



Model 1305

GT130x Series Flowmeter Model 1305

Variable Area

Glass Tube Variable Area Flowmeters O-ring Seal Construction

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	Refer to Pressure/Temperature Ratings Tables
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	Refer to Pressure/Temperature Ratings Tables
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

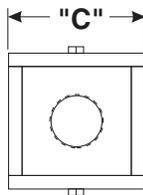
Product Specifications - Capacities

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	12.00	18.0	10-RJ-37	24.00	18.0
		10-RJ-180	21.00	71.0	10-RJ-83	35.00	35.0
					10-RJ-90	50.00	71.0

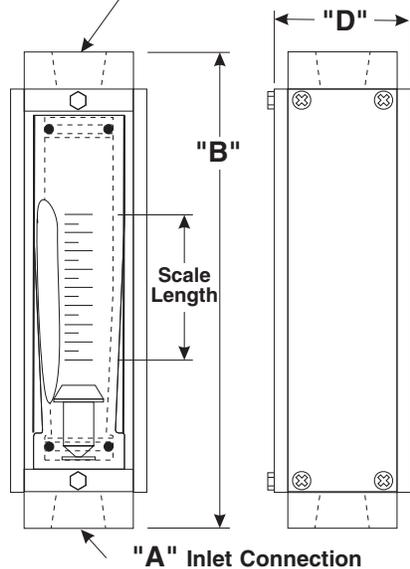
NOTE: ALL AIR FLOWS ARE AT 14.7 PSIA AND 70 DEG F

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)

Product Specifications - Pressure and Temperature Ratings

Pressure Rating for Female Threaded 1305 Units					
Meter Size	Max. Operating Pressure		PED	Max. Operating Temperature	
	PSIG	Bar		°F	°C
#8	200	13.8	SEP	250	121
#10	150	10.3	SEP	250	121

Pressure Rating for Female Threaded 1305 Units <u>With CRN Approval</u>					
Meter Size	Max. Operating Pressure		PED	Max. Operating Temperature	
	PSIG	Bar		°F	°C
#8	145	10	SEP	250	121
#10	94	6.5	SEP	250	121

Model Code

Code	Description	Code Option	Option Description
I-V	Base Model Numbers	1305F	Threaded
VI-VII	Tube Designator		Size
		J1	8
		L1	10
		J4	8 w/CRN
			Tube No.
		L4	10 w/CRN
			R-8M-75-1
			R-10M-75-3
			R-8M-75-1
			R-10M-75-3
VIII-IX	Float Designator		Size 8
		2C	8-RV-8
		5C	-
		6C	-
		7C	-
		8C	8-RJ-10
		9C	8-RJ-23
		AC	8-RJ-30
	BC	8-RJ-39	
			Size 10
			-
			10-RJ-37
			10-RJ-80
			10-RJ-83
			10-RJ-90
			-
			10-RJ-180
			-
X-XI	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
		N3	Special calibration with scale 10% F.S. LIQUID
		P1	Special calibration with scale 5% F.S. GAS
	P3	Special calibration with scale 5% F.S. LIQUID	
XII	Materials of Construction		Fitting
		A	Brass
		B	316 Stainless Steel
		C	316 Stainless Steel
		D	316 Stainless Steel
	E	Brass	
		O-ring	
		Buna	
		Viton	
		Viton	
		Buna	
		Viton	
		Side Plates	
		Aluminum	
		Aluminum	
		Stainless Steel	
		Aluminum	
		Aluminum	
XIII	Accessories	A	None

Notes:

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

1305 Meter Weight - Sizes 8/10

Material of Construction	Connection Type
	NPT-F
Brass/Aluminum	1.3 kg / 2.9 lbs
Stainless Steel	1.7 kg / 3.8 lbs

Sample Standard Model Code

I-V	VI-VII	VIII-IX	X-XI	XII	XIII
1305F	J1	2C	C2	A	A

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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.

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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.

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