Flanged Electromagnetic Flow Sensor

No Moving Parts, Minimal Straight Pipe Requirement, Unobstructed Flow

The Series FLMG Flanged Electromagnetic Flow Sensor is a flanged electromagnetic flowmeter designed for use in 4 to 10” pipes in municipal or industrial water and wastewater applications. The FLMG has no moving parts and requires less frequent maintenance in applications where debris or sand is in the flow. It’s specially designed with electrodes that discourage fouling and requires little space between the water and wastewater applications. The FLMG has no moving parts and requires less applications. This series also features backup battery power to provide auxiliary power during power failures.

ACCESSORIES

- Series BAT, Blind Analog Transmitter, converts pulse output to 4 to 20 mA analog controllers for remote reading, data logging, pulse-to-analog conversion, and telemetry. It includes a 20-foot power cable providing pulse output for use with a variety of displays and controllers for remote reading, data logging, pulse-to-analog conversion, and telemetry applications. This series also features backup battery power to provide auxiliary power during power failures.

- Series RTI, Rate Total Indicator, converts pulse output to 4 to 20 mA analog output. Unit is loop powered, fits on the enclosure of the meter, and provides a high/low flow alarm.

- Series PWD, Pulse Divider, for use with pacing electronic metering pumps. Unit switches to suit a number of metering pump inputs.

SPECIFICATIONS

Service: Compatible non-coating conductive liquids.

Range: See chart.

Wetted Materials:
Liner: Dual diuremeter rubber; Electrodes: 316 SS.

Accuracy: ±1% (10% to 100% of FS max. flow), ±2% (min. to 10% FS).

Temperature Limits: Process: 10 to 130°F (-12 to 54°C); Ambient: -40 to 158°F (-40 to 70°C).

Pressure Limits: 150 psi (10.3 bar).

Mounting Orientation: Horizontal or vertical.

Process Connection: ANSI flange.

Display: Rate: 5 digits; Total: 8 digits LCD.

Output: Current sinking square wave pulse, opto-isolated.

Power Requirements: 7 to 32 VDC @ 30 mA and (2) 3.6 V AA lithium metal batteries, installed and functional, user replaceable for backup power.

Battery Life: 2 months with power failure; 10 years with power.

Electrical Connection: #22 AWG, 3 conductor length (18´ (5.5 m) (2000´ max.).

Conductivity: ≥20 microSiemens.

Empty Pipe Detection: Hardware/software, conductivity-based.

Enclosure Materials:

Enclosure Rating: NEMA 4X (IP66).

Weight:
4”: 32 lb (14515 g);
6”: 47 lb (21319 g);
8”: 69 lb (31298 g);
10”: 125 lb (56699 g).

Example

<table>
<thead>
<tr>
<th>Series</th>
<th>FLMG</th>
<th>04</th>
<th>GM</th>
<th>GAL</th>
<th>H</th>
<th>15</th>
<th>FLMG-04-GM-GAL-H-15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power/Size</td>
<td>FLMG</td>
<td>04</td>
<td>06</td>
<td>08</td>
<td>10</td>
<td>DC Powered 4” Pipe</td>
<td>DC Powered 6” Pipe</td>
</tr>
<tr>
<td>Rate/Measurement</td>
<td>GM</td>
<td>LM</td>
<td>LS</td>
<td>FM</td>
<td>MH</td>
<td>GD</td>
<td>LD</td>
</tr>
<tr>
<td>Total Measurement</td>
<td>GAL</td>
<td>GLX</td>
<td>LIT</td>
<td>LTX</td>
<td>MLT</td>
<td>CMT</td>
<td>CMX</td>
</tr>
<tr>
<td>Pulse Rate</td>
<td>H</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>High Frequency* Required with use with Series BAT</td>
<td>10 Units/Pulse</td>
<td>100 Units/Pulse</td>
</tr>
<tr>
<td>Options</td>
<td>15</td>
<td>30</td>
<td>45</td>
<td>60</td>
<td>Factory-Installed Power/Output Cable, 15 m (50 ft)**</td>
<td>Factory-Installed Power/Output Cable, 30 m (100 ft)**</td>
<td>Factory-Installed Power/Output Cable, 45 m (150 ft)**</td>
</tr>
<tr>
<td>Internal Data Logger</td>
<td>2 months with power failure; 10 years with power.</td>
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*Units: Gal or Liter depending on (rate/total unit) selection rate measurement

**20-foot (6 m) cable standard