELGIUM, BULGARIA, CANADA, CHINA, CZECHIA, FRANCE, GERMANY, GREAT BRITAIN, HUNGARY, INDIA, INDONESIA, ITALY, MALAYSIA, MEXICO, NETHERLANDS, PERU, POLAND, REPUBLIC OF KOREA, RUSSIA, SPAIN, SWITZERLAND, THAILAND, TUNISIA, TURKEY, USA, VIETNAM

KOBOLD Instruments, Inc.
1801 Parkway View Drive
Pittsburgh, PA 15205
Main Office:
1.800.998.1020
1.412.788.4890
info@koboldusa.com
www.koboldusa.com



Low Volume Rotameter Flow Meter Model KFS

Description

The KFS variable area rotameter delivers accuracy at a low cost and is a simple and compact solution for a wide variety of applications. It offers a durable one-piece acrylic body with removable PVC or stainless steel fittings. Integral needle valves are also available.

Sample Areas of Application

- Air Sampling Equipment
- Aquaculture
- Desalination Equipment
- Gas Analyzers
- Medical Systems
- Photoprocessing Equipment
- Water Treatment and Distribution Systems

KFS Versions

1. KFS-22... and KFS-42...:
acrylic with stainless steel connection at the back
2. KFS-53...:
acrylic with PVC connection at top and bottom

Technical Details

See order details for additional technical details and ranges

Accuracy:

- KFS-2...:** ±5% of full scale
KFS-4...: ±3% of full scale
KFS-5...: ±2% of full scale

Max. Temperature: 145 °F

Max. Pressure: 90 PSI

Connection:

KFS-2 and KFS-4
 ¼" NPT female at the back: measuring ranges 69, 70, 73
 ½" NPT female at the back: all other ranges

Accessories: hose connector PPH, white, straight for ¼" hose diameter

KFS-5...: 1" NPT female at bottom and top

Materials

Wetted Parts	KFS-22 + KFS-42	KFS-53
Housing	Acrylic	Acrylic
Connection	St. steel	PVC
Gasket	FPM	NBR
Float	Glass, St. steel, PTFE	St. steel

Glass: agate

Stainless steel: 304 SS (1.4301)



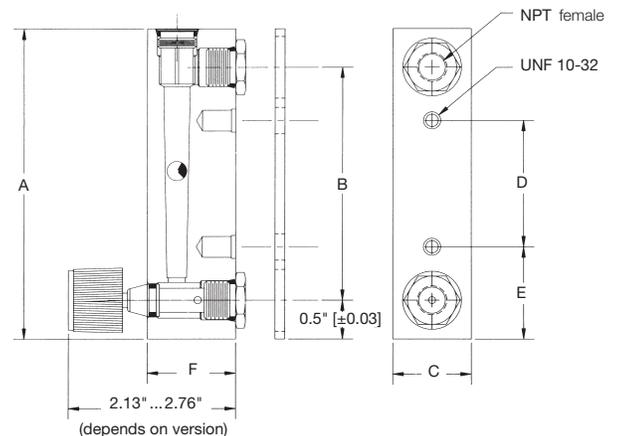
Options

Stainless steel needle valves are standard for models KFS-2... and KFS-4...

The KFS-5... is available an optional panel installation kit. Please note that in this case the connections are in back.

Dimensions KFS-2... and KFS-4...

Model	A [±0.02]	B [±0.02]	C [±0.02]	D [±0.01]	E [±0.02]	F [±0.02]
KFS-2...	4.02"	3.00"	1.00"	1.63"	1.19"	1.13"
KFS-4... (½)	6.50"	5.52"	1.38"	3.50"	1.50"	1.13"
KFS-4... (¼)	6.62"	5.52"	1.13"	3.50"	1.50"	1.13"



	Weight (oz)*		
	KFS-2...	KFS-4...	KFS-5...
net	4.8	8.2	9.7
w. packing	5.5	9.3	10.8

* includes back plate for KFS-2/KFS-4 (not for KFS-5)

Order Details

Model KFS-2... (overall length 4", connection at the back, accuracy $\pm 5\%$ of full scale)

Air* Measuring Range Dual Scale		Float Material	Stainless Steel Connection	Option
0.04 ... 0.5 l/min	0.08 ... 1 SCFH	Glass	KFS-2212	NO = needle valve
0.1 ... 1 l/min	0.2 ... 2 SCFH	Glass	KFS-2213	
0.2 ... 2.5 l/min	0.6 ... 6 SCFH	Glass	KFS-2229	
0.4 ... 5 l/min	1 ... 10 SCFH	Glass	KFS-2214	
1 ... 10 l/min	2 ... 20 SCFH	St. steel	KFS-2215	
2 ... 25 l/min	5 ... 50 SCFH	St. steel	KFS-2216	
5 ... 80 l/min	10 ... 160 SCFH	St. steel	KFS-2219	

* at 1 bar abs., 20 °C

Model KFS-4... (overall length 6.5", connection at the back, accuracy $\pm 3\%$ of full scale)

Measuring Range (Water) Dual Scale		Float Material	Stainless Steel Connection	Air* Measuring Range Dual Scale		Float Material	Stainless Steel Connection	Option
4 ... 50 cm ³ /min	0.08 ... 0.8 GPH	Glass	KFS-4238	0.4 ... 5 l/min	1 ... 10 SCFH	Glass	KFS-4240	NO = needle valve
10 ... 120 cm ³ /min	0.1 ... 2 GPH	Glass	KFS-4256	1 ... 10 l/min	2 ... 20 SCFH	St. steel	KFS-4241	
25 ... 225 cm ³ /min	0.4 ... 4 GPH	St. steel	KFS-4251	2 ... 20 l/min	4 ... 40 SCFH	St. steel	KFS-4242	
40 ... 400 cm ³ /min	0.6 ... 6 GPH	St. steel	KFS-4250	3 ... 30 l/min	6 ... 60 SCFH	Glass	KFS-4243	
40 ... 660 cm ³ /min	1 ... 10 GPH	PTFE	KFS-4252	4 ... 45 l/min	10 ... 100 SCFH	St. steel	KFS-4244	
100 ... 1500 cm ³ /min	2.5 ... 25 GPH	St. steel	KFS-4253	10 ... 100 l/min	20 ... 200 SCFH	St. steel	KFS-4247	
200 ... 3000 cm ³ /min	3 ... 50 GPH	St. steel	KFS-4254	25 ... 255 l/min**	55 ... 550 SCFH	St. steel	KFS-4270**	
300 ... 3700 cm ³ /min	5 ... 60 GPH	St. steel	KFS-4255	50 ... 560 l/min**	100 ... 1200 SCFH	St. steel	KFS-4273**	
1 ... 10 l/min **	16 ... 160 GPH	St. steel	KFS-4269**					

* at 1 bar abs., 20 °C

** Connection: 1/4" NPT female at the back, cannot be combined with hose connector set KFS-PPH W 024

Model KFS-5... (overall length 13.5", accuracy $\pm 2\%$ of full scale)

Air Measuring Range (at 1 bar abs., 20 °C)	Float Material	PVC Connection	Option
100 ... 700 l/min 200 ... 1400 SCFH	St. steel	KFS-5353	00 = no option

Accessories

Order Code	Description	Picture
KFR-PPHW024	Hose Connector set, PP, 1/8" NPT x 1/4", straight	
KFR-PAHW032	Hose Connector set, PA, 1/4" NPT x 5/16", straight	
KFR-PAVW032	Hose Connector set, PA, 1/4" NPT x 5/16", angled	



Low Volume Rotameter Flow Meter Model KFS

Dimensions: KFS-5...

