FLANGED ELECTROMAGNETIC FLOW SENSOR

No Moving Parts, Minimal Straight Pipe Requirement, Unobstructed Flow

The SERIES FLMG Flanged Electromagnetic Flow Transmitters is a flanged, in-line flowmeter designed for use in 4 to 10’ (10 to 25 cm) pipes. This series displays flow rate and total with selectable pulse rate output.

FEATURES/BENEFITS

• Long life cycle and less frequent maintenance with no moving parts to wear or break and electrodes that discourage fouling
• Minimum space requirement between the meter and a pipe elbow
• Rate and total indication are standard on large LCD display
• Obstruction free pipe cross-section yields low pressure drop
• Rate and total with selectable pulse rate output.
• Pulse divider, for use with pacing electronic metering pumps: unit divides the input frequency to any number from 1 to 9999 with the use of rotary switches to suit a number of metering pump inputs. (See website)

APPLICATIONS

• Pulse output for use with a variety of displays and controllers for remote reading
• Unaffected by change in temperature, density, viscosity or concentration
• Obstruction free pipe cross-section yields low pressure drop
• Rate and total indication are standard on large LCD display
• Minimum space requirement between the meter and a pipe elbow
• Internal data logger
• Blind analog transmitter; converts pulse output to 4 to 20 mA analog output.

FEATURE/BENEFITS

• Compatible non-coating conductive liquids.
• Range: See chart.
• Wetted Materials: Liner: Dual durometer 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: 150# drilling ANSI.
• Mounting Orientation: Vertical.
• Pressure Limits: 130°F (-12 to 54°C); Ambient: -40 to 10°F (-40 to 54°C).
• Temperature Limits: 10 to 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 m ) (2000 max.).
• Conductivity: ≥20 microSiemens.
• Empty Pipe Detection: Hardware/ software, conductivity-based.
• Enclosure Rating: NEMA 4X (IP66).
• 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.

ACCESSORIES

Series Description

B.A.T

Ronan Analog transmitter; converts pulse output to 4 to 20 mA analog output, unit is loop powered; fits on the enclosure of the meter, and is field spannable.

R.T.I

Rate total indicator; converts pulse output to 4 to 20 mA analog output with local flow rate and totalization display; unit is loop powered, fits on the enclosure of the meter, and is field spannable.

P.W.D

Blind analog transmitter; converts pulse output to 4 to 20 mA analog output; power/size are selectable.

SPECIFICATIONS

Service: Compatible non-coating conductive liquids.
Range: See chart.
Wetted Materials: Liner: Dual durometer 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: 150# drilling ANSI.
Display: Rate: 5 digits; Total: 8 digits LCD.***
Output: Current sinking square wave pulse, opto-isolated.

MODEL CHART

Example FLMG-04-XX-XXX-X FLMG-08-XX-XXX-X FLMG-10-XX-XXX-X Price

Series FLMG 04 -08 08 10 04 08 08 10 04 08 08 10 04 08 08 10 Price

Power/Size

FLMG-04-XX-XXX-X FLMG-08-XX-XXX-X FLMG-10-XX-XXX-X

DC powered 4˝ pipe DC powered 8˝ pipe DC powered 10˝ pipe

Rate/Measurement

GM LM LS FM MH GD LD

Gallon/minute Liter/minute Liter/second Cubic foot/minute Cubic meter/day Million gallon/day Mega liter/day

Total Measurement

GAL GLX LIT LTX MLT CMT CMX CFX

Gallon Gallon x 1000 Liter Liter x 1000 Mega liter Cubic meter Cubic meter x 1000 Cubic foot Cubic feet x 1000

Pulse Rate

H 1 2 4

High frequency* required with use with Series BAT and RTI 10 units*/pulse 100 units*/pulse 1000 units*/pulse

Options

15 30 45 60

Factory-installed power/output cable, 15 m (50 ft)** Factory-installed power/output cable, 30 m (100 ft)** Factory-installed power/output cable, 45 m (150 ft)** Factory-installed power/output cable, 60 m (200 ft)**

Notes:

*Units: Gal or liter depending on (rate/total unit) selection rate measurement

**20-foot (6 m) cable standard

***Display is standard

① Items are subject to Schedule B discounts.

<table>
<thead>
<tr>
<th>4˝</th>
<th>6˝</th>
<th>8˝</th>
<th>10˝</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gal/Min</td>
<td>Liter/Sec</td>
<td>Gal/Min</td>
<td>Liter/Sec</td>
</tr>
<tr>
<td>Minimum</td>
<td>12</td>
<td>.75</td>
<td>32</td>
</tr>
<tr>
<td>Maximum</td>
<td>500</td>
<td>31.5</td>
<td>1200</td>
</tr>
</tbody>
</table>