



# Orbisphere M1100 Luminescent dissolved oxygen sensor, 0-2 ppm, with 12 mm fitting

Kontakta oss

Produktnr: M1100-S10

Inget leveransdatum anges

## Monitors oxygen in the beverage production process (bypass)

Sensor for the determination of dissolved oxygen (DO) in beer (bypass) and de-aerated water.

SEK Pris:

The M1100 Oxygen sensor has an unbeatable precision of 0.8 ppb and a limit of detection of 0.6 ppb. Such accurate measurement readings are essential to control low oxygen levels in beer.

The absence of membrane and electrolyte means that the sensor accuracy is unaffected by process changes or pressure shocks. Maintenance and operating costs are also reduced. The sensor has been designed to ensure mechanical robustness and resistance to CIP processes to extend operational lifetime and optimise its total cost of ownership.

The quick response time comes from a two second measurement frequency. Capable of measuring accurately at this frequency over a 12 month period.

#### **Minimal Drift and Annual Calibration**

The M1100 sensor provides immediate oxygen readings with a measurement frequency of two seconds. The instrument carries consistent readings with no drift for 12 months without calibration (when utilising standard weekly CIP processes), surpassing other optical sensors that display significant drift after only a few months in similar conditions.

#### **Minimal Maintenance Optical Technology**

The M1100 pioneered the use of luminescent technology in brewing applications (bypass) and as a result, the sensor doesn't require the replacement of membranes or any electrolytes. Additionally, the sensor's accuracy is unaffected by process changes or pressure shocks, further reducing maintenance. Annual maintenance is limited to just a few minutes for a zero-point calibration. Chemicals are not required for this process, making the task easier and safer without reducing measurement precision.

#### Low Level Oxygen Measurement with Accurate ppb

The M1100-L sensor has a lower detection level of 0.6 ppb. This highly accurate instrument's readings are essential to control low oxygen levels in beer production, to decrease unnecessary line stoppages, and to increase production uptime.

#### Low-cost upgrade package

The M1100-H sensor has a range of 0-40 ppm, and is ideal for use in wort applications, for example. Even in this harsh wort environment, the instrument maintains very good accuracy and minimal drift. Only a yearly maintenance and calibration will be required in most cases.

#### Specifikationer

Användningsförhållanden: 0 - 95 % non-condensing relative humidity

Applikation: Beverage (bypass)

Certifieringar : 2004/108/EC - EN 61326-1

Displayupplösning: 0.1 ppb

Flödeshastighet: 12 mm fitting

Fuktade material: 316 L Stainless Steel (1.4435), Silicone

Garanti: 24 månader

Kalibrering: Single point zero calibration with standard 99.999% nitrogen (quality 50) or equivalent oxygen

free gas

Kapslingens Skyddsklass IP: Sensor resistant to all common CIP methods

Lägsta detektionsgräns: 0.6 ppb

Material: 316 L Stainless Steel (1.4435), Silicone

Mätområde: 0 - 2000 ppb DO (dissolved oxygen)

Noggrannhet: ± 0.8 ppb or 2 % whichever is greater

Omgivningstemperatur: -5 - 100 °C (23 - 212 °F)

Parameter: Oxygen

Prov: tryck: 1 - 20 bar absolut (14,5 to 290 psia)

Repeterbarhet:  $\pm$  0.4 ppb eller 1 % beroende på vilket som är störst Reproducerbarhet:  $\pm$  0,8 ppb eller 2 % beroende på vilket som är störst

Responstid: (90%)< 10 (газова фаза)

Temperaturområde : Accurate from -5 - 50 °C (23 - 122 °F)

Resistant - temperature from -5 - 100 °C (23 - 212 °F)

Vad ingår i leveransen: Sensor only and manual.

Controller, sensor cable, flow-chamber or process connection must be ordered separately.

Vikt: M1100 12mm: 0,6 kg

M1100 28mm: 0,74 kg

## Vad finns i förpackningen

Sensor only and manual. Controller, sensor cable, flow-chamber or process connection must be ordered separately.

### Obligatoriska tillbehör

- Givarkabel (5 m) för anslutning av givare typ M/K med Orbisphere 410-/510-instrument (Item 32510.05)
- Orbisphere 410M-styrenhet O<sub>2</sub> (LDO), 1 kanal, panelmontering, 100 240 AC, 0/4 20 mA, Profibus/RS485 (Item 410M/P1C10000)
- Orbisphere 410M-styrenhet O<sub>2</sub> (LDO), 1 kanal, väggmontering, 100 240 VAC, 0/4 20 mA, Profibus DP/RS485 (Item 410M/W1C10000)
- Orbisphere 410M-styrenhet O<sub>2</sub> (LDO), 1 kanal, väggmontering, 10 30 VDC, 0/4 20 mA, RS485 (Item 410M/W2C00000)