Electromagnetic Flowmeter

NIVOMAG
MFI 960

NIVOMAG
MFI 860

Features

- Universal Power Supply

- Bi-directional Flow Measurement

- Built-in Totaliser

- Remote Monitoring

- Conforms to International Standards

HART
COMMUNICATION PROTOCOL

Electromagnetic Flowmeter

The electromagnetic flow meter accurately measures the flow rate of conducting liquids or slurries flowing in closed pipes. It is obstruction less and hence does not add pressure drop to the process. Absence of moving parts eliminates the need for maintenance. The performance of the instrument is not affected by the properties of the material such as corrosiveness, viscosity and density.

The instrument works on the principle of Faraday's law of Electromagnetic Induction. A magnetic field is generated by the instrument in the flow tube. The fluid flowing through this magnetic field generates a voltage that is proportional to the flow velocity. This voltage is measured by the electronics and a corresponding output provided.

NIVOMAG
MFI 960

NIVOMAG
MFI 860

Universal Power supply
Accepts any voltage from 90 Vac to 265 Vac.

Bi-directional Flow Measurement
Measures the flow in both forward and reverse directions.

Built-in Totaliser
Provides a separate totalized volume value for flow in each direction.

Remote Monitoring
Easy monitoring of the process even in hard to reach places.

Conforms to International Standards
Designed to meet global requirements and available with international approvals.

Technical Specifications

Line Size	: 10 NB to 600 NB
Mains supply	: 90 Vac to 265 Vac, 50/60 Hz
Option	: 18 Vdc to 30 Vdc
Outputs	: 4-20mA, Relay, Frequency, Pulse, RS 485, HART (optional)
Accuracy	: ± 0.5 % of reading, optional 0.3%
Minimum Conductivity	: In 5 μS/cm
Lining Material	: PTFE, Rubber
Electrodes	: SS 316, Hastalloy 'C', Titanium, Monel and Pt-Rh
Process Temperature	: + 150° C max
Housing	: Cast Aluminium
Protection	: IP 67
Option	: IP 68 for sensor

Product Range

A range of converters are available to suit the specific needs of the customer.

MFI 960

Advanced SMART Microprocessor based instrument with high accuracy and offering completely flexibility at site with interchangeable electronics.

MFI 860

A full featured, microcontroller based flow meter with programming capabilities offering the user greater flexibility in configuring the instrument to his needs.
Instruments with IP68 protection, remotely mounted electronics and Stainless Steel Construction for use in the water industry.

Sanitary Version

Instruments with sanitary connections and complete Stainless Steel construction for use in hygienic applications in the Food, Beverage and Pharmaceutical Industries.

Lining

The sensor liner and electrodes are available in various materials to ensure optimal suitability with different applications.

PTFE Lining

Suitable for use in high temperature and corrosive applications.

Rubber Lining

Suitable for use in water applications as well as in abrasive applications.

Electrodes

General applications

The standard electrode for general-purpose applications is Ss316.

Corrosive applications

Depending on the corrosiveness of the fluid, the electrodes made of Monel, Titanium or Platinum-Rhodium can be provided.

Salient Features

- Empty Pipe Detection.
- Low Flow Cut off
- Display in User Selectable units
- User Configurable relays (In-Built)
- Programmable Pulse on-time
- Diagnostic Messages
- Adjustable Damping
- Digital Output

Flowmeter Size Selection

The flowmeter should be selected with the help of the Nomogram below
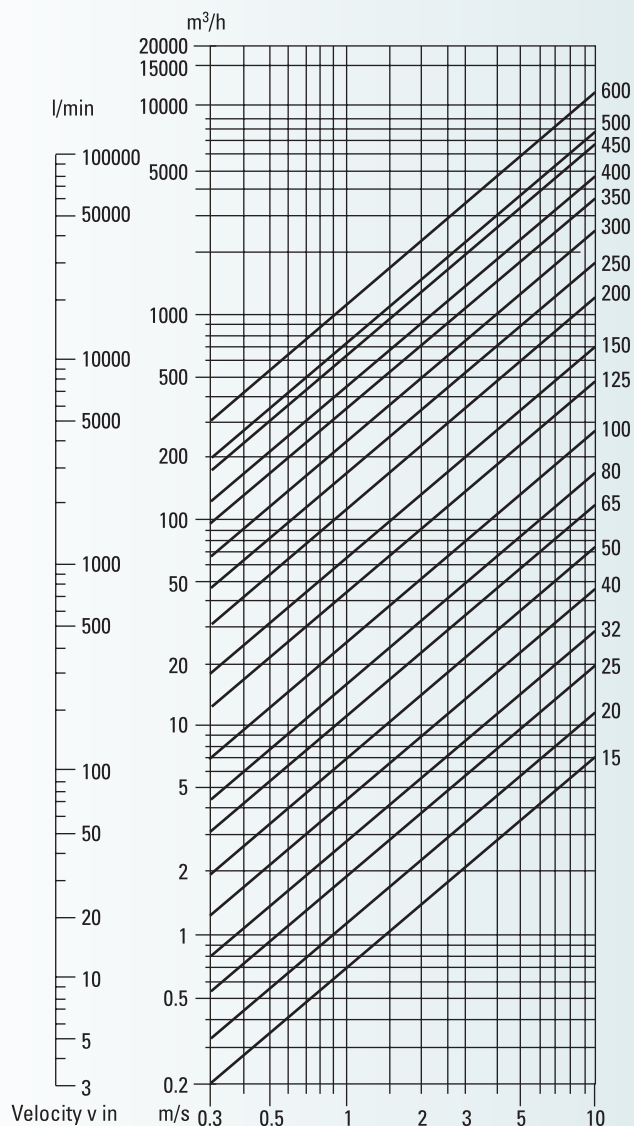
Nivo Electromagnetic
Flowmeters provide
trouble free sensing of

Liquids
Potable Water
Raw Water
Chilled Water
Beverages
Juices

Corrosive Liquids
Acids
Alkalis
Chemical Solutions

Slurries & Pastes
Coal Slurry
Sugar Syrup
Effluents
Sewage
Molasses

and many more!

We reserve the right to modify the technical data without prior notice.

Manufactured by

Nivo Controls Private Limited

104-115, Electronic Complex, Indore 452 010, India.

Phone : +91 731 4081305
Fax   : +91 731 2550075
E-mail : info@nivocontrols.com
URL   : www.nivocontrols.com