



**GEOVENT**

## INSTRUCTION MANUAL



**GEOFILTER  
GFO 315**



## Contents

1.0 Introduction	3
2.0 Safety	3
2.1 General safety	3
2.2 Danger	3
3.0 Machine overview	4
3.1 Description	4
3.2 Intended use	4
3.3 Machine specifications	4
3.3.1 Design	4
3.3.2 Technical data	4
4.0 Transport, handling and storage	4
5.0 Assembly, installation and start of operation	4
5.1 Location	4
5.2 Installation	5
5.3 Control and test of the security system	5
6.0 Commissioning	5
6.1 After installation	5
7.0 Control, test and maintenance	5
7.1 Control	5
7.2 Maintenance	5
7.3 Replacing filter	5
8.0 Cleaning	7
9.0 Troubleshooting	7
10.0 Dismantling, disabling and scrapping	7
11.0 Dimensions	7
12.0 Liability	8
13.0 Declaration of conformity	8
14.0 Spare part list	9

## 1.0 Introduction

This manual is made and designed in order to facilitate the best and most secure interaction with the product. The manual is relevant for people involved in transportation, stocking, installation, using, maintaining and all other thinkable interaction with the product.

The manual must be read in full and understood before interacting with the product.

When the manual has been read and understood in full, the table of contents can be used to find the relevant information in each case.

The product is manufactured by:

Geovent A/S  
Hovedgaden 86  
DK-8861 Løgstrup  
DENMARK

Tel.: (+45) 86 64 22 11  
E-mail: salg@geovent.dk  
www.geovent.com

This manual is to be used for all interactions with the product including: Transportation, stocking, installation, operation and maintenance.

This product is marked with: (example)

**15-320**



**GeoFilter GFO 315**

## 2.0 Safety

### 2.1 General safety

Carefully read this manual before use and observe the safety instructions in order to avoid injuries!  
Keep this manual in a safe place!

Secure that all users of the product have read this manual and that they follow the instructions as described. Observe all instructions marked on the product! Observe the indications of the manufacturer. Never use the product if you are in doubt about how it works or what you should do.

When doing maintenance follow the instructions in chapter 7.0.

Do not modify the product or use spare parts from other suppliers than Geovent, as this may hamper the product and the function.

### 2.2 Danger

You must wear safety gloves when handling or using the product to protect your hands from scratches etc.

Be aware that the product may tilt when you move it. You must handle the product with care and tie it safely to the truck or the fork lift when it is in transport.

Follow the instructions in chapter 7.0 when the product is maintained.

When handling the product be sure that there is no risk for the installer, and secure that there are no people around the product, secure that the product cannot fall down risking to injure persons or subjects.

The product is not to be used in areas categorised as ATEX zones, e.g. with dust from aluminium, flour, wood, and other mediums that present an explosion hazard. In case of problems:

If a repair is not possible you should dispose of the product. Please follow the instruction for disposal in chapter 10.0.

### 3.0 Machine overview

#### 3.1. Description

The GFO 315 filter unit is an oil mist filter which is easy to install and use.

#### 3.2 Intended use

GeoFilter GFO 315 is used for filtering oil-saturated air from industrial processes.

The filter unit must not be used in areas categorized as ATEX zones, e.g. for aluminum, flour and wood dust as well as other media associated with the risk of explosion.

GeoFilter GFO 315 comes with a filter cartridge of nonwoven micro-glass fiber filter.

As a general rule, the filter must be installed indoors to avoid any condensation problems.

### 3.3 Machine specifications

#### 3.3.1 Design

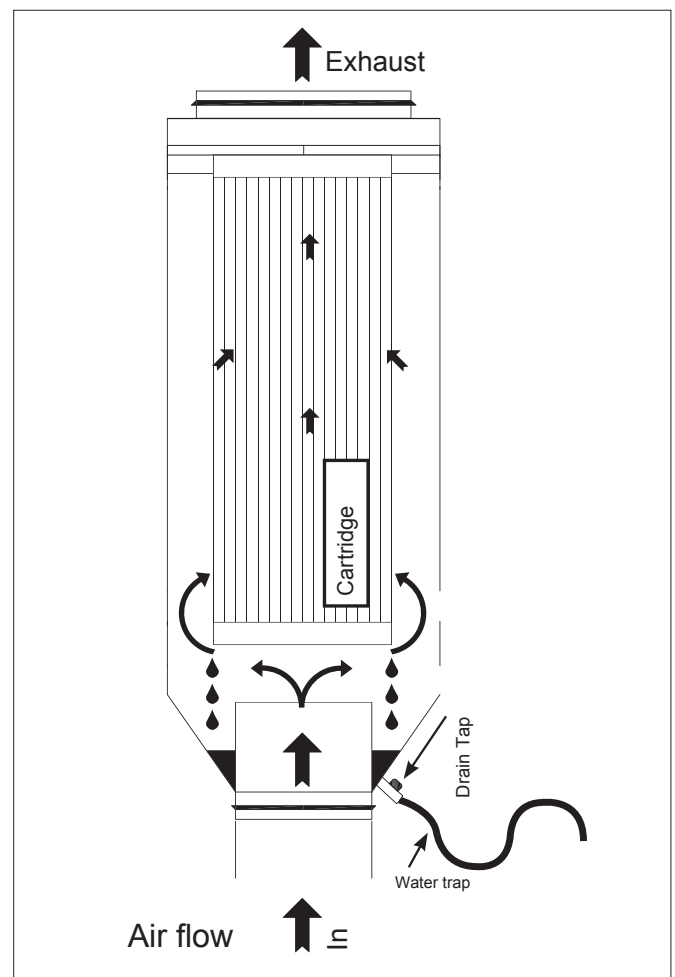
Cabinet:	Galvanized steel
Filter media:	Filter cartridge, nonwoven micro-glass fiber
Drain tap:	TEA coated brass

#### 3.3.2 Technical data

##### Dimensions

Model/Dimension	Height [mm]	Wide [mm]	Inlet [mm]
GeoFilter GFO 315 SMALL	790	400	ø160
GeoFilter GFO 315	1085	400	ø200
GeoFilter GFO 315 EXT	1285	400	ø200

Model/Dimension	Outlet [mm]	Weight [kg]
GeoFilter GFO 315 SMALL	ø160	
GeoFilter GFO 315	ø315	18
GeoFilter GFO 315 EXT	ø315	



### 4.0 Transport, handling and storage

During transport in a truck or in another means of transportation the product must be securely packed in a box or a pallet and covered with a water proof material. The product must be securely stowed in the truck so that it will neither tilt nor shift during transport.

During transport over a short distance e.g. in a stock or a factory, the product can be moved by means of a forklift or a stabeler.

When moved it must be secured that the product does not tilt or shift. And it must be secured that the limitations of the means of transportation is not exceeded.

The product must be placed in a dry place and covered securely, in order to secure that moist, metal parts or other substances do not damage the product. It is not allowed to place anything on top of the product.

### 5.0 Assembly, installation and start of operation

#### 5.1 Location

To ensure a fault-free function, the product must be installed indoors. Outdoor installation is not recommended.

Before installing the product, make sure that an optimal location is chosen. Is there room for maintenance and filter change? Are there optimal connection options for piping?

## 5.2 Installation

The GFO 315 filter unit should be installed indoors, for example in a technical room with good ventilation for safe operation.

The filter is not suitable for being placed outdoor.

Before installing the product, make sure that an optimal location is chosen. Is there room for maintenance and filter change? Are there optimal connection options for piping?

At the bottom of the GFO filter unit there must be room for draining the oil by means of the drain tap.

If the oil is drained during operation, ensure that a water trap is fitted/formed. If this is not done, the oil will not drain out of the filter.

The following installation should only be carried out by a trained fitter.

### Procedure:

1. The GFO 315 filter unit is mounted in the vertical duct system or on a console.
2. It must be connected to a circular ventilation duct on the both clean and dirty side.  
(The lower pipe connection is always the dirty side). Remember to seal the connections with joint compound.
3. To ensure a proper dilution, the exhaust should be at least two metres over the rooftop towards the atmosphere with a minimum exhaust speed of 8 m/s.

## 5.3 Control and test of the security system

Before use, check the function of the filter.

Check that the entire system is completely tight. In case of beep sounds, the leak must be located and sealed.

## 6.0 Commissioning

The entire system should be inspected at least once a year by a qualified service technician.

Once the filter is assembled, properly installed and ready for use, there will be no interaction between the user and the filter unit. However, the user will need to ensure that the filter unit is drained from oil and that the filter cartridge is replaced as needed. The user must

be aware of whether there is the correct suction in the extraction system. If not, see pkt. 4.0 Maintenance.

The filter unit should drip off 8 hours a day.

## 6.1 After installation

Check the installation according to chapter 5.3.

## 7.0 Control, test and maintenance

### 7.1 Control

Check the installation according to chapter 5.3.

### 7.2 Maintenance

Periodic maintenance of the filter:

- Check the pressure loss over the filter unit and change the filter cartridge if pressure loss exceeds the recommended level.
- Regularly check the clean side of the filter unit for oil and change filter cartridge in the event of leakage.
- Continuously empty the filter reservoir from oil via the drain tap at the bottom.

### 7.3 Replacing filter

Inspect the bottom of the cone for dirt that may prevent the oil from draining out of the drain cock.

The filter cartridge should be replaced after approx. 4000-8000 hours of operation or max. 4 years. (Depending on load.)

### Procedure:



1. Loosen the buckle straps at both the top and the bottom.
2. Remove the intermediate piece and change the filter cartridge as described below.

- Loosen the fixing plate by removing the screws.
- Save the fixing plate and the filter plate, as they will need to be refitted.
- Carefully pull out the contaminated filter and place it in a plastic bag which is sealed and disposed of it according to the local regulations.
- Carefully insert the new filter cartridge through the filter plate (to avoid damage). Then reinstall the mounting plate with the four screws. Do not tighten the screws so much that the filter plate is deformed.

#### ATTENTION:

Remember to install the filter cartridge with the opening facing upwards.

7. Carefully guide the filter with filter plate into place in the intermediate piece, which is then guided back between the top and bottom.

8. Put on the buckle straps and tighten these so that the top, middle and bottom pieces are assembled.

## 8.0 Cleaning

The outside of the product is cleaned with a vacuum cleaner or a cloth.

## 9.0 Troubleshooting

### There is insufficient air flow

Check if the filter cartridge needs to be replaced. If so: Replace the filter cartridge as described in section 7.3. Check that the filter cartridge is facing correctly. The opening of the filter cartridge should face upwards.

### Noise comes from the filter

Check that the filter cartridge is properly attached to the top plate. If not: Tighten the screws holding the filter cartridge.

### Oil in the filter reservoir does not run out

Check if the drain cock is blocked by sanding dust or other particles. Clean if this is the case.

### There is oil on the clean side of the filter

The filter cartridge may be leaking. If so: Replace the filter cartridge as described in section 7.3.

## 10.0 Dismantling, disabling and scrapping

Dismantle the filter cartridge as described in chapter 7.

Carefully remove the contaminated filter cartridge, place it in a plastic bag and seal the bag. Dispose of it according to local regulations.

The inside of the product must be cleaned by means of with a detergent suitable for removing the oil.

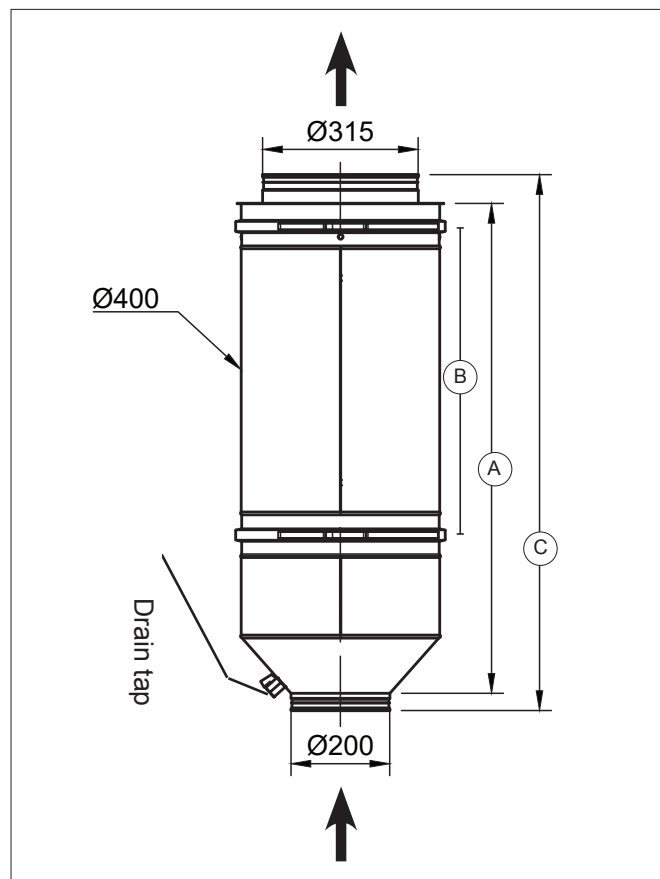
Dismantle the metallic parts. Afterwards cut the larger pieces into smaller pieces and dispose of it according to local regulation.

Dismantle plastic parts and dispose of it according to local regulations.

The packing material must be sorted according to local regulation in order to be able to reuse the material.

## 11.0 Dimensions

### GeoFilter GFO 315



Art. No.			
15-319 GeoFilter GFO 315 SMALL	704	300	790

Art. No.	A	B	C
15-320 GeoFilter GFO 315	992	625	1085
15-321 GeoFilter GFO 315 EXT	1192	825	1285

## 12.0 Liability

### Warranty

Geovent A/S grants a warranty for products, which are defective, when it can be proved that the defects are due to poor manufacture or materials on the part of Geovent. The warranty comprises remedial action (reparation or exchange) until one year after the date of shipment.

No claims can be made against Geovent A/S in relation to loss of earnings or consequential loss as a result of defects on products from Geovent.

Wear on parts such as filter cartridges and hose is not included in the warranty.

### User liability

In order for Geovent to be capable of granting the declared warranty, the user/fitter must follow this instruction manual in all respects.

Under no circumstances may the products be changed in any way, without prior written agreement with Geovent A/S.

Please refer to the current sales and delivery conditions at [www.geovent.com](http://www.geovent.com)

## 13.0 Declaration of conformity

The manufacturer: GEOVENT A/S  
HOVEDGADEN 86  
DK-8831 LØGSTRUP

Hereby declares that:

The product: GeoFilter

Model: GeoFilter GFO 315 SMALL,  
GeoFilter GFO 315,  
GeoFilter GFO 315 EXT

Complies with the relevant parts of the following directives and standards:

Directive 2006/42 / EC of the European Parliament and of the Council of 17 May 2006 on machines and amending directives 95/16 / EC.

This declaration is no more valid if changes are made to the product by others than the manufacturer.

Authorized to collect the technical file:

Lise Cramer

Date: 21.04.2023

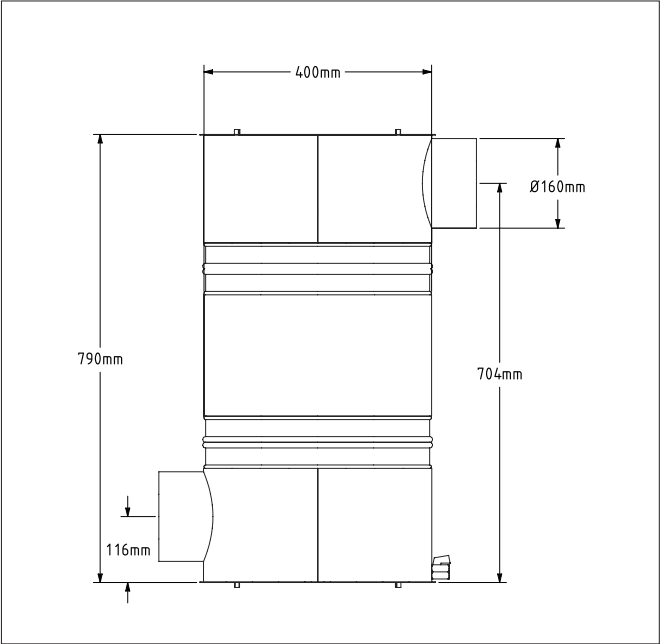
Position: Director  
Name: Thomas Molsen



Signature: \_\_\_\_\_



GeoFilter GFO-315 SMALL



14.0 Spare part list

Art. No.	Description
15-334	Filter cartridge for GFO 315 small
15-335	Filter cartridge for GFO 315 standard
15-338	Filterwrap, acts as prefilter
15-336	Filter cartridge for GFO 315 EXT
15-339	Filterwrap, acts as prefilter











***GEOVENT***

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