Proline Promag L 400 electromagnetic flowmeter

Flowmeter for the water and wastewater industry with a weight-optimized sensor

Benefits:

- Reduced installation costs – flexible mounting by lap-joint flange concept (DN < 350/14")
- Energy-saving flow measurement – no pressure loss due to cross-section constriction
- Maintenance-free – no moving parts
- Safe operation – no need to open the device due to display with touch control, background lighting
- Time-saving local operation without additional software and hardware – integrated web server
- Integrated verification – Heartbeat Technology

More information and current pricing:

www.endress.com/5L4C

Specs at a glance

- **Max. measurement error** Volume flow (standard): ±0.5 % o.r. ± 1 mm/s (0.04 in/s) Volume flow (option): ±0.2 % o.r. ± 2 mm/s (0.08 in/s)
- **Measuring range** 9 dm³/min to 162 000 m³/h (2.5 gal/min to 1030 Mgal/d)
- **Medium temperature range** Liner material hard rubber: 0 to +80 °C (+32 to +176 °F) Liner material polyurethane: −20 to +50 °C (−4 to +122 °F) Liner material PTFE: −20 to +90 °C (−4 to +194 °F)
- **Max. process pressure** PN 16, Class 150
- **Wetted materials** Liner: PTFE; Polyurethane; Hard rubber Electrodes: 1.4435 (316L); Alloy C22, 2.4602 (UNS N06022)

Field of application: The weight-optimized Promag L is suitable for applications in the water and wastewater industry. Due to its lap-joint flange concept, the flowmeter offers flexible and easy installation. Promag L 400 saves time and costs thanks to the broad functionality of

Endress+Hauser

its water- and wastewater-optimized transmitter. In addition, Heartbeat Technology ensures compliance and process safety at all times.

Features and specifications

Liquids

Measuring principle
Electromagnetic

Product headline
Flowmeter for the water and wastewater industry with a weight-optimized sensor.
Suitable for applications in the water and wastewater industry.

Sensor features
Reduced installation costs – flexible mounting by lap‐joint flange concept (DN < 350/14"). Energy‐saving flow measurement – no pressure loss due to cross section constriction. Maintenance‐free – no moving parts.
Up to 30 % less sensor weight. Nominal diameter: DN 25 to 2400 (1 to 90"). Maximum reduced installation length to DVGW/ISO.

Transmitter features
Safe operation – no need to open the device due to display with touch control, background lighting. Time‐saving local operation without additional software and hardware – integrated web server. Integrated verification – Heartbeat Technology.
Transmitter housing made of durable polycarbonate or aluminium. WLAN access. Integrated data logger: measured values monitoring.

Nominal diameter range
Lap joint flange, lap joint flange, stamped plate: DN 25 to 300 (1 to 12")
Fixed flange: DN 350 to 2400 (14 to 90")

Wetted materials
Liner: PTFE; Polyurethane; Hard rubber
Electrodes: 1.4435 (316L); Alloy C22, 2.4602 (UNS N06022)

Liquids

Measured variables

Volume flow, conductivity, mass flow

Max. measurement error

Volume flow (standard): ±0.5 % o.r. ± 1 mm/s (0.04 in/s)
Volume flow (option): ±0.2 % o.r. ± 2 mm/s (0.08 in/s)

Measuring range

9 dm³/min to 162 000 m³/h (2.5 gal/min to 1030 Mgal/d)

Max. process pressure

PN 16, Class 150

Medium temperature range

Liner material hard rubber: 0 to +80 ℃ (+32 to +176 ℉)
Liner material polyurethane: −20 to +50 ℃ (−4 to +122 ℉)
Liner material PTFE: −20 to +90 ℃ (−4 to +194 ℉)

Ambient temperature range

Flange material carbon steel: −10 to +60 ℃ (+14 to +140 ℉)
Flange material stainless steel: −40 to +60 ℃ (−40 to +140 ℉)

Sensor housing material

DN 25 to 300 (1 to 12"): AlSi10Mg, coated
DN 350 to 2400 (14 to 90"): Carbon steel with protective varnish
Sensor connection housing: AlSi10Mg, coated

Transmitter housing material

Polycarbonat; AlSi10Mg, coated

Degree of protection

Compact version: IP66/67, type 4X enclosure
Sensor remote version (standard): IP66/67, type 4X enclosure
Sensor remote version (option): IP68, type 6P enclosure
Transmitter remote version: IP66/67, Type 4X enclosure

Display/Operation

4‐line backlit display with touch control (operation from outside)
Configuration via local display, web browser and operating tools possible

Liquids

Outputs

3 ouputs:

0‑20 mA/4‑20 mA HART (active)

Pulse/frequency/switch output (passive)

Pulse/frequency output (passive)

Switch output (passive)

Inputs

Status input

Digital communication

HART, PROFIBUS DP, EtherNet/IP, Modbus RS485

Power supply

AC 100 to 240 V / AC/DC 24 V

Hazardous area approvals

cCSAus

Metrological approvals and certificates

Calibration performed on accredited calibration facilities (acc. to ISO/IEC 17025), NAMUR

Hygienic approvals and certificates

Drinking water approval: ACS, KTW/W270, NSF 61, WRAS BS 6920

More information **www.endress.com/5L4C**

Endress+Hauser