



"Look for the silver label!"



"Look for the silver label!"

A1 SERIES COMMERCIAL GRADE METERS

Commercial Grade Meters are designed as self-contained, battery powered units. These indicating meters come in Aluminum or Nylon only. A1 Meters are not field serviceable like the popular G2 Series Meters. For flowmeters with advanced features and additional housing materials, refer to the G Series, G2 Series, OM Series or TM Series sections in this catalog.

1) Select Your Turbine



Aluminum



Nylon



2) Select Your Electronic Choice

For further details see the Electronics Section.



"Look for the silver label!"

09 Computer



XX No Computer



3) Select Your Module



Standard Remote Kit



FM Approved Remote Kit



Conditioned Signal Output Module



4) Do You Require Any Accessories?



Display Adapter Kit



Electronics Programmer

Product Identifier

A1 = Commercial Grade Electronic Digital Meter

Electronic Choice

- 09** = 2 Totals (1 Resettable, 1 Cumulative), Factory Calibration in Gallons and Litres, User Configuration and Rate of Flow
- XX** = No Computer

Calibration

- GM** = Gallons / Minute
- LM** = Litres / Minute
- 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*

See Reference section for meter dimensions.

Fitting Type

- N** = NPT (Female)
- I** = ISO (Female) BSPT
- 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

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

* When ordering Computer Assembly Only, specify Turbine Housing size.

* ISO 7 designation is RC

FLOMEC® 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 or Nylon housing material.

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

Aluminum



"Look for the silver label!"

Nylon



For complete part number, see "Meter Number Reference" for this section.

ACCURACY: ±1.5% READING
(On models A100, A200 and N100)

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; User Configuration and Rate of Flow.
- ✓ Output capabilities available to communicate with process control equipment.
- ✓ Lightweight, compact design allows for easy installation.
- ✓ Lithium battery life: 5 years.

APPROVALS



NEMA
4



IP65

IECEx

	ALUMINUM			NYLON	
	A025 (Low Flow)	A100 (1 inch)	A200 (2 inch)	N025 (Low Flow)	N100 (1 inch)
Design Type:	Paddlewheel	Turbine	Turbine	Paddlewheel	Turbine
Housing Material:	Aluminum	Aluminum	Aluminum	Nylon	Nylon
Fitting Size:	1 inch	1 inch	2 inch	1 inch	1 inch
Fitting Type:	NPT, ISO [◆] or BSPP(female)	NPT, ISO [◆] or BSPP(female)	NPT or ISO [◆] (female)	NPT or ISO [◆] (female)	NPT or ISO [◆] (female)
Flow Range (GPM):	0.3 - 3 GPM	3 - 50 GPM	30 - 300 GPM	0.3 - 3 GPM	3 - 50 GPM
Flow Range (LPM):	1 - 11 LPM	11 - 190 LPM	114 - 1,135 LPM	1 - 11 LPM	11 - 190 LPM
Accuracy:	Application Dependent [*]	± 1.5% of reading	± 1.5% of reading	Application Dependent [*]	± 1.5% of reading
Repeatability:	± 1%	± 0.2%	± 0.2%	± 1%	± 0.2%
Pressure Rating:	300 PSI / 21 BAR	300 PSI / 21 BAR	300 PSI / 21 BAR	150 PSI / 10.2 BAR	150 PSI / 10.2 BAR
Operating Temperature Range:	-40° F to +250° F (-40° C to +121° C)	-40° F to +250° F (-40° C to +121° C)	-40° F to +250° F (-40° C to +121° C)	-40° F to +250° F (-40° C to +121° C)	-40° F to +250° F (-40° C to +121° C)
with Computer:	0° F to +140° F (-18° C to +60° C)	0° F to +140° F (-18° C to +60° C)	0° F to +140° F (-18° C to +60° C)	0° F to +140° F (-18° C to +60° C)	0° F to +140° F (-18° C to +60° C)
Wetted Material - Housing:	Aluminum	Aluminum	Aluminum	Nylon	Nylon
Bearings:	Ceramic	Ceramic	Ceramic	Ceramic	Ceramic
Shaft:	Tungsten Carbide	Tungsten Carbide	Tungsten Carbide	Tungsten Carbide	Tungsten Carbide
Rotor:	Nylon	Nylon	Nylon	Nylon	Nylon
Signal Generators:	Ferrite	Ferrite	Ferrite	Ferrite	Ferrite
Rings:	316 Stainless Steel	316 Stainless Steel	316 Stainless Steel	316 Stainless Steel	316 Stainless Steel
Typical K-Factor:	2200 PPG / 581 PPL	730 PPG / 193 PPL	72 PPG / 19 PPL	2200 PPG / 581 PPL	730 PPG / 193 PPL
Frequency Range:	11 - 110 Hz @ 0.3 - 3 GPM	36.5 - 608.3 Hz @ 3 - 50 GPM	36 - 360 Hz @ 30 - 300 GPM	11 - 110 Hz @ 0.3 - 3 GPM	36.5 - 608.3 Hz @ 3 - 50 GPM
Recommended Strainer Size:	55 mesh	28 mesh	28 mesh	55 mesh	28 mesh
Shipping Weight:	1.35 lbs. (0.61 kg)	1.35 lbs. (0.61 kg)	3.0 lbs. (1.36 kg)	1.0 lbs. (0.5 kg)	1.0 lbs. (0.5 kg)
Local Display:	09 Computer (See page 63)	09 Computer (See page 63)	09 Computer (See page 63)	09 Computer (See page 63)	09 Computer (See page 63)
Calibration Report	Comes standard with A1 Series Meters. N.I.S.T. – Certification available.				

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

◆ ISO 7 Designation is RC.

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



*FM Approved
Remote Kit
Assembly Installed*

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 Computer.

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



Standard Remote Kit Assembly (Part No. 113265-1)



*Standard Remote Kit
Assembly Installed*

The Standard 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 also provides the versatility of panel mounting of the LCD readout up to 300 ft. (90 m) from the turbine housing and sensor.

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

Do not use on A1 2-inch meter. Order 113275-1.

Features and Benefits:

- ✓ 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.
- ✓ Battery powered from meter; no additional power required.

SPECIFICATIONS

Magnetic Pickup:	1.5 k Ohm, 700 mH
Signal Type:	Sine Wave
Voltage:	Peak to Peak 33 mV to 825 mV
Frequency:	11 to 750 Hz
Cable:	10 ft. (3 m), 2-conductor shielded, Belden #1266A or #8451



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 VDC, approximately 1 mA
Connection:	Three wire
Frequency:	0 to 750 Hz
Cable:	10 ft. (3 m) Belden #9363

APPROVALS



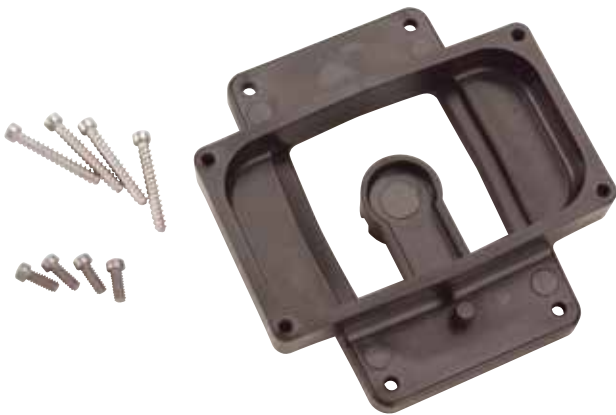
Conditioned Signal Output Module (Part No. 113435-1)



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.

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.



Kit Shown Installed on PVDF Meter

GPI Electronics Programmer (Part No. 113800-06)



The GPI Electronics Programmer is a system composed of a small USB interface unit, a USB cable, and a software program. This kit is perfect for reconfiguring multiple GPI Electronics for the first time or when changing the configuration over the life of the meter.

Used with your PC, it allows quick, convenient on-screen setting (and reading) of setup options and calibration data from many GPI Electronic Digital Meters (EDMs).