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.at.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

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
Hygienic and sterile applications (sterilizable, autoclavable):
- Bioreactor/fermenter
- Biotechnology
- Pharmaceutical
- Food

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

Reference
Double chamber reference system

Measurement range
pH 0 to 14

Measuring principle
Measuring principle

Design
Design

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
IP 68

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