

Ammonia (Liquid) Flow Meters

Sturdy in-line, 316 SST construction (brass free), EPR seals and gasketed case to handle the harsh corrosive nature of ammonia.

Features and Benefits

- Expanded 3.5" (90mm) 270° analog dial for reading at a glance
- Suitable for use with opaque and clear fluids.
- Measures 6:1 range with $\pm 3\%$ F.S. accuracy
- Dial and case factory configured for quick installation – but easily field re-configured if needed
- Liquid flow ranges from 4 GPH (15 l/h) in 1/2" flow meter to 3000 GPM (12000 l/m) in 8" flow meter.

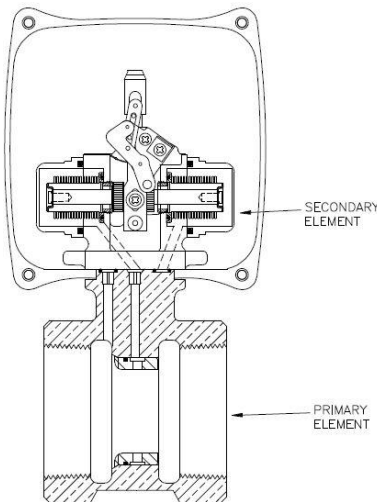
Applications

- Fertilization Process
- Pulp and Paper Industry
- Water and Waste Water Treatment
- Industrial Refrigeration



Principle of Operation

Our differential pressure flow meters are based on the premise that the pressure drop across the meter is proportional to the square of the flow rate. The flow rate is obtained by measuring the pressure differential and extracting the square root.



Specifications

	Standard	Options
Housing	Polycarbonate	Aluminum
Body	316 SS	n/a
Bellows	316 SS	
Seals	EPR	n/a
Crystal	Polycarbonate	Glass Plastic
Gear Movement Accuracy	316 SS	
Repeatability	$\pm 1\%$ F.S.	
Pressure		
Maximum	180 psig	400 psig
Minimum	10 psig	10 psig
Temperature		
Maximum	212°F	350°F
Minimum	-30 °F	-80 °F

Model Number System

The example **1/2"-73-R-6-ESN** describes a 1/2" pipe size, 7000 series threaded connection, 316 SST material, flow from left to right, flow rate of 6 GPH, Options – Low flow rate (ES) and Ammonia service (N).

1/2"	-	7	3	-	R	-	6	-	ESN
Pipe Size		Series	Material		Flow Direction		Flow Rate		Options
1/4"	(8mm)	7000 Series	1 - Bronze		L – Right to Left		See Flow Chart		See Table
1/2"	(15mm)	8000 Series	2 - Monel		R – Left to Right				
3/4"	(20mm)		3 - SST		VUR – Vertical Up Flow Dial Right				
1"	(25mm)				VUL - Vertical Up Flow Dial Left				
1 1/2"	(40mm)				VDR - Vertical Down Flow Dial Right				
2"	(50mm)				VDL - Vertical Up Flow Dial Left				
2 1/2"	(65mm)								
3"	(80mm)								
4"	(100mm)								
5"	(125mm)								
6"	(150mm)								
8"	(200mm)								

Table Of Options

Flow Ranges – Series 7000 & 8000

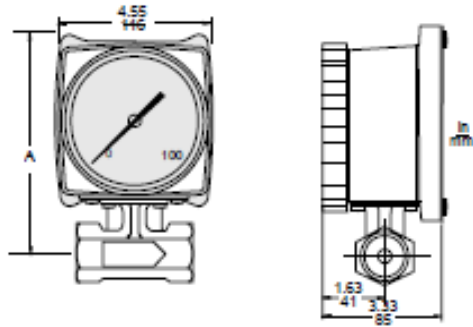
		Size	GPM	LPM	Size	GPM	LPM
B	EPR Seals	1/4	2	8	2 1/2	60	240
B2	Teflon Seals	1/4	3	10	2 1/2	100	400
E	Non-Standard Flow Rate	1/4	4	15	2 1/2	150	600
ES	Low Flow Rate (Below 2 GPM)	1/4			2 1/2	200	800
F	Aluminum Housing with Plastic Dial Crystal						
F2	Aluminum Housing with Glass Dial Crystal	1/2	2	8	3	200	800
N	Ammonia Service	1/2	3	10	3	300	1000
G	Custom Scales and Dials	1/2	4	15	3	400	1500
P	Panel Mount	1/2	6	25	3	500	2000
R3	Remote Readout, 316 SS (Mechanical Indicator)	1/2	10	40			

Low Flow Rates – Option ES

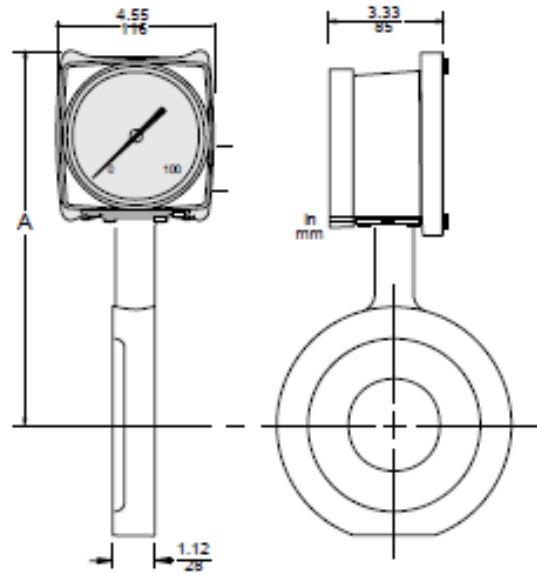
Size	GPH	l/h	cc/m						
1/2	4	15	200	1	15	60	5	300	1000
1/2	6	20	300	1	20	80	5	400	1500
1/2	10	40	400	1	30	120	5	600	2400
1/2	15	60	600	1	40	150	5	800	3000
1/2	20	80	1000	1 1/2	30	120	6	600	2400
1/2	30	120	2000	1 1/2	40	150	6	800	3000
1/2	40	150	3000	1 1/2	60	240	6	1000	4000
1/2	60	240	4000	1 1/2	100	400	6	2000	8000
1/2	100	400	6000	2	40	150	8	600	2400
				2	60	240	8	1000	4000
				2	100	400	8	2000	8000
				2	150	600	8	3000	12000
				2	200	800			

Note: Available with 1/2" 7000 Series Only

7000 Series – 1/4" to 3" Connections



8000 Series – 1/2" to 8" Connection



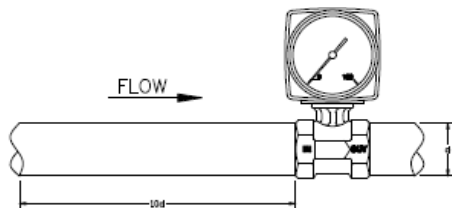
Dimensions

Nominal Sizes		Series 7000 – A		Series 8000 - A	
In	mm	In	mm	In	mm
1/4	08	5.95	151	n/a	n/a
1/2	15	5.95	151	6.62	168
3/4	20	5.95	151	7.06	179
1	25	6.07	154	7.25	184
1 1/2	40	6.39	162	7.81	198
2	50	6.80	172	8.00	203
2 1/2	65	n/a	n/a	8.54	217
3	80	7.48	190	8.87	225
4	100	n/a	n/a	9.95	252
5	125	n/a	n/a	10.36	263
6	150	n/a	n/a	11.05	280
8	200	n/a	n/a	12.30	311

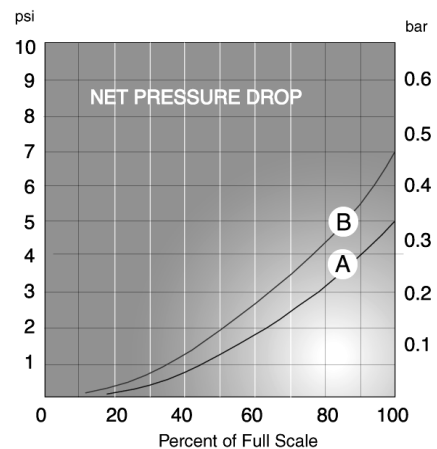
Note: Dimensions are based on bronze meters.

Piping Requirements

The site selected should provide at least 10 pipe diameters of straight meter sized pipe between the meter inlet and any upstream fitting such as elbow, tee or valve.



Pressure Drop Characteristics



Curve A – Bronze Bellows

Curve B – Monel, SS, Inconel Bellows

RCM Industries, Inc.

110 Mason Circle Concord, CA 94520-1238 USA
 Ph. 925.687.8363 Toll Free 888-flo-gage Fax 925.671.9636
 e-mail : sales@flo-gage.com <http://www.flo-gage.com>