Promag 50E

Benefits:
- Cost-effective sensor – ideal solution for basic requirements
- Energy-saving flow measurement – no pressure loss due to cross-section constriction
- Maintenance-free – no moving parts
- Fast commissioning – application-specific Quick Setups
- Safe operation – display provides easily readable process information
- Fully industry compliant – IEC/EN/NAMUR

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** 4 dm³/min to 9600 m³/h (1 to 44 000 gal/min)
- **Medium temperature range** -10 to +110 °C (+14 to +230 °F)
- **Max. process pressure** PN 40, Class 150, 20K
- **Wetted materials** Liner: PTFE Electrodes: 1.4435 (316L); Alloy C22, 2.4602 (UNS N06022); Tantalum

Field of application: Promag E is a streamlined sensor for basic chemical applications. It is the most economical solution for our chemical customers. Combined with the proven Promag 50 transmitter with push buttons, Promag 50E offers accurate measurement of liquids for a wide range of standard applications. Promag 50E is available as compact or remote version.

Features and specifications

Liquids

**Measuring principle**
Liquids

**Product headline**
std_productprofile_product_usp_34675_1508941655.
Fully suitable for basic applications in the chemical and process industry.

**Sensor features**
Nominal diameter: max. DN 600 (24"). Ex approvals for Zone 2. Liner made of PTFE.

**Transmitter features**
std_productprofile_product_benefits_34681_1508942231.
std_productprofile_product_benefits_34683_1508942232.
std_productprofile_product_benefits_34682_1508942239.
std_successorproducts_product_differentiating_tech_features_35305_1
std_successorproducts_product_differentiating_tech_features_35308_1
std_successorproducts_product_differentiating_tech_features_35309_1

**Nominal diameter range**
DN 15 to 600 (½ to 24")

**Wetted materials**
Liner: PTFE
Electrodes: 1.4435 (316L); Alloy C22, 2.4602 (UNS N06022); Tantalum

**Measured variables**
Volume flow

**Max. measurement error**
Volume flow (standard): ±0.5 % o.r. ± 1 mm/s (0.04 in/s)
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**Measuring range**
4 dm³/min to 9600 m³/h (1 to 44 000 gal/min)

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PN 40, Class 150, 20K
## Liquids

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
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<tbody>
<tr>
<td><strong>Medium temperature range</strong></td>
<td>−10 to +110 °C (+14 to +230 °F)</td>
</tr>
<tr>
<td><strong>Ambient temperature range</strong></td>
<td>−10 to +60 °C (+14 to +140 °F)</td>
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<tr>
<td><strong>Sensor housing material</strong></td>
<td>AlSi10Mg, coated; carbon steel with protective coating</td>
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<tr>
<td><strong>Transmitter housing material</strong></td>
<td>Powder-coated die-cast aluminum</td>
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</tbody>
</table>
| **Degree of protection** | Compact version: IP67, type 4X enclosure  
Sensor remote version (standard): IP67, type 4X enclosure  
Sensor remote version (option): IP68, type 6P enclosure  
Transmitter remote version: IP67, type 4X enclosure |
| **Display/Operation** | 2-line backlit display with push buttons  
Configuration via local display and operating tools possible |
| **Outputs** | 3 outputs:  
0-20 mA (active)/4-20 mA (active/passive)  
Pulse/frequency output (passive)  
Switch output (passive) |
| **Inputs** | Status input |
| **Digital communication** | HART  
PROFIBUS PA/DP |
| **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) |
Liquids

**Hazardous area approvals**
ATEX, cCSAus

**Product safety**
CE, C-tick, EAC marking

**Metrological approvals and certificates**
Calibration performed on accredited calibration facilities (acc. to ISO/IEC 1

**Pressure approvals and certificates**
PED

More information [www.us.endress.com/50E](http://www.us.endress.com/50E)