

Data Sheet



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

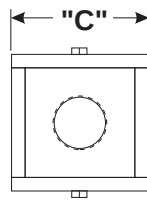
Product Specifications - Capacities

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	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

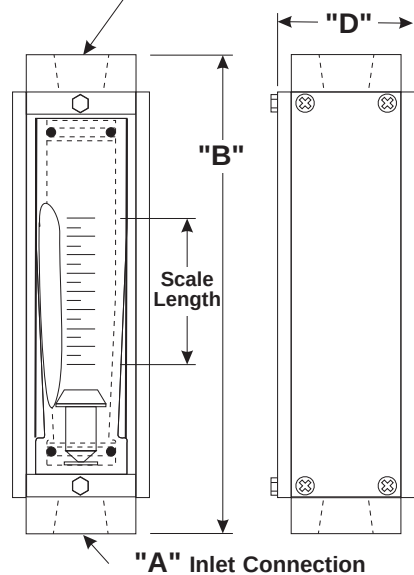
NOTE: ALL AIR FLOWS ARE AT 14.7 PSIA AND 70 DEG F

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)

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 With CRN Approval					
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	Tube No.	
		J1	8	R-8M-75-1	
		L1	10	R-10M-75-3	
		J4	8 w/CRN	R-8M-75-1	
		L4	10 w/CRN	R-10M-75-3	
VIII-IX	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	-	
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	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
XIII	Accessories	A	None		

Notes:

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

1305 Meter Weight - Sizes 8/10

Sample Standard Model Code

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

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

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BROOKS
INSTRUMENT

Data Sheet

GT130x Series Flowmeter Model 1306

Variable Area

Model 1306
NPT,
Standard



Model 1306
Flanged,
FV Retrofit



Glass Tube Variable Area, O-ring Seal Construction, Full-View® Replacement Flowmeters

Description

Model 1306 O-ring seal flowmeters are rugged, economical, accurate indicating flowmeters for liquids and gasses and can be a "drop-in" replacement for many Full-View® models.

Features

- Rugged side-plate construction - protects glass tube from piping stress and/or vibration
- O-ring seal - inlet and outlet same size - positive seal - easy to maintain
- Choice of float types and capacity ranges - broad range of flow rates
- Vertical or horizontal NPT/flanged connections - meter can be easily adapted to customer piping
- Model 1100 Series (Full-View) replacement

Product Specifications

Capacities and Pressure Drops	See Capacities Table
Pressure Ratings	Refer to Pressure/Temperature Ratings Tables
Flow Accuracy	Standard: $\pm 2\%$ Full Scale, Class 2.5 acc VDI/VDE Optional: $\pm 1\%$ Full Scale, Class 1.6 acc VDI/VDE
Repeatability	0.5% Full Scale
Scale Length	150mm
Scale Graduations	Direct reading, engraved detachable metal plate
Ambient Temperature Limits	33 to 125°F (1°C to 52°C)
Operating Fluid Temperature Limits	Refer to Pressure/Temperature Ratings Tables
Connections	Female NPT, Rc/150# flange - vertical or horizontal
Dimensions	See Dimensions Figure
Materials of Construction	
Metering Tube	Borosilicate glass
Protective Tube Sleeve	UV stabilized polycarbonate
Window	Scratch resistant, UV stabilized polycarbonate (stainless steel frames standard with stainless steel side plates)
Floats & Float Stops	Glass, sapphire, 316 stainless steel or carboloy
Housing	Aluminum, stainless steel side plates (stainless steel standard Full-View replacement)
End Fittings	Brass or 316 stainless steel
O-rings/Packing	Buna-N, Viton®-A fluoroelastomers, Kalrez® 4079 perfluoroelastomers (Sizes 7-10); Neoprene, Viton® or Teflon® packing (Sizes 2-6)
Optional Equipment	Mountings: Brackets for flush or front of panel
	Valves: Available for connection sizes 1/2" through 1" only. Piped in outlet or inlet

Product Specifications - Capacities

Size	Tube	Float	Model Code	Water ²		Pressure Drop		V.I.C. ¹		Air ³		Pressure Drop	
				cc/min	l/h	kPa / inch W.C.	cSt	slpm	nm3/h	kPa / inch W.C.			
2	R-2-15-AAAA	316SS	BA	2.5	0.15	0.17 / 0.7	1.0	0.15	0.0087	0.19 / 0.8			
		GLASS	BB	0.57	0.034	0.08 / 0.3	1.0	0.05	0.0028	0.08 / 0.3			
		SAPPHIRE	BC	1.1	0.067	0.09 / 0.4	1.0	0.079	0.0044	0.1 / 0.4			
		CARBOLOY	BD	5	0.3	0.27 / 1.1	1.0	0.28	0.015	0.3 / 1.2			
2	R-2-15-D	316SS	BE	20	1.2	0.22 / 0.9	1.0	0.82	0.046	0.24 / 1.0			
		GLASS	BF	5.5	0.33	0.08 / 0.3	1.0	0.36	0.021	0.08 / 0.3			
		SAPPHIRE	BG	10	0.63	0.1 / 0.4	1.0	0.51	0.028	0.11 / 0.4			
		CARBOLOY	BH	33	1.9	0.38 / 1.5	1.0	1.2	0.068	0.42 / 1.7			
2	R-2-15-B	316SS	BJ	130	8	0.45 / 1.8	1.0	4.6	0.26	0.51 / 2.0			
		GLASS	BK	53	3.1	0.16 / 0.6	1.0	2.3	0.13	0.18 / 0.7			
		SAPPHIRE	BL	79	4.7	0.21 / 0.8	1.0	3	0.17	0.23 / 0.9			
		CARBOLOY	BM	200	12	0.75 / 3.0	1.0	6.6	0.37	0.51 / 2.0			
2	R-2-15-C	316SS	BN	210	13	0.85 / 3.4	1.0	7.5	0.42	1.1 / 4.4			
		GLASS	BP	84	5	0.28 / 1.1	1.0	3.8	0.21	0.34 / 1.4			
		SAPPHIRE	BQ	120	7.7	0.41 / 1.7	1.0	5	0.28	0.51 / 2.0			
		CARBOLOY	BR	320	19	1.51 / 6.1	1.0	10	0.59	1.2 / 4.8			
6	R-6-15-A	316SS	CA	490	29	1.53 / 6.1	1.0	16	0.92	1.7 / 6.8			
		GLASS	CB	200	12	0.45 / 1.8	1.0	8.7	0.48	0.5 / 2.0			
		SAPPHIRE	CC	290	17	0.72 / 2.9	1.0	11	0.62	0.8 / 3.2			
		CARBOLOY	CD	720	43	2.61 / 10.5	1.0	23	1.2	2.9 / 11.6			
6	R-6-15-B	316SS	CE	1300	81	7.5 / 30.1	1.0	43	2.4	8.3 / 33			
		GLASS	CF	570	34	2.34 / 9.4	1.0	23	1.3	2.6 / 10.4			
		SAPPHIRE	CG	840	50	3.7 / 14.9	1.0	30	1.6	4.1 / 16.5			
		CARBOLOY	CH	1900	110	14.4 / 57.8	1.0	61	3.4	16 / 64			
Size	Tube	Float	Model Code	l/h	gph	kPa / inch W.C.	cSt	scfm	nm3/h	kPa / inch W.C.			
7	R-7M-127-1F	Glass	A1	24	6.40	0.25/1.0	1	0.72	1.1	0.25/1.0			
		316 SS	A3	73	19	0.75/3.0	1	1.3	2.1	0.75/3.0			
8	R-8M-127-4F	8-RV-3	DB	160	43	0.5/2.0	3	2.8	4.4	0.75/3.0			
		8-RV-8	DC	220	59	1.25/5.0	4	4	6.4	1.5/6.0			
		8-RS-8	DD	290	79	2/8.0	2	5.2	8.3	2/8.0			
		8-RV-14	DE	300	81	2/8.0	7	5.3	8.4	2.5/10.0			
		8-RS-14	DF	380	100	3/12.0	3	6.7	10	3.25/13.0			
		8-RV-31*	DG	400	100	6/24.0	7	6.8	10	7/28.0			
		8-RS-31*	DH	500	130	8.25/33.0	3	8.4	13	9.25/37.0			
10	R-10M-127-3F	10-RV-15	GA	610	160	0.5/2.0	12	11	17	0.5/2.0			
		10-RV-30	GB	830	220	1/4.0	13	15	23	1/4.0			
		10-RV-64	GC	1300	360	2.25/9.0	20	24	38	2.5/10.0			
		10-RS-64	GD	1700	450	3/12.0	5	30	48	3.25/13.0			
		10-RS-138*	GF	2200	590	7.25/29.0	5	39	61	8.25/33.0			

* These floats require a back pressure of 30 psig / 2 bar

¹ Viscosity Immunity Ceiling

² Water flows @ 20°C

³ Air flows in scfm or slpm are @ 70°F & 14.7 psia; Air flows in mn 3/h (0°C&1.013bar(a)) measured @ 20°C & 1.013bar(a)

Product Specifications - Pressure and Temperature Ratings

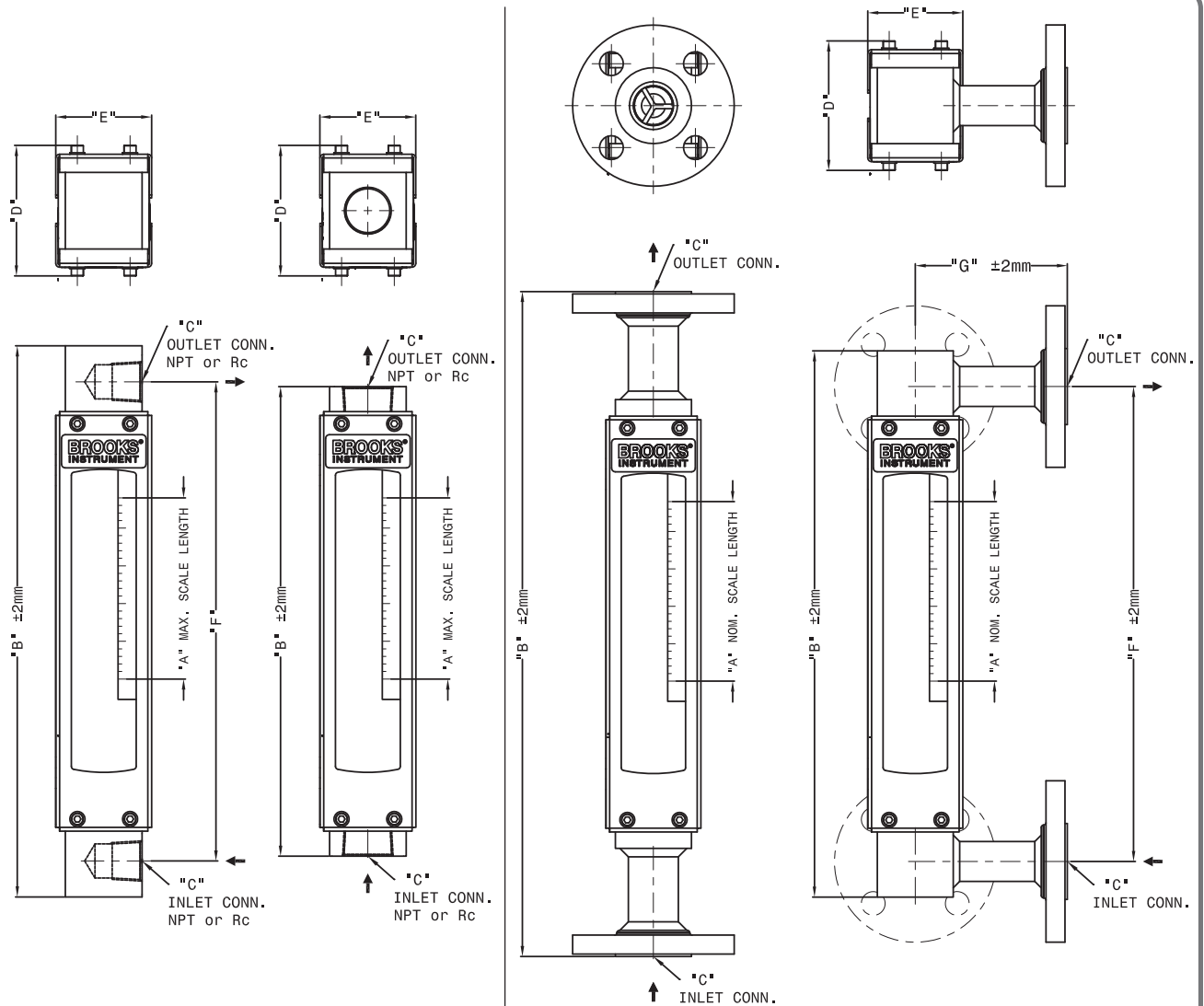
Pressure Rating for Female Threaded 1306 Units					
Meter Size	Max. Operating Pressure		PED	Max. Operating Temperature	
	PSIG	Bar		°F	°C
#2	500	34.5	SEP	250	121
#6	450	31	SEP	250	121
#7	350	24	SEP	250	121
#8	300	20.7	SEP	250	121
#9/10	100	6.9	SEP	250	121

(Values apply to unit with valve - sizes 7-10)

Pressure Rating for Female Threaded & Flanged (150#) 1306 Units With CRN Approval					
Meter Size	Max. Operating Pressure		PED	Max. Operating Temperature	
	PSIG	Bar		°F	°C
#2	217	15	SEP	250	121
#6	145	10	SEP	250	121
#7	152	10.5	SEP	250	121
#8	116	8	SEP	250	121
#9/10	80	5.5	SEP	250	121

Pressure Rating for Flanged (150#) 1306 Units					
Meter Size	Max. Operating Pressure @ 70°F/21°C		PED	Max. Operating Pressure @ 250°F/121°C	
	PSIG	Bar		PSIG	Bar
#2	276	19	SEP	226	15.6
#6	276	19	SEP	226	15.6
#7	276	19	SEP	226	15.6
#8	276	19	SEP	226	15.6
#9/10	100	6.9	SEP	100	6.9

Product Dimensions



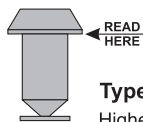
MODEL GT 1306 WITH NPT or Rc CONNECTION

METER SIZE	REPLACE- MENT OF	A	B	C	D	E	F
SIZE 2/6 (NPT ONLY)	-	150	245	1/4"	69	54	-
	1110	150	245	1/4"	80	58	218
	1114	150	245	1/4"	80	58	-
SIZE 7	-	150	299	1/2"	87	64	-
	-	150	299	1/2"	87	64	-
SIZE 8	1110	150	333	1/2"	87	64	292
	1114	150	305	1/2"	87	64	-
	-	150	300	1"	87	64	-
SIZE 9	1110	150	365	3/4"	87	64	318
	1114	150	311	3/4"	87	64	-
	-	150	300	1"	87	64	-
SIZE 10	1110	150	365	3/4"	87	64	318
	1114	150	311	1"	87	64	-

MODEL GT 1306 WITH FLANGED CONNECTION

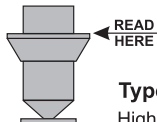
METER SIZE	REPLACE- MENT OF	A	B	C	D	E	F	G
SIZE 2/6	1140	150	245	1/2"-150LBS	80	58	218	89
	1144	150	378	1/2"-150LBS	80	58	-	-
SIZE 8	1140	150	333	1/2"-150LBS	87	64	292	89
	1144	150	454	1/2"-150LBS	87	64	-	-
SIZE 9	1140	150	365	1"-150LBS	87	64	318	102
	1144	150	451	1"-150LBS	87	64	-	-
SIZE 10	1140	150	365	1"-150LBS	87	64	318	102
	1144	150	445	1"-150LBS	87	64	-	-

Float Types



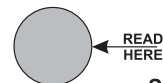
Type RV (rib guided)

Highest immunity to viscous fluids with medium meter capacity. (most stable)



Type RS (rib guided)

High flow capacity with some immunity to viscous fluids.



Spherical (Ball)

Lowest meter capacity or medium capacity with low viscosity fluids.

Model Code

Code	Description	Code Option	Option Description			
I-V	Base Model Number	1306B	O-ring seal flowmeter, scale length 150mm			
VI-VII	Tube & Float Designator	**	To be selected from the flow range/capacities table			
VIII	Fitting Material	1	Brass			
		2	316 Stainless Steel			
		3	316 Stainless Steel FV retrofit (Size 2, 6, 8, 10 retrofit)			
		4	316 Stainless Steel FV retrofit (Size 9 retrofit)			
		5	316 Stainless Steel w/CRN			
		6	316 SS w/CRN FV retrofit (Size 2, 6, 8, 10 retrofit)			
		7	316 SS w/CRN FV retrofit (Size 9 retrofit)			
IX	O-ring Material	1	Viton			
		2	Buna			
		3	Kalrez			
		4	Neoprene			
		5	Teflon			
X	Connection Type		Meter Type	Conn.	In	Out
		1	Std	NPT	Vertical	Vertical
		2	Std	Rc	Vertical	Vertical
		A	FV Retrofit Only	NPT	Horizontal	Horizontal
		B	FV Retrofit Only	NPT	Vertical	Vertical
		C	FV Retrofit Only	NPT	Horizontal	Vertical
		D	FV Retrofit Only	NPT	Vertical	Horizontal
		E	FV Retrofit Only	Flanged	Horizontal	Horizontal
		F	FV Retrofit Only	Flanged	Vertical	Vertical
		G	FV Retrofit Only	Flanged	Horizontal	Vertical
H	FV Retrofit Only	Flanged	Vertical	Horizontal		
XI	Scale Type	C	DR Scale mm, Class 2.5/2% FS			
		D	DR Scale mm, Class 1.6/1% FS			
		G	DR Scale + factor, Class 2.5/2% FS			
		H	DR Scale + factor, Class 1.6/1% FS			
		L	DR Scale, Class 2.5/2% FS			
		M	DR Scale, Class 1.6/1% FS			
		N	DR Scale, Class 2.5/2% FS Dual Scales			
		P	DR Scale, Class 1.6/1% FS Dual Scales			
XII	Panel Mounting	0	None			
		1	Front panel mounting			
		2	Flush panel mounting			
XIII	Valve	0	None			
		B	1/2" 316 Stainless Steel needle valve on inlet			
		D	1" 316 Stainless Steel needle valve on inlet			
		F	1/2" 316 Stainless Steel needle valve on outlet			
		H	1" 316 Stainless Steel needle valve on outlet			

Sample Standard Model Code

I-V	VI-VII	VIII	IX	X	XI	XII	XIII
1306B	A1	1	1	1	A	1	B

Model 1306 - Meter Weight: (Lbs./kg)

Meter Size	Connection Type		
	NPT/RC	NPT With Valve	Flanged (150#)
#2/6	5.51 Lbs / 2.5 kg	N/A	7.72 Lbs / 3.5 kg
#7/8	7.72 Lbs / 3.5 kg	8.82 Lbs / 4.0 kg	9.92 Lbs / 4.5 kg
#9/10	9.26 Lbs / 4.2 kg	11.46 Lbs / 5.2 kg	13.45 Lbs / 6.1 kg

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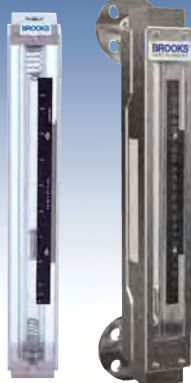
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Data Sheet

GT130x Series Flowmeter Model 1307

Variable Area

*Model 1307
NPT,
Standard*



*Model 1307
Flanged,
FV Retrofit*

Glass Tube Variable Area, O-ring Seal Construction, Full-View® Replacement Flowmeters

Description

Model 1307 O-ring seal flowmeters are rugged, economical, accurate indicating flowmeters for liquids and gasses and can be a "drop-in" replacement for many Full-View® models.

Features

- Rugged side-plate construction - protects glass tube from piping stress and/or vibration
- O-ring seal - inlet and outlet same size - positive seal - easy to maintain
- Choice of float types and capacity ranges - broad range of flow rates
- Vertical or horizontal NPT/flanged connections - meter can be easily adapted to customer piping
- Model 1100 Series (Full-View) replacement

Product Specifications

Capacities and Pressure Drops	See Capacities Table
Pressure Ratings	Refer to Pressure/Temperature Ratings Tables
Flow Accuracy	Standard: $\pm 2\%$ Full Scale, Class 2.5 acc VDI/VDE Optional: $\pm 1\%$ Full Scale, Class 1.6 acc VDI/VDE
Repeatability	0.5% Full Scale
Scale Length	250mm
Scale Graduations	Direct reading, engraved detachable metal plate
Ambient Temperature Limits	33 to 125°F (1°C to 52°C)
Operating Fluid Temperature Limits	Refer to Pressure/Temperature Ratings Tables
Connections	Female NPT/150# flange - vertical or horizontal
Dimensions	See Dimension Figures
Materials of Construction	
Metering Tube	Borosilicate glass
Protective Tube Sleeve	UV stabilized polycarbonate
Window	Scratch resistant, UV stabilized polycarbonate (stainless steel frames standard with stainless steel side plates)
Floats & Float Stops	Glass, sapphire, 316 stainless steel or carboloy
Housing	Aluminum, stainless steel side plates (stainless steel standard Full-View replacement)
End Fittings	Brass or 316 stainless steel
O-rings/Packing	Buna-N, Viton®-A fluoroelastomers, Kalrez® 4079 perfluoroelastomers (Sizes 8-10) Neoprene, Viton® or Teflon® packing (Sizes 2, 6)
Optional Equipment	Mountings: Brackets for front of panel

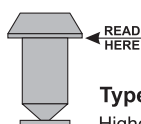
Product Specifications - Pressure and Temperature Ratings

Pressure Rating for Female Threaded 1307 Units					
Meter Size	Max. Operating Pressure		PED	Max. Operating Temperature	
	PSIG	Bar		°F	°C
#2	500	34.5	SEP	250	121
#6	450	31	SEP	250	121
#8	300	20.7	SEP	250	121
#9	175	12.1	SEP	250	121
#10	100	6.9	SEP	250	121

Pressure Rating for Female Threaded & Flanged (150#) 1307 Units With CRN Approval					
Meter Size	Max. Operating Pressure		PED	Max. Operating Temperature	
	PSIG	Bar		°F	°C
#2	217	15	SEP	250	121
#6	217	15	SEP	250	121
#8	94	6.5	SEP	250	121
#9	72	5	SEP	250	121
#10	72	5	SEP	250	121

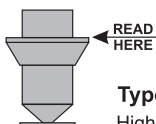
Pressure Rating for Flanged (150#) 1307 Units					
Meter Size	Max. Operating Pressure @ 70°F/21°C		PED	Max. Operating Pressure @ 250°F/121°C	
	PSIG	Bar		PSIG	Bar
#2	276	19	SEP	226	15.6
#6	276	19	SEP	226	15.6
#8	276	19	SEP	226	15.6
#9	175	12.1	SEP	175	12.1
#10	100	6.9	SEP	100	6.9

Float Types



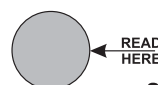
Type RV (rib guided)

Highest immunity to viscous fluids with medium meter capacity. (most stable)



Type RS (rib guided)

High flow capacity with some immunity to viscous fluids.



Spherical (Ball)

Lowest meter capacity or medium capacity with low viscosity fluids.

Product Specifications - Capacities

Size	Tube	Float	Water ²		Presures Drop	V.I.C. ¹	Air ³		Presures Drop
			cc/min	l/h	kPa / inch W.C.	cSt	slpm	nm3/h	kPa / inch W.C.
2	R-2-25-D	GLASS	5.6	0.33	0.08 / 0.3	1.0	0.36	0.02	0.08 / 0.3
		SAPPHIRE	10	0.61	0.1 / 0.4	1.0	0.5	0.028	0.11 / 0.4
		316SS	20	1.2	0.22 / 0.9	1.0	0.8	0.045	0.24 / 1.0
		CARBOLOY	32	1.9	0.38 / 1.5	1.0	1.2	0.067	0.42 / 1.7
2	R-2-25-B	GLASS	49	2.9	0.16 / 0.6	1.0	2.2	0.12	0.18 / 0.7
		SAPPHIRE	74	4.4	0.21 / 0.8	1.0	2.8	0.16	0.23 / 0.9
		316SS	120	7.4	0.45 / 1.8	1.0	4.3	0.24	0.51 / 2.0
		CARBOLOY	180	11	0.75 / 3.0	1.0	6.2	0.34	0.51 / 2.0
2	R-2-25-C	GLASS	82	4.9	0.28 / 1.1	1.0	3.7	0.21	0.34 / 1.4
		SAPPHIRE	120	7.5	0.41 / 1.7	1.0	4.9	0.27	0.51 / 2.0
		316SS	210	12	0.85 / 3.4	1.0	7.4	0.41	1.1 / 4.4
		CARBOLOY	320	19	1.51 / 6.1	1.0	10	0.58	1.2 / 4.8
6	R-6-25-B	GLASS	550	33	2.34 / 9.4	1.0	22	1.2	2.6 / 10.4
		SAPPHIRE	810	49	3.7 / 14.9	1.0	28	1.6	4.1 / 16.5
		316SS	1300	78	7.5 / 30.1	1.0	42	2.3	8.3 / 33
		CARBOLOY	1800	110	14.4 / 57.8	1.0	58	10	16 / 64
Size	Tube	Float	GPM	l/h	kPa / inch W.C.	cSt	scfm	slpm	kPa / inch W.C.
8	R-8M-25-4F	8-RV-3	0.78	2.9	0.1 / 4.0	2.0	3.17	89.8	0.1 / 4.0
		8-RV-8	1.0	4.1	1.7 / 7.0	3.7	4.4	126	2.0 / 8.0
		8-RS-8	1.4	5.3	2.5 / 10	1.80	5.8	166	2.7 / 11.0
		8-RV-14	1.4	5.4	3.0 / 12	5.4	5.8	166	3.5 / 14
		8-RS-14	1.8	6.9	4.2 / 17	1.9	7.5	214	4.7 / 19
		8-RV-31*	2	7.8	5.7 / 23	7	8.3	235	7.0 / 28
		8-RS-31*	2.5	9.8	8.2 / 33	3.1	10	301	9.2 / 37
9	R-9M-25-3F	9-RV-33	2.5	9.5	1.5 / 6.0	11.0	10	295	1.7 / 7.0
		9-RS-33	3.2	12	1.7 / 7.0	2.4	13	380	2.0 / 8.0
		9-RV-87*	3.9	14	3.5 / 14	17.0	16	460	4.0 / 16
		9-RS-87*	5.1	19	4.2 / 17	3.5	21	600	5.0 / 20
10	R-10M-25-3F	10-RV-64	6.2	23	2.7 / 11	15.0	25	7129	3.2 / 13
		10-RS-64	7.8	29	3.7 / 15	3.7	32	910	4.2 / 17
		10-RS-138*	10	41	7.2 / 29	5.5	45	1299	8.2 / 33

* These floats require a back pressure of 30 psig / 2 bar

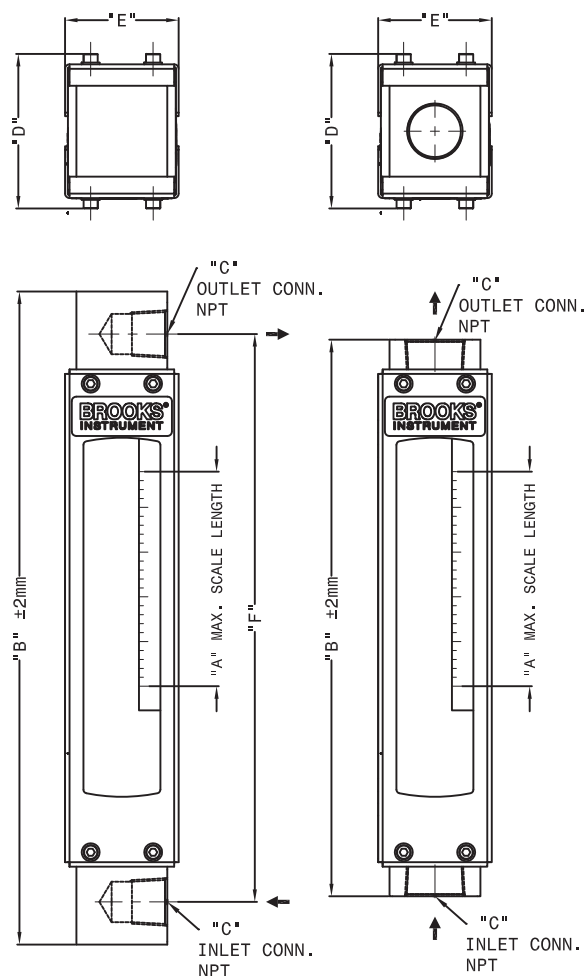
¹ Viscosity Immunity Ceiling

² Water flows @ 20°C

³ Air flows in scfm or slpm are @ 70°F & 14.7 psia

³ Air flows in mn 3/h (0°C&1.013bar(a)) measused @ 20°C & 1.013bar(a)

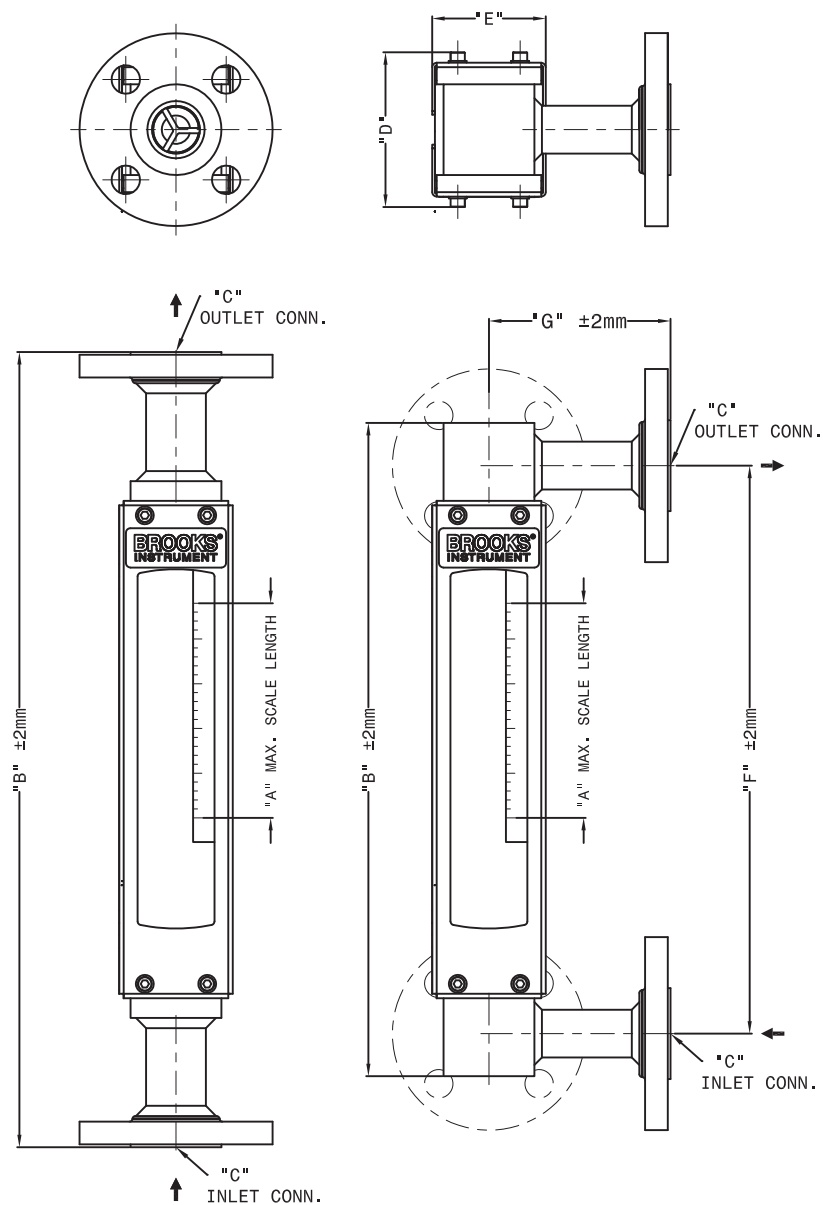
Product Dimensions - NPT Connections



MODEL GT 1307 WITH NPT CONNECTION

METER SIZE	REPLACEMENT OF	A	B	C	D	E	F
SIZE 2/6	-	250	371	1/4"	69	54	-
	1110	250	371	1/4"	80	58	345
	1114	250	371	1/4"	80	58	-
SIZE 8	-	250	430	1/2"	87	64	-
	1110	250	456	1/2"	87	64	419
	1114	250	432	1/2"	87	64	-
SIZE 9	-	250	430	3/4"	87	64	-
	1110	250	497	3/4"	87	64	445
	1114	250	438	3/4"	87	64	-
SIZE 10	-	250	430	1"	87	64	-
	1110	250	497	1"	87	64	445
	1114	250	438	1"	87	64	-

Product Dimensions - Flanged Connections



MODEL GT 1307 WITH FLANGED CONNECTION

METER SIZE	REPLACE- MENT OF	A	B	C	D	E	F	G
SIZE 2/6	1140	250	371	1/2" - 150LBS	80	58	345	89
	1144	250	505	1/2" - 150LBS	80	58	-	-
SIZE 8	1140	250	456	1/2" - 150LBS	87	64	419	89
	1144	250	581	1/2" - 150LBS	87	64	-	-
SIZE 9	1140	250	497	1" - 150LBS	87	64	445	102
	1144	250	578	1" - 150LBS	87	64	-	-
SIZE 10	1140	250	497	1" - 150LBS	87	64	445	102
	1144	250	572	1" - 150LBS	87	64	-	-

Model Code

Code Description Code Option Option Description

I-V Base Model Numbers	1307F	O-ring Seal Flowmeter, scale length 250mm				
VI-VII Tube Designator		Meter size	Tube Number			
	C1	2	R-2-25-D			
	C2	2	R-2-25-B			
	C3	2	R-2-25-C			
	G1	6	R-6-25-B			
	J2	8	R-8M-25-4F			
	K1	9	R-9M-25-3F			
	L2	10	R-10M-25-3F			
	C4	2 w/CRN	R-2-25-D			
	C5	2 w/CRN	R-2-25-B			
	C6	2 w/CRN	R-2-25-C			
	G4	6 w/CRN	R-6-25-B			
	J4	8 w/CRN	R-8M-25-4F			
	K4	9 w/CRN	R-9M-25-3F			
	L4	10 w/CRN	R-10M-25-3F			
VIII Float Designator		Size 2	Size 6	Size 8	Size 9	Size 10
	1	316SS	316SS	8-RV-3	9-RV-33	10-RV-64
	2	Glass	Glass	8-RV-8	9-RS33	10-RS-64
	3	Sapphire	Sapphire	8-RS-8	9-RV-87	-
	4	Carboloy	Carboloy	8-RV-14	9-RS-87	10-RS-138
	5	-	-	8-RS-14	-	-
	6	-	-	8-RV-31	-	-
	7	-	-	8-RS-31	-	-
IX Float Material	C	316 stainless steel				
	D	Glass				
	E	Sapphire				
	F	Carboloy				
X-XI Scale	D2	% of Max. Flow (LIQUID) detachable				
	E2	% of Max. Flow (GAS) detachable				
	J1	GPM WATER SP. GR. 1.0, VISC 1.0 CP detachable				
	K1	LPM WATER SP. GR. 1.0, VISC 1.0 CP detachable				
	L1	SCFM AIR @ STP detachable				
	M1	Special inscription (special calibration not required) detachable				
	Q1	Special calibration with scale 2% F.S. (GAS) detachable				
	Q3	Special calibration with scale 2% F.S. (LIQUID) detachable				
	R1	Special calibration with scale 1% F.S. (GAS) detachable				
	R2	Special calibration with scale 1% F.S. (LIQUID) detachable				

Model Code continued on next page.

Sample Standard Model Code

I-V	VI-VII	VIII	IX	X-XI	XII	XIII
1307F	J2	2	C	A1		

Model 1307 - Meter Weight: (Lbs./kg)

Meter Size	Connection Type	
	NPT/RC	Flanged (150#)
#2/6	6.82 Lbs / 3.1 kg	9.04 Lbs / 4.1 kg
#8/10	9.48 Lbs / 4.3 kg	11.68 Lbs / 5.3 kg

Model Code (continued)

Code Description	Code Option	Option Description							
XII Materials of Construction		Meter Type	Fitting	O-ring (Sz 8-10)	Packing (Sz 2-6)	Side Plates	Conn	In	Out
	A	Std	Brass	Buna	Neoprene	Aluminum	NPT	Vertical	Vertical
	B	Std	316SS	Viton	Viton	Aluminum	NPT	Vertical	Vertical
	C	Std	316SS	Viton	Viton	Stainless Steel	NPT	Vertical	Vertical
	D	Std	316SS	Buna	Neoprene	Aluminum	NPT	Vertical	Vertical
	E	Std	Brass	Viton	Viton	Aluminum	NPT	Vertical	Vertical
	F	Std	316SS	Kalrez	Teflon	Aluminum	NPT	Vertical	Vertical
	G	Std	316SS	Kalrez	Teflon	Stainless Steel	NPT	Vertical	Vertical
	H	FV retrofit	316SS	Buna	Neoprene	Stainless Steel Rugged	NPT	Horizontal	Horizontal
	J	FV retrofit	316SS	Buna	Neoprene	Stainless Steel Rugged	NPT	Vertical	Vertical
	K	FV retrofit	316SS	Buna	Neoprene	Stainless Steel Rugged	NPT	Horizontal	Vertical
	L	FV retrofit	316SS	Buna	Neoprene	Stainless Steel Rugged	NPT	Vertical	Horizontal
	M	FV retrofit	316SS	Buna	Neoprene	Stainless Steel Rugged	Flanged	Horizontal	Horizontal
	N	FV retrofit	316SS	Buna	Neoprene	Stainless Steel Rugged	Flanged	Vertical	Vertical
	P	FV retrofit	316SS	Buna	Neoprene	Stainless Steel Rugged	Flanged	Horizontal	Vertical
	Q	FV retrofit	316SS	Buna	Neoprene	Stainless Steel Rugged	Flanged	Vertical	Horizontal
	R	FV retrofit	316SS	Viton	Viton	Stainless Steel Rugged	NPT	Horizontal	Horizontal
	S	FV retrofit	316SS	Viton	Viton	Stainless Steel Rugged	NPT	Vertical	Vertical
	T	FV retrofit	316SS	Viton	Viton	Stainless Steel Rugged	NPT	Horizontal	Vertical
	U	FV retrofit	316SS	Viton	Viton	Stainless Steel Rugged	NPT	Vertical	Horizontal
	V	FV retrofit	316SS	Viton	Viton	Stainless Steel Rugged	Flanged	Horizontal	Horizontal
	W	FV retrofit	316SS	Viton	Viton	Stainless Steel Rugged	Flanged	Vertical	Vertical
	X	FV retrofit	316SS	Viton	Viton	Stainless Steel Rugged	Flanged	Horizontal	Vertical
	Y	FV retrofit	316SS	Viton	Viton	Stainless Steel Rugged	Flanged	Vertical	Horizontal
	Z	FV retrofit	316SS	Kalrez	Teflon	Stainless Steel Rugged	NPT	Horizontal	Horizontal
	1	FV retrofit	316SS	Kalrez	Teflon	Stainless Steel Rugged	NPT	Vertical	Vertical
	2	FV retrofit	316SS	Kalrez	Teflon	Stainless Steel Rugged	NPT	Horizontal	Vertical
	3	FV retrofit	316SS	Kalrez	Teflon	Stainless Steel Rugged	NPT	Vertical	Horizontal
	4	FV retrofit	316SS	Kalrez	Teflon	Stainless Steel Rugged	Flanged	Horizontal	Horizontal
	5	FV retrofit	316SS	Kalrez	Teflon	Stainless Steel Rugged	Flanged	Vertical	Vertical
	6	FV retrofit	316SS	Kalrez	Teflon	Stainless Steel Rugged	Flanged	Horizontal	Vertical
	7	FV retrofit	316SS	Kalrez	Teflon	Stainless Steel Rugged	Flanged	Vertical	Horizontal
XIII Accessories	A	None							
	B	Inlet/Outlet left or right							
	C	Dual Scales							
	D	Inlet/Outlet left or right & Dual Scales							
	E	Dual Scales and front of panel mounting screws							
	F	Front of panel mounting screws							
	G	Inlet/Outlet left or right & Dual Scales & front of panel mounting screws							

Sample Standard Model Code

I-V	VI-VII	VIII	IX	X-XI	XII	XIII
1307F	J2	2	C	A1	A	A

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.

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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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TRADEMARKS

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