

Endress+Hauser introduces new flowmeter line

The Proline 10 product family is simple to use over its entire lifecycle, and it provides a high level of reliability and performance.

July 15, 2021 – Many industrial process plants and facilities include hundreds or even thousands of measurement devices. Particularly for basic applications, demands for simplicity in commissioning, operation, and maintenance have increased significantly in recent years. Proline 10 meets these requirements without compromise because simplicity is the top priority for this new line of flowmeters from Endress+Hauser.

Proline Promag and Promass flowmeters have been proven in use over the past few decades in various industries. Since Promass flowmeters were introduced 40 years ago, over 1 million devices have been delivered. Promag flowmeters have been on the market for almost 50 years with over 2 million installed devices. Proline flowmeters continue this legacy with products designed for basic applications.

In addition to traditional quality indicators, the expectations for additional process plant and measuring device quality have continually increased. At the same time, end users demand minimal required maintenance effort coupled with maximum ease of use and low operating costs.

The Proline 10 fulfills these requirements without compromise. Endress+Hauser's tried-and-tested transmitter technology has evolved with an even stronger focus on simplicity and user-friendliness, providing cost-efficiency and time savings through the complete lifecycle—from procurement to servicing—via simple and intuitive operation. This makes it easy for users to keep tabs on their basic applications, even in core processes.

Uncompromisingly simple

Proline 10 provides time and money savings over the entire product life cycle without any limitation on measurement performance. Every device is tested on accredited and traceable calibration rigs per ISO/IEC 17025. Proline 10 provides a high level of simplicity, safety and reliability.

Simplicity starts with end users selecting the optimum device for their application quickly, without overlooking any important order options. However, simplicity goes even farther. All

the transmitter functions share one common goal: making handling of the device as easy as possible. Both commissioning and operation can be done quickly, in the field as well as in the control room. A commissioning wizard enables on-site configuration with either the auto-rotatable and high-contrast LCD touch screen, or the SmartBlue app via Bluetooth. The latter approach is particularly useful when devices are installed in difficult-to-access locations.

If warning or error messages occur during operation, Proline 10 provides guidance via integrated device diagnostics, which categorizes errors in accordance with NAMUR NE107, visualizes the cause of each, and offers appropriate remedies to provide error-free operation.

Designed for basic applications in all industries

Proline 10 flowmeters cover a wide range of basic applications in all kinds of industries.

Proline Promag electromagnetic flowmeters are ideally suited for measuring the flows of conductive liquids, as well as for volume measurement of water and corrosive liquids (Promag 10 W/H/D), and chemically aggressive fluids (Promag 10 P).

The flowmeters meet the demands of basic applications in the water and wastewater, food and beverages, mining, minerals and metals, chemicals, power and energy, life sciences, utility, and other industries. They can be used, for example, for measuring raw water, cooling water, process water, or wastewater. Typical applications include volume measurement, consumption measurement, process monitoring, pump control, and dosing measurement.

Promass 10 K Coriolis flowmeters measure the mass flow of both liquids and gases in utilities, with minimal operating costs to maintain the flowmeter. The device can be used for filling and dosing tasks, process monitoring, pump control, consumption measurements, and much more.

In the chemical industry, Promass 10 K is used to measure the mass flow of liquids such as acids, alkalis, cleaning agents and solvents, oils, and alcohols—as well as liquid hydrocarbons.

In the food and beverage industry, the device measures the admixture quantity of animal fats (e.g., butter), or carbon dioxide (CO₂) during beverage carbonization. Furthermore, Promass 10 K is a reliable device for accurate quantity measurement in submetering distribution networks. In the life sciences industry, it can be used for mass flow measurement of purified water for injection purposes on process skids. In the utility industry, users benefit from efficient and cost-saving mass flow measurement of liquid and gaseous fuels.

Simply clever – multivariable and usable everywhere

Proline 10 provides optimum product quality and process monitoring measurements via the simultaneous measurement of additional process variables. In addition to mass flow, Promass

10 K also measures volume flow, temperature, and optionally density. With its Gas Fraction Handler function, Promass 10 K provides reliable and accurate measurements of even inhomogeneous liquids with entrained gas.

Proline Promag 10 is optionally available with conductivity measurement (Promag W/P/H) or temperature measurement (Promag H). Promag W and P can also be ordered with grounding-free measurement, which is based on the floating measurement concept.

Another order option is “0 x DN full bore” for the Promag 10 W. Electromagnetic flowmeters with this option can be installed without inlet and outlet runs, a capability often needed in piping networks or directly downstream of fittings to provide accurate measurements independently of the flow profile. Thanks to their design without tube restriction, there is no pressure loss.

Heartbeat Technology – for maximum operational safety

The Heartbeat Technology option provides permanent self-diagnostics with the highest level of coverage, as well as a traceable device verification, all without process interruption. The integrated real-time clock ensures each verification receives an automatically generated time stamp. Heartbeat Technology reduces risks in a plant, thus increasing reliability and availability.

HistoROM

HistoROM data storage ensures maximum data security before, during, and after servicing. All device parameters are stored securely on the HistoROM data storage module and are automatically reloaded after maintenance work, or easily transferred after a device is replaced. Installation and maintenance are therefore easy and quick, reducing downtime.

Transmitter for seamless system integration

Promag and Promass sensors can be combined with four different Proline 10 transmitters:

- Without display, measurement data can be queried via communication protocols.
- With two status LEDs, operated via Bluetooth with the SmartBlue app.
- With a 2.4" LCD display which can be used to read data, with the SmartBlue app is used for configuration and operation.
- With a 2.4" LCD touchscreen that can be operated with common touch gestures, or by using the SmartBlue app.

Proline transmitters make no compromise in terms of performance and accuracy. Digital signal processing begins in the intelligent sensor and is the basis for reliable, exact measurement.

The transmitter can simultaneously record multiple measured values and forward them to a process control or monitoring system. Complete access to all measurement data, including diagnostic data acquired by Heartbeat Technology, is possible at any time thanks to digital data transmission over HART or Modbus RS485, and over the corresponding 4-20 mA signal outputs.

For more information, please go to: https://eh.digital/Proline10_us

About Endress+Hauser in the U.S.

Endress+Hauser is a global leader in measurement instrumentation, services and solutions for industrial process engineering. Endress+Hauser provides sensors, instruments, systems and services for level, flow, pressure and temperature measurement as well as analytics and data acquisition. We work closely with the chemical, petrochemical, food & beverage, oil & gas, water & wastewater, power & energy, life science, primaries & metal, renewable energies, pulp & paper and shipbuilding industries. Endress+Hauser supports its customers in optimizing their processes in terms of reliability, safety, economic efficiency and environmental impact. The Group employs nearly 14,000 personnel worldwide and generated [net sales of] more than 2.6 billion euros (2.89 billion U.S. dollars) in 2020.

Contact:

Sara Fisk
Marketing Communications Manager
Endress+Hauser
2350 Endress Place, Greenwood, IN 46143
Phone: 317-535-2108
sara.fisk@endress.com
www.us.endress.com

The Endress+Hauser Group

Endress+Hauser is a global leader in measurement and automation technology for process and laboratory applications. The family company, headquartered in Reinach, Switzerland, achieved net sales of over 2.6 billion euros in 2020 with a total workforce of 14,000.

Endress+Hauser devices, solutions and services are at home in many industries. Customers thus use them to gain valuable knowledge from their applications. This enables them to improve their products, work economically and at the same time protect people and the environment.

Endress+Hauser is a reliable partner worldwide. Own sales companies in 50 countries as well as representatives in another 70 countries ensure competent support. Production facilities on four continents manufacture quickly and flexibly to the highest quality standards.

Endress+Hauser was founded in 1953 by Georg H Endress and Ludwig Hauser. Ever since, the company has been pushing ahead with the development and use of innovative technologies, now helping to shape the industry's digital transformation. 8,000 patents and applications protect the Group's intellectual property.

For further information, please visit www.endress.com/media-center or www.endress.com