

# Electromagnetic Flow Meter

For industrial water, sea water, and other electrically conductive liquids

## Key Features

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- Bi-directional - can measure flow in the forward and reverse directions
- Pipe Size: DN15 to DN150
- Accuracy:  $\pm 0.5\%$
- Two outputs as standard:
  - Digital - Modbus and
  - Analog - 4-20mA
- Power Supply: 24vDC
- Measure: Real-time flow, Accumulated flow, Flow velocity and Mass flow
- Unaffected by temperature, pressure or density of the liquid
- IP65 rating



## About

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Compressed Air Alliance's electromagnetic flow meter has no moving parts, rotating gears, turbines or bearings. It relies on two electrodes to measure the density of the magnetic field that results from an electrically conductive fluid, such as water, flowing through a pipe.

Electromagnetic flow meters can measure fluids containing solid contamination such as slurries, sludges and some chemicals. These flow meters provide real time flow rates, total volume, velocity and mass flow in a single unit with both Modbus RTU and 4-20mA outputs. The Bi-Directional ability allows the flow directions to be detected and recorded separately.

These flow meters are incredibly durable and made for most industrial environments.

## Applications

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- Manufacturing and industrial use
- Electrically conductive fluids
- Permanent measurement
- Min flow velocity of 0.5m/s

# Specifications

## Medium

- Liquid Medium
- Industrial and Domestic Water
  - Sewage
  - Salt and Sea water
  - Non-Corrosive waste-water
  - Acetic and Nitric Acid
  - Potassium, Sodium, Ammonium and Calcium Hydroxides
  - Aqua Regia
  - Other liquids available on request

## Measurement Range

Measurement Principal	Faraday's law of electromagnetic induction
Min flow velocity	0.5m/s (1.6 ft/sec)
Medium conductivity	>50us/cm
Medium Temperature Range	-20°C to +100°C -4°F to 212°F

## Accuracy

Measurement Accuracy	
• Flow speed > 1m/s	±0.5%
• Flow speed < 1m/s	±0.5% ±2mm/s
Repetitiveness	0.15%
Maximum Temperature Measurement Error	±0.1°C

## Power Supply

Power Requirement	24 VDC Max 15VA
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## Output

Outputs	4-20 mA Modbus RTU (RS485)
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## Working Environment

Ambient / working temperature	-10°C to +55°C 14°F to +158°F
Rated Pressure	0 - 16bar 0 - 232psi

## Other

Pipe Diameters	DN15-DN150 Other sizes available on request
Flange Connection	DIN
Display	In-built Monochrome LCD
IP Rating	IP65
Casing	304 Stainless Steel
Electrode	Titanium
Liner	PTFE
Bi-directional	Yes
Warranty	12 months

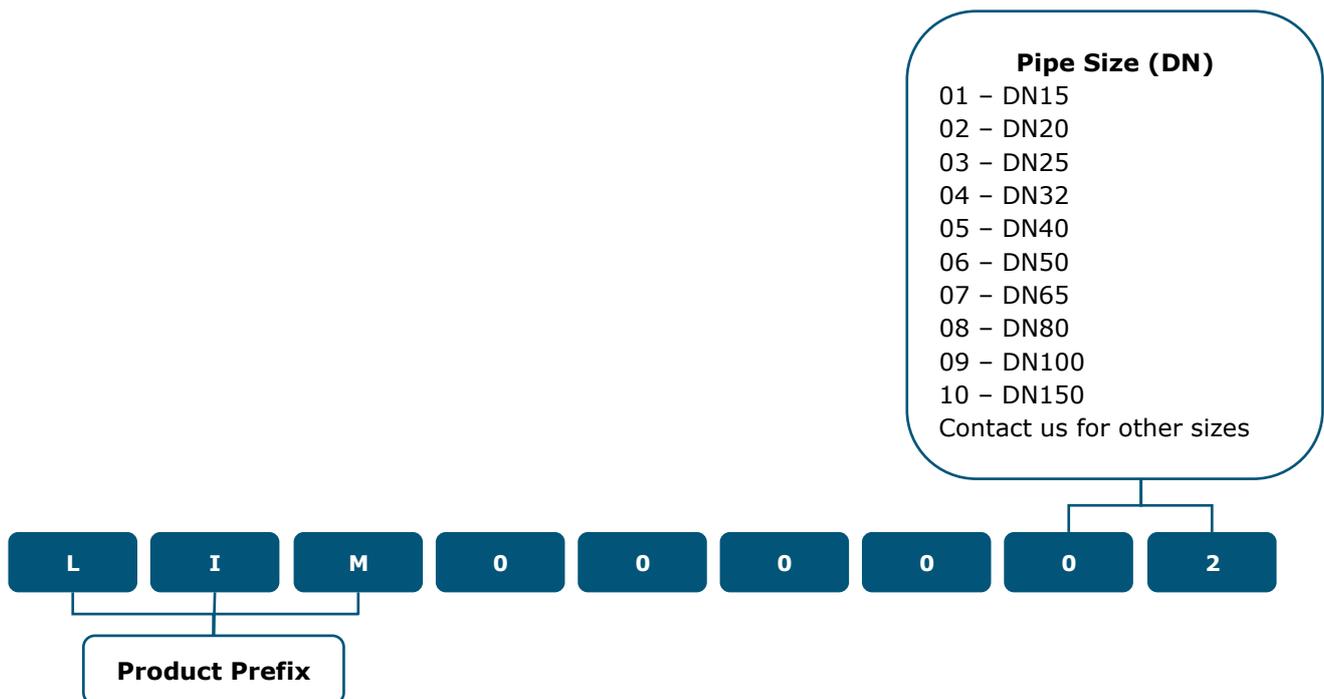
## Flow Range

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DN	Pipe Size		Flow Range (m <sup>3</sup> /hr)		Flow Range (gpm)	
	ID (mm)	Inches	Min	Max	Min	Max
15	15	1/2"	0.4	4.0	1.8	17.6
20	20	3/4"	0.8	8.0	3.5	35.2
25	25	1"	1.2	12.0	5.3	52.8
32	32	1.25"	2.0	20.0	8.8	88.0
40	40	1.5"	3.0	30.0	13.2	132
50	50	2"	5.0	50.0	22	220
65	65	2.5"	8.0	80.0	35.2	352
80	80	3"	12.0	120.0	52.8	528
100	100	4"	20.0	200.0	88.0	880
150	150	6"	32.0	320.0	140.8	1408

## How to Order

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# Liquid Flow Meter Product Range

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## Electromagnetic Flow Meter

Ideal for industrial water, waste water and other electrically conductive fluids

### Flow Range

Min Flow Velocity: 0.5 m/s (1.6 ft/sec)

### Power

24vDC

### Bi-directional

Yes

### Accuracy

±0.5%

### Outputs

Modbus & 4-20mA

### Pipe Size

DN15 to DN150

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## Clamp-On Ultrasonic Flow Meter

Fast and easy to install. Clean liquids

### Flow Range

0.1m/s to 5.0m/s (0.328 ft/s to 16ft/s)

Min Flow Velocity: 0.1m/s (0.328 ft/s)

### Power

24vDC

### Bi-directional

No

### Accuracy

±2%

### Outputs

Modbus & 4-20mA

### Pipe Size

DN6 to DN100

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## Wall-mount Ultrasonic Flow Meter

Ideal for industrial water, waste water and other clean liquids

### Flow Range

0.01m/s to 12m/s (0.03 ft/s to 40ft/s)

Min Flow Velocity: 0.1m/s (0.328 ft/s)

### Power

24vDC

### Bi-directional

No

### Accuracy

±0.5%

### Outputs

Modbus & 4-20mA

### Pipe Size

DN25 to DN5000

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## Strength

- We export to almost 100 countries.
- We have more than 2000 global customers.
- We can provide a total filtration solution.

- Filter-Online & Nordic Filtration offers a wide selection of filtration products for Domestic and Industrial Application.

- You can buy our products on our websites or by contacting us by phone or e-mail. Information about our products as well as brochures and manuals can be found on our websites:

[www.filter-online.com](http://www.filter-online.com) for Domestic Products

[nordicfiltration.com](http://nordicfiltration.com) for Industrial Products

We distribute many of our products from our stock in Denmark. Some products are shipped from remote stock.



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