Proline Promag L 400 / 5L4C

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

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

Features and specifications
Liquids

Measuring principle

Product headline
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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)

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)
**Liquids**

**Max. process pressure**
PN 16, Class 150

**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)

**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)

**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

**Outputs**
3 outputs:
0-20 mA/4-20 mA HART (active)
Pulse/frequency/switch output (passive)
Pulse/frequency output (passive)
Switch output (passive)

**Inputs**
Status input
### Liquids

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<tr>
<th><strong>Digital communication</strong></th>
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<td>HART, PROFIBUS DP, EtherNet/IP, Modbus RS485</td>
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<th><strong>Power supply</strong></th>
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<td>AC 100 to 240 V / AC/DC 24 V</td>
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<th><strong>Metrological approvals and certificates</strong></th>
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<td>Calibration performed on accredited calibration facilities (acc. to ISO/IEC 17025), NAMUR</td>
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More information [www.endress.com/5L4C](http://www.endress.com/5L4C)