

CO₂/O₂ Gehaltemeter



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General product information

In the wine, beer and beverage industries, the content of dissolved carbon dioxide (CO₂) and oxygen (O₂) are determining factors in the quality, taste and flavor stability of sparkling wine, beer and carbonated beverages. Particularly, O₂ is an important parameter as it causes a rapid decline of the flavor stability and shelf life. Because of this, producers continuously control and measure the concentrations of CO₂ and O₂ during production.

The CO₂/O₂ Gehaltemeter, type c-DGM, combines the internationally accepted determination of the dissolved CO₂ content based on Henry's Law with a highly accurate dissolved O₂ measurement. This state-of-the-art optical O₂ measurement technology provides better response times than traditional O₂ measuring instruments and doesn't require frequent calibration. The design allows for higher product pressure, making it suitable for the soft drink industry. Equipped with an advanced operator and location identification system, it allows for the traceability of measuring data and up to 10 different product types can be programmed into the instrument.

Principle of operation

After operator/location identification, sampling takes place. When the CO₂ measurement is started, the O₂ content is stored. Automatically, equilibrium is created, followed by the measurement of pressure and temperature. The dissolved CO₂ content is then electronically calculated and displayed. The data can be securely transferred to a PC using the interface cable. Besides the combined CO₂/O₂ measurement, the c-DGM is suitable for single O₂ measurement, continuous O₂ measurement and single CO₂ measurement.



c-DGM

CO₂/O₂ Gehaltemeter



Benefits

- Accurate product control
 - reproducible and operator independent results
- Cost saving
 - lower investment costs (one device for CO₂ and O₂ measurement for up to 10 product types)
 - less labor intensive
 - reduction of beer loss
 - low maintenance

Application

- At-line, sampled directly during the production process (from process lines, vessels, tanks or kegs)
- Laboratory, after the production, sampled from all sorts of bottles or cans

Technical Data

Measurement	O ₂ content	CO ₂ content
Measuring range	0.0 - 2,000 ppb	1.00 - 5.00 CO ₂ vol.
Accuracy	± 1 ppb + 2% of m.v.	± 0.03 vol.
Measuring units	ppb, ppm	vol.
Temperature	23 - 104° F, acc. ± 0.2° F	
Pressure	0 - 145 psi, acc. ± 0.01 psi	
Number of measurement per charge	approx. 120	
Measuring time (incl. sampling)	approx. 120 sec.	
Interface	RS-232	
Dimensions	ca. 8.25x5x10.25 in. (LxWxH)	
Weight	ca. 7 lbs.	

Scope of Supply

- CO₂/O₂ Gehaltemeter, type c-DGM
- Service set with power supply (U.S. or Euro plug)
- Software set (CD + Interface)
- Set of two sample hoses
- Operator ID - key (2 pieces)
- Location ID - key (2 pieces)
- Instruction manual

Options

- Certificate of Measurement
- Quick charger

Haffmans North America reserves the right to make changes in the technical specifications at any time.

c-DGM 0807



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