



CARBOSET™

Carbonation

Application

In the carbonation module, CARBOSET™, beer, softdrinks, and other beverages are continuously carbonated.

Working Principle

CO₂ is injected in the product line directly, without the need for utilising any porous disc or sinter candle. This means that CIP of the CO₂ and product lines can be carried out without reduction in flow rate.

A specially designed mixer/accelerator makes sure that the CO₂ dissolves rapidly into the product by a combination of turbulent flow and increased pressure.

An analyzer is included after the mixer and carbonated product is analyzed for CO₂ content.

The reading from the analyzer is passed on to a PID controller in the PLC. This controller receives a continuously updated reading and displays it. The reading can also be presented on a pen recorder.

The desired CO₂ value is set on the controller, which then automatically adjusts the CO₂ control valve, thereby holding the CO₂ at the desired level.

The control panel with the PLC controls the plant operation.

Relevant process data displayed:

- Actual and setpoint CO₂ content
- Plant status
- Controller settings
- Alarm status
- A fail-safe system is monitoring the operation.

The plant is designed for cleaning in place. Both the CO₂ and product line can be cleaned without removing any parts from the pipes.

Basic Unit

The unit is self-contained and preassembled on a frame. In compliance with food industry regulations, all components in contact with the process liquids are made of stainless steel with heat resistant seals.



Benefits

- *Developed in co-operation with the brewing industry*
- *Automatic control*
- *Sanitary design*
- *Robust construction*
- *Compact design*
- *Efficient dissolving of CO₂*
- *Versatile and adaptable to different process requirements*
- *Low maintenance*

Technical Data

Capacity ranges, hl/h: 50-150, 80-150
120-220, 200-300
280-500 and 480-800

Carbonation level: Up to 7 g/l (final product)

CO₂ analyzer accuracy: ± 0.05 g/l

Utility data: Depending on capacity range

Dimensions

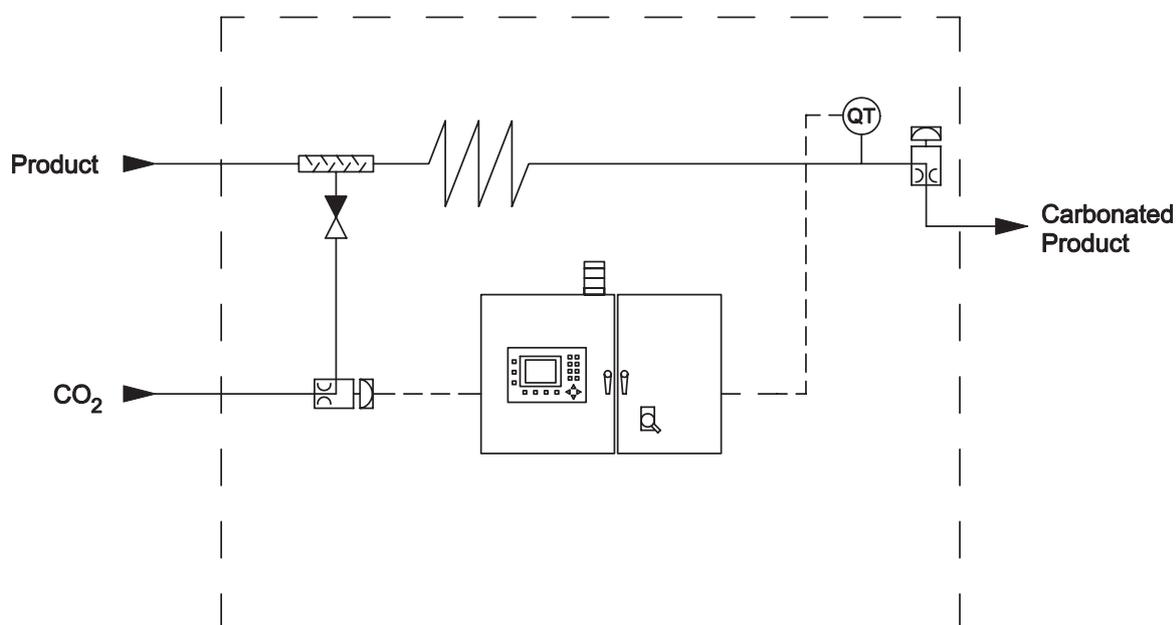
Approximate dimensions and weight depending on capacity range:

L = 1.5 W = 1.0 m H = 2.3 m

Weight: approx 150 kg

Optional Equipment

- Different automation levels
- Remote control
- Communication with other control systems



How to contact Alfa Laval

Contact details for all countries are continually updated on our website. Please visit www.alfalaval.com to access the information direct.