

## Promag 53L



More information and current pricing:

[www.cz.endress.com/53L](http://www.cz.endress.com/53L)

### 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
- Quality – software for filling & dosing, density, electrode cleaning and also advanced diagnostics
- Easy calculation – bidirectional totalizers
- Automatic recovery of data for servicing
- Maintenance-free – no moving parts

### Specs at a glance

- **Max. measurement error** Volume flow (standard):  $\pm 0.5\%$  o.r.  $\pm 1$  mm/s (0.04 in/s) Volume flow (option):  $\pm 0.2\%$  o.r.  $\pm 2$  mm/s (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 industry with a lap-joint flange concept for flexible installation independent of the orientation of the pipe flange pitch diameter. Combined with the Promag 53 transmitter with touch control, 4-line display and extended functionality like software options for filling and dosing, electrode cleaning or advanced diagnostics, Promag 53L offers highest accuracy in the most complex and demanding measuring tasks.

### Features and specifications

## Liquids

### Measuring principle

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#### Product headline

The flowmeter with a weight-optimized sensor and flexible system integration. Fully suitable for standard applications in the water and wastewater industry.

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#### 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").

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#### Transmitter features

Quality – software for filling & dosing, density, electrode cleaning and also advanced diagnostics. Easy calculation – bidirectional totalizers. Automatic recovery of data for servicing. 4-line backlit display with touch control. Device in compact or remote Version.

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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, mass flow

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#### Max. measurement error

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

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#### 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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## Liquids

**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**

A: 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**

4-line backlit display with touch control (operation from outside)

Configuration via local display and operating tools possible

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**Outputs**

4 modular outputs:

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

Pulse/frequency (passive)

Relay output

Switch output (passive)

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## Liquids

### Inputs

2 modular inputs:

Status input

0-20 mA (aktiv)/4-20 mA (aktiv/passiv)

### Digital communication

HART, PROFIBUS PA/DP, FOUNDATION Fieldbus, MODBUS RS485, EtherNet/IP

### 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

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

### Material certificates

3.1 material

### Hygienic approvals and certificates

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

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