Data Sheet

O-ring Seal Flowmeter Model 1306

Model 1306 Flanged, FV Retrofit

Variable Area



Model 1306

NPT,

Standard

O-ring Seal Construction, Glass Tube Variable Area, 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	See Pressure Table
Flow Accuracy	Standard: ±2% Full Scale, Class 2.5 acc VDI/VDE
	Optional: ±1% Full Scale, Class 1.6 acc VDI/VDE
Repeatability	0.5% Full Scale
Scale Length	127mm
Scale Graduations	Std.: Fused on metering tube choice of millimeter or percent of maximum flow with factor tag
	Opt.: Direct reading, engraved detachable metal plate
Ambient Temperature Limits	33 to 125°F (1°C to 52°C)
Operating Fluid Temperature Limits	33°F to 250°F (1°C to 121°C)
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	316 stainless steel Float types: RV and RS (see Float Type Figure)
Housing	Aluminum, stainless steel side plates (stainless steel standard Full-View replacement)
End Fittings	Brass or 316 stainless steel
O-rings	Buna-N, Viton®-A fluoroelastomers, Kalrez® 4079
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

				Water ²		Press Drop	V.I.C. ¹	Air ³		Press Drop
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

NOTES:

- * These floats require a back pressure of 30 psig / 2 bar
- The capacities are based on 316 SS floats
- ¹ Viscosity Immunity Ceiling

² Water flows @ 20°C

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

Product Dimensions



Product Specifications - Pressure Ratings

a,					
	Meter	Max. Pressure at	Max.	Pressure	PED
	Size	90°C/194°F	Temp.	Reduction	Category
		Bar/PSIG	°C/°F	above 90°C/194°F	
				Bar/°C/PSIG/°F	
	7	24/348	120/248	0.093/1.35	SEP
	8	20.7/300	120/248	0.093/1.35	SEP
	10	6.9/100	120/248	0.056/0.81	SEP

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.

Model Code

Code [Description	Code Option	Option Description					
Ι.	Base Model Number	1306B	O-ring seal flowmeter, scale length 127mm					
11	Tube & Float Designator	**	To be selected from	n the flow range	tahlo			
				in the now range	table			
III.	Fitting Material	1	Brass					
		2	316 Stainless Stee	l				
		3	316 Stainless Stee	l FV retrofit (Size	e 8, 10 retrofit)			
		4	316 Stainless Stee	l FV retrofit (Size	e 9 retrofit)			
IV.	O-ring Material	1	Viton					
	5	2	Buna					
		3	Kalrez					
V	Connection Type		Meter Type	Connection	In	Out		
•••	connection type	1	Std	NPT	Vertical	Vertical		
		2	Std	Rc	Vertical	Vertical		
		A	FV Retrofit Only	NPT	Horizontal	Horizontal		
		B	FV Retrofit Only	NPT	Vertical	Vertical		
		<u> </u>	FV Retrofit Only	NPT	Horizontal	Vertical		
		D	FV Retrofit Only	NPT	Vertical	Horizontal		
		F	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		
M	Coole True	6	mu De sel Class 2	F (20)/ FC	-			
VI.	Scale Type		mm Decal, Class 2	.5/2% FS				
		G	% Docal + factor	(lace 2 5/20% E				
		Н	% Decal + factor.	Class 1.6/1% F	5			
		1	DR Scale, Class 2.5	5/2% FS	·			
		M	DR Scale, Class 1.0	5/1% FS				
		N	DR Scale, Class 2.	5/2% Dual Scale	S			
		P	DR Scale, Class 1.6	6/1% Dual Scale	15			
VII.	Panel Mounting	0	None					
		1	Front panel mount	ting				
		2	Flush panel mount	ting				
VIII.	Valve	0	None					
		В	1/2" 316 Stainless	Steel needle va	lve on inlet			
		D	1" 316 Stainless S	teel needle valve	e on inlet			
		F	1/2" 316 Stainless	Steel needle va	lve on outlet			
		Н	1" 316 Stainless S	teel needle valve	e on outlet			

Sample Standard Model Code

1	II		IV	V	VI	VII	VIII
1306B	A1	1	1	1	Α	1	В

Model 1306 - Approximate Shipping Weight (lbs./KG) Meter Size | Threaded | Flanged |

Meter Size	Ihreaded	Flanged
7,8	4/1.8	5/2.2
10	5/2.2	9/4

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 Americas
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TRADEMARKS

Brooks	Brooks Instrument, LLC
Full-View	Brooks Instrument, LLC
Kalrez perfluoroelastomers .	DuPont Performance Elastomers
Viton fluoroelastomers	DuPont Performance Elastomers



Brooks Instrument

407 West Vine Street P.O. Box 903 Hatfield, PA 19440-0903 USA T (215) 362 3700 F (215) 362 3745 E-Mail BrooksAm@BrooksInstrument.com www.BrooksInstrument.com Brooks Instrument

Neonstraat 3 6718 WX Ede, Netherlands T +31 (0) 318 549 300 F +31 (0) 318 549 309 E-Mail BrooksEu@BrooksInstrument.com

Brooks Instrument

1-4-4 Kitasuna Koto-Ku Tokyo, 136-0073 Japan T +81 (0) 3 5633 7100 F +81 (0) 3 5633 7101 E-Mail BrooksAs@BrooksInstrument.com



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