Alfa Laval ALFADOSE™

In-line blending

Introduction

The ALFADOSE™ modular system is designed for controlled dosing of large or small volume components directly into a main product stream. Within the brewing and beverage industry, it is employed for in-line blending, to obtain the accurate final product in one step.

Application

- Adjusting beer taste and quality by addition of ingredients such as malt extract, hops extract, colour and flavour
- Dosing of soft drink ingredients.

Design

The ALFADOSE self-contained process module is pre-assembled and factory tested before delivery. It is designed for CIP and in compliance with food industry regulations. All components in contact with the process liquids are made of stainless steel with heat resistant seals.

Benefits

- Automatic control and "plug-and-play" concept ensures a minimum of site work
- Sanitary and compact design with low maintenance demand
- Stable and reliable operation with outstanding dosing accuracy
- Versatile and adaptable to different process and ingredient requirements.

Working principles

The dosing and mixing is carried out by continuously controlling the flow ratios of the constituent components by use of high precision volume or mass flow meters.

The dosing of ingredients, if applicable, the total batch volume, is preselected on the control panel in the form of a recipe.

The ALFADOSE module is fully automated with a PLC system controlling the plant operation. Selection of functions through easy and logical operator interaction via a colour touch panel.

Process data displayed:

- Plant status
- Actual and set-point dosing ratios and flow rates
- Alarm status
- Controller settings.

A fail-safe system is monitoring the operation.

Options

- Ingredient dosing and preparation vessels with a.o. heating, cooling and agitation
- Variable flow design
- Integrated cooling of blended product
- Product carbonation
- In-line gravity and alcohol measurement for exact and controlled dosing
- In-line carbon dioxide measurement for exact and controlled carbonation level
- In-line dissolved oxygen measurement
- Remote control and communication with other control systems via data bus or digital I/O
- Integrated CIP.

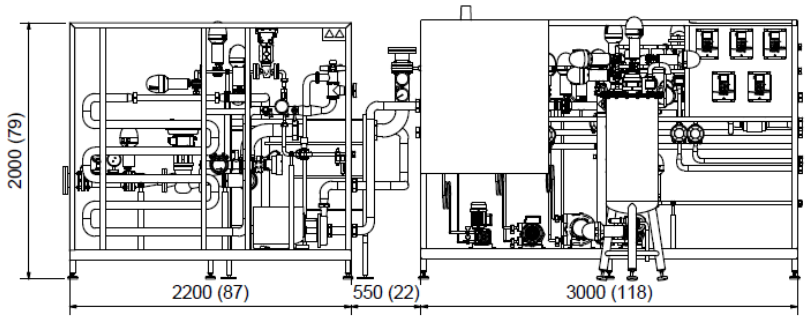
Technical data

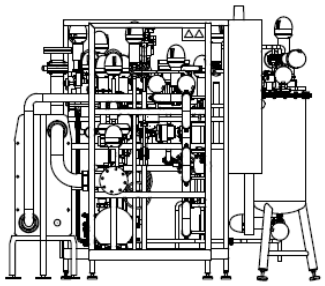
Capacity range final product	45-1,100 hl/h
Dosing ratios	1–30%
Accuracy	Less than ±0.2% of max flow
Utility data	Depending on capacity range

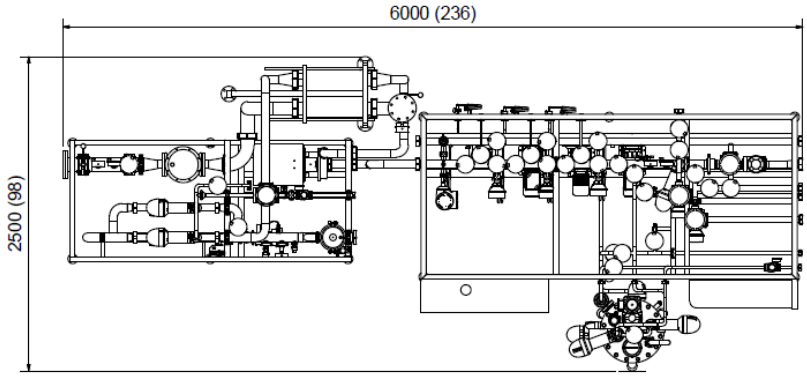
Dimensional drawing

Approximate dimensions and weight depending on capacity range, e.g. 100 hl/h final product and 4 dosing points

Length x width x height	6 (236) x 2.5 (98) x 2 (79) m (inches)
Weight	1,500 kg







How to contact Alfa Laval

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