Promag 53L

More information and current pricing:
www.dk.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): ±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: 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

Product headline

The flowmeter with a weight-optimized sensor and flexible system integration. 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

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.

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, 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 dm^3/min to 162 000 m^3/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

4-line backlit display with touch control (operation from outside)
Configuration via local display and operating tools possible

Outputs

4 modular outputs:
0-20 mA (active)/4-20 mA (active/passive)
Pulse/frequency (passive)
Relay output
Switch output (passive)

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

More information **www.dk.endress.com/53L**