

# Proline Promag W 800 electromagnetic flowmeter

Long-lasting battery-powered magmeter with secure system integration and communication



## Benefits:

- With corrosion protection for underground installation or permanent underwater use
- Improved process safety – leakage detection with low flow and pressure measurement
- Reliable measurement – accurate measured values even with 0 x DN inlet run
- Long-term operation – robust and completely welded sensor
- Secure data storage and transmission – worldwide encrypted communication over the mobile network
- Convenient commissioning and operation – device access via Bluetooth using intuitive SmartBlue app
- Integrated verification – Heartbeat Technology

More information and current pricing:

[www.endress.com/5W8C](http://www.endress.com/5W8C)

## Specs at a glance

- **Max. measurement error** Volume flow:  $\pm 0.5\%$  o.r.  $\pm 2$  mm/s ( $\pm 0.5\%$  o.r.  $\pm 0.08$  in/s)
- **Measuring range** 9 dm<sup>3</sup>/min to 9600 m<sup>3</sup>/h (2.5 to 44000 gal/min)
- **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 70°C
- **Max. process pressure** PN 40, Class 300, 20K
- **Wetted materials** Liner: polyurethane; PTFE; hard rubber  
Electrodes: 1.4435 (316L); Alloy C22, 2.4602 (UNS N06022)

**Field of application:** Promag W 800 is ideal for off-grid applications in the water industry, even flow measurement in direct underground installation or underwater. Promag 800 covers basic functionality,

Promag 800 Advanced offers the full performance spectrum. The battery-powered transmitter provides worldwide transmission of measured data without additional energy supply. Heartbeat Technology ensures measurement reliability and compliant verification.

## Features and specifications

### Liquids

#### Measuring principle

Electromagnetic

#### Product headline

Battery-powered flowmeter with EN ISO 12944 corrosion protection & intelligent energy efficient mode.

For direct underground installation or permanent underwater use. Certified sensor for the most demanding water and wastewater applications.

#### Sensor features

Secure, reliable long-term operation – robust and completely welded sensor. Energy-saving flow measurement – no pressure loss due to cross section constriction. Maintenance-free – no moving parts.

International drinking water approvals. Degree of protection IP68 (Type 6P enclosure).

#### Transmitter features

Secure data storage and transmission – worldwide encrypted communication over the mobile network . Convenient commissioning and operation – device

access via Bluetooth using intuitive SmartBlue app. Integrated verification – Heartbeat Technology.

Transmitter housing made of durable polycarbonate. Battery lifetime up to 15 years. Measuring intervals can be adapted individually.

#### Nominal diameter range

DN 25 to 600 (1 to 24")

## Liquids

### Wetted materials

Liner: polyurethane; PTFE; hard rubber

Electrodes: 1.4435 (316L); Alloy C22, 2.4602 (UNS N06022)

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### Measured variables

Volume flow

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### Max. measurement error

Volume flow:  $\pm 0.5\%$  o.r.  $\pm 2$  mm/s ( $\pm 0.5\%$  o.r.  $\pm 0.08$  in/s)

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### Measuring range

9 dm<sup>3</sup>/min to 9600 m<sup>3</sup>/h (2.5 to 44000 gal/min)

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### Max. process pressure

PN 40, Class 300, 20K

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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 70°C

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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 600 (14 to 24"): Carbon steel with protective varnish

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### Transmitter housing material

Polycarbonat

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### Degree of protection

Compact version: IP66/67, type 4X enclosure and IP68, type 6P enclosure

Sensor remote version (standard): IP66/67, type 4X enclosure

Sensor remote version (option): IP68, type 6P enclosure, with protective varnish according to EN ISO 12944 C5-M/Im1/Im2/Im3

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## Liquids

### Display/Operation

4-line backlit display with touch control (operation from outside)  
Configuration via local display and operating tools possible; Remote data access via mail and SMS

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### Outputs

3x Pulse/switch output (passive); Modbus RS485

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### Inputs

Status input

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### Digital communication

LTE Cat M1; LTE Cat NB1; LTE Cat NB2; GPRS; EGPRS

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### Power supply

Internal:

Batteries per DC 3.6 V External:

AC 85 to 265 V (47 to 63 Hz) / DC 19 to 30 V

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### Hazardous area approvals

CSA, GP

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### Product safety

CE Marking, EAC Marking, UKCA Marking

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### Metrological approvals and certificates

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

Heartbeat Technology complies with the requirements for measurement traceability according to ISO 9001:2015 – Section 7.1.5.2 a (TÜV SÜD attestation)

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### Pressure approvals and certificates

CRN, PED

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### Hygienic approvals and certificates

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

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