A1 Series Meter Numbering System

**Product Identifier**

- **A1** = Commercial Grade Electronic Digital Meter

**Electronic Choice**

- **09** = 2 Totals (1 Resettable, 1 Cumulative), Factory Calibration in Gallons and Litres, 2 User Calibrations and Flowrate
- **XX** = No Computer

**Calibration**

- **GM** = Gallons / Minute (NPT only)
- **LM** = Litres / Minute (ISO only)
- **XX** = No Computer

**Turbine Material & Size**

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

**Fitting Type**

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

**Packaging**

- **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
- **C1** = Generic Low Flow – 1 inch
- **C2** = Generic – 2 inch
- **C3** = Generic Computer Only

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A1 + 09 + LM + N100 + N + A1  (Sample Model Number)

*When ordering Computer Assembly Only, specify Turbine Housing size.*
Build-Your-Own A1 Series Meter

Commercial Grade Meters are designed as self-contained, battery powered units. The chart below shows the Meter sizes and materials available and the optional Modules that can be ordered separately. Technical Specifications on Commercial Grade Meters are included in this section. For Flowmeters with advanced features and other housing materials, refer to the Industrial Grade Meter section of this catalog.

1) Select Your Turbine Material and Size

Aluminum:
- A025 (Low Flow 1 inch)
- A100 (1 inch)
- A200 (2 inch)

Nylon:
- N025 (Low Flow 1 inch)
- N100 (1 inch)

2) Select Your Electronic Choice

(For further details see page 46)

- 09 Computer
- XX No Computer

3) Select Your Module

- Standard Remote Kit
  (Low Level Sine Wave)
  Part # 113265-1
  This module allows remote mounting of the computer electronics for specialized situations such as remote readings or high and low fluid temperature applications.
  (Requires 09 Computer)

- FM Approved Remote Kit
  (Low Level Sine Wave)
  Part # 113275-1
  This assembly module allows remote mounting of the computer electronics for specialized situations such as remote readings or high and low fluid temperature applications while maintaining the Factory Mutual Approval and self-powered design.
  (Requires 09 Computer)

- Conditioned Signal Module
  (Open Collector or 6 volt Square Wave Signal)
  Part # 113435-1
  This module provides an unscaled, amplified, digital signal from a GPI turbine housing. This module’s digital output eliminates the need for addition signal conditioning equipment.
  (No Computer Required)

- FM Approved Sensor Kit
  (Open Collector, NPN)
  Part # 120077-01
  The FM Approved Sensor is designed for use with the A1 Turbine Meter when rotor pulse data is required and the meter is located within a hazardous location. It is ideal for indoor or outdoor applications, and the output signal is compatible with existing GPI remote electronics.
  (No Computer Required)
GPI Commercial Grade Meters are identified by an A1 prefix. Commercial Grade Meters are packaged as a self-contained unit. Select this meter when you need an accurate, basic meter. GPI Commercial Grade Meters come in Aluminum and Nylon.

Choose one of three sizes of Aluminum meters for petroleum products. Use the Nylon meters for water or non-aggressive chemicals.

**Select Your Fitting Size:**

**Aluminum:**
- Low Flow: 1 inch, 2 inch

**Nylon:**
- Low Flow: 1 inch

**Features and Benefits:**
- Unique package combines Turbine and LCD into a self-contained, compact, economical meter.
- Local Display Computer features: 2 Totals (1 Resettable, 1 Cumulative); Factory Calibration in gallons and litres; 2 User Calibrations and Flowrate.
- Output capabilities available to communicate with process control equipment.
- Lightweight, compact design allows for easy installation.
- Powered by Lithium batteries for long life.

<table>
<thead>
<tr>
<th>Model</th>
<th>A = Height</th>
<th>B = Width</th>
<th>C = Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>A025 (Low Flow)</td>
<td>2.5” (6.3 cm)</td>
<td>2.0” (5.1 cm)</td>
<td>4.0” (10.1 cm)</td>
</tr>
<tr>
<td>A100 (1 inch)</td>
<td>2.5” (6.3 cm)</td>
<td>2.0” (5.1 cm)</td>
<td>4.0” (10.1 cm)</td>
</tr>
<tr>
<td>A200 (2 inch)</td>
<td>4.5” (11.4 cm)</td>
<td>3.0” (7.6 cm)</td>
<td>6.0” (15.2 cm)</td>
</tr>
<tr>
<td>N025 (Low Flow)</td>
<td>2.5” (6.3 cm)</td>
<td>2.0” (5.1 cm)</td>
<td>4.0” (10.1 cm)</td>
</tr>
<tr>
<td>N100 (1 inch)</td>
<td>2.5” (6.3 cm)</td>
<td>2.0” (5.1 cm)</td>
<td>4.0” (10.1 cm)</td>
</tr>
</tbody>
</table>
## A1 Commercial Grade Meters

<table>
<thead>
<tr>
<th>Design Type:</th>
<th>A025 (Low Flow)</th>
<th>A100 (1 inch)</th>
<th>A200 (2 inch)</th>
<th>N025 (Low Flow)</th>
<th>N100 (1 inch)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing Material:</td>
<td>Paddlewheel</td>
<td>Turbine</td>
<td>Turbine</td>
<td>Paddlewheel</td>
<td>Turbine</td>
</tr>
<tr>
<td>Fitting Size:</td>
<td>1 inch</td>
<td>1 inch</td>
<td>2 inch</td>
<td>1 inch</td>
<td>1 inch</td>
</tr>
<tr>
<td>Fitting Type:</td>
<td>NPT, ISO or BSPP(female)</td>
<td>NPT, ISO or BSPP(female)</td>
<td>NPT or ISO (female)</td>
<td>NPT or ISO (female)</td>
<td>NPT or ISO (female)</td>
</tr>
<tr>
<td>Flow Range (GPM):</td>
<td>0.3 - 3 GPM</td>
<td>3 - 50 GPM</td>
<td>30 - 300 GPM</td>
<td>0.3 - 3 GPM</td>
<td>3 - 50 GPM</td>
</tr>
<tr>
<td>Flow Range (LPM):</td>
<td>1 - 10 LPM</td>
<td>10 - 190 LPM</td>
<td>100 - 1,000 LPM</td>
<td>1 - 10 LPM</td>
<td>10 - 190 LPM</td>
</tr>
<tr>
<td>Accuracy:</td>
<td>± 1.5% of reading</td>
<td>± 1.5% of reading</td>
<td>N/A *</td>
<td>± 1.5% of reading</td>
<td>± 1.5% of reading</td>
</tr>
<tr>
<td>Repeatability:</td>
<td>± 1%</td>
<td>± 0.2%</td>
<td>± 0.2%</td>
<td>± 1%</td>
<td>± 0.2%</td>
</tr>
<tr>
<td>Pressure Rating:</td>
<td>300 PSI / 21 BAR</td>
<td>300 PSI / 21 BAR</td>
<td>300 PSI / 21 BAR</td>
<td>150 PSI / 10.2 BAR</td>
<td>150 PSI / 10.2 BAR</td>
</tr>
<tr>
<td>Operating Temperature Range:</td>
<td>-40°F to +250°F</td>
<td>-40°F to +250°F</td>
<td>-40°F to +250°F</td>
<td>-40°F to +250°F</td>
<td>-40°F to +250°F</td>
</tr>
<tr>
<td>with Computer:</td>
<td>-40°C to +121°C</td>
<td>-40°C to +121°C</td>
<td>-40°C to +121°C</td>
<td>-40°C to +121°C</td>
<td>-40°C to +121°C</td>
</tr>
<tr>
<td>Wetted Material - Housing:</td>
<td>Aluminum</td>
<td>Aluminum</td>
<td>Aluminum</td>
<td>Nylon</td>
<td>Nylon</td>
</tr>
<tr>
<td>Wetted Material - Shaft:</td>
<td>Aluminum</td>
<td>Ceramic</td>
<td>Ceramic</td>
<td>Nylon</td>
<td>Nylon</td>
</tr>
<tr>
<td>Wetted Material - Rotor:</td>
<td>Nylon</td>
<td>Nylon</td>
<td>Nylon</td>
<td>Nylon</td>
<td>Nylon</td>
</tr>
<tr>
<td>Wetted Material - Rings:</td>
<td>316 Stainless Steel</td>
<td>316 Stainless Steel</td>
<td>316 Stainless Steel</td>
<td>316 Stainless Steel</td>
<td>316 Stainless Steel</td>
</tr>
<tr>
<td>Typical K-Factor:</td>
<td>2200</td>
<td>730</td>
<td>72</td>
<td>2200</td>
<td>730</td>
</tr>
<tr>
<td>Frequency Range:</td>
<td>11 - 110 Hz @</td>
<td>36.5 - 608.3 Hz @</td>
<td>36 - 360 Hz @</td>
<td>11 - 110 Hz @</td>
<td>36.5 - 608.3 Hz @</td>
</tr>
<tr>
<td>Recommended Strainer Size:</td>
<td>55 mesh</td>
<td>28 mesh</td>
<td>28 mesh</td>
<td>55 mesh</td>
<td>28 mesh</td>
</tr>
<tr>
<td>Shipping Weight:</td>
<td>1.35 lbs. (0.61 kg)</td>
<td>1.35 lbs. (0.61 kg)</td>
<td>3.0 lbs. (1.36 kg)</td>
<td>1.0 lbs. (0.5 kg)</td>
<td>1.0 lbs. (0.5 kg)</td>
</tr>
<tr>
<td>Local Display:</td>
<td>09 Computer (See page 47)</td>
<td>09 Computer (See page 47)</td>
<td>09 Computer (See page 47)</td>
<td>09 Computer (See page 47)</td>
<td>09 Computer (See page 47)</td>
</tr>
</tbody>
</table>

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