to improve your product quality

ProcanDCD®
Dissolved CO_2 analyzer

Instrument Features

Continuous and accurate measurement of dissolved carbon dioxide. The ProcanDCD® is the ideal in-line CO_2-system for the beverage industry using short sampling times.

The method of analysing is the same as used in most production laboratories. Values of pressure and temperature are electronically introduced in user 's concentration tables.
From these proven tables the pressure exerted by a known volume of CO_2 in a liquid at any given temperature can be found. Therefore if carbonated liquid at process pressure is isolated from the mainstream and the pressure 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 tested liquid.

The ProcanDCD must be installed in a by-pass of a process line. The sample will be pumped through the measuring chamber, and at certain intervals it will be completely isolated from the process line. At the end of the cycle, the measuring values are ready for calculation of the concentration. During the next step of the cycle, the chamber will be flushed and prepared for the next sample.

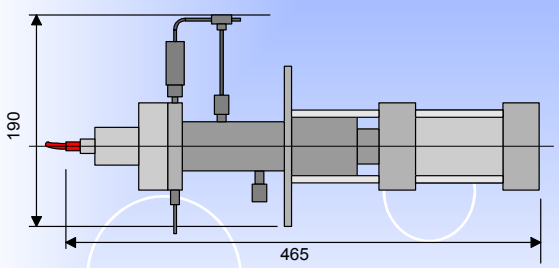
All applied parts are made out of stainless steel or other corrosive resistant materials and can withstand all CIP procedures.

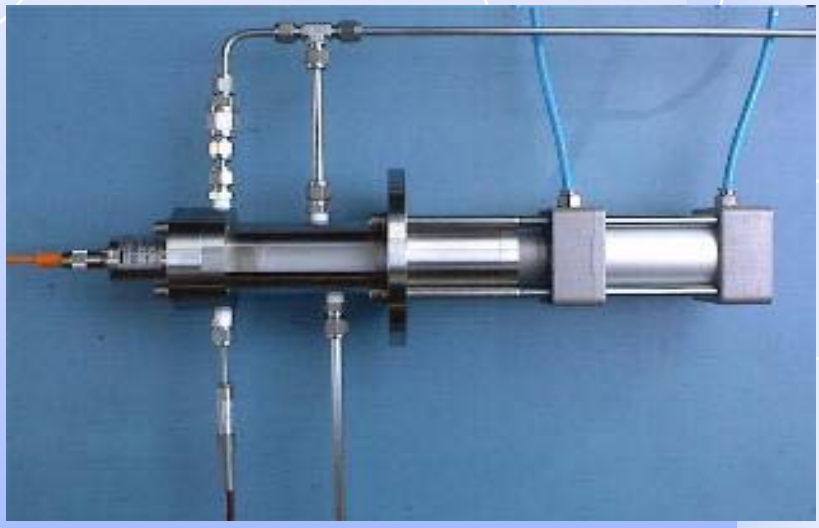
Simple and reliable operation with a low maintenance level.

Approved quality and knowledge.

The dissolved carbon dioxide concentration can be expressed in vol/vol, g/l bar etc..

This instrument has been developed to be used with the ProcanMaster® computer system.





Specifications

Measuring ranges
Range : 0...12 g/l (0...6 V/V)
Other ranges on request

Precision
± 0,05 g/l (± 0,025 V/V)

Reproducibility
< 0,01 g/l (0,005 V/V)

Drift
< 0,05 g/l (0,025 V/V) within 4 years

Speed of response (t_{90})
15 s … 30 s

Temperature compensation
Is included in the calibration and made over the range of interest

Process temperature
-1 .... 30 °C

CIP temperature
Max. 130 °C

Process pressure
Max. 10 bar

Ambient temperature
-5...40 °C

Output signals
Temperature and pressure CO_2 via RS485 interface

Air Supply
5 bar (clean pressured air)

Built-in position
Any

Sample Flow
Recommended 100... 200 l/hour

Sample Connections
6 mm 6L, SwageLock fittings

Materials in contact process liquid
SS316, Viton, Turcon

Weight
5 kg

STEUMA instruments, Kortestraat 10A, 4818LT, Breda, The Netherlands
tel. 0031 76 5220901, fax 0031 76 5205865
E-mail: info@steuma.com Web: http:// www.steuma.com