



A1 SERIES FLOWMETERS, ALUMINUM OPTION

FLOMEC® A1 Series Meters are designed as self-contained, battery-powered units. Select the A1 Series when you need an accurate meter for thin petroleum-based fluid applications.

- Available in Aluminum
- Available in three sizes
- Designed for thin petroleum based fluids

FEATURES / BENEFITS

- Unique package combines Turbine and LCD into a self-contained, compact, economical meter
- Local Display Computer features: 2 Non-Volatile Totals (Batch Total = Resettable, Total = Non-resettable) and Rate of Flow
- Output capabilities available to communicate with process control equipment
- Lightweight, compact design allows for easy installation
- AAA Alkaline battery life: 2 years
- 12 selectable engineering units (gallons or liters are standard defaults)
- Factory calibration

APPLICATIONS

- Fuel Transfer
- Batching / Blending
- Fuel Products



PRODUCT CONFIGURATION

1 PRODUCT IDENTIFIER:

A1 = Electronic Digital Meter

2 ELECTRONIC CHOICE:

Computer Display, Meter Mounted

Q9 = Q9 2-Button Computer

*Computer Display & Module, Meter Mounted** - **SAFE AREA ONLY**

P9 = Q9 2-Button Computer w/Pulse Out Module, includes External Power and 10 ft. of Cable

42 = Q9 2-Button Computer w/4-20mA Module and 10 ft. of Cable

*Module, Meter Mounted (No Display)** - **SAFE AREA ONLY**

PO = Pulse Out (Unscaled) Conditioned Signal Module w/Cable

Retrofit Computer Kit (Display Only)

R9 = Q9 2-Button Computer Retrofit Kit (Replaces Q9 Display)

No Electronics - Turbine Only

XX = No Electronics - Turbine Only

**All Electronics Approvals Void*

3 CALIBRATION:

GD = Gallons Per Minute (Gallons Default) with NIST Certificate

GM = Factory Default Calibration in Gallons

LD = Liters Per Minute (Liters Default) with NIST Certificate

LM = Factory Default Calibration in Liters

XX = No Computer

4 TURBINE SIZE:

A025 = Aluminum - Low Flow

A100 = Aluminum - 1-inch

A200 = Aluminum - 2-inch

X### = No Turbine**

***When ordering Display Only, the ### should be the turbine size.*

5 FITTING TYPE:

N = NPT (Female)

I = ISO (Female) BSPT

B = BSPP Female

X = No Turbine

6 PACKAGING:

*With FM, ATEX & IEC Approval for **HAZARDOUS AREA***

A1 = Standard or Low Flow, 1-inch (w/Q9 Electronics Choice)

A2 = 2-inch (w/Q9 Electronics Choice)

B1 = Standard or Low Flow, 1-inch Turbine Only

B2 = 2-inch Turbine Only

B3 = Display Only (w/Q9 & R9 Electronics Choice)

*Non-Approved Version - **SAFE AREA ONLY***

C2 = Low Flow through 2-inch Turbines (w/P9, 42, & PO Electronics Choice)

1 2 3 4 5 6
---->>>> A1 Q9 GM A100 N A1

APPROVALS[†]



IP65



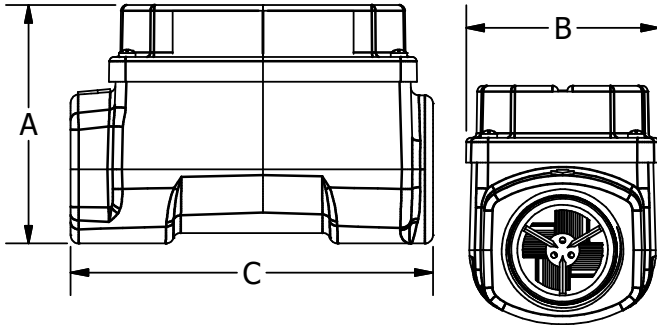
[†]All A1 Series Q9 Displays have the CE, NEMA 4, and IP65 approval.

SPECIFICATIONS

Meter Sizes Available:		A025 (Low Flow), A100 (1-inch), A200 (2-inch)	
Design Type:	A025	Paddlewheel	
	A100	Turbine	
	A200	Turbine	
Fitting Size / Fitting Type:	A025	1-inch / NPT, ISO ⁺ or BSPP (Female)	
	A100	1-inch / NPT, ISO ⁺ or BSPP (Female)	
	A200	2-inch / NPT or ISO ⁺	
Flow Range:	A025	0.3 - 3 GPM	1 - 11 L/min
	A100	3 - 50 GPM	11 - 190 L/min
	A200	20 - 200 GPM	76 - 760 L/min
Accuracy (% of Reading):		A025: Application Dependent ¹	
		A100, A200: ± 1.5%	
Repeatability:	A025	± 1.0%	
	A100	± 0.2%	
	A200	± 0.2%	

⁺ISO 7 Designation is RC.

¹Accuracy can vary up to ± 5% depending on installation and fluid type. Field calibration is recommended for best accuracy.



DIMENSIONS

	A025, 1 in. Low Flow	A100, 1 in.	A200, 2 in.
A = Height*	2.5 in. (63.5 mm)	2.5 in. (63.5 mm)	3.2 in. (81.3 mm)
B = Width	2.0 in. (50.8 mm)	2.0 in. (50.8 mm)	3.3 in. (83.8 mm)
C = Length	4.0 in. (101.6 mm)	4.0 in. (101.6 mm)	6.3 in. (160.0 mm)

*Height includes 0.7 in. (1.8 cm) for the computer electronics.

Pressure Rating (Aluminum):		300 psi (21 bar)
Operating Temperature Range:		-40° F to 250° F (-40° C to 121° C)
with Safe Area Only Display:		0° F to 140° F (-18° C to 60° C)
with Intrinsically Safe Display:		0° F to 129° F (-18° C to 54° C)
Typical K-Factor:	A025	2,200 PPG (581 Pulses/L)
	A100	730 PPG (193 Pulses/L)
	A200	100 PPG (26 Pulses/L)
Frequency Range:	A025	11-110 Hz @ 0.3-3 GPM (1-11 L/min)
	A100	36.5-608.3 Hz @ 3-50 GPM (11-190 L/min)
	A200	33-330 Hz @ 20-200 GPM (76-760 L/min)
Recommended Strainer Size:	A025	55 mesh (275 µm)
	A100	28 mesh (700 µm)
	A200	28 mesh (700 µm)
Wetted Materials (Aluminum):	Housing:	Aluminum
	Bearings:	Ceramic (96% Alumina)
	Shaft:	Tungsten Carbide
	A025 & A100 Rotor:	Nylon
	A200 Rotor, 2-inch:	PVDF
	Rings:	316 Stainless Steel
Calibration Report:	Comes standard with A1 Series meters.	
	N.I.S.T. – Certification available.	

ACCESSORIES

Part No.	Description
113275-10	FM Approved Remote Kit Assembly [†]
113435-10	Conditioned Signal Output Module
125260-02	90° Display Adapter Kit
120077-01	FM Approved Sensor Kit [†]
120077-02	ATEX Approved Sensor Kit [†]
113524-01	Connector Kit for FM or ATEX Approved Sensor [†]
125060-10	Pulse Out, External Power, Scaled Pulse Module
125100-10	4-20 mA Module

[†]Does not make Non-FM or Non-ATEX Approved meters FM or ATEX Approved.