



A1 SERIES (COMMERCIAL GRADE METERS)

FLOMEC® A1 Series Meters are designed as self-contained, battery powered units. Select the A1 Series when you need an accurate, basic meter.

- Available in Aluminum or Nylon
- Aluminum model is available in three sizes
- Use the Aluminum model for petroleum products
- Nylon meter for use in water or non-aggressive chemical applications

FEATURES / BENEFITS

- Unique package combines Turbine and LCD into a self-contained, compact, economical meter.
- Local Display Computer features: 2 Totals (1 Resettable, 1 Cumulative); Rate of Flow and User Configuration.
- Output capabilities available to communicate with process control equipment.
- Lightweight, compact design allows for easy installation.
- Lithium battery life: 5 years
- Factory calibration in gallons and litres (can also be field calibrated to other fluids).

APPLICATIONS

- Fuel Transfer
- Plant Process Water
- Batching / Blending
- Fuel Products (Aluminum model)
- Water / Non-aggressive Chemicals (Nylon model)
- Ag Chemicals
- Solvents / Glycol
- Chemical Feed Lines

PRODUCT CONFIGURATION

PRODUCT IDENTIFIER **1**

A1 = Commercial Grade Electronic Digital Meter

ELECTRONIC CHOICE **2**

09 = 2 Totals (1 Resettable, 1 Cumulative); Factory Calibration in gallons and litres, User Configuration and Rate of Flow
XX = No Computer

CALIBRATION **3**

GM = GPM & L/min (Gallons Default)
LM = GPM & L/min (Litres Default)
XX = No Computer

TURBINE SIZE **4**

A025 = Aluminum - Low Flow
A100 = Aluminum - 1 inch
A200 = Aluminum - 2 inch
N025 = Nylon - Low Flow
N100 = Nylon - 1 inch
X### = No Turbine*

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

FITTING TYPE **5**

N = NPT (Female)
I = ISO (Female) BSPT
B = BSPP Female - available on A025 and A100 turbines only
X = No Turbine

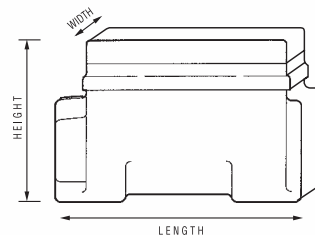
PACKAGING **6**

A1 = Standard Low Flow - 1 inch
A2 = Standard - 2 inch
B1 = Low Flow - 1 inch Turbine Only
B2 = 2 inch Turbine Only
B3 = Computer Only

1 2 3 4 5 6
 ---->>>> A1 09 GM N100 N A1

DIMENSIONS

Meter Size	Length " (mm)	Height " (mm)	Width " (mm)
A025	4.0 (102)	2.5 (63)	2.0 (51)
A100	4.0 (102)	2.5 (63)	2.0 (51)
A200	6.0 (152)	4.5 (114)	3.0 (76)
N025	4.0 (102)	2.5 (63)	2.0 (51)
N100	4.0 (102)	2.5 (63)	2.0 (51)



SPECIFICATIONS

Meter Sizes Available:	A025 (Low Flow), A100 (1 inch), A200 (2 inch), N025 (Low Flow), N100 (1 inch)		
Design Type:	A025	Paddlewheel	
	A100	Turbine	
	A200	Turbine	
	N025	Paddlewheel	
	N100	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, ISO* or BSPP (Female)	
	N025	1 inch / NPT, ISO* (Female)	
	N100	1 inch / NPT, ISO* (Female)	
Flow Range:	A025	0.3 - 3 GPM	1 - 11 L/min
	A100	3 - 50 GPM	11 - 190 L/min
	A200	30 - 300 GPM	114 - 1,135 L/min
	N025	0.3 - 3 GPM	1 - 11 L/min
	N100	3 - 50 GPM	11 - 190 L/min
	Accuracy (% of Reading):	A025 & N025: **Application Dependent	
	A100, A200 & N100: $\pm 1.5\%$		
Repeatability:	A025	$\pm 1.0\%$	
	A100	$\pm 0.2\%$	
	A200	$\pm 0.2\%$	
	N025	$\pm 1.0\%$	
	N100	$\pm 0.2\%$	

*ISO 7 Designation is RC.

**Accuracy can vary up to $\pm 5\%$ depending on installation and fluid type. Field calibration is recommended for best accuracy.

APPROVALS



IP65



NEMA 4

Pressure Rating (Aluminum):	300 psi (21 bar)	
Pressure Rating (Nylon):	150 psi (10.3 bar)	
Operating Temperature Range:	-40° F to 250° F (-40° C to 121° C)	
	with Display:	14° F to 140° F (-10° C to 60° C)
Typical K-Factor:	A025	2,200 PPG (581 Pulses/L)
	A100	730 PPG (193 Pulses/L)
	A200	72 PPG (19 Pulses/L)
	N025	2200 PPG (581 Pulses/L)
	N100	730 PPG (193 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	36-360 Hz @ 30-300 GPM (114-1135 L/min)
	N025	11-110 Hz @ 0.3-3 GPM (1-11 L/min)
	N100	36.5-608.3 Hz @ 3-50 GPM (11-190 L/min)
	Recommended Strainer Size:	A025
	A100	28 mesh (700 μ m)
	A200	28 mesh (700 μ m)
	N025	55 mesh (275 μ m)
	N100	28 mesh (700 μ m)
Wetted Materials (Aluminum):	Housing:	Aluminum
	Bearings:	Ceramic
	Shaft:	Tungsten Carbide
	Rotor:	Nylon
	Rings:	316 Stainless Steel
Wetted Materials (Nylon):	Housing:	Nylon
	Bearings:	Ceramic
	Shaft:	Tungsten Carbide
	Rotor:	Nylon
	Rings:	316 Stainless Steel
Calibration Report:	Comes standard with A1 Series meters.	
	N.I.S.T. - Certification available.	

ACCESSORIES / ELECTRONICS

Part No.	Description
113275-1	FM Approved Remote Kit Assembly
113435-1	Conditioned Signal Output Module
125260-01	90° Display Adapter Kit
120077-01	FM Approved Sensor Kit

Part No.	Description
120077-02	ATEX Approved Sensor Kit
113524-01	Connector Kit for FM or ATEX Approved Sensor
113437-01	Conduit Adapter Kit
125080-1	Pulse Access Dust Cover

A1 Series Meter MODULES

FM Approved Remote Kit Assembly (Part No. 113275-1)



The Factory Mutual (FM) Approved Remote Kit Assembly modifies FLOMEC® Electronic Digital Meters for applications in specialized situations including remote indication and high or low fluid temperature metering applications. This kit provides the versatility of panel mounting of the LCD readout up to 100 ft. (30 m) from the turbine.

This kit consists of a sensor module, a dust cover assembly and 10 ft. (3 m) of cable; it also requires a 09 Display.

Features and Benefits:

- ✓ Maintains FM Approval.
- ✓ Accommodates fluid temperatures from -40° F to +250° F (-40° C to +121° C).
- ✓ This kit can upgrade an existing FLOMEC® meter or can be purchased with a new meter.
- ✓ Use this module with GPI Industrial or Commercial Grade Electronic Digital Meters.

SPECIFICATIONS

Magnetic Pickup:	1.3 k Ohm, 90 mH
Signal Type:	Sine Wave
Voltage:	Peak to Peak 10 mV to 500 mV
Frequency:	11 to 750 Hz
Cable:	10 ft. (3 m), 2-conductor shielded, Belden #9501

APPROVALS



Features and Benefits:

- ✓ Provides two digital signals: Open Collector or 6-volt Square Wave and can communicate with most process control devices.
- ✓ Operating temperature range of -40° F to +212° F (-40° C to +100° C).
- ✓ Can be externally powered or battery powered.

SPECIFICATIONS

Connector:	Hubble PG7
Signal Type:	Open Collector (NPN)
Power:	External 9 to 35 V (dc), approximately 1 mA
Connection:	Three wire
Frequency:	0 to 750 Hz
Cable:	10 ft. (3 m) Belden #9363

APPROVALS



Conditioned Signal Output Module (Part No. 113435-1)



This module provides an unscaled, amplified, digital signal capable of transmission up to 5,000 ft. (1.5 km). There is no need for additional signal conditioning or amplification devices to achieve the desired digital signal. Use on G2 "Turbine Only" model.

The module is factory assembled for Open Collector signal output and operates from an external 9 to 35 volt power source. By changing terminal connections and adding a battery kit, the module provides a self-powered 6-volt Square Wave signal.

A1 Series Meter ACCESSORIES

90° Display Adapter Kit (Part No. 125260-01)

90° Display Adapter Kit allows for horizontal readout of vertical meters. Includes adapter, O-ring, screws and foam spacers required for installation.

Can be ordered with a meter. Specify -19 option with meter order.



*Kit Shown Installed
on PVDF Meter*

