Digital pH sensor Memosens CPS31E

Memosens 2.0 glass electrode for application in drinking water and swimming pools

More information and current pricing:
www.endress.com/CPS31E

Benefits:

- Reliable: Ceramic junction ensures reliable measurement at low conductivities. For minimum conductivities, 3 junctions are the best choice.
- Robust: The optional salt storage provides for extended operating time.
- Precise: The sensor shows minimum drift thanks to a very low level of ion depletion in electrolyte.
- Memosens 2.0 offers extended storage of calibration and process data. These data are the ideal basis for predictive maintenance and can also be used to develop and provide enhanced IIoT services.
- Safe: Non-contact, inductive, digital signal transmission eliminates errors due to moisture.
- Cost-efficient: Fast sensor exchange in the field increases process uptime and regeneration extends the sensor lifetime.

Specs at a glance

- **Measurement range** pH 1 to 13
- **Process temperature** −15 to 80 °C (5 to 176 °F)
- **Process pressure** 0.8 to 4 bar (11.6 to 58 psi) (absolute)

Field of application: Memosens CPS31E is the expert for pH compensation in disinfection processes. It delivers stable measurement results, ensuring safe swimming pool and drinking water. Thanks to Memosens 2.0 digital technology, CPS31E provides the perfect data basis for predictive maintenance, offers easy operation and more process uptime since it can be calibrated in the laboratory and quickly exchanged on site. The sensor resists moisture and its 3 optional junctions make it suitable for minimum conductivity.

Features and specifications

pH

Measuring principle
Potentiometric

Application
- Drinking water
- Swimming pool water
- pH compensation during the measurement of free chlorine

Characteristic
Digital pH electrode for standard applications in drinking water and swimming pool water

Measurement range
pH 1 to 13

Measuring principle
Gel filled reference with one or three ceramic junctions with optional salt storage

Design
All shaft lengths with temperature sensor

Material
Sensor shaft: Glass to suit process
pH membrane: glass Type A
Metal lead Ag/AgCl
Open aperture: Ceramic junction
O-ring: FKM
Process coupling: PPS fiber-glass reinforced
Nameplate: Ceramic metal oxide

Dimension
Diameter: 12 mm (0.47 inch)
Shaft length: 120 mm (4.70 inch)

Process temperature
−15 to 80 °C (5 to 176 °F)

pH

Process pressure
0.8 to 4 bar (11.6 to 58 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, contactless connection head with Memosens 2.0 technology

Ingres protection
IP68

More information **www.endress.com/CPS31E**

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