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.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

Design

All shaft lengths with temperature sensor
Advanced gel technology

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

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)

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)

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

Temperature sensor

NTC 30K

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

Connection

Inductive, digital connection head with Memosens 2.0 technology

Ingres protection

IP68

Additional certifications

Additional certifications

More information **www.endress.com/CPS11E**

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