

MIS



 **IO-Link**

All-Metal Magnetic Inductive Flow Meter

- ✓ Rate, Total, Grand Total, and Batching
- ✓ 2 Configurable Outputs
- ✓ Bi-directional Measurement
- ✓ Rotatable TFT Display with Intuitive Menu



MIS

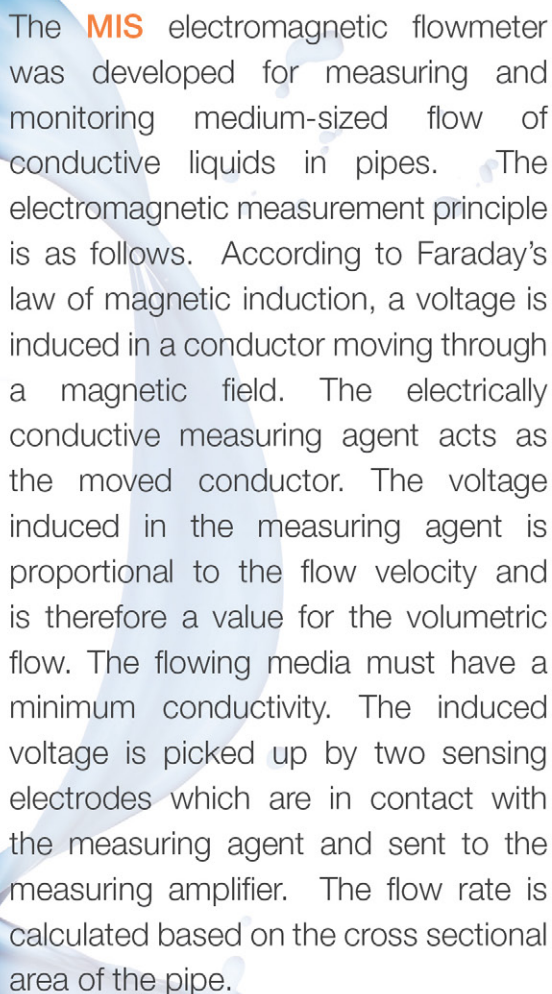
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The KOBOLD **MIS**, is a full bore electromagnetic flowmeter featuring the unique and versatile electronics module from the new and popular MIM model. Like the MIM, the **MIS** can accommodate all flow directions due to the rotating, digital TFT display screen. The rugged flow bodies, built off of our reliable EPS model, are made of epoxy-coated cast steel.

With elements borrowed from the MIM and EPS models, the new **MIS** model is a unique, economical and competent full bore electromagnetic flowmeter, suitable for a wide range of standard applications.

KOBOLD Instruments Inc.



The **MIS** electromagnetic flowmeter was developed for measuring and monitoring medium-sized flow of conductive liquids in pipes. The electromagnetic measurement principle is as follows. According to Faraday's law of magnetic induction, a voltage is induced in a conductor moving through a magnetic field. The electrically conductive measuring agent acts as the moved conductor. The voltage induced in the measuring agent is proportional to the flow velocity and is therefore a value for the volumetric flow. The flowing media must have a minimum conductivity. The induced voltage is picked up by two sensing electrodes which are in contact with the measuring agent and sent to the measuring amplifier. The flow rate is calculated based on the cross sectional area of the pipe.

The measurement does not depend on the process liquid properties such as density, viscosity, or temperature. The two outputs can be independently set to switch, or provide an analog or frequency output. A batching function can also be selected, where output 1 is set to switch as NPN/PNP/PP and output 2 is set as the control input.

MIS Highlights:

- ✓ *Rate, Total, Grand Total, and Batching*
- ✓ *2 Configurable Outputs*
- ✓ *Bi-directional Measurement*
- ✓ *Batching Function has External Control Input*
- ✓ *Multi-parameter TFT Display*
- ✓ *Display Rotates in 90° Increments*
- ✓ *Easy Set-up via Optical Touch Keys*
- ✓ *Accuracy $\pm (0.5\% \text{ of Reading} + 0.3\% \text{ of Full Scale})$*
- ✓ *Ranges: 2...277 to 5...1,100 GPM*
- ✓ *Max. Pressure of 230 PSIG*
- ✓ *Max. Temperature of 158 °F*
- ✓ *2", 3", or 4" ANSI Flange*
- ✓ *Minimum Conductivity of 20 $\mu\text{S/cm}$*
- ✓ *Max. Viscosity of 100,000 cPs*



MIS Common Application Areas:

- ✓ *Water Treatment*
- ✓ *Water Distribution Networks*
- ✓ *Waste Water Treatment*
- ✓ *Filtration Systems*
- ✓ *Industrial Applications*

MIM

For smaller lines, the KOBOLD MIM offers the same extensive features as the MIS, plus integral temperature measurement.



MIM Highlights:

- ✓ 316L Stainless Steel Housing
- ✓ Color, Multi-parameter TFT Display
- ✓ Display Rotates in 90° Increments
- ✓ Intuitive Menu via 4 Optical Keys
- ✓ 2 Configurable Outputs
- ✓ Grand and Resettable Totalizer
- ✓ PT1000 Temperature Sensor
- ✓ Bi-directional Flow Measurement
- ✓ 1/4"...2" NPT Fittings, Tri-Clamp®
- ✓ 230 PSIG Maximum Pressure
- ✓ 280 °F Maximum Temperature



KOBOLD Instruments Inc:

For more than 35 years, **KOBOLD** has been a world leader in process measurement and control solutions. We offer one of the industry's broadest lines of sensors, switches, and transmitters to measure and control flow, pressure, level, and temperature. The **KOBOLD** brand is synonymous with quality, craftsmanship, technological advancement, and cost effectiveness. Our engineers and customer service representatives are ready to help you find the ideal **KOBOLD** solution for your most demanding applications.

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