



CSF Self-cleaning Wedge Wire Filter

Function

The COLF (Contec Liquid Filters) wedge wire filter consists of the following parts:

- two part filter housing
- wedge wire element
- cleaning - scraper blade
- motor

The CONTEC automatic strainer is logic, efficient and economical way of filtration.

The system is solidly built and may be used for the toughest applications. The medium flows from the outside to the inside of the filter element and the solids are collected on the outside of the wedge wire screen. The scraper blade cleans the permanent rotating filter element and the collected solids are forced into the bottom part collection area by the liquid pressure. The collected solids may be purged manually or by means of automatic valves. Clogging of the filter is almost impossible, because of the special construction of the wedge shaped filter element wires. The filter fineness is established by the width between the wedge formed wires. The elements may be changed without any special tools.

Benefits

- No cartridge use
- Self-cleaning
- No interruption of production process
- Easy to dismount and inspect
- Low operating costs
- Solidly built filter housing
- Limited maintenance, uncomplicated, rugged, reliable design
- Filtration level 25 μm – 3.0 mm
- Continuous cleaning of the filter surface ensures minimum pressure drop
- The use of different construction materials and equipment facilitates application possibilities for the filter in every field of industry.
- Installed upstream of pumps etc. extends the life of such components and prolongs the service life of fine filters.

Features

- Permanent cleaning without stops
- No waste or disposal of filter cartridges
- Minimal product loss during purging
- May be used for all kinds of liquids
- Filters from 25 μm up to 3.0 mm
- Maximal temperature up to 200 °C
- High differential pressure
- Rugged two part housing
- Outside - inside filtration
- No product contamination
- Purging by ball valve or automates
- Taylor made execution possible





Technical data

Materials

Filter housing	316 Ti / 1.4571
Filter element	316 L / 1.4435
Scraper blade	301 / 1.4310

Gasket

Viton O-ring

Filter elements

25 µm – 3.0 mm

Pressure

10 bar

Max. temperature

200 °C

Motor

Power 230/400 V, 50 Hz
Other Voltages on request

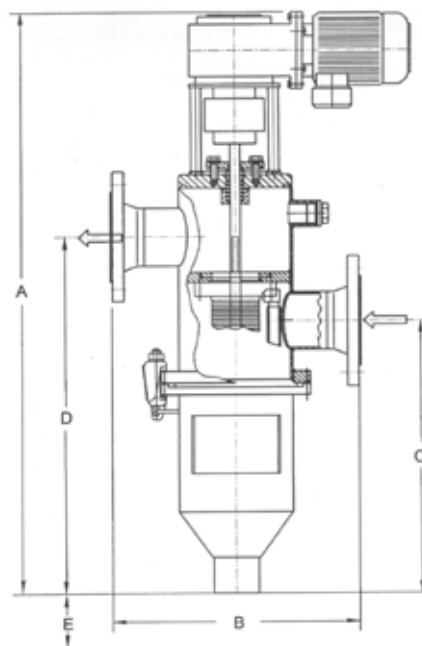
Class

IP 54 / IP 65

Option

EX – proof (ATEX 100a)

Manufactured acc. pressure vessel directive 2014/68/E Cat. 1, Art. A



Technical data

CAPACITY	CSF250	CSF400	CSF700	CSF1000
Water / 100 µm filter element	< 4 m ³ /h	13 m ³ /h	22 m ³ /h	35 m ³ /h
Inlet	R1"	Flange DN 50	Flange DN 65	Flange DN 80
Outlet	R1"	Flange DN 50	Flange DN 65	Flange DN 80
Purge	R 3/4"	R 2"/ Flange DN 50	R 2"/ Flange DN 50	R 2"/ Flange DN 50
Vent	R 1/8"	R 3/4"	R 3/4"	R 3/4"
Housing closing < 6 bar	Quick clamp	Bolted flange	Bolted flange	Bolted flange
Housing closing > 6 – 10 bar	Quick clamp	Closing bolts	Closing bolts	Closing bolts
Closure > 6 – 10 bar	Quick closure clamp	Clamp screw	Clamp screw	Clamp screw
Built in height A		910	1010	1075
Flange size in mm B		370	370	465
Flange height in mm C		370	470	520
Flange height in mm D		504	604	665
Built out height in mm E		300	400	400
Volume in ltr.	1.5	10.5	12.5	22.5
Power watt	20	75	75	75
Weight kg	12	40	47	81

Subject to change without prior notice

Options

- Explosion proof motor
- Special voltage
- High pressure version
- Coatings and special materials
- TÜV and other certificates



Description

The robust CONTEC CSF filter with its motor-driven cleaning device is suitable for the separation of suspensions as well as the continuous separation of solid particles from liquids whose viscosities may range from water-thin to pasty. It thus offers a wide range of application possibilities throughout the entire processing industry. The filter housing is constructed in two parts and is easy to open. By loosening the quick clamps or hexagonal bolts the lower part, including the sump can be removed downwards. The filter elements can be removed without special tools and are easy to clean, if required. The various design types made of steel or stainless steel materials, with or without heat jacket enable this versatile filter to be employed for numerous applications.

Operation

The liquid flows from the outside to the inside of the wedge wire screen and leaves the filter housing through the higher placed exit. Between lower placed entrance and the upper exit a seal is placed, limiting any cross contamination between lower (dirty) part and upper (clean) part.

Dirt and particles are retained on the outside of the screen and are continuously removed from the filter element with a flexible scraper blade. The dirt is directed to the sump by a laminar flow in the filter and collected in the bottom part of the filter housing. This collection chamber may be purged either manually or automatically through a valve.

An automatic purge system can be set up including an actuator and a time controller or pressure differential initiated valves. The installation of a manual by pass function is advised. Liquid losses are limited. The automatic strainer is available either skid mounted or with support legs.

Applications

- **Chemical Industry**
Ammonia, Solvents, Softening agents, Glycol's, Adhesives, chemical base materials, Suspensions, Lye's, Waste liquids, etc. washing liquids, distillation and reaction fluids, surfactants.
For preliminary and coarse filtering upstream of distillation columns, reactors, flue gas Scrubbers, pumps, fine filters, filling plants, etc.
- **Paint and Colour Industry**
Varnishes, Dispersions, Coatings, Tar products, Agents, etc.
- **Beverage Industry**
Wineries (Must filtration), Breweries, Distilleries, etc.
- **Cosmetic Industry**
Soaps Fats, Essences, Tooth Pastes, etc.
- **Plastic Industry**
Base products, PVC and PU Pastes, Rubber products, Silicones, etc.
- **Food Industry**
Sweets, Dairy products, Fats, Flavours, Concentrates, Treacle's, fatty acids, cooking oils, molasses, fruit concentrates and juices, syrups, chocolate mass, egg mass
- **Mineral Oil Industry**
Oils, Greases, Solvents, Waste Oils, Diesel Oils, lubricating oils, heating oils, heat transfer fluids, reclaimed oils
- **Car Industry & metal working**
Degreasing baths, Cooling liquids, Lubrication liquids, Greases, etc. Cooling water, washing and scrubbing water, process water, water from cutting Processes
- And many others, I.e. Electro-, Optic-, Pulp & Paper-, Leather-, Sugar-Industries ...