# Digital ORP sensor Memosens CPS12E

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

# Benefits:

- Robust, low maintenance ORP sensor: Large, dirt-repellent PTFE junction protects from soiling by the medium. Long poison diffusion path prevents poisoning of the electrode reference.
- Suitable for harsh applications: Gold pin or platinum cap cover the full range of oxidizing or reducing media. Shaft glass ensures high chemical stability. The sensor is pressure stable up to 17 bar (246.5 psi) absolute.
- Memosens 2.0 technology enables the sensor to store more process and calibration data. It lays the basis for IIoT services and predictive maintenance.
- Extremely reliable measurement with to non-contact, inductive signal transmission results in increased process safety.
- Lab calibration and fast sensor replacement on site allow for minimized process downtimes, reducing operating costs.

# Specs at a glance

- Measuring range -1500 mV to +1500 mV
- Process temperature -15 to 135 °C (5 to 275 °F)
- Process pressure 0.8 to 17 bar (11.6 to 246.5 psi) absolute

**Field of application:** Memosens CPS12E is the digital all-round ORP sensor. It measures reliably even in harsh applications or hazardous areas. Designed for low maintenance and a long operating life, the ORP sensor offers you best value for money. Memosens CPS12E features Memosens 2.0 digital technology that provides the perfect basis for predictive maintenance thanks to extended storage of calibration and

Endress+Hauser



More information and current pricing: www.endress.com/CPS12E process data. The plug & play principle of Memosens allows for easy operation and more process uptime.

# Features and specifications

## ORP / Redox

Measuring principle

Sensor ORP / Redox

#### Application

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

#### Characteristic

Digital ORP sensor for standard applications in process technology and environmental engineering with dirt-repellent PTFE junction and integrated temperature sensor

#### Measuring range

-1500 mV to +1500 mV

#### Measuring principle

Gel compact electrode with teflon junction and double gel reference Measuring part as gold-pin or platinum ring

#### Design

All shaft lengths with temperature sensor Advanced gel technology

#### Material

Sensor shaft: Glass to suit process ORP measuring element: Platinum or gold Metal lead: Ag/AgCl Aperture: Ring-shaped PTFE junction O-ring: FKM Process coupling: PPS fibre-glass reinforced Nameplate: ceramic metal oxide

## ORP / Redox

#### Dimension

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

#### **Process temperature**

-15 to 135 ℃ (5 to 275 °F)

#### Process pressure

0.8 to 17 bar (11.6 to 246.5 psi) absolute

#### Temperature sensor

NTC 30K

## 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

#### Ingress protection

IP68

## Additional certifications

Additional certifications

More information www.endress.com/CPS12E

