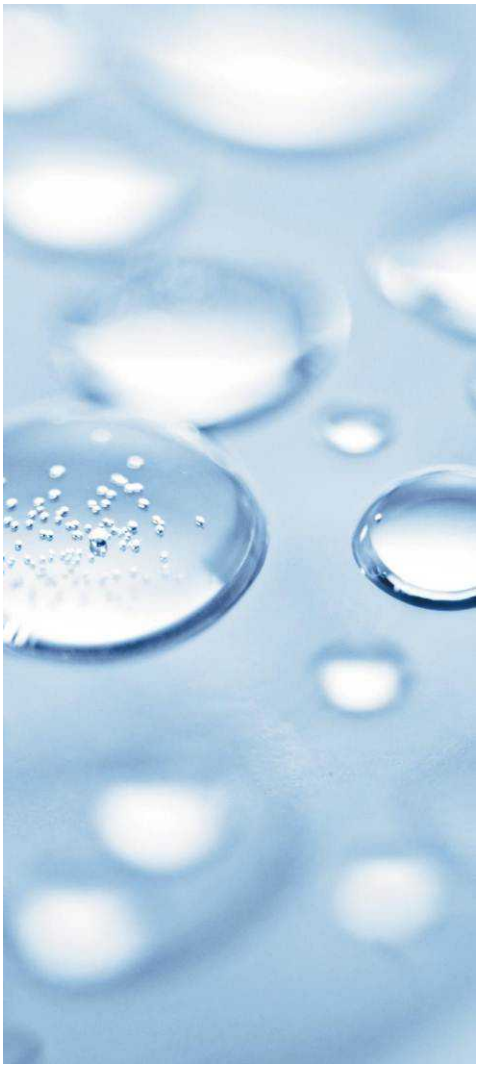
CARBOTEC TR

Inline Dissolved Gas Sensor



- Precise and fast determination of dissolved gas content
- Compact transmitter version with local display
- Compatible to Varivent®-Inline housings DN 65 – DN 150
- Analogue and digital In-/Outputs, optional Profibus
- Long run stable, low response time
- Easy Maintenance, hygienic Construction, CIP-capable
- Commonly used for CO_2 in carbonated soft drinks & beverages

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The Carbotec TR-PT in-line transmitter measures continuously and exactly the content of dissolved gas in liquids, for example for monitoring the carbon dioxide content in carbonated drinks.

For determining the CO_2-content of a carbonated liquid, every 20 seconds a 25ml sample is isolated from the main stream. The pressure of this sample is abruptly reduced to below atmospheric pressure. The resultant pressure will differ from that of a non-carbonated liquid according to the volume of dissolved CO_2 in the sampled liquid. This difference in resulting pressure is the basis for calculating the CO_2-content of the liquid. The temperature dependence of the measurement signal is electronically compensated by PT100. After the measurement the sample is returned to the beverage line. The CO_2-concentration can be displayed in different units like e.g. g/l. The menu-driven software includes the product-specific calibration and product selection. Analogue and digital in- and outputs onboard can be used for process controlling and automation. The sensor has a hygienic construction and is cleanable with all in food- and beverage industry typical CIP-media.

Technical Data:
(for CO_2 in Carbonated Drinks)

Measuring range:	0 – 10 g/l CO_2
Accuracy:	+/- 0,05 g/l CO_2
Reproducibility:	+/- 0,01 g/l CO_2
Response Time:	≤ 20 sec
Temperature comp.:	PT100
Temperature range, Medium:	-10°C - +100°C
Pressure range:	Max. 10 bar
Material in contact with medium:	Stainless Steel 1.4404, EPDM (FDA), PTFE (FDA)
Process connection:	compatible to Varivent©-Inline housings DN65 - DN150; Length of measuring head depending from pipe diame
Inputs:	- 6x digital (24 VDC)
Outputs:	- 3x digital (24 VDC) - 2x analog (4-20 mA)
Optional:	Profibus DP
Enclosure rating:	IP 65
Power supply:	24 VDC

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