СГУСТИТЕЛИ, ФИЛЬТР-ПРЕССЫ И ФИЛЬТРЫ

Модуль фильтра Альфа Лаваль W-SIL

Self cleaning strainer module

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
- Plug & play unit

Design

The W-SIL strainer module is delivered as a complete framemounted unit ready to be mounted directly on the floor. The module includes the electrical cabinet for motor control and solids discharge valve.

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

The standard 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.

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, 200, 400 microns
- Special motor voltages
- Teflon scrapers instead of stainless steel brushes (special driveshaft required)

Working principle

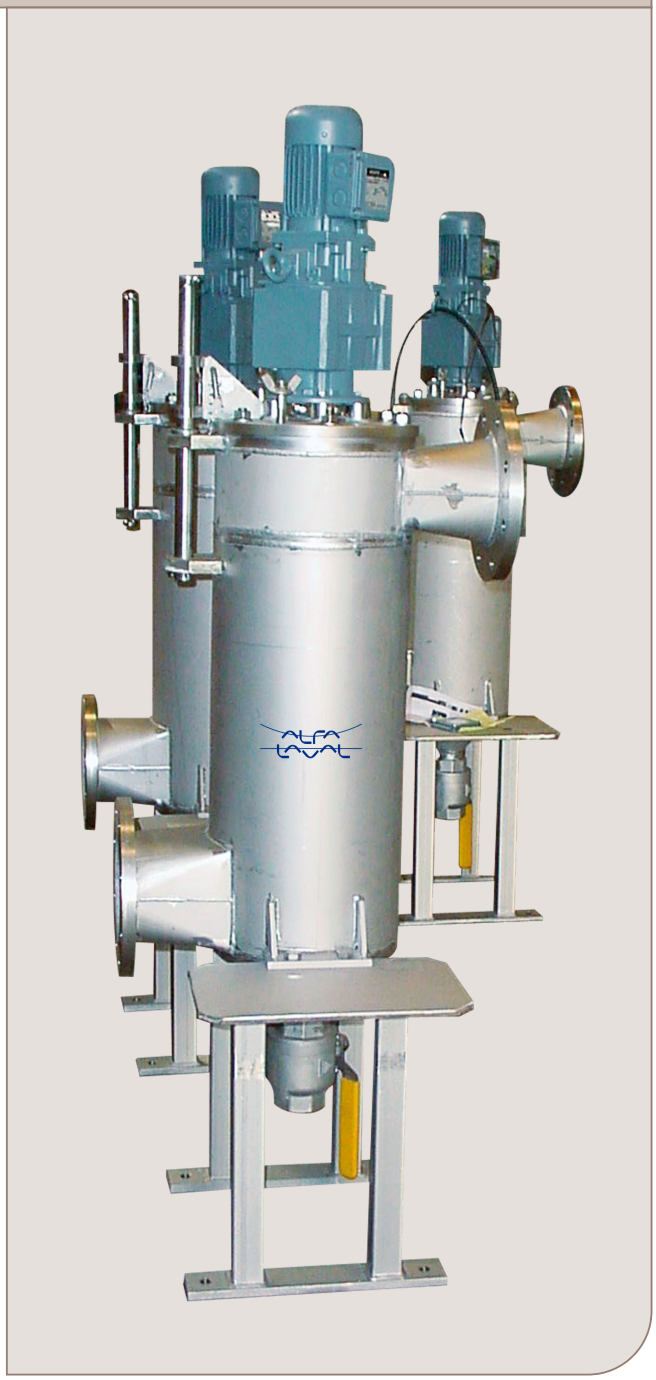
The strainer has a stainless steel casing surrounding a filter basket through which the liquid passes. Any coarse particles suspended in the liquid are held back in the filter basket, and then forced downwards by rotating brushes mounted on a central shaft. This shaft is driven by an electrical gear motor mounted on top of the unit.

The collected particles are removed from the cone at the lower end via the sludge valve, which is controlled via a timer in the electrical cabinet. 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.

Альфа Лаваль самоочищающийся фильтр 100/150

Safety strainer for rotating equipment



Introduction

The Self-cleaning strainer 100 or 150 (SCS) is designed to prevent costly downtime by keeping oversize material from clogging process equipment. The strainer protects centrifuges, cyclones, cleaning nozzles and pumps thus keeping the process trouble-free.

Application

Removal of oversize material from process flows such as wash water to disc nozzle centrifuges and rotary vacuum filters.

Benefits

- The unique brushing device of the SCS assures a constant and equal pressure on the screen, despite wear on the brisles.
- The SCS drive unit has special snap-coupling and guiding rod to facilitate quick and easy opening during cleaning and maintenance.

Design

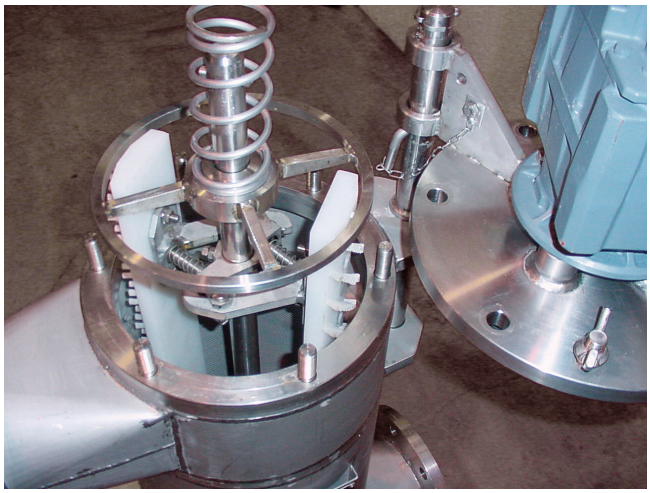
The SCS consists of housing, screen and motorised cleaning device, and is available in stainless steel. The brush-blocks are made of HDPE and the bristles of nylon 6.6. All other interior components are made of stainless steel.

The SCS can be mounted on a supporting frame, constructed in stainless steel.

The SCS has 0.8 mm screen openings as standard. Openings between 0.3 mm and 3 mm are also available.

Working principle

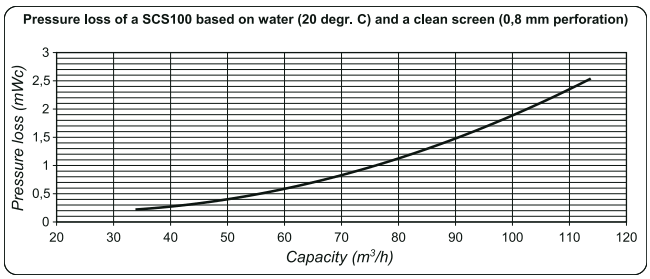
The SCS has constantly spiralling brushes or scrapers that rotate slowly to keep accumulation of coarse particles moving. This keeps oversize material from plugging or blinding the screen so the flow through the strainer is smooth and unhampered. Accumulation of oversize material can be removed by intermittent purges through a generously sized discharge outlet.

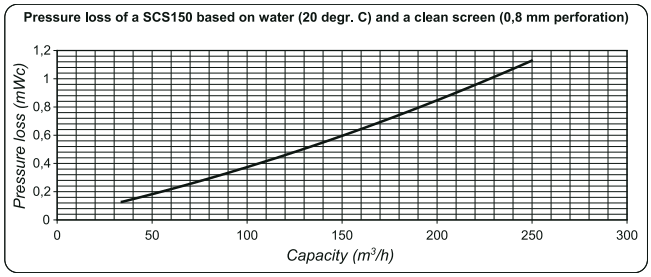


Technical data

	Net weight kg	Weight in operation kg	Support weight kg
SCS 100	282	370	28
SCS 150	312	420	28

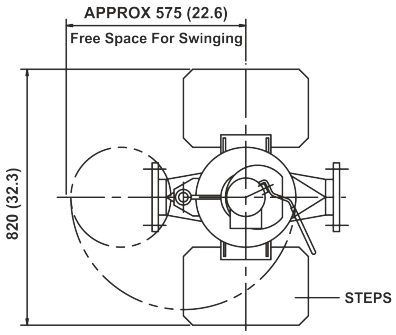
	Feed N1	Outlet N2	Drain N3
SCS 100	DN100	DN100	2½"
SCS 150	DN150	DN150	2½"

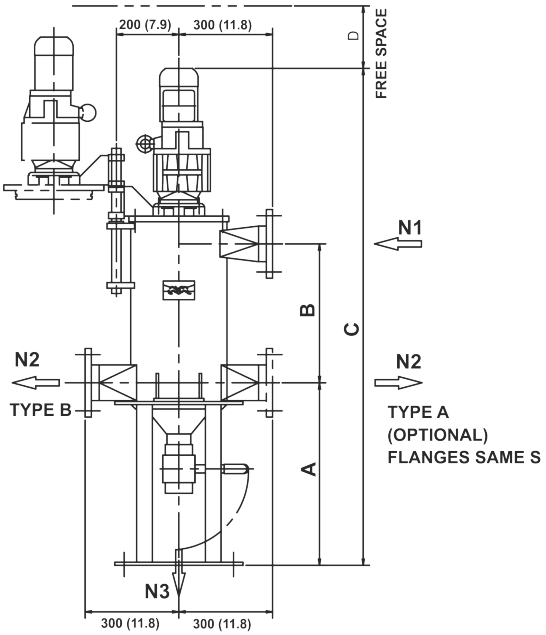




Dimensional drawing

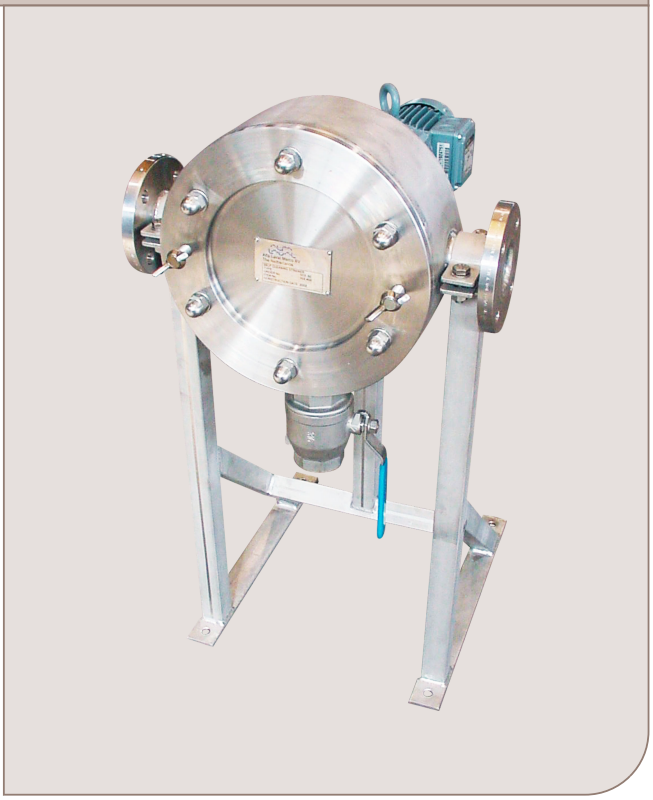
Dimensions	A	B	C	D
SCS 100 in mm	585	445	1595	200
SCS 150 in mm	605	633	1815	350





Альфа Лаваль самоочищающийся фильтр 50

Safety strainer for rotating equipment



Introduction

The Self Cleaning Strainer (SCS50) is a self-cleaning enclosed strainer designed to prevent costly downtime by keeping oversize material from clogging process equipment. The strainer protects centrifuges, cyclones, cleaning nozzles and pumps thus keeping the process trouble-free.

Application

Removal of oversize material from process flows such as wash water to disc nozzle centrifuges and rotary vacuum filters.

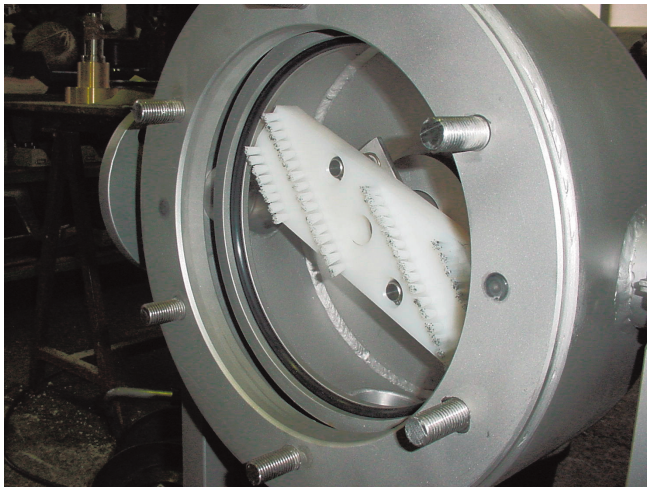
Benefits

- Reliable and continuous operation
- Easy maintenance

Working principle

The SCS50 has slowly rotating brushes to keep accumulation of coarse particles moving. This keeps oversize materials from plugging or blinding the screen so the flow through the strainer is smooth and unhampered.

Accumulations of oversize material can be removed by intermittent purges through a generously sized discharge outlet.



Design

The SCS50 consists of; housing, screen with back-up plate and motorised cleaning device. The SCS50 housing is made of stainless steel. The brush-block is made of HDPE and the bristles of nylon 6.6. Screen plate and other interiors are stainless steel.

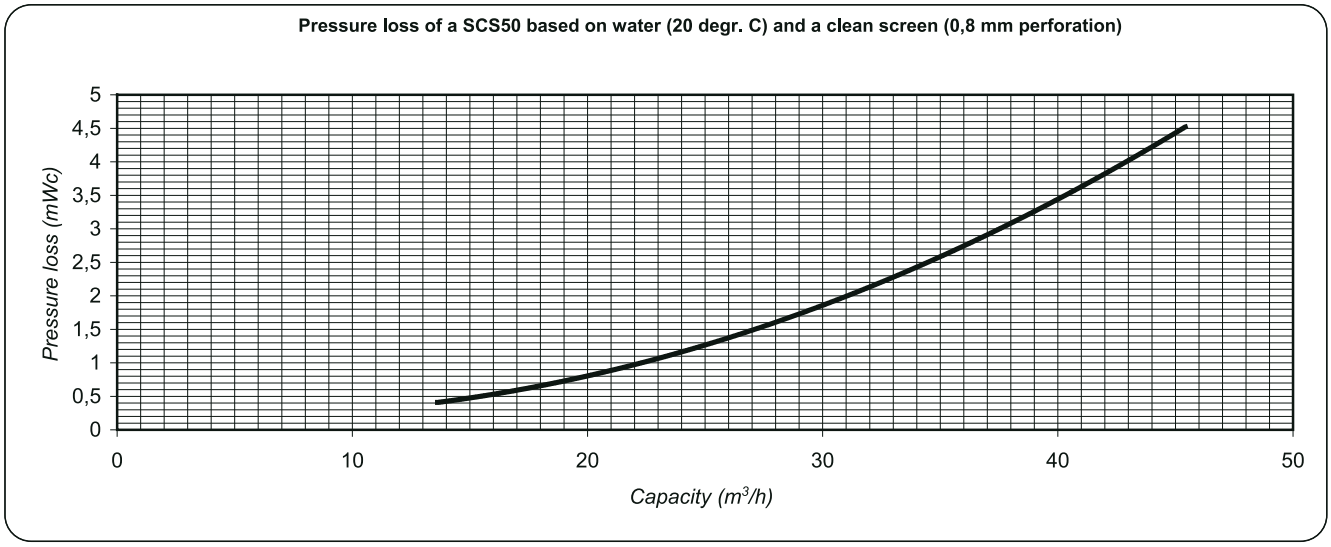
The SCS50 can be mounted either directly in line or on a supporting frame.

The SCS50 is equipped with standard 0.8 mm screen openings. Openings of other sizes within the range of 0.3 mm and 3 mm are available on request.

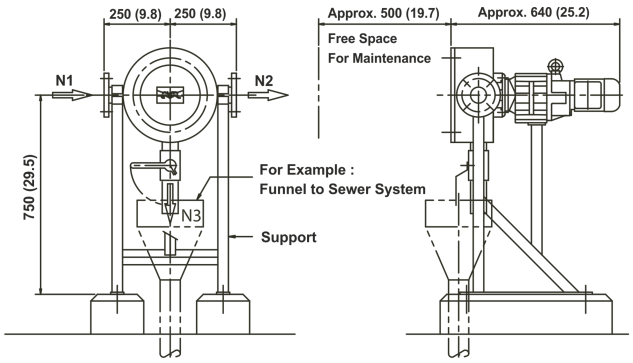
Technical data

	Net weight kg	Weight in operation kg	Support weight kg
SCS50	65	75	12

Nozzle indication	Size DN	Connection norm	Rating PN	Type / Facing	Service
N1	50	DIN 2501	10	Raised face	Feed
N2	50	DIN 2501	10	Raised face	Outlet
N3	Rp 2 ½"	DIN 2999	-	Female thread	Drain



Dimensional drawing



Фильтр Альфа Лаваль W-SIL

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, 200, 400 microns
- Special motor voltages
- Complete module including control cabinet
- Teflon scrapers instead of stainless steel brushes (special driveshaft required)

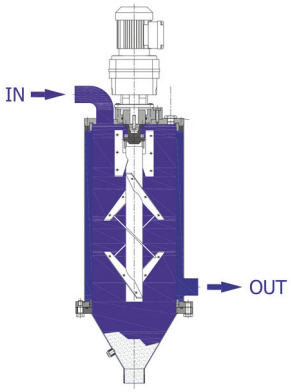
Working principle

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 m2 (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 100ºC (212ºF)[1]
Test pressure	300 kPa / 3bar (43 PSI)[2]
Standard motor	0.25 kW 3 ph, 750 rpm
Shaft speed	8.3 rpm
Weight	95 kg (209 lbs) approximately

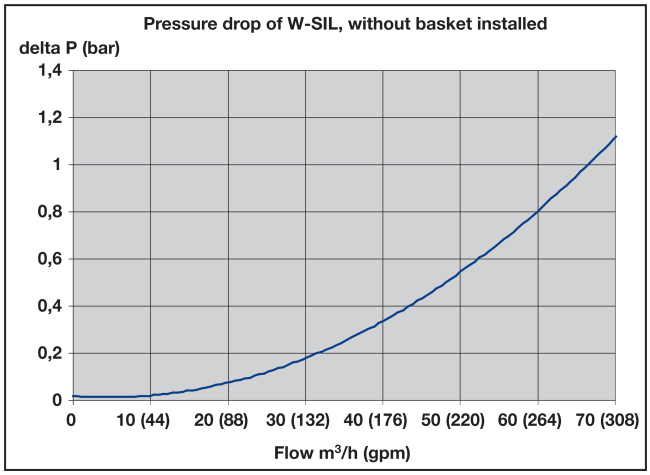
[1] giving max 0.5 bar (7.2 PSI) vapour pressure

[2] Test pressure for strainer with flange or other connection on inlet and outlet pipe is 900 kPa / 9 bar (130 PSI)

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

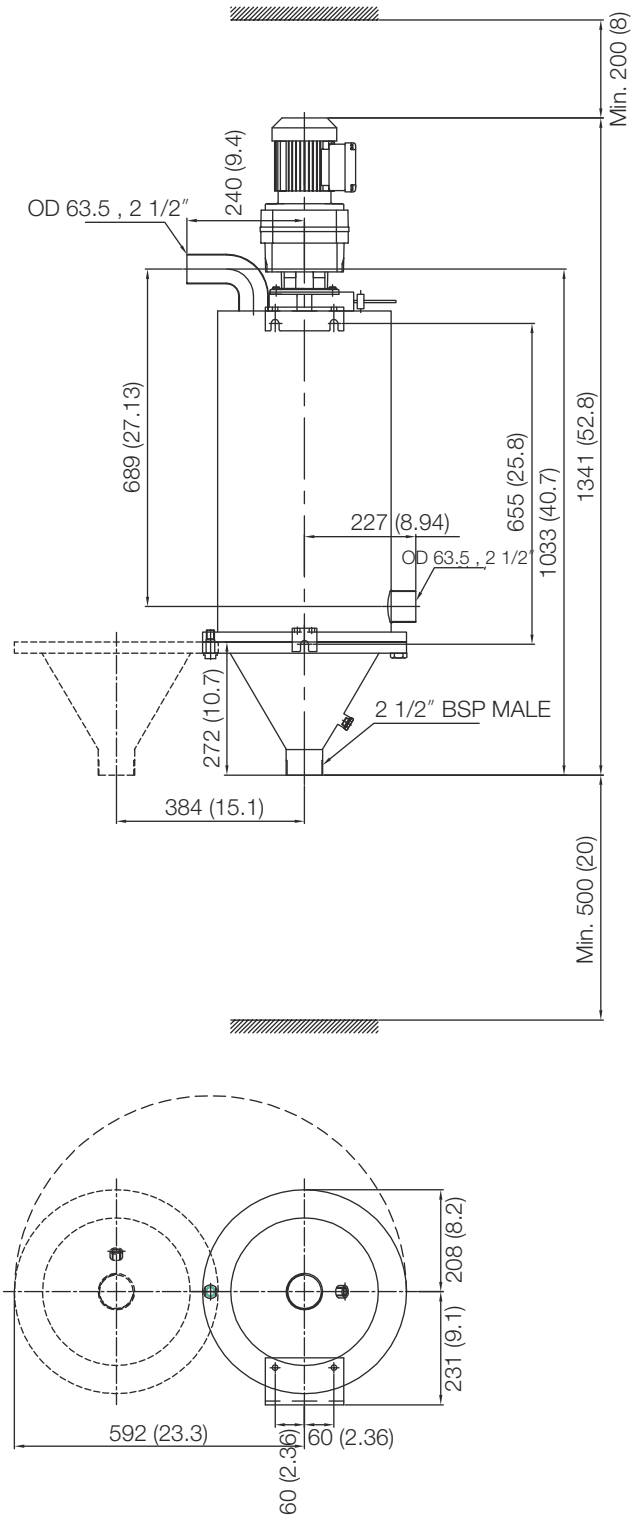
Shipping data	
Gross weight	110 kg (242 lbs) approximately
Volume	0.6 m3 (22 cubic foot)

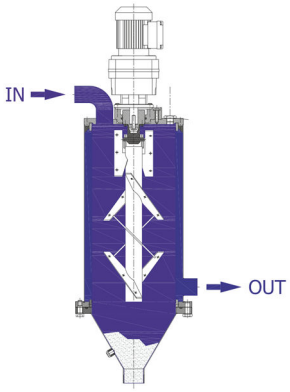


Capacity

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





Technical data

Total volume	70 l
Cone volume	8.5 l
Straining surface	0.55 m2 (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 100ºC (212ºF)[1]
Test pressure	300 kPa / 3bar (43 PSI)[2]
Standard motor	0.25 kW 3 ph, 750 rpm
Shaft speed	8.3 rpm
Weight	170kg (374lbs) approximately

[1] Giving max 0.5 bar (7.2PSI) vapour pressure

[2] Test pressure for strainer with flange or other connection on inlet and outlet pipe is 900 kPa / 9 bar (130 PSI)

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 (0.12)
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	190kg (418lbs) approximately
Volume	1.6 m3 (57 cubic foot) approximately

Dimensional drawing