

# **HAFFMANS** OGM IN-LINE 0, GEHALTEMETER - ULTRAPURE GAS APPLICATION

PRODUCT LEAFLET



### GENERAL PRODUCT INFORMATION

In the production of beer and other carbonated beverages the quantity of oxygen  $(0_2)$  in gases such as carbon dioxide  $(CO_2)$  and/or nitrogen  $(N_2)$  that are in contact with the beverage is a decisive factor to the product's final quality and overall taste. A low  $O_2$  content is crucial to avoid  $O_2$  pick-up throughout the production process.

When  $CO_2$  is recovered from the fermentation process, the gas is liquefied so that non-condensable gases –  $O_2$  and  $N_2$  – can be removed. During  $N_2$  generation the residual quantity of  $O_2$  is continuously monitored to assure that the  $N_2$  produced has a consistent high purity. During both of these processes the in-line  $O_2$  Gehaltemeter, type OGM, measures the  $O_2$  content of ultrapure gases and provides a key parameter for an efficient and economical plant operation.

The OGM uses optical technology that is not sensitive to organic substances and humidity to measure  $O_2$ . It provides greatly improved response times compared to traditional  $O_2$  measuring devices and doesn't require frequent calibration which reduces downtime and labor cost.

The user-friendly control unit can be supplied in either field or panel mounted versions and a maximum of two  $0_2$  sensors can be connected to each control unit.

## BENEFITS

#### • Cost saving

- efficient and economical operation of  $CO_2$  recovery or  $N_2$  generation plants
- reduces gas loss
- low maintenance
- insensitive to air humidity

## APPLICATIONS

In-line, for the determination of the O<sub>2</sub> content of ultrapure gas, typically CO<sub>2</sub> gas from fermentation, preferably installed after the activated carbon filter/drier of a CO<sub>2</sub> recovery system or a nitrogen generation plant.

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## **TECHNICAL DATA**

#### **CONTROL UNIT**

Power supply 85-264 V / 50-60 Hz (optional 24 VDC)

Dimensions 235 x 205 x 165 mm/9.25 x 8.07 x 6.50 in (LxWxH)

Mounting Wall mounting

#### **O**, SENSOR

25 mm connection Dimensions 84 x 240 mm

### **O, SENSOR LHG**

#### Measuring range

O<sub>2</sub> measurement 0 - 200 ppm (vol/vol) -5.0 - 40.0 °C (23 - 104 °F) Temperature Pressure adjustable from 0.0 - 2.000 bar (0 - 29 psi) compensation

Accuracy  $O_{a}$  measurement 2 ppm + 5% of m.v.\* ± 0.1 °C/°F Temperature

0<sub>2</sub> units ppm (vol/vol), %, % a.s.

**Process temperature** Max. 50 °C (122 °F)

Measuring interval 30 sec. (adjustable from 3 - 999 sec.)

Memory capcity Up to 500 measurements

**Protection class** IP-67

\* at 20 °C



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## SCOPE OF SUPPLY

- Control unit
- 0, sensor
- Sensor communication cable
- Control unit wall mounting set
- Power supply cable
- I/O cable for analog output
- Set of pressure reduction accessories
- Calibration beaker with spare O-ring 60 x 3 mm
- Instruction manual

## **OPTIONS**

- Profibus DP
- Control unit pipe/sensor mounting set (DN 40 - DN 125)
- Control unit panel mounting set
- Certificate of measurement
- 0, calibration set



