

HAFFMANS CO₂-SELECTOR

NON-INVASIVE CO₂ MEASUREMENT

PRODUCT LEAFLET



GENERAL PRODUCT INFORMATION

When producing a beer, carbonated soft drinks, carbonated water and/or wine, the carbon dioxide (CO₂) content is a key quality parameter and decisive to the product's taste. Therefore, beverage manufacturers frequently measure and control the CO₂ content during production and beyond, to determine shelf-life of the packaged products..

The Haffmans CO₂-Selector provides an advanced solution for non-invasive CO₂ measurement in the filled package. Using an innovative laser technology, the Haffmans CO₂-Selector measures the partial CO₂ pressure and total pressure of the headspace and accurately determines the dissolved CO₂ content in the package. Piercing is not required to perform the measurement. The bottle is not destructed and no product is lost.

How this works

The Haffmans CO₂-Selector's laser transmitter sends a beam through the headspace of the package to a receiver. At a particular wavelength, the CO₂ molecules in the headspace absorb the infrared light of the laser. Based on the width of the absorption lines and the intensity, the total pressure and the partial CO₂ pressure in the package is determined. Other gases present in the headspace - such as oxygen (O₂), nitrogen (N₂) or hydrogen (H₂) - do not have an impact on the partial CO₂ pressure, enabling a CO₂ selective measurement. In addition, the measurement is independent of the color or material of the bottle.

Only a few minutes are required to prepare the package by shaking it to equilibrium and performing the measurement. The procedure is simple and repeatable, which allows for an unlimited number of CO₂ measurements to be conducted on the same package.

BENEFITS

- High-precision laser technology
- One instrument for a wide range of carbonated beverages
- Non-invasive CO₂ measurement
- Suitable for all bottle closures incl. swing top, naturel cork, sport cap
- Selective and non-selective CO₂ values
- Safe, non-contact procedure
- No product loss
- Fast, repeatable measurement
- Temperature compensated results
- No consumables or wear parts
- Multi-lingual operator interface
- Maintenance-free

APPLICATIONS

- Laboratory
- Filling department

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TECHNICAL DATA

Measuring range

| | |
|----------------------------------|-----------------|
| Total pressure | 0.5 - 8.0 bara |
| Partial CO ₂ pressure | 0.08 - 8.0 bara |
| Temperature | +5 - 35 °C |
| CO ₂ value | 0.2 - 13.0 g/l |

Measuring cycle

ca. 5 s.

Bottle dimensions

| | |
|----------|-------------|
| Height | max. 400 mm |
| Diameter | max. 190 mm |

Laser

| | |
|-------|-----------|
| Type | IR, <1 mW |
| Class | 1 |

Voltage

100 - 240 V / AC 50-60 Hz / 84 VA

Dimensions

| | |
|------------------------------------|-----------------------------------|
| Haffmans CO ₂ -Selector | 555 x 280 x 250 mm (H x W x D) |
|------------------------------------|-----------------------------------|

Interface Panel

190 x 280 x 135 mm
(H x W x D)

Weight

| | |
|------------------------------------|--------|
| Haffmans CO ₂ -Selector | 11 kg |
| Interface | 1.9 kg |

SCOPE OF SUPPLY

- Haffmans CO₂-Selector
- Haffmans CO₂-Selector Interface Panel, consisting of:
 - tablet
 - docking station
 - security lock
 - tablet brace set
- Power supply modules
- Mains cables for power supply modules
- USB A/B cable
- Inner measuring gauge
- Instruction Manual



HAFFMANS BV

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