

Data Sheet



Model 1305

O-ring Seal Flowmeter Model 1305

Variable Area

O-ring Seal Construction Glass Tube Variable Area Flowmeters

Description

The Brooks® Model 1305 glass tube flowmeters provide a low cost means of flow rate indication. They are designed for applications where the metering accuracy requirements are not severe. These meters are ideal for purge type service, seal oil systems, bearing lubrication and cooling water indication. Model 1305 is available with vertical inlets and outlets and standard materials of construction only.

Features

- Capacity ranges 0.8 to 25 gpm; 3 to 50 scfm
- O-ring seal construction
- Sturdy bolted side-plate construction
- Standard NPT connections
- Vertical inlets and outlets standard

Product Specifications

Capacities and Pressure Drops	See Capacities Table
Max Working Pressure* at 250°F/121°C	Size 8: 200 psig; size 10: 150 psig
PED Category	SEP
Standard Flow Accuracy	±10% Full Scale from 100% to 10% of scale reading
Optional Flow Accuracy	±5% Full Scale from 100% to 10% of scale reading
Repeatability	1% Full Scale
Scale Length	75mm (3")
Scale Graduations	Std.: On-tube printed scale (Linear scale, direct reading gpm water or scfm air) Opt.: Detachable printed scale (Choice of direct reading units, millimeter or percentage of maximum flow with factor tag)
Ambient Temperature Limits	33 to 125°F (1°C to 52°C)
Operating Fluid Temperature Limits	Maximum: 250°F (121°C); Minimum: 33°F (1°C)
Connections	Standard: Female NPT
Connection Orientation	Vertical inlets and outlets
Dimensions	See Dimensions Figure
Materials of Construction	
Metering Tube	Borosilicate glass
Protective Tube Sleeve	UV stabilized polycarbonate
Window	Scratch resistant, UV stabilized polycarbonate
Float & Float Stops	316 stainless steel
Housing	Aluminum side plates
End Fittings	Brass, 316 stainless steel
O-rings	Buna-N, Viton®-A fluoroelastomers
Bolts	300 series stainless steel

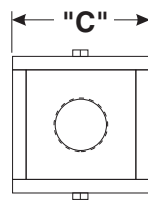
Product Specifications - Capacities

METER SIZE	TUBE	WATER			AIR @ STP		
		FLOAT	GPM	PRESSURE DROP INCHES W.C.	FLOAT	SCFM	PRESSURE DROP INCHES W.C.
8	R-8M-75-1	8-RV-8	0.80	8.0	8-RV-8	3.00	9.0
		8-RJ-10	1.50	9.0	8-RJ-10	6.00	11.0
		8-RJ-23	2.50	13.0	8-RJ-23	10.00	15.0
		8-RJ-30	3.50	19.0	8-RJ-30	14.00	22.0
		8-RJ-39	5.00	34.0			
10	R-10M-75-3	10-RJ-80	10.00	18.0	10-RJ-37	24.00	18.0
		10-RJ-120	15.00	35.0	10-RJ-83	35.00	35.0
		10-RJ-180	25.00	71.0	10-RJ-90	50.00	71.0

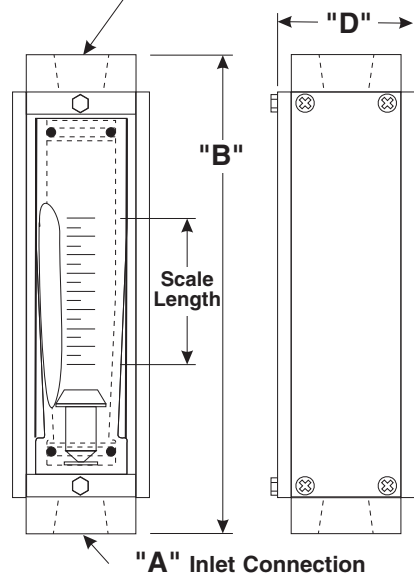
NOTE: ALL AIR FLOWS ARE AT 14.7 PSIA AND 70 DEG F

Product Dimensions

Top View



"A" Outlet Connection



Front View

Side View

Approximate Dimensions 1305 Flow Indicators					
Meter Size	Scale Length	"A" (Conn. Size)	"B"	"C"	"D"
8	75 mm	1/2" NPT	7-3/4" (196.85)	2-3/8" (60.33)	2-3/8" (60.33)
10	75 mm	1" NPT	7-3/4" (196.85)	2-3/8" (60.33)	2-3/8" (60.33)

DIMENSIONS
INCHES (mm)

Model Code

Code Description		Code Option	Option Description		
I. Base Model Numbers		1305F	Threaded		
II. Tube Designator		J1	R-8M-75-1		
		L1	R-10M-75-3		
III. Float Designator			Size 8	Size 10	
		2C	8-RV-8	-	
		5C	-	10-RJ-37	
		6C	-	10-RJ-80	
		7C	-	10-RJ-83	
		8C	8-RJ-10	10-RJ-90	
		9C	8-RJ-23	10-RJ-120	
		AC	8-RJ-30	10-RJ-180	
		BC	8-RJ-39		
IV. Scale (see note 1)		C2	0-100 LINEAR on tube		
		J2	GPM WATER SP. GR . 1.0, VISC 1.0 CP on tube		
		L2	SCFM AIR @ STP on tube		
			The following selections are detachable		
		M1	Special inscription (special calibration not required)		
		N1	Special calibration with scale 10% F.S. GAS (see note 2)		
		N3	Special calibration with scale 10% F.S. LIQUID (see note 2)		
		P1	Special calibration with scale 5% F.S. GAS		
		P3	Special calibration with scale 5% F.S. LIQUID		
V. Materials of Construction (see note 3)			Fitting	O-ring	Side Plates
		A	Brass	Buna	Aluminum
		B	316 Stainless Steel	Viton	Aluminum
		C	316 Stainless Steel	Viton	Stainless Steel
		D	316 Stainless Steel	Buna	Aluminum
		E	Brass	Viton	Aluminum
VI. Accessories		A	None		

Notes:

1 Selections C2, J2 and L2 are standard size 8 & 10

2 Specify only if NIST certification is required.

Sample Standard Model Code

I	II	III	IV	V	VI
1305F	J1	9C	C2	A	A

Approximate Shipping Weight (lbs.)

MODEL	SIZE	
	8	10
1305	7	5

Brooks Service and Support

Brooks is committed to assuring all of our customers receive the ideal flow solution for their application, along with outstanding service and support to back it up. We operate first class repair facilities located around the world to provide rapid response and support. Each location utilizes primary standard calibration equipment to ensure accuracy and reliability for repairs and recalibration and is certified by our local Weights and Measures Authorities and traceable to the relevant International Standards.

Visit www.BrooksInstrument.com to locate the service location nearest to you.

START-UP SERVICE AND IN-SITU CALIBRATION

Brooks Instrument can provide start-up service prior to operation when required. For some process applications, where ISO-9001 Quality Certification is important, it is mandatory to verify and/or (re)calibrate the products periodically. In many cases this service can be provided under in-situ conditions, and the results will be traceable to the relevant international quality standards.

CUSTOMER SEMINARS AND TRAINING

Brooks Instrument can provide customer seminars and dedicated training to engineers, end users, and maintenance persons.

Please contact your nearest sales representative for more details.

HELP DESK

In case you need technical assistance:

Americas	☎ 1 888 554 FLOW
Europe	☎ +31 (0) 318 549 290
Asia	☎ +81 3 (0) 5633 7100

Due to Brooks Instrument's commitment to continuous improvement of our products, all specifications are subject to change without notice.

DS-VA-1305-eng (0414)

TRADEMARKS

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