

Proline

Promag 10L/50L/53L

The no-frills flowmeter
for water and wastewater
Robust – Economical – Precise

The compact allrounder

- Promag sensors have been successfully installed for over 20 years for reliable flow measurement of drinking water, industrial and wastewater.
- Promag L has all the qualities of the tried-and-tested Proline product family.
- Promag L is a cost-effective, easy-to-install flowmeter that ensures highest plant availability.
- Promag L has internationally recognized approvals for drinking water, such as KTW/W270, ACS, NSF 61 or WRAS BS 6920





Promag L

For all cases

The primary objectives of the water industry are to convey, purify and distribute water in adequate amounts. In this process, accurate measurement of water flow plays a particularly important role – whether for balancing or for process control in water mains systems and treatment plants. It is precisely in these applications that you can depend on the uncompromising quality of Promag L.

Promag L is a flowmeter engineered especially for the water industry. Thanks to its robust and streamlined design, along with its high measuring accuracy, Promag L can be used in a wide variety of areas:

- For drinking, industrial and wastewater
- For applications in small plant engineering to large-scale projects in the water industry (e.g. flow measurement in water mains systems, pump systems or shafts)
- For monitoring utilities (e.g. with hot water or cooling water)

The Promag L sensors can be combined with three different transmitters:

- Promag 10 for basic applications
- Promag 50 for standard applications with extended functionality
- Promag 53 for advanced applications

Wherever – you can always rely on the performance capabilities of all of our Proline flowmeters: a long service life and high operational reliability.

Lap-joint flanged device

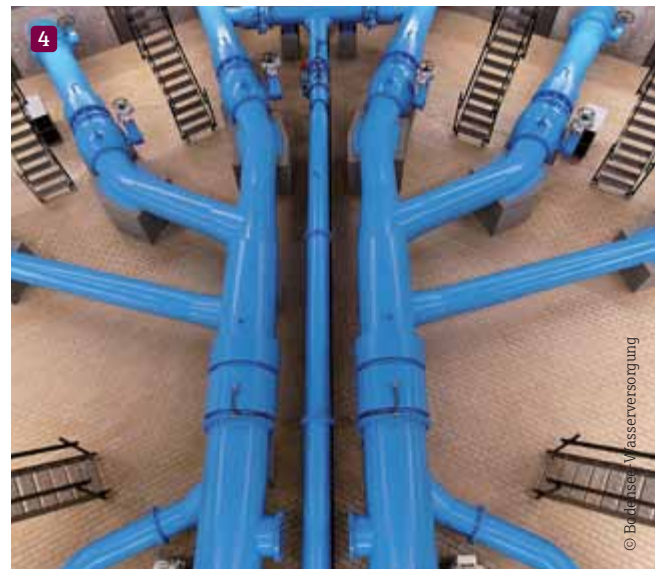
- Diameters: DN 50/2" to 300/12"
- Freely rotatable flanges for easy and flexible installation in pipes – regardless of the direction of the flange pitch diameter
- Up to 30% weight reduction compared to conventional flanged devices
- Compact design without limitations in accuracy, repeatability, etc.



Flanged device

- Diameters: DN 350/14" to 2400/90"
- For all standard applications for water and wastewater
- Compact design without limitations in accuracy, repeatability, etc.
- Short, optimized face-to-face lengths taking into account ISO and DVGW
- High corrosion resistance in accordance with EN ISO 12944-2 C5-I






Areas of flow measurement:

- 1** Raw water pumping **2** Desalination plant **3** Drinking water reservoir,
4 Water mains system **5** **6** Sewage treatment plant

Technical data

| Promag 10/50/53 (transmitter) | | Promag L (sensor) | |
|-------------------------------|---|--------------------------|---|
| Power supply | Promag 10: AC 85 to 250 V (45 to 65 Hz) AC 20 to 28 V (45 to 65 Hz) DC 11 to 40 V Promag 50/53: AC 85 to 260 V (45 to 65 Hz) AC 20 to 55 V (45 to 65 Hz) DC 16 to 62 V | Nominal diameters | DN 50/2" to 2400/90" |
| Ambient temperature | Standard: -20 to +60 °C (-4 to +140 °F) Option (up to DN 300/12"): -40 to +60 °C (-40 to +140 °F) | Process connections | - DN 50/2" to 300/12": Lap-joint flanges EN (DIN), ASME - DN 350/14" to 2400/90": Flanges EN (DIN), ASME, AWWA, AS |
| Design/Degree of protection | Compact: IP67 (Type 4X incl.) Remote: IP67 (Type 4X incl.) Option: "Harsh environment" version (DN 50/2" to 300/12") | Process pressure | PN 6/10/16 (EN [DIN]), Cl. 150 (ASME), Cl. D (AWWA), Table E (AS), PN 16 (AS) |
| Galvanic isolation | All circuits for inputs, outputs and power supply are galvanically isolated from each other | Process temperature | Polyurethane: -20 to +50 °C (-4 to +122 °F) Hard rubber: 0 to +80 °C (32 to 176 °F) PTFE (up to DN 300/12"): -20 to +90 °C (-4 to +194 °F) |
| Outputs | Promag 10: current (HART), pulse or status output Promag 50/53: current (HART), pulse, frequency or switch output | Drinking water approvals | KTW/W270, ACS, NSF 61, WRAS BS 6920 - for polyurethane liners - for hard rubber liners (from DN ≥ 350/14") |
| Inputs | Promag 50/53: status input | Materials | Liners: Polyurethane, hard rubber, PTFE Electrodes: 1.4435 (316L), Alloy C22 |
| Communication | Promag 10: HART Promag 50: HART, PROFIBUS DP/PA Promag 53: HART, PROFIBUS DP/PA, Modbus RS485, FOUNDATION Fieldbus | Degree of protection | IP67 (Type 4X incl.), IP68 (Type 6P incl.) Option: "Harsh environment" version (DN 50/2" to 300/12") |
| Measured error | Promag 10: ±0.5% o.r. ± 2 mm/s Promag 50: ±0.5% o.r. ± 1 mm/s or ±0.2% o.r. ± 2 mm/s (optional) Promag 53: ±0.2% o.r. ± 2 mm/s | Electrical conductivity | Promag 10: ≥50 µS/cm Promag 50/53: ≥5 µS/cm (demineralized water: ≥20 µS/cm) |
| Ex approvals | FM/CSA (Cl. 1, Div. 2) | Subject to modification | |

The Promag 10L/50L/53L measuring system fulfills the EMC requirements according to IEC 61326 and NAMUR NE21. It also conforms to the requirements of the EU and ACMA directives and thus carries the  and  mark.