Installation and maintenance manual GB/en

TROX® TECHNIK
The art of handling air

**TROX GmbH**
Heinrich-Trox-Platz
47504 Neukirchen-Vluyn
Germany
Phone: +49 (0) 2845 2020
Fax: +49 (0) 2845 202265
E-mail: trox-de@troxgroup.com
Internet: http://www.trox-technik.com

# PFC

## Pocket filters

### Important notes

#### Information on the installation manual

This manual enables operating or service personnel to correctly install the product described below and to use it safely and efficiently.

It is essential that these individuals read and fully understand this manual before starting any work. The basic prerequisite for safe working is to comply with the safety notes and all instructions in this manual.

The local regulations for health and safety at work and general safety regulations also apply.

### Safety

#### Correct use

Pocket filter PFC is used as a prefilter or final filter in ventilation and air conditioning systems to separate fine dusts from the air.

#### Airflow velocity and nominal volume flow rate

If the filter is used correctly and if the nominal volume flow rate is maintained, the airflow velocity on the filter will usually not exceed 530 fpm, not even when the final differential pressure is reached.

Use test and monitoring systems, e.g. differential pressure monitors or flow meters, to ensure that the nominal volume flow rate is maintained.

#### Qualified staff

The work described in this manual has to be carried out by individuals with the qualification, training, knowledge and experience described below:

#### Properly trained person

Properly trained persons are trained individuals who understand any potential hazards related to the work under consideration, and who recognise and avoid any risks involved. Training is provided by the HVAC contractor when the system is handed over.

Properly trained persons are responsible for cleaning the unit, and for carrying out functional tests, regular checks and smaller adjustments.

#### Personal protective equipment

Personal protective equipment is equipment that protects the user against health or safety risks at work.

Personal protective equipment must be worn for various types of work; the protective equipment required is listed in this manual together with the description of each type of work.

### Supply package, transport and storage

Upon delivery, carefully remove the packaging and check the unit for transport damage and completeness. Then put the product back into its packaging.

Supply package:

- Filter PFC

#### Transport

Do not remove the protective wrapping until just before installation.

### Storage

Please note:

- Store the product only in its original packaging
- Protect the product from the effects of weather
- Protect the product from humidity, dust and contamination
- Storage temperature: 14 °F to 122 °F.
- Relative humidity: 95% max., no condensation

### Technical data

| | |
|---|---|
| Product description | Pocket filter |
| Description | PFC |
| Filter class according to ISO 16890 | see product sticker |
| Nominal volume flow rate | |
| Initial differential pressure | |
| Airflow velocity at nominal volume flow rate | 530 fpm |
| Max. airflow velocity | 661 fpm |
| Maximum relative humidity | 90% |
| Ambient temperature range | PLA: +41[1)] to +140 °F<br>GAL: +41[1)] to +194 °F |
| Filter medium | Non-woven chemical fibres |
| Filter frame material | PLA = plastic (standard construction)<br>GAL = galvanised steel |

1) There is a risk of ice buildup on the filter with temperatures below +41 °F. Be sure to prevent this, e.g. with a filter preheater.

### Filter change, inserting filters

Before installation

- Be sure to install the filter only in a place that is suitable.
- Unpack the filter outside of the hazardous area.
  - Handle the filter with care to not damage the filter medium.

    Hold the filter only by the edges.
  - Check the filter for external damage and completeness, ☞ *Chapter 3 'Supply package, transport and storage' on page 1*. Do not install a damaged or incomplete filter.

### Installation

**Personnel:**

- Properly trained person

**Protective equipment:**

- Industrial safety helmet
- Light respiratory protection
- Protective gloves

Before you start changing filters, switch off the ventilation and air conditioning system.

1. ▶ Remove the existing filter.
2. ▶ Then clean the system as required.
3. ▶ Insert the new filter and secure it.

   **Be sure to not damage the filter medium:** Handle the filter with care and only touch the frame.

## Maintenance

Maintenance applies mainly to the filter element. Check the filter regularly and replace it, if necessary.

The service life of a filter depends mainly on how contaminated the air is. Check the filter in intervals that are short enough so that you can anticipate any defects or problems before they actually occur.

Replace the filter immediately if any of the following is true:

- the filter is defective
- there are hygiene problems (micro-organisms, fungal spores, odours, etc.)
- the maximum filter usage time has been reached (VDI 3803, part 4)
- the defined final differential pressure has been reached

For more recommendations regarding the maximum usage time see SWKI 2003-5, VDI 6022, VDI 3803 and EN 13053.

*You may replace a filter even before the defined final differential pressure has been reached if this is more economic.*

## Disposal

**ENVIRONMENT!**

Risk of harm to the environment due to the incorrect handling of hazardous materials and substances.

Filters and cleaning materials that have been contaminated with bacterial, toxic or radioactive particles are considered hazardous waste and have to be disposed of by an authorised business in compliance with local regulations.

Disposing of filter elements with household waste is allowed only in the following cases:

- For unused filter elements
- For filter elements that have been exposed only to atmospheric outdoor air

## Ordering replacement filters

To ensure permanent protection from particulate matter and other pollutants we recommend using only original TROX filters.

Original TROX filters carry a sticker on the frame with information on how to order replacements.

*To avoid downtime of the ventilation and air conditioning system, we recommend you to always have the required filters in stock.*

To order replacement filters:
*https://www.trox.de/onlineshop/filtergeraete-und-filterelemente-1df986693c21980d*