

# 2550 Electromagnetic Flow Sensor



Local Display

## Description

Rugged construction allows the +GF+ SIGNET 2550 Electromagnetic Flow Sensors, otherwise called magmeters, to be installed in fluid conditions where other sensors would fail, such as high particle concentration. It features a

bipolar pulsed DC drive which prevents coating of the stainless steel electrodes. Suited for pipe sizes DN 50 to DN 300 (2 to 12 in.), easy maintenance, and features a local display and state-of-the-art microprocessor technology.

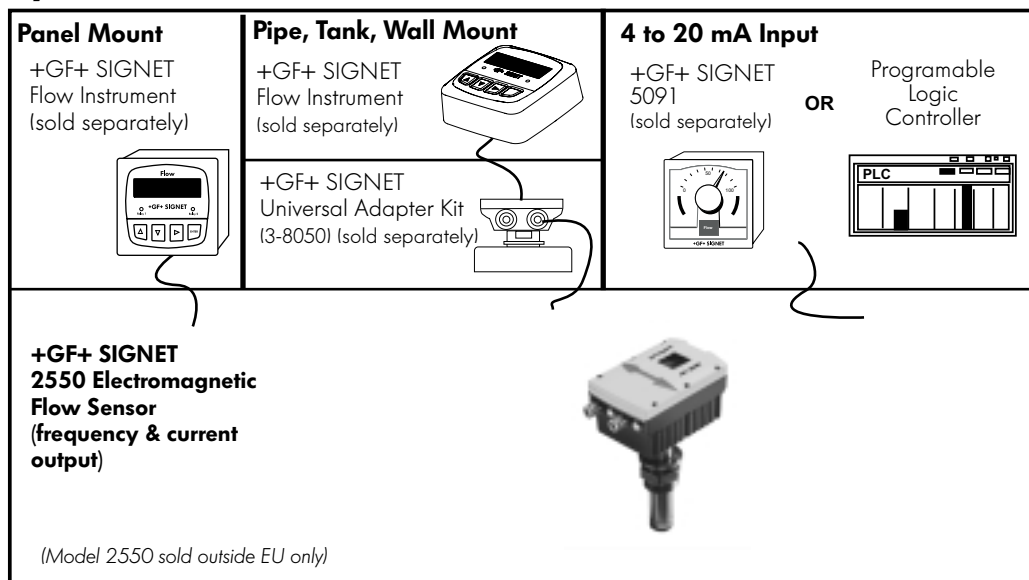
## Features

- Local Rate Indication
- Fully Scaleable Isolated 4 to 20mA Output
- Pushbutton Programmable
- Fluid Diagnostics
- Frequency Output
- Pipe sizes DN 50 to DN 300 (2 to 12 in.)

## Applications

- Waste Effluent Monitor
- Scrubbers
- Raw Water Intake
- Metal Recovery and Landfill Leachate
- RO Feedwater

## System Overview



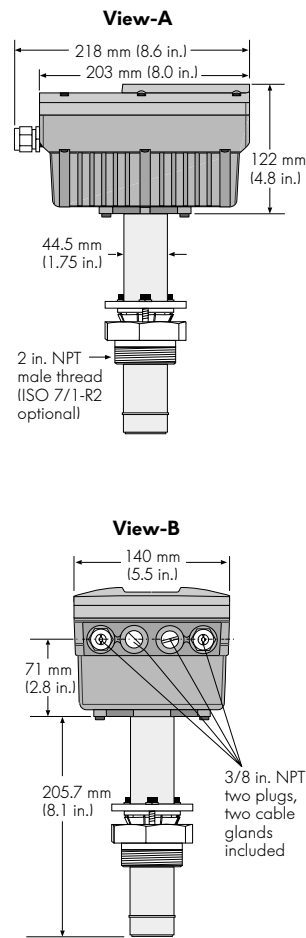
## Compatible Instruments

The 2550 Electromagnetic flow sensors are compatible with the following +GF+ SIGNET instruments:

5075	5500	8550
5091	5600	8900

See individual catalog pages for more information.

## Dimensions



## Specifications

### General

Flow Rate Range:  
0.1 to 6 m/s (0.3 to 20 ft/s)

Linearity:  
 $\pm 2\%$  of reading or  $\pm 0.05$  ft/s  
(whichever is greater)

Min. Reynolds Number: 4500

Pipe Size Range:  
DN50 to DN300 (2 to 12 in.)

### Wetted Materials:

Sensor Body, Electrodes and Installation Hardware: 316SS (1.4401)

Insulator: PFA

Internal O-Ring: FPM

Enclosure: NEMA 4 die cast aluminum

### Electrical

Power Requirements:  
24 VDC  $\pm 10\%$ , 600 mA

Max. Loop Impedance: 600 $\Omega$ , isolated

Frequency Output:  
0 to 6m/s (20 ft/s) = 0 to 500 Hz  
isolated, open collector, 5 to 12VDC  
(2K $\Omega$  pull-up resistor recommended)

### Fluid Condition

Temperature: 0 to 100°C (32 to 212°F)

Min. Conductance Req'd: 5  $\mu$ S/cm

Ambient temperature:  
-20 to 80°C (-4 to 176°F)

**Shipping Weight:** 6.7 kg (14.8 lbs.)

### Max. Pressure./Temperature Ratings

17 bar (250 psi) max. @100°C (212°F)

### Standards and Approvals

- CE
- Manufactured under ISO 9001:2000 for Quality and ISO 14001:1996 for Environmental Management

### Application Tips:

- Note minimum conductivity requirements for each sensor.
- Minimum (0.2 in.) insertion depth needed; allows for no pressure drop.
- These products are not submersible.

### For more information:

- For flow wiring information see page 173.
- For flow installation tips and information see page 156.
- To compare this Sensor with other +GF+ SIGNET Flow Sensors, see Flow Selection Guide on page 4.
- For Flow sensor mounting position information see page 156.

## Ordering Information

Sensor Part Number	
<b>3-2550.100</b>	Insertion Electromagnetic Flow Meter (Magmeter), Model 2550 (sold outside the EU only)
↓	Process fitting size - choose one
	<b>-110</b> 2 inch NPT
	<b>-111</b> 7/1-R2 ISO
↓	Installation tool - optional
	The installation tool simplifies installation and insures proper insertion depth for maximum accuracy.
<b>3-2550.100</b>	<b>-110</b> Example Part Number

Mfr. Part No.	Code
3-2550.100-110	<b>159 000 294</b>
3-2550.100-110T	<b>159 000 632</b>
3-2550.100-111	<b>198 840 024</b>
3-2550.100-111T	<b>198 840 025</b>

## Accessories and Replacement Parts

Mfr. Part No.	Code	Description
3-2550.355	<b>159 000 296</b>	Magmeter Installation Tool (for 3-2550)
1500-0101	<b>159 000 239</b>	Cable Connector (0.125 to 0.187 o.d.)
6400-0020	<b>159 000 647</b>	Fuse, Slo-Blo
1222-0439	<b>159 000 235</b>	Gasket, outer cover