

# Digital oxygen sensor Memosens COS22E

## Memosens 2.0 hygienic, amperometric oxygen sensor for the food and life sciences industries



F L E X

### Benefits:

- Low maintenance: The modular sensor design enables fast exchange of membrane cap and electrolyte.
- Full compliance with all relevant regulations for hygienic processes ensures the safety of your product.
- High accuracy of the measuring principle enables precise measurement resulting in best product quality.
- The sensor is suitable for application in hazardous areas.
- 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.
- Increased plant availability: Memosens technology and Liquiline transmitters enable plug & play for fast commissioning and sensor exchange.

More information and current pricing:

[www.fr.endress.com/COS22E](http://www.fr.endress.com/COS22E)

### Specs at a glance

- **Measurement range** Standard sensor: 0 to 60 mg/l, 0 to 600 %SAT, 0 to 1200 hPa, 0 to 100 Vol% Trace sensor: 0 to 10 mg/l, 0 to 120 %SAT, 0 to 250 hPa, 0 to 25 Vol%
- **Process temperature** -5 to 135 °C (23 to 275 °F)
- **Process pressure** 1 to 12 bar abs (14.5 to 174 psi)

**Field of application:** Memosens COS22E is fully compliant to FDA and USP and thus suitable for hygienic and sterile applications. The sensor is low-maintenance and ensures long-term stability - even with frequent sterilization. Its trace version safeguards your products, process and plant equipment from oxygen influences. Thanks to Memosens 2.0 digital technology, COS22E offers extended storage of calibration and process

data providing the perfect basis for predictive maintenance and efficient operation.

## Features and specifications

### Oxygen

#### Measuring principle

Amperometric oxygen measurement

#### Application

Typical applications are:

- Pharmaceuticals and biotechnology: process control in enzyme production, control of culture preparations
- 
- Water treatment: boiler feed water, WFI (Water for Injection)
- Residual oxygen measurement in processes

#### Installation

Installation

#### Characteristic

Digital hygienic amperometric oxygen sensor with maximum measurement stability over several sterilization cycles available in two measuring ranges

#### Measurement range

Standard sensor: 0 to 60 mg/l, 0 to 600 %SAT, 0 to 1200 hPa, 0 to 100 Vol%

Trace sensor: 0 to 10 mg/l, 0 to 120 %SAT, 0 to 250 hPa, 0 to 25 Vol%

#### Measuring principle

Measuring principle

#### Design

Design

## Oxygen

### Material

Sensor shaft: Stainless steel 1.4435 (AISI 316L)

Process seal: FKM (USP<87>, <88> Class VI and FDA)

Process seal for Ex versions: FKM (not FDA compliant)

Seals/O-rings: EPDM (USP<87>, <88> Class VI and FDA), FKM (FDA)

Shaft sleeve: Stainless steel 1.4435 (AISI 316L) or Titanium or Hastelloy

Membrane cover layer: Silicone (USP<87>, <88> Class VI and FDA)

### Dimension

Diameter: 12 mm (0.47 inch)

Shaft length: 120, 160, 220, 320, 420 mm  
(4.72, 6.30, 8.66, 12.60 und 16.54 inch)

### Process temperature

-5 to 135 °C (23 to 275 °F)

### Process pressure

1 to 12 bar abs (14.5 to 174 psi)

### Temperature sensor

NTC 22k

### Connection

Inductive, contactless connection head with Memosens 2.0 technology

### Ingres protection

IP68

### Additional certifications

Additional certifications

More information [www.fr.endress.com/COS22E](http://www.fr.endress.com/COS22E)