

## Proline Promag 10L electromagnetic flowmeter

The flowmeter with a weight-optimized sensor and high cost-effectiveness



More information and current pricing:

[www.ca.endress.com/10L](http://www.ca.endress.com/10L)

### Benefits:

- Reduced installation costs – flexible mounting by one-of-a-kind lap-joint flange concept (DN < 350/14")
- Energy-saving flow measurement – no pressure loss due to cross-section constriction
- Maintenance-free – no moving parts
- Cost-effective – designed for easy applications and direct integration
- Safe operation – display provides easily readable process information
- Fully industry compliant – IEC/EN/NAMUR

### Specs at a glance

- **Max. measurement error** Volume flow:  $\pm 0.5\%$  o.r.  $\pm 2$  mm/s ( $\pm 0.5\%$  o.r.  $\pm 0.08$  in/s)
- **Measuring range** 9 dm<sup>3</sup>/min to 162 000 m<sup>3</sup>/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:** Promag L is the versatile standard sensor for the water and wastewater industry with a lap-joint flange concept for flexible installation independent of the orientation of the pipe flange pitch diameter. Combined with the Promag 10 transmitter for basic applications and direct integration, Promag 10L offers accurate measurement of liquids for a wide range of applications. It will be the preferred solution for customers aiming for minimized cost of ownership.

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## Features and specifications

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### Liquids

**Measuring principle**

Electromagnetic

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**Product headline**

The flowmeter with a weight-optimized sensor and high cost-effectiveness.

Suitable for applications in the water and wastewater industry.

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**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.

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**Transmitter features**

Cost-effective – designed for easy applications and direct integration.

Safe operation – display provides easily readable process information.

Fully industry-compliant – IEC/EN/NAMUR.

2-line display with push buttons. Device as compact or remote version. HART.

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**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")

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**Wetted materials**

Liner: PTFE; Polyurethane; Hard rubber

Electrodes: 1.4435 (316L); Alloy C22, 2.4602 (UNS N06022)

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**Measured variables**

Volume flow

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**Max. measurement error**

Volume flow:  $\pm 0.5$  % o.r.  $\pm 2$  mm/s ( $\pm 0.5$  % o.r.  $\pm 0.08$  in/s)

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## Liquids

**Measuring range**

9 dm<sup>3</sup>/min to 162 000 m<sup>3</sup>/h (2.5 gal/min to 1030 Mgal/d)

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**Max. process pressure**

PN 16, Class 150

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**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)

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**Ambient temperature range**

Flange material carbon steel: -10 to +60 °C (+14 to +140 °F)

Flange material stainless steel: -40 to +60 °C (-40 to +140 °F)

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**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

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**Transmitter housing material**

Powder - coated die - cast aluminum

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**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: IP67, type 4X enclosure

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**Display/Operation**

2-line display with push buttons

Configuration via local display and operating tools possible

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**Outputs**

4 - 20 mA HART (active)

Pulse/switch output (passive)

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**Inputs**

None

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## Liquids

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### Digital communication

HART

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### Power supply

DC 11 to 40 V

AC 85 to 250 V (45 to 65 Hz)

AC 20 to 28 V (45 to 65 Hz)

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### Hazardous area approvals

cCSAus

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### Product safety

CE, C-tick

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### Metrological approvals and certificates

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

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### Hygienic approvals and certificates

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

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