General

The ALMAGWP is an inline-type electromagnetic flowmeter with flanged connections. This versatile flow sensor is available for nominal pipe sizes ranging from ½" through 80" and can detect fluid velocities ranging from less than 0.1 mps to 10 mps. The ALMAGWP comes with an easy to read OLED display and is available with a wide variety of options including AC or DC power, local or remote display, RS485, HART, and Profibus communications or relay outputs. This broad array of options makes the ALMGWP an excellent choice for measuring conductive fluid flow rates in many applications and industries including food & beverage, pulp & paper and industrial process control.

Features

- Various liner materials are available to satisfy nearly all industrial applications
- Wide fluid velocity range of 0-32 ft/sec with excellent low-flow accuracy
- Flange-type process connections available in ANSI, DIN, and JIS style
- Optional 5 Amp, form C relay contacts allow high power loads to be controlled directly from the meter
- Optional IP68 environmental protection class (submersible)
- Easy-to-read OLED display; visible in low light environments and in direct sunlight, no backlighting necessary
- Excellent accuracy: ± 0.5% of reading standard, ±0.3% of reading optional
- Upright/reverse flowrate test function standard with every unit

Specifications

- Size: ½”~120” (DN15~DN3000)
- Measuring Range: 0.32 ft/s (0.1 m/s) min. fluid velocity
  33 ft/s (10 m/s) max.
- Material
  - Measuring Tube: Stainless Steel #304
  - Flange material: Carbon Steel (standard)
    - Stainless Steel #304 (optional)
    - Stainless steel #316 (optional)
  - Coil Housing: Carbon Steel (standard)
    - Stainless Steel #304 (optional)
    - Stainless steel #316 (optional)
- Liner
  - Chloroprene Rubber (Neoprene)
  - Polyurethane
  - PTFE
  - F46
  - PFA
- Protection: IP65
- IP68 (remote type only)
- Conductivity: ≥ 5 µS/cm
- Power requirements: 110-240VAC or 16-36 VDC
- Outputs: 4-20mA, pulse, (2) open collector switches
  or (2) Form C, 5 Amp relay contacts (optional)
- Communication: HART, RS485/Modbus, Profibus-DP
- Electrode & Grounding: Stainless Steel 316L
  - Nickel
  - Hastelloy C
  - Titanium
  - Tantalum
- Ambient Temperature: -5 to +130 °F (-20 ~ 55 °C)
- Process Connection: Flanged
- Flange types: Standard ANSI 150#
  - Options: JIS 10K / JIS 20K / JIS 40K
  - ANSI 300# / ANSI 600#
  - DIN PN 10 / PN 16 / PN25 / PN 40
- Grounding Resistance: < 10 Ω
- Accuracy: ±0.5% of reading (Velocity ≥ 0.5 m/s)
  ±0.005 m/s (Velocity < 0.5 m/s)
- Temperature: 14 ~ 140 °F (-10~60 °C) - Polyurethane
  -5 ~ 160 °F (-20~71 °C) - Neoprene
  -40 ~ 356 °F (-40~180 °C) - PFA
  -40 ~ 356 °F (-40~180 °C) - PTFE

SmartMeasurement

10437 Innovation Drive, Suite 315, Milwaukee, WI 53226, USA
Mounting

- Standard Integral type
  - Mounting dimensions
  - Standard Integral type
  - Standard Remote type

Alarm indicator

Flow rate
Flow rate units of measure
Fluid velocity
Empty pipe ratio
Percent of full scale flow rate
Forward & reverse totalized flows
Net difference between forward & reverse totalized flows
Enter
Up
Down
Compound

Flow Rate
Fluid Velocity
Empty Pipe Ratio
% of Full Scale Flow
Alarm Status

Forward & reverse totalized flows
Enter Key
Up Key
Down Key
Compound Key

Total Flow

- Flow Rate
- Fluid Velocity
- Empty Pipe Ratio
- % of Full Scale Flow
- Alarm Status

- Forward & reverse totalized flows
- Enter Key
- Up Key
- Down Key
- Compound Key

Smartmeasurement™
DIMENSIONS - Inline - ANSI and DIN Flanges

** Flanges for 28” diameter and greater conform to ANSI B16.47 Series B, 150# Class
**Please contact your local Smart Measurement application engineer**

**You also need to provide the following information:**

<table>
<thead>
<tr>
<th>Type of Fluid</th>
<th>Please specify the name of your fluid media, the operating PH, and conductivity.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Scale Flow</td>
<td>Maximum and minimum flow rates should be specified in units of MPH, GPM, LPM, etc.</td>
</tr>
<tr>
<td>Line Size</td>
<td>Please state nominal pipe size as well process connection type (flange, threaded, etc..)</td>
</tr>
<tr>
<td>Pressure &amp; Temperature</td>
<td>We will calibrate your flowmeter as close to your operating conditions as possible</td>
</tr>
</tbody>
</table>

### Model Selection Guide

<table>
<thead>
<tr>
<th>ALMAGWP Series</th>
<th>Example: ALMAGWP-F-50-0-3-IN-2.5-65-0-DC-0-EXI-NN-NN</th>
</tr>
</thead>
</table>
| ALMAGWP-* | **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-* **-