

# 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.cz.endress.com/5W8C](http://www.cz.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)
- **Max. process pressure** PN 40, Class 300, 20K
- **Wetted materials** Liner: polyurethane; 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 housing made of durable polycarbonate.

#### Transmitter features

No power grid required – battery lifetime of up to 15 years. Worldwide transmission of measured data and events via e-mail and SMS – integrated GSM/GPRS modem. Reliable data storage – integrated SD card.

All in 1 housing incl. batteries & wireless modem. Measuring intervals can be adapted individually.

#### Nominal diameter range

DN 25 to 600 (1 to 24")

#### Wetted materials

Liner: polyurethane; hard rubber

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

## Liquids

### Measured variables

Volume flow

---

### 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)

---

### Max. process pressure

PN 40, Class 300, 20K

---

### 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)

---

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

---

### Transmitter housing material

Polycarbonat

---

### 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

---

### 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

---

## Liquids

### Outputs

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

---

### Inputs

Status input

---

### Digital communication

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

---

### Power supply

Internal:

Batteries per DC 3.6 V External:

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

---

### Hazardous area approvals

CSA, GP

---

### 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)

---

### Pressure approvals and certificates

CRN, PED

---

### Hygienic approvals and certificates

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

---

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