

Promag 50L



More information and current pricing:

www.us.endress.com/50L

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
- Fast commissioning – application-specific Quick Setups
- Safe operation – display provides easy readable process information
- Fully industry compliant – IEC/EN/NAMUR
- Maintenance-free – no moving parts

Specs at a glance

- **Max. measurement error** Volume flow (standard): $\pm 0.5\%$ o.r. ± 1 mm/s (0.04 in/s) Volume flow (option): $\pm 0.2\%$ 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: 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 proven Promag 50 transmitter with push buttons, Promag 50L offers highly accurate measurement of liquids for a wide range of standard applications. Promag 50L is available in a compact or remote version.

Features and specifications

Liquids

Measuring principle

Electromagnetic

Product headline

The flowmeter with a weight-optimized sensor and a modular electronic concept. Fully suitable for standard applications in the water and wastewater industry.

Sensor features

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. Up to 30 % less sensor weight. Nominal diameter: DN 25 to 2400 (1 to 90").

Transmitter features

Fast commissioning – application-specific Quick Setups. Safe operation – display provides easy readable process information. Fully industry compliant – IEC/EN/NAMUR. 2-line backlit display with push buttons. Device in compact or remote Version.

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

Max. measurement error

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

A: Powder-coated die-cast aluminum

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

Display/Operation

2-line backlit display with push buttons

Configuration via local display and operating tools possible

Outputs

3 outputs:

0-20 mA (active)/4-20 mA (active/passive)

Pulse/frequency output (passive)

Switch output (passive)

Inputs

Status input

Liquids

Digital communication

HART
PROFIBUS PA/DP

Power supply

DC 16 to 62 V
AC 85 to 260 V (45 to 65 Hz)
AC 20 to 55 V (45 to 65 Hz)

Hazardous area approvals

cCSAus

Product safety

CE, C-tick

Metrological approvals and certificates

3.1 material, calibration performed on accredited calibration facilities
(acc. to ISO/IEC 17025)

Hygienic approvals and certificates

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

More information www.us.endress.com/50L