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/signal output (passive)
    - Pulse/frequency output (passive)
    - Switch output (passive)

- **Inputs**
  - Status input
## Liquids

<table>
<thead>
<tr>
<th><strong>Digital communication</strong></th>
<th>HART, PROFIBUS DP, EtherNet/IP, Modbus RS485</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Power supply</strong></td>
<td>AC 100 to 240 V / AC/DC 24 V</td>
</tr>
<tr>
<td><strong>Hazardous area approvals</strong></td>
<td>cCSAUs</td>
</tr>
<tr>
<td><strong>Metrological approvals and certificates</strong></td>
<td>Calibration performed on accredited calibration facilities (acc. to ISO/IEC 17025), NAMUR</td>
</tr>
<tr>
<td><strong>Hygienic approvals and certificates</strong></td>
<td>Drinking water approval: ACS, KTW/W270, NSF 61, WRAS BS 6920</td>
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</tbody>
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More information [www.us.endress.com/5L4C](http://www.us.endress.com/5L4C)