



ALFADOSE™

Dosing and mixing

Application

The ALFADOSE is a modular system 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.

It is commonly used for:

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

Design

ALFADOSE is a self-contained process module, 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.

The benefits of the ALFADOSE are

- Developed in co-operation with the brewing industry
- 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 principle

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 pre-selected 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 / display.



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

Specifications

Standard capacity ranges,
final product, hl/h: 30-70, 50-120, 100-200, 180-300
Dosing ratios: 1-30%
Accuracy: Less than $\pm 0.2\%$ of max flow
Utility data: Depending on capacity range

(Other specifications on request)

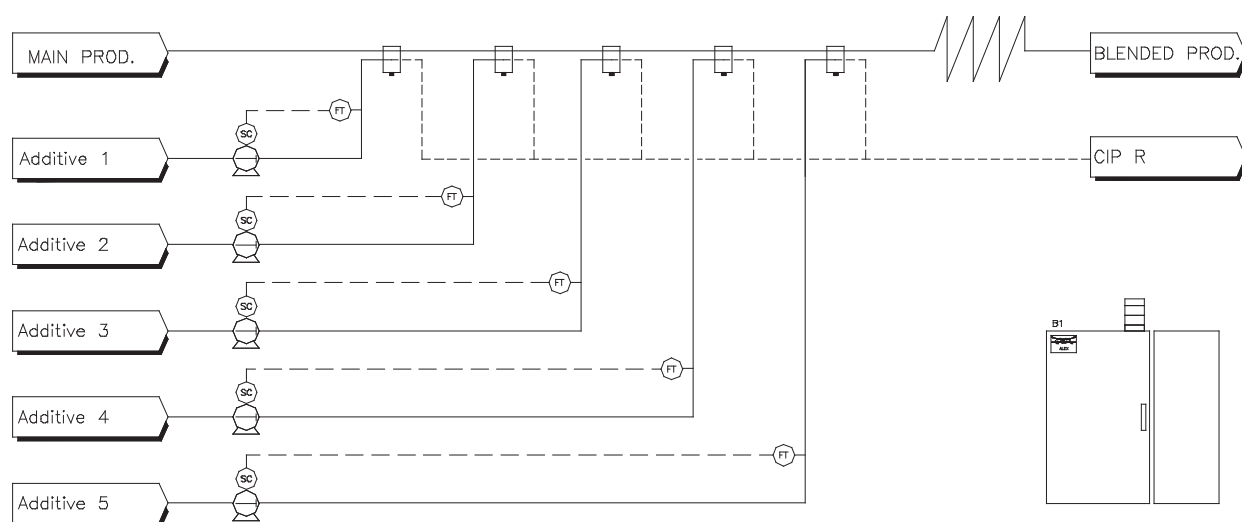
Approximate dimensions and weight depending on capacity
range, eg 100 hl/h final product and 4 dosing points.

L= 2.5 m W= 1.0 m H= 2.3 m

Weight: approx 400 kg

Extra equipment

- Ingredient dosing and preparation vessels with heating, cooling, agitation, etc.
- 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



ALFADOSE Flow diagram

How to contact Alfa Laval

Up-to-date Alfa Laval contact details for
all countries are always available on our
website at www.alfalaval.com