

# Oxygen Sensors

series 611

For liquid and gas phase measurements



## Fast and precise oxygen measurements

The MecSens series 611 oxygen sensors are versatile and suitable for the most demanding of oxygen measurements under the harshest conditions. Sensors measure trace to saturation levels either in-line, off-line or at-line and are suitable for both dissolved and gaseous applications.



## Commercial Benefits

- Trace Level precision
- Operational cost savings
- Reliability of measurements
- Reduced TCO
- Dissolved and gaseous applications

## Technical Benefits

- Trace level accuracy
- Very low detection limit of 0.1 ppb dissolved or 0.5 ppm (v/v) gaseous.

Display units from limit of 0.1 ppb to 99.99 ppm dissolved or 0.5 ppm (v/v) to 99.99% gaseous.

- Proven Technology
- All stainless steel sensor rated IP68 / Nema 6P and 100 bars.
- Low maintenance / Ease of maintenance
- Interchangeable anode electrode reduces repair costs and maintenance procedures.

The membrane surface in contact with the sample is minimal, thus reducing the maintenance frequency.

- Ease of Calibration (1 point / air)
- Calibration parameters are stored in the Eeprom sensor so that it can be connected to any MecSens instrument without need for re-calibration.
- Hygienic certification for critical industrial applications



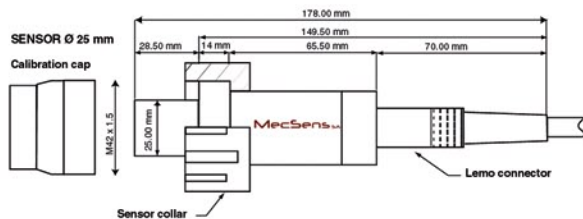
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## A breakthrough in oxygen measurements

From production to quality assurance, laboratory and maintenance, users will find appropriate applications for this unique hygienic sensor which provides fast precise and accurate measurements. Integrated in portable or in-line instrument, it has the additional benefit of very low maintenance and ownership costs. The customer can measure either dissolved or gaseous oxygen concentrations and the medium temperature. This smart sensor memories the calibration parameters simplifying the calibration procedure on-site.



## Sensor Technical Specification

- The polarographic membrane covered oxygen sensor has an absolute zero and low drift.
- The sensor uses various membranes to optimize the performance for the application.
- The mechanical construction and design ensure unrivalled performance and extended service intervals.

The hat-shaped protection cap, the inter-changeable anode and a temperature sensor integrated into the cathode enhance the sensor operation and extend the service life whilst reducing the maintenance time and repair costs.

During the calibration, the sensor Eeprom stores all important parameters. Once completed, the sensor can be connected to any MecSens instrument without the need for calibration.

Membrane model number	82956	82952	82935
Measuring range DO2	0.1ppb - 20ppm	1ppb -100ppm	10 ppb – 400pm
Measuring range PO2	0.4 bars	0 - 2 bars	0 -10 bars
Flow rate Liquids	180ml/min	50 ml/min	25 ml/min
Flow rate Linear flow	200cm/sec	30cm/sec	20cm/sec
Flow rate Gaseous	0.005 - 3l/min	0.005 - 3l/min	0.005 – 3l/min
Response tome (90% at 25%)	7.2 sec	38 sec	2.5 min
Accuracy	1% of the measured value or lowest value whichever is greater		
Temperature Compensation	0°C to + 50°C / 32°F to 113°F		
Temperature range	CIP or SIP resistant up to 120°C/248°F		
Pressure rating	300 bars or 4350 Psi		
Weight	0.6 kg		
Enclosure protection	IP65		
Material in contact with sample	ANSI 316L, PFA oder Tefzel		
Sensor model number	Model 61100: Sensor Ø25 mm Model 61101: Sensor Ø28 mm		
Sensor cable	3m standard length / optional extension up to 1000 m		