

## Digital pH sensor Memosens CPS11E

Memosens 2.0 pH electrode for standard applications in process and water & wastewater industries



More information and current pricing:

[www.fi.endress.com/CPS11E](http://www.fi.endress.com/CPS11E)

### Benefits:

- IIoT ready: Memosens 2.0 offers extended storage of calibration and process data, enabling better trend identification and providing a future-proof basis for predictive maintenance and enhanced IIoT services.
- Low operating costs: Lab calibration and quick sensor exchange in the process result in minimized process downtime and longer sensor lifetime.
- Robust, low maintenance electrode: Long poison diffusion path or optimized ion trap prevent poisoning of the electrode reference. Large, dirt-repellent PTFE junction protects from soiling by the medium.
- Process glass is suitable for the full pH range and pressure-stable up to 17 bar (246.5 psi) absolute. Optional F-glass allows application in media containing hydrofluoric acid such as etching baths in semiconductor production.
- Improved optional salt storage ensures reliable measurement in low conductivity applications such as boiler feed water.
- Maximum process integrity through non-contact, inductive signal transmission.

### Specs at a glance

- **Measurement range** Application A ■ pH: 1 to 12 Application B ■ pH: 0 to 14 Application F ■ pH: 0 to 10
- **Process temperature** Application A: -15 to 80 °C (5 to 176 °F) Application B: 0 to 135 °C (32 to 275 °F) Application F: 0 to 70 °C (32 to 158 °F)
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**Process pressure** Applications A and B: 0.8 to 17 bar (11.6 to 246.5 psi) absolute Application F: 0.8 to 7 bar (11.6 to 101.5 psi) absolute

**Field of application:** Memosens CPS11E is the digital all-rounder for stable processes. It measures reliably even in extreme pH ranges or hazardous areas. Thanks to Memosens 2.0 digital technology, the pH sensor resists moisture and enables lab calibration, increasing process safety and simplifying operation. Its extended storage of calibration and process data provides the perfect basis for predictive maintenance. Designed for a long operating life and low maintenance, Memosens CPS11E offers you best value for money.

## Features and specifications

pH

### Measuring principle

Potentiometric

### Application

Long-term monitoring and limit control in processes with stable process conditions

Water and wastewater treatment

### Characteristic

Digital pH electrode for standard applications in process and environmental technology with dirt-repellent PTFE ring junction and built-in temperature sensor

### Measurement range

Application A

- pH: 1 to 12

Application B

- pH: 0 to 14

Application F

- pH: 0 to 10

pH

**Measuring principle**

Gel compact electrode with PTFE ring junction

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**Design**

All shaft lengths with temperature sensor  
Advanced gel technology

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**Material**

Sensor shaft: Glass to suit process  
pH membrane glass: Type A, B, F  
Metal lead: Ag/AgCl  
Aperture: Ring-shaped PTFE junction, sterilizable  
O-ring: FKM  
Process coupling: PPS fibre-glass reinforced  
Nameplate: ceramic metal oxide

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**Dimension**

Diameter: 12 mm (0.47 inch)  
Shaft length: 120, 225, 360 and 425 mm  
(4.72, 8.86, 14.17 and 16.73 inch)

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**Process temperature**

Application A: -15 to 80 °C (5 to 176 °F)  
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**Process pressure**

Applications A and B:  
0.8 to 17 bar (11.6 to 246.5 psi) absolute  
Application F:  
0.8 to 7 bar (11.6 to 101.5 psi) absolute

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**Temperature sensor**

NTC 30K

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pH

**Ex certification**

With ATEX, IECEx, CSA C/US, NEPSI, Japan Ex and INMETRO approvals for use in hazardous areas Zone 0, Zone 1 and Zone 2

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**Connection**

Inductive, digital connection head with Memosens 2.0 technology

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**Ingres protection**

IP68

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**Additional certifications**

Additional certifications

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