

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, meter for petroleum products, water or non-aggressive chemical applications.

- 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 (Batch Total = Resettable, Total = Non-resettable) and Rate of Flow. Includes non-volatile totals.
- Output capabilities available to communicate with process control equipment
- Lightweight, compact design allows for easy installation
- AAA Alkaline battery life: 2 years
- Factory calibration in gallons or litres (can also be field calibrated to other fluids)

APPLICATIONS

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

PRODUCT CONFIGURATION

1 PRODUCT IDENTIFIER:

A1 = Commercial Grade Electronic Digital Meter

2 ELECTRONIC CHOICE:

Computer Display, Meter Mounted

Q9 = Q9 2-Button Computer

*Computer Display & Module, Meter Mounted**

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)**

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

Retrofit Computer Kit (Display Only)

R9 = Q9 2-Button Computer Retrofit Kit (Replaces 09 Display)

No Electronics - Turbine Only

XX = No Electronics - Turbine Only

**All Electronics Approvals Void*

3 CALIBRATION:

GM = GPM & L/min (Gallons Default)

LM = GPM & L/min (Litres Default)

XX = No Computer

4 TURBINE SIZE:

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.*

5 FITTING TYPE:

N = NPT (Female)

I = ISO (Female) BSPT

B = BSPP Female - available on A025 and A100 turbines only

X = No Turbine

6 PACKAGING:

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

A1 = Standard or Low Flow, 1 inch (w/Q9 & R9 Electronics Choice)

A2 = Standard, 2 inch (w/Q9 & R9 Electronics Choice)

B1 = Standard or Low Flow, 1 inch Turbine Only

B2 = Standard, 2 inch Turbine Only

B3 = Display Only

*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 N100 N A1

APPROVALS†



NEMA
4



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), 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 ⁺ | |
| | 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 ¹ A100, A200 & N100: ± 1.5% | |
| Repeatability: | A025 | ± 1.0% | |
| | A100 | ± 0.2% | |
| | A200 | ± 0.2% | |
| | N025 | ± 1.0% | |
| | N100 | ± 0.2% | |

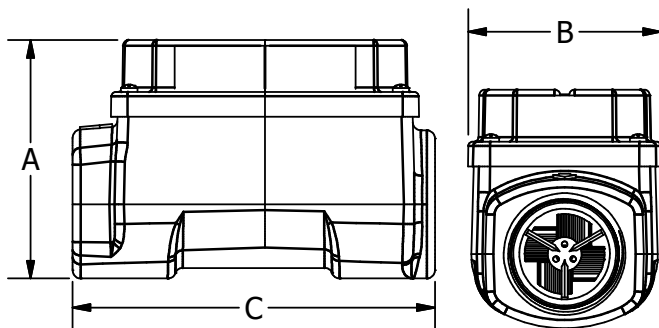
¹ISO 7 Designation is RC.

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. | N025, 1 in. Low Flow | N100, 1 in. |
|--------------------|----------------------|-------------------|--------------------|----------------------|-------------------|
| A = Height* | 2.5 in. (6.3 cm) | 2.5 in. (6.3 cm) | 4.25 in. (11.4 cm) | 2.5 in. (6.3 cm) | 2.5 in. (6.3 cm) |
| B = Width | 2.0 in. (5.1 cm) | 2.0 in. (5.1 cm) | 3.0 in. (7.6 cm) | 2.0 in. (5.1 cm) | 2.0 in. (5.1 cm) |
| C = Length | 4.0 in. (10.1 cm) | 4.0 in. (10.1 cm) | 6.0 in. (15.2 cm) | 4.0 in. (10.1 cm) | 4.0 in. (10.1 cm) |

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



| | | |
|-------------------------------------|---------------------------------------|---|
| 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 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 | 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 | 55 mesh (275 µm) |
| | A100 | 28 mesh (700 µm) |
| | A200 | 28 mesh (700 µm) |
| | N025 | 55 mesh (275 µm) |
| | N100 | 28 mesh (700 µm) |
| Wetted Materials (Aluminum): | Housing: | Aluminum |
| | Bearings: | Ceramic (96% Alumina) |
| | Shaft: | Tungsten Carbide |
| | Rotor: | Nylon |
| | Rings: | 316 Stainless Steel |
| Wetted Materials (Nylon): | Housing: | Nylon |
| | Bearings: | Ceramic (96% Alumina) |
| | Shaft: | Tungsten Carbide |
| | Rotor: | Nylon |
| | 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 Approved meters FM Approved.