

# HAFFMANS OGM IN-LINE O<sub>2</sub> GEHALTEMETER - ULTRAPURE GAS APPLICATION

PRODUCT LEAFLET



## GENERAL PRODUCT INFORMATION

In the production of beer and other carbonated beverages the quantity of oxygen (O<sub>2</sub>) in gases such as carbon dioxide (CO<sub>2</sub>) and/or nitrogen (N<sub>2</sub>) that are in contact with the beverage is a decisive factor to the product's final quality and overall taste. A low O<sub>2</sub> content is crucial to avoid O<sub>2</sub> pick-up throughout the production process.

When CO<sub>2</sub> is recovered from the fermentation process, the gas is liquefied so that non-condensable gases – O<sub>2</sub> and N<sub>2</sub> – can be removed. During N<sub>2</sub> generation the residual quantity of O<sub>2</sub> is continuously monitored to assure that the N<sub>2</sub> produced has a consistent high purity. During both of these processes the in-line O<sub>2</sub> Gehaltemeter, type OGM, measures the O<sub>2</sub> content of ultrapure gases and provides a key parameter for an efficient and economical operation of CO<sub>2</sub> recovery.

The OGM uses optical technology that is not sensitive to organic substances and humidity to measure O<sub>2</sub>. It provides greatly improved response times compared to traditional O<sub>2</sub> 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 O<sub>2</sub> probes can be connected to each control unit.

## BENEFITS

- Cost saving
  - efficient and economical operation of CO<sub>2</sub> recovery or N<sub>2</sub> generation plants
  - reduces gas loss
  - low maintenance

## 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.

# HAFFMANS OGM

## IN-LINE O<sub>2</sub> GEHALTEMETER - ULTRAPURE GAS APPLICATION

PRODUCT LEAFLET

### TECHNICAL DATA

#### CONTROL UNIT

##### Power supply

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

##### Dimensions

200 x 200 x 80 mm/8 x 8 x 3.25 in (LxWxH)

##### Mounting

Field (e.g. wall/pipe) or panel mounting

#### O<sub>2</sub> PROBE

##### 25 mm connection

Dimensions 280 x 100 mm/11 x 4 in (LxD)

#### O<sub>2</sub> SENSOR LHG

##### Measuring range

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

##### Accuracy

O <sub>2</sub> measurement	2 ppm + 5 % of m.v.*
Temperature	± 0.1 °C/°F

#### O<sub>2</sub> UNITS

##### Process temperature

Max. 50 °C (122 °F)

##### Measuring interval

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

##### Memory capacity

Up to 500 measurements

##### Protection class

IP-67

\* at 20 °C

### SCOPE OF SUPPLY

- Control unit
- Probe communication cable
- Wall mounting set
- I/O cable for analog output
- O<sub>2</sub> probe
- Set of pressure reduction accessories
- Calibration beaker with spare O-ring 60 x 3 mm
- Power supply cable
- Instruction manual

### OPTIONS

- Pipe/probe mounting set (- DN 125)
- Control unit with Profibus DP
- O<sub>2</sub> calibration set
- Certificate of measurement



25 mm probe



HAFFMANS BV

P.O. BOX 3150 NL-5902 RD VENLO, NETHERLANDS WWW.HAFFMANS.NL

All Pentair trademarks and logos are owned by Pentair, Inc. All other brand or product names are trademarks or registered marks of their respective owners. Because we are continuously improving our products and services, Pentair reserves the right to change specifications without prior notice.

Pentair is an equal opportunity employer.

OGM UP Gas E-4 /12 © 2012 Pentair, Inc. All Rights Reserved.

