

Filter fitting (code MIE-FB/FC)

The filter fitting consists of securing rails for filters and a housing front section.



The fitting is adapted for integration into the standard module (code EMM).

The fitting is available in two versions:

- FB for bag filter or AL filter
- FC for panel filter

FB can be fitted with:

- Synthetic filter, deep-folder. Class G4, M5 and M6.
- Glass fibre filter, deep-folded. Class F7, F8 and F9.
- Carbon filter class C7 with integrated pre-filter in class F7.
- Aluminium filter, knitted.

FC can be fitted with:

- Panel filter, class G4 (code P4).

For both versions:

- The filters are mounted on rails and can easily be removed and replaced.
- Filter slide rails are available in acid-proof, stainless steel.
- The filter slide rails are fitted with effective sealing strips.
- The model FB filter inserts are locked with eccentric rails.
- Measurement outlets are available for connecting differential pressure gauge.

Filter section accessories

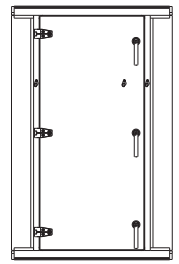
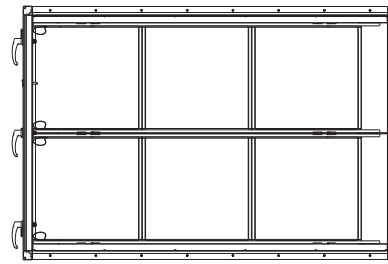
- Filter monitor, U-tube manometer (code MIET-FB-01)
- Filter monitor, Kytölä manometer (code MIET-FB-02)
- Filter monitor, Magnehelic manometer (code MIET-FB-03)

Insert damping (dB)

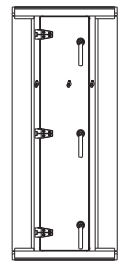
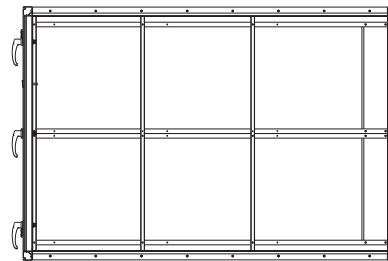
| Octave band intermediate frequency (Hz) | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
|---|----|-----|-----|-----|------|------|------|------|
| G4 | - | - | 1 | 2 | 3 | 3 | 5 | 6 |
| M5, M6 | 2 | 3 | 6 | 8 | 14 | 17 | 19 | 21 |
| F7-F9 | 3 | 3 | 6 | 8 | 14 | 17 | 19 | 21 |
| Aluminium filter | 1 | 1 | 1 | 2 | 3 | 3 | 5 | 6 |
| C7 | - | - | - | 1 | 1 | 2 | 2 | 3 |

Technical data, size 740

Configuration

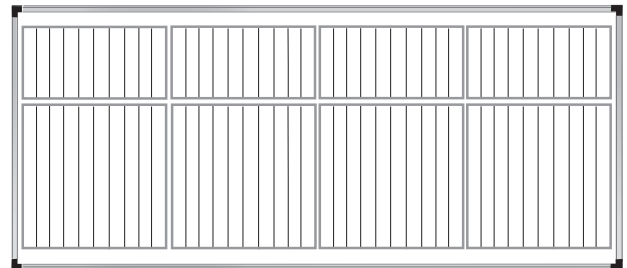


Example MIE-FB



Example MIE-FC

Filter



Size (cross-section) 740

| Filter type | No. of filters | Dimensions (mm) | | No. of bags/filters | Filter area, total (m ²) |
|------------------|----------------|-----------------|--------|---------------------|--------------------------------------|
| | | W x H | Length | | |
| Bag filter G4 | 4 | 592 x 287 | 360 | 6 | 14,4 |
| | 4 | 592 x 592 | 360 | 6 | |
| Bag filter M5 | 4 | 592 x 287 | 534 | 6 | 26,0 |
| | 4 | 592 x 592 | 534 | 6 | |
| Bag filter M6 | 4 | 592 x 287 | 534 | 8 | 32,8 |
| | 4 | 592 x 592 | 534 | 8 | |
| Bag filter F7-F9 | 4 | 592 x 287 | 534 | 10 | 40,0 |
| | 4 | 592 x 592 | 534 | 10 | |
| Panel filter P4 | 4 | 292 x 596 | 48 | - | 2,2 |
| | 4 | 596 x 596 | 48 | - | |
| Aluminium filter | 4 | 287 x 592 | 25 | - | 2,0 |
| | 4 | 592 x 592 | 25 | - | |
| Carbon filter C7 | 4 | 287 x 592 | 292 | - | 46,0 |
| | 4 | 592 x 592 | 292 | - | |

Filter types

Pre filter, fine filter and panel filter

Filters in class G4, M5 and M6 consist of deep-folder filter bags mounted on a metal frame. The filter material is synthetic fibre.

Filters in class F7, F8 and F9 consist of deep-folder filter bags with a metal frame. The filter material is glass fibre.

Panel filter in class G4 (code P4) in synthetic fibre with waxed cardboard frame (pre-filter).

Carbon filter with pre-filter

The class 7 filter consists of deep-folder filter bags containing active carbon and an integrated class 7 pre-filter.

The filter is suitable for minimising the effect of, for example, cooking smells and car exhaust fumes in comfort systems.

Aluminium filter

The washable knitted aluminium filter is a smooth filter, 25 mm thick, and designed for use in air containing fats.

Operation and Maintenance Instructions

The air filters in a ventilation system are designed to prevent dust and other impurities from entering the building. They should also protect sensitive components inside the unit, e.g. coils and heat exchangers, from exposure to impurities.

The dust separation efficiency varies considerably between various filter types. The dust collecting efficiency also varies substantially. It is therefore important to use filters of the same quality and capacity when you replace them.

Dust separation class is specified with standard designations:

- Pre filter G4
- Medium filters M5 and M6
- Fine filters F7, F8 and F9

Higher digits denote a higher collecting efficiency. The filter is designed for one-time use. If the filter becomes fouled, the unit will lose capacity. The filter should therefore be changed if the pressure drop across it exceeds the specified value.

It is important to stop the unit before changing filters to prevent dust from coming loose and being drawn into the unit. The inside surfaces of the filter section should therefore also be cleaned when the filter is changed.

Inspection

Check the pressure drop across the filter. The pressure drop is measured with a manometer connected to measurement outlets. The measurement outlets are connected to each side of the filter. If the filter has reached its specified final pressure drop, it must be changed.

Filter replacement

1. Shut down the unit via the control terminal and lock the safety switch in the 0 position.

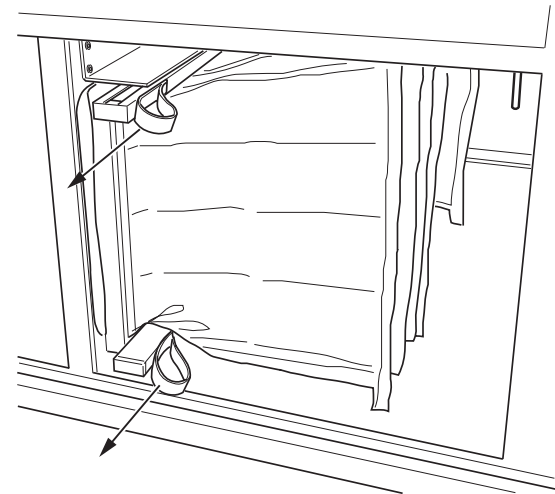
NB: The safety switch is not designed for starting/stopping the unit. Always start and shut down the unit by means of the control equipment.

2. Wait until the fans have stopped, then open the inspection door.



WARNING: Positive pressure inside the unit, risk of personal injury. Allow the pressure to drop before you open the inspection doors.

3. Release the eccentric rails.



Eccentric rails

4. Remove the old filter by pulling it towards you.
5. Clean the filter cabinets.
6. Install the new filter, press in the eccentric rails to engage them and close the inspection door.
7. If there is a non-removable filter monitor: attach the probes on each side of the filter.
8. Start the unit.

Cleaning

Vacuum and use a damp cloth to wipe clean the inside of the filter section.