



# Alfa Laval W-SIL strainer

## Self cleaning strainer

### Introduction

The W-SIL strainer is specially designed for the continuous removal of coarse particles from process liquids, in order to protect downstream equipment such as centrifuges, heat exchangers, pumps, etc.

### Applications

- Beverage production waste water treatment
- Coffee and tea production
- Fat and oil processing
- Fruit and vegetable processing
- Industrial food refrigeration
- Soft drink production
- Wine and distilled alcoholic beverages production

### Benefits

- Self cleaning, solids are continuously brushed off from the filter surface
- A variety of perforated and slotted filter baskets available
- All parts in contact with the product are made of stainless steel
- Compact design

### Design

The strainer casing and all product-wetted parts are made of stainless steel in a grade equivalent to AISI 316L (SIS 2343).

The standard W-SIL strainer model is equipped with a gear motor, a central shaft with inclined stainless steel brushes, a perforated filter basket, a set of tools and standard spare parts.

The strainer is delivered ready to be mounted vertically using three 16 mm diameter bolts.

### Options

- Filter baskets perforated: 1.5 mm (0.06 inch), 2 mm (0.08 inch), 3 mm (0.12 inch)
- Filter baskets slotted: 50, 100, 150, 200, 300, 400 microns
- Special motor voltages
- Complete module including control cabinet
- Teflon scrapers instead of stainless steel brushes (special driveshaft required)

### Working principle

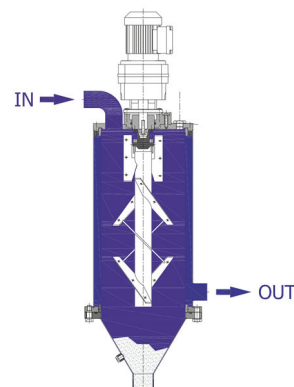
The strainer has a stainless steel casing surrounding a filter basket through which the liquid passes.



Any coarse particles suspended in the liquid are held back in the filter basket, and then forced downwards by rotating brushes mounted on a central shaft. This shaft is driven by an electrical gear motor mounted on top of the unit.

The collected particles are removed from the cone at the lower end. This cone is easy to open for inspection and access to the shaft and brushes.

Pipe connections for flushing the strainer are available on the bottom cone. Connections for instrumentation are located on the top of the unit. For high viscosity products or for improved CIP ability, the strainer can be equipped with teflon scrapers.



## Technical data

Total volume	70 l
Cone volume	8.5 l
Straining surface	0.55 m <sup>2</sup> (5.9 sq foot)
Throughput	up to 60 000 l/h (265 gpm)
Working pressure	up to 600 kPa / 6 bar (87 PSI)
Working temperature	up to 100°C (212°F) <sup>1</sup>
Test pressure	900 kPa / 9bar (130 PSI)
Standard motor	0.25 kW 3 ph, 750 rpm
Shaft speed	8.3 rpm
Weight	95 kg (209 lbs) approximately

<sup>1</sup> giving max 0.5 bar (7.2 PSI) vapour pressure

## Filter baskets mm (inch)

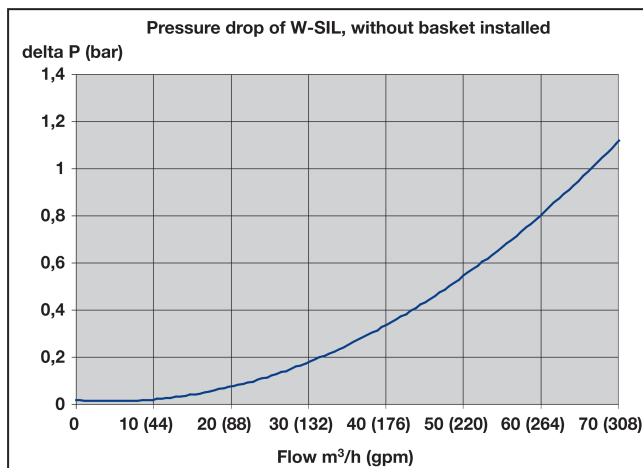
Perforated standard	0.6 (0.02), 0.8 (0.03), 1 (0.04)
Perforated on request	1.5 (0.06), 2 (0.08), 3 (0.012)
Slotted on request	50, 100, 200 and 400 microns

## Connections

Product inlet/outlet mm	Pipe 63.5 x 1.5, weld end
Product inlet/outlet (inch)	Pipe 2.5 x 0.06, weld end
Sludge outlet	Threaded pipe 2 1/2-inch SWG
Instrument	3/4-inch SWG on liquid inlet and top
Flushing	3/8-inch SWG on bottom cone

## Shipping data

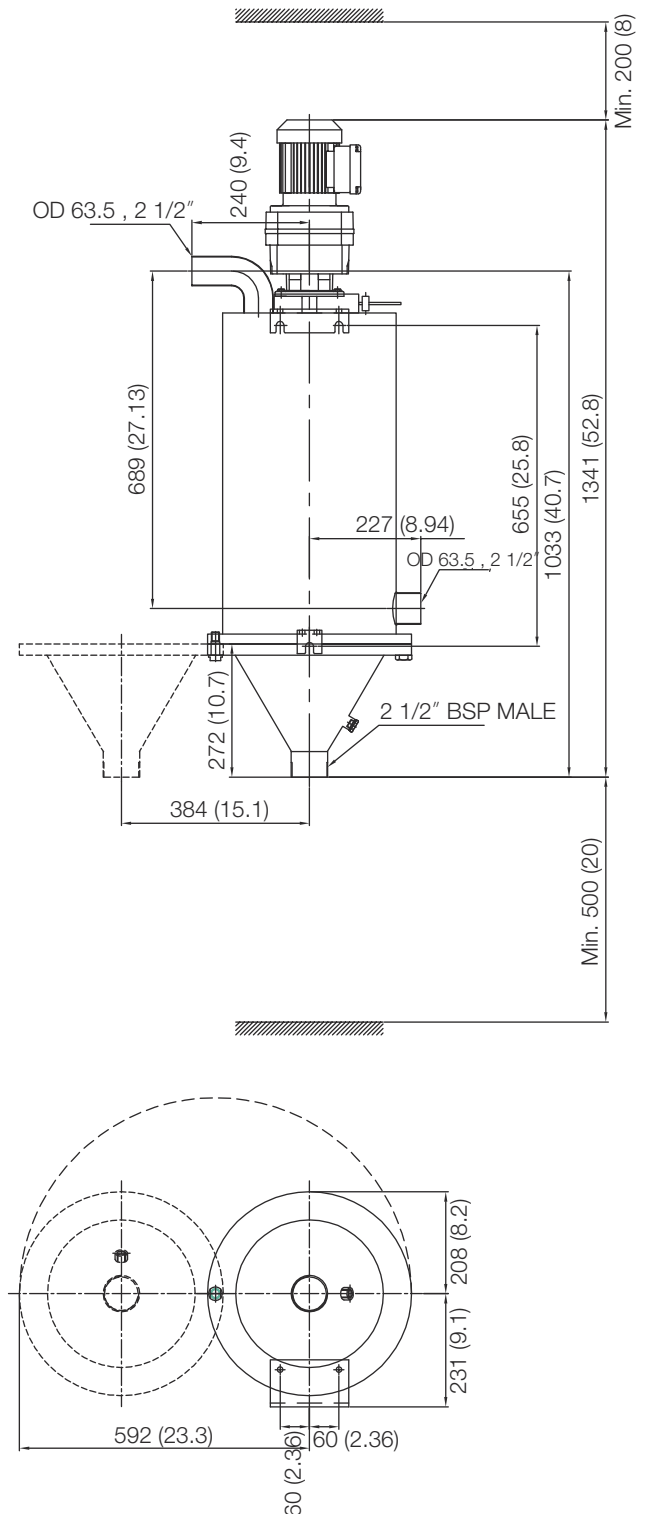
Gross weight	110 kg (242 lbs) approximately
Volume	0.6 m <sup>3</sup> (22 cubic foot)



## Capacity

The maximum working pressure is 600kPa (87 PSI). Throughput specifications depend on the particular application, the configuration of the cylinder perforations, the viscosity of the liquid being processed and the feed pressure.

## Dimensional drawing



This document and its contents is owned by Alfa Laval Corporate AB and protected by laws governing intellectual property and thereto related rights. It is the responsibility of the user of this document to comply with all applicable intellectual property laws. Without limiting any rights related to this document, no part of this document may be copied, reproduced or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise), or for any purpose, without the expressed permission or authorized by Alfa Laval Corporate AB. Alfa Laval Corporate AB will enforce its rights related to this document to the fullest extent of the law, including the seeking of criminal prosecution.

## 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](http://www.alfalaval.com)