

# Digital non-glass pH sensor Memosens CPS97E

Memosens 2.0 ISFET pH sensor for polluted media in chemical processes, paper or pigment production



More information and current pricing:

[www.casc.endress.com/CPS97E](http://www.casc.endress.com/CPS97E)

## 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 withstands harsh conditions ensuring product safety
- Open aperture prevents blocking of the sensor even in media with a high dirt load.
- Chemically stable reference gel assures long-term stable measurements
- Low maintenance: ISFET technology is insensitive to high temperature or temperature changes which results in long calibration intervals
- Maximum process safety: Non-contact, inductive signal transmission eliminates all problems caused by moisture or corrosion.

## Specs at a glance

- **Measurement range** pH 0 to 14
- **Process temperature** -15 to 110 °C (5 to 230 °F)
- **Process pressure** Max. 11 bar abs. at 100 °C (Max. 159.5 psi at 212 °F)

**Field of application:** Memosens CPS97E is the expert for media with a high content of fibres or suspended solids such as dispersions, precipitations and emulsions. Its unbreakable shaft and the open aperture guarantee reliable measurement under harsh process conditions. CPS97E 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

pH

### Measuring principle

ISFET

### Application

Unbreakable pH sensor for use in highly polluting media:

- Chemical industry
- Pulp and paper industry
- Mineral and metal industry

### Characteristic

Digital pH electrodes for with open aperture for clogging media e.g. suspended solids, dispersion, precipitation reaction

Needs min. conductivity of  $>500\mu\text{S}/\text{cm}$

### Reference

Stabilized gel reference system

### Measurement range

pH 0 to 14

### Measuring principle

Measuring principle

### Design

Design

### Material

Sensor shaft: PEEK

Sealings: FFKM

Metal lead: Ag/AgCl

O-ring: FKM

Process coupling: PPS fiber-glass reinforced

Nameplate: Ceramic metal oxide

pH

**Dimension**

Diameter: 12 mm (0.47 inch)  
Shaft lengths: 120, 225, 360 and 425 mm  
(4.72, 8.86, 14.2 and 16.7 inch)

**Process temperature**

-15 to 110 °C (5 to 230 °F)

**Process pressure**

Max. 11 bar abs. at 100 °C  
(Max. 159.5 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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