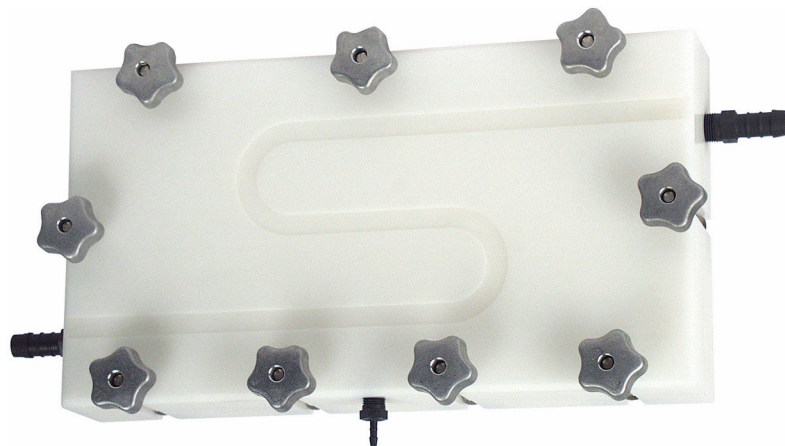


Technical Information

Stamoclean CAT411

Microfilter

Cross-flow filter for the filtration of aqueous samples from pressure pipes



The CAT411 microfilter is a special cross-flow filter for sampling from pressure pipes for the purpose of continuous online monitoring.

A self-cleaning effect results from the flow of medium at the filter.

Application

- Wastewater treatment plant
 - Return activated sludge up to max. 4 g/l (4000 ppm) dry matter
 - Excess sludge up to max. 4 g/l (4000 ppm) dry matter
 - Secondary clarification
- Industry
 - Pressure on filter 0.2 to 1 bar (3 to 15 psi)
 - Sampling in the bypass at higher pressures

Your benefits

- High degree of operational safety thanks to robust design
- Simple cleaning reduces operating costs
- Easy and fast replacement of filter membranes
- Long service life
- Short response time of downstream measuring device due to low dead volume
- No separate energy requirements
- Easy installation

Function and system design

Operating principle

A sample flow of 0.8 to 1.8 m³/h (3.5 to 8 gal/min) is permanently conducted through the microfilter via a pressure pipe. Some of the sample passes the filter membrane and is then conveyed to the measuring device as filtrate.

The principle of cross-flow filtration is used for sampling. The PTFE filter membrane separates particles > 0.45 µm from the filtrate. These particles collect in front of the filter membrane and are washed away with the sample flow.

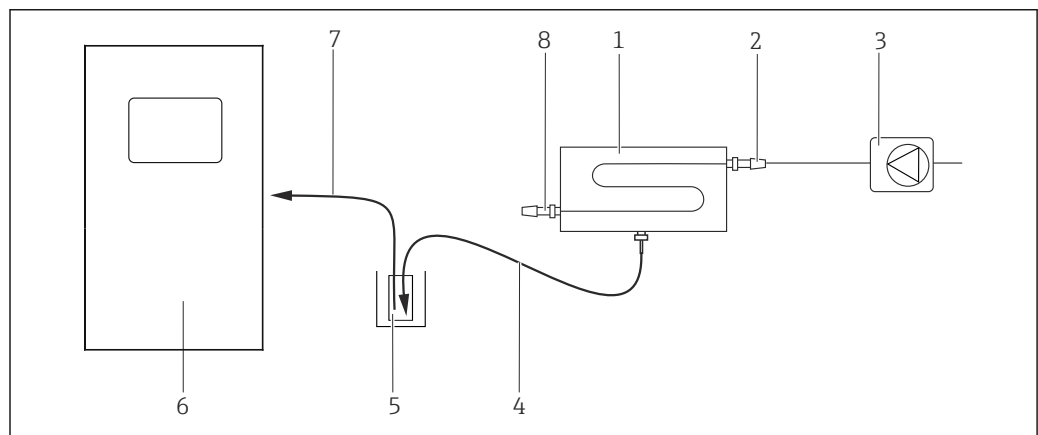
The medium is conducted in a meander-like channel through the filter element. A consistently high flow velocity is achieved in this way. This causes the self-cleaning effect. Mechanical drives to generate a flow at the filter surface are therefore not required.

Measuring system

A complete sample conditioning system comprises:

- Stamoclean CAT411 microfilter
- Collecting vessel
- Analyzer

A sensor with a flow assembly can also optionally be integrated into the measuring system.



A0031554

- | | | | |
|---|------------------------------|---|------------------------------|
| 1 | Complete measuring system | 5 | Collecting vessel (optional) |
| 1 | CAT411 | 6 | Analyzer |
| 2 | Inlet | 7 | Analyzer suction line |
| 3 | Sample pump or pressure line | 8 | Free outlet |
| 4 | Filtrate line | | |

Process

Medium temperature 5 to 50 °C (41 to 122 °F)

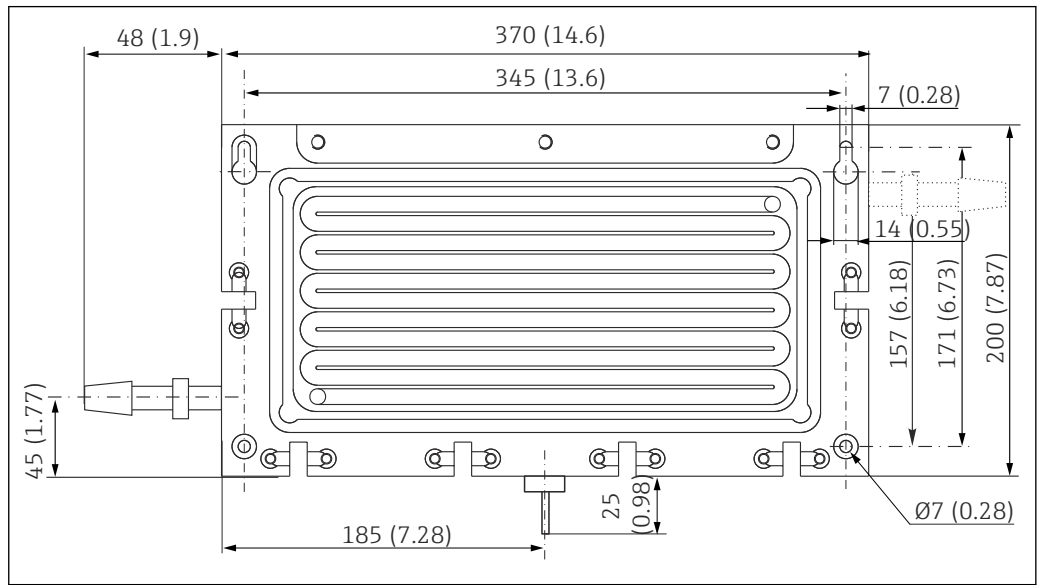
Process pressure 0.2 to 1 bar (3 to 15 psi)

Flow velocity 2.5 to 5.5 m/s (8 to 18 ft/s)

Inlet volume 0.8 to 1.8 m³/h (3.5 to 8 gal/min)

Mechanical construction

Dimensions




2 Dimensions

Filter membrane	L x B: 300 x 135 mm (11.8 x 5.31")	
Weight	Approx. 3 kg (6.6 lbs)	
Materials	Housing	POM
	Fixing screws	Stainless steel
	Seals	Perbunan
	Filter membrane	PTFE
Channel cross-section	9 x 10 mm (0.35 x 0.39")	
Filter membrane pore size	0.45 µm	
Connections	Inlet and outlet:	Hose connection nipple for hose ID 14 mm (0.55")
	Filtrate outlet:	Hose connection nipple for hose ID 4 mm (0.16")

Ordering information

Product pagewww.endress.com/cat411


Product Configurator

1. **Configure:** Click this button on the product page.
 2. Select **Extended selection**.
 - ↳ The Configurator opens in a separate window.
 3. Configure the device according to your requirements by selecting the desired option for each feature.
 - ↳ In this way, you receive a valid and complete order code for the device.
 4. **Apply:** Add the configured product to the shopping cart.
-  For many products, you also have the option of downloading CAD or 2D drawings of the selected product version.
5. **Show details:** Open this tab for the product in the shopping cart.
 - ↳ The link to the CAD drawing is displayed. If selected, the 3D display format is displayed along with the option to download various formats.
-

Scope of delivery

The scope of delivery comprises:

- 1 Filter holder
- 2 Perbunan seals
- 1 Operating Instructions

 The materials to secure the filter holder on the wall are not included in the scope of supply and must be provided by the customer.



71570880

www.addresses.endress.com
