

# Digital non-glass pH sensor Memosens CPS77E

## Memosens 2.0 ISFET pH electrode for food & beverage and life sciences industries



More information and current pricing:

[www.de.endress.com/CPS77E](http://www.de.endress.com/CPS77E)

### Benefits:

- 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.
- Unbreakable PEEK sensor body ensures highest product safety where glass breakage is intolerable.
- With its certified biocompatibility and pharma compliance (optional Pharma CoC), the sensor protects the quality of your products.
- The sensor is suitable for hot steam sterilization and autoclaving offering long-term stable measurements.
- Low maintenance: ISFET technology is insensitive to temperature variations and shows virtually no acid or alkaline errors, allowing for long calibration intervals.
- Six times higher CIP stability compared to conventional ISFET pH sensors ensures a longer lifetime even when the sensor is exposed to cleaning in place.
- Maximum process safety: Non-contact inductive signal transmission eliminates all problems due to moisture or corrosion.

### Specs at a glance

- **Measurement range** pH 0 to 14
- **Process temperature** -15 to 135°C (5 to 275°F)
- **Process pressure** Max. 11 bar abs at 100 °C (Max. 160 psi at 212 °F)

**Field of application:** Memosens CPS77E is the expert for hygienic applications. Its bacteria-proof reference with highly stable gel guarantees reliable measurements. The unbreakable sensor is sterilizable with hot steam, autoclavable and assures highest product safety. CPS77E

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features Memosens 2.0 digital technology, offering extended storage of calibration and process data for predictive maintenance. The sensor resists moisture and enables lab calibration, enhancing process integrity and increasing process uptime.

## Features and specifications

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pH

### Measuring principle

ISFET

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### Application

Hygienic and sterile applications (sterilizable, autoclavable):

- Bioreactor/fermenter
  - Biotechnology
  - Pharmaceutical
  - Food
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### Characteristic

Digital, sterilizable and autoclavable pH electrode for hygienic production processes with bacteria tight ceramic junction

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### Reference

Double chamber reference system

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### Measurement range

pH 0 to 14

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### Measuring principle

Measuring principle

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### Design

Design

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pH

**Material**

Sensor shaft: PEEK

Sealings: FFKM

Metal lead: Ag/AgCl

Open aperture: Ceramic junction, zirconium dioxide

O-ring: FKM

Process coupling: PPS fiber-glass reinforced

Nameplate: Ceramic metal oxide

**Dimension**

Diameter: 12 mm (0.47 inch)

Shaft lengths: 120, 225 and 360 mm

(4.72, 8.86 and 14.2 inch)

**Process temperature**

-15 to 135°C (5 to 275°F)

**Process pressure**

Max. 11 bar abs at 100 °C

(Max. 160 psi at 212 °F)

**Temperature sensor**

Pt1000

**Ex certification**

With the following approvals for use in potentially explosive areas of Zone 0, Zone 1 and Zone 2: ATEX, IECEx, CSA C / US, NEPSI, JPN Ex, INMETRO,

UKCA and Korea Ex

**Connection**

Inductive, contactless connection head with Memosens 2.0 technology

**Ingres protection**

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