# **A1 SERIES LOW FLOW**

#### ALUMINUM PADDLEWHEEL METER





#### **SPECIFICATIONS**

| Model Numbers:                     |           | A1A-10-N-L-Q w/Q9 display                      |              |  |
|------------------------------------|-----------|--|--------------|--|
|                                    |           | A1A-10-N-L-P conditioned signal output (blind) |              |  |
| Design Type:                       |           | Paddlewheel                                    |              |  |
| Fitting Size / Fitting Type:       |           | 1-inch / NPT (Female)                          |              |  |
| Flow Range:                        |           | 0.3 - 3 GPM                                    | 1 - 11 L/min |  |
| Accuracy (% of Reading):           |           | Application Dependent <sup>1</sup>             |              |  |
| Repeatability:                     |           | ± 1.0%   |              |  |
| 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:                  |           | 2,200 PPG (581 Pulses/L)                       |              |  |
| Frequency Range:                   |           | 11-110 Hz @ 0.3-9 GPM<br>(1-11 L/min)          |              |  |
| Recommended Strainer Size:         |           | 55 mesh (275 μm)                               |              |  |
| Wetted<br>Materials<br>(Aluminum): | Housing:  | Aluminum                                       |              |  |
|                                    | Bearings: | Ceramic (96% Alumina)                          |              |  |
|                                    | Shaft:    | Tungsten Carbide                               |              |  |
|                                    | Rotor:    | Nylon  |              |  |
|                                    | Rings:    | 316 Stainless Steel                            |              |  |
| Calibration Report:                |           | N.I.S.T. – Certification available.            |              |  |

 $^{1}$ Accuracy can vary up to  $\pm$  5% depending on installation and fluid type. Field calibration is recommended for best accuracy.

**FLOMEC®** A1 Series Paddlewheel Meter for accurate measurement of thin petroleum-based fluid applications. For low flow applications: 0.3 - 3 GPM (1 to 11 L/min). Accuracy can vary up to  $\pm 5\%$  depending on installation and fluid type. Field calibration is recommended for best accuracy. A1's lightweight, compact design allows for easy installation.

# A1A-10-N-L-Q MODEL WITH DISPLAY

A1 Aluminum with Q9 Display is designed as a self-contained, battery-powered unit. Intrinsically safe for use in hazardous areas. *t* 

## FEATURES / BENEFITS

- Unique package combines Paddlewheel and LCD into a selfcontained, 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
- 12 selectable engineering units (gallons or liters are standard defaults)
- · Factory calibration
- AAA Alkaline battery life: 2 years

## A1A-10-N-L-P MODEL (BLIND)

A1 Aluminum with Conditioned Signal Output Module (Blind). Conditioned signal module is not FM approved.

#### **FEATURES & BENEFITS**

- Provides an NPN Open Collector pulse that can communicate with most process control devices
- Modular design allows for use with output modules, sensors, and remote display kits; plug and play
- External 9 to 35 V (dc), approximately 1mA
- 10 ft. (3 m) 3-wire with strain relief
- Factory calibration

#### **APPLICATIONS**

- Fuel Transfer
- Batching / Blending
- Fuel Products

# APPROVALS†/WARRANTY





**IP65** 





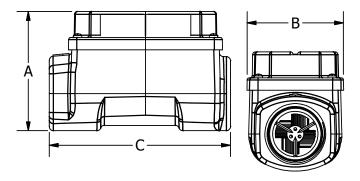
tlf the meter includes any modules (4-20 mA and Pulse Out) that introduces external power, then all intrinsic safety approvals are voided.





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## ALUMINUM PADDLEWHEEL METER



### **DIMENSIONS**

| A =     | 2.5 in.    |
|---------|------------|
| Height* | (63.5 mm)  |
| B =     | 2.0 in.    |
| Width   | (50.8 mm)  |
| C =     | 4.0 in.    |
| Length  | (101.6 mm) |

<sup>\*</sup>Height includes 0.7 in. (1.8 cm) for the computer electronics.

# **ACCESSORIES**

| Part No.  | Description                                  |  |
|-----------|--|--|
| 113275-10 | FM Approved Remote Kit Assembly <sup>‡</sup> |  |
| 113435-10 | Conditioned Signal Output Module             |  |
| 125260-02 | 90o Display Adapter Kit                      |  |
| 125100-10 | 4-20 mA / Pulse Out Module                   |  |

‡Does not make Non-FM or Non-ATEX Approved meters FM or ATEX Approved.

