

Magnet Filter System SEC-MFS-25

SecuriSmoke ASD Aspirating Smoke Detector

SEC-MFS-25 Magnet Filter System for filtering magnetic dust in the sampling pipe of an aspirating smoke detector.

Area: ASD 531, ASD 532, ASD 533 and ASD 535



Fig. 1 SEC-MFS-25

Description / function

The Magnet Filter System 25 (SEC-MFS-25) supplements conventional filters by adding environments with metallic dust. The system thus significantly extends the service life of the smoke detectors used in the aspirating smoke detectors and prevents false alarms caused by metallic dust. For use in areas with metal-containing dust, in particular rail-mounted transport systems. Metallic dust has a size distribution that overlaps that of smoke particles. As a result, it is not possible to filter out metallic dust using conventional dust filter units.

A replaceable plastic cartridge protects the strongly magnetic element from dust deposits. The intake air only flows around the plastic cartridge. In contrast to flow-through filter systems, no pressure drop occurs. This means no reduction in ASD intake volume, and flow resistance has no influence on system behaviour.



Notice

To achieve optimum dust separation, we recommend combining the magnetic filter system with a dust filter unit.

Neodymium magnets retain their magnetism almost indefinitely under normal conditions. They differ here from conventional ferrite magnets, which lose their magnetism over time even without external influences.

Neodymium magnets may lose magnetic force under these conditions:

- Heat (over +80°C)
- Radioactivity
- Other strong magnetic fields

Mounting / installation

Fasten the Magnet Filter System 25 (SEC-MFS-25) to the holder on a stable surface using four Ø 5 mm drill holes. The openings for air inlet and air outlet are already glued at the factory with adaptations from 5/4" to 40 mm. Two reductions from 40 mm to 25 mm tube are included in the scope of delivery.

Choose a vibration-free, level and smooth installation surface (may need to be levelled). The base plate must lie flat. It must be ensured that the pipes are adapted tension-free and stress-free. Lever forces or torques must not effect the housing or screw-junction piece. The cover central-locking screws and the anti-twist screws must be tightened hand-tight using an Allen key, and then it must be ensured that the cover is seated and sealed correctly.



Caution

Very strong permanent magnets – fragile

Risk of injury when handling due to strong attraction force. Risk of breakage if improperly removed from packaging. Maintain distance from pacemakers, magnetic data storage devices, electrical and electronic devices

Maintenance



Notice

The filter cartridges must be checked as part of the quarterly maintenance. If a filter cake (an accumulation of retained substances) is visible on the surface of the filter cartridge, the maintenance interval has to be shortened accordingly.

Performed in accordance with DIN 14675 and VDE 0833-2

1. Sampling tube inspection (damage, structural changes)
2. Check fault message
3. Apply smoke to the farthest sampling hole (per sampling branch)
4. Transmission of fault and alarm to the fire alarm control panel
5. Comparison of airflow values. In the event of a negative deviation, the sampling tube must be cleaned with blasts of compressed air
6. Replacing the filter cartridge
Open the filter cover to replace the filter cartridge. Remove the old cartridge and insert a new one. The cover seal must be checked for wear and replaced if necessary. Then close the filter cover again.
7. Entry in the commissioning and maintenance log



Notice

Trouble-free functioning of the filter is guaranteed only with the original filter replacement cartridges (relevant to approval and safety)!
Washing or any other method of cleaning the filter cartridges is not permitted.

Example installation

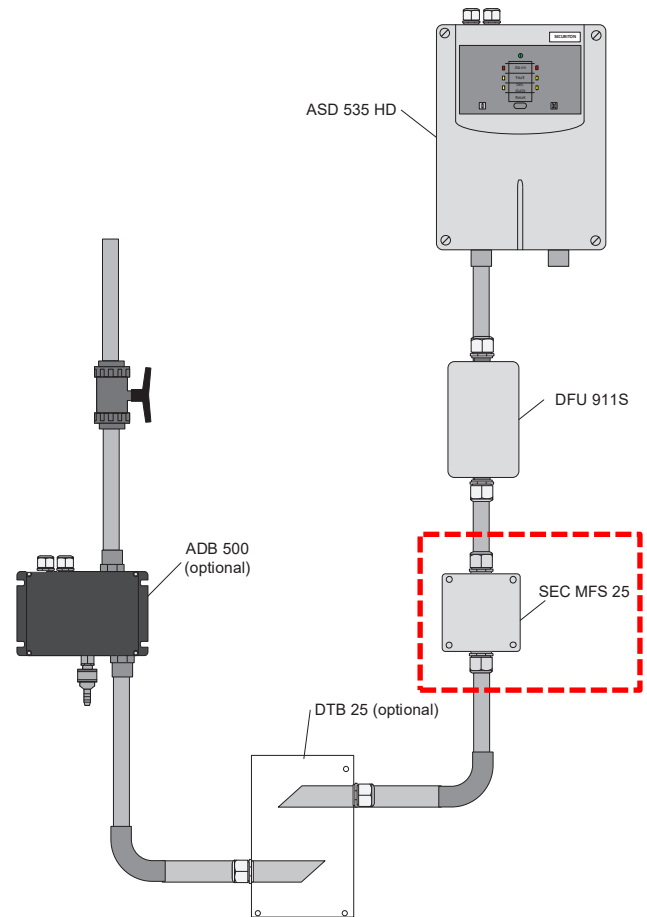


Fig. 2 SEC-MFS-25 Installation

Dimensioned drawing

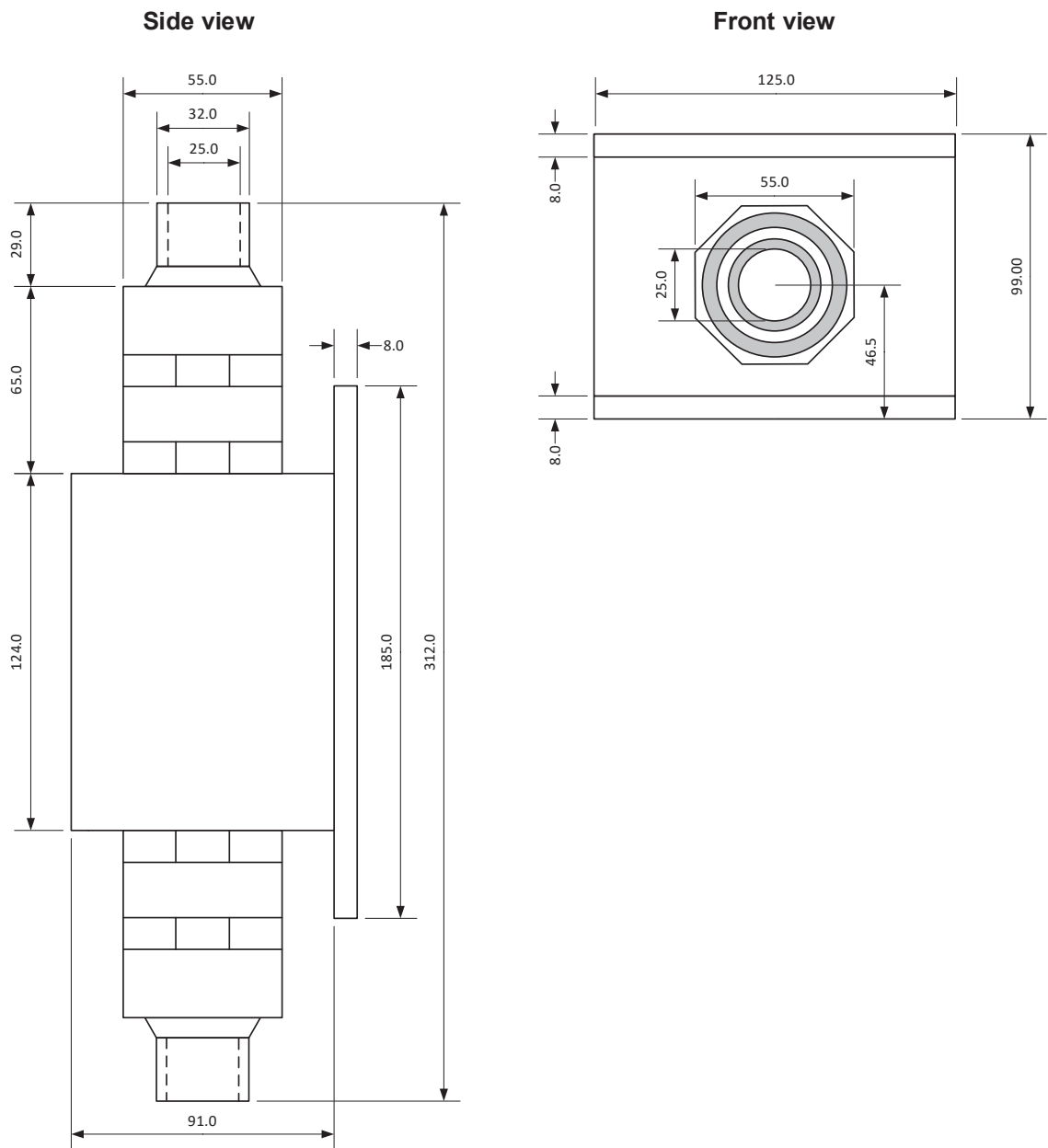


Fig. 3 Dimensioned drawing in mm

Drill drawing (no 1:1 drilling template)

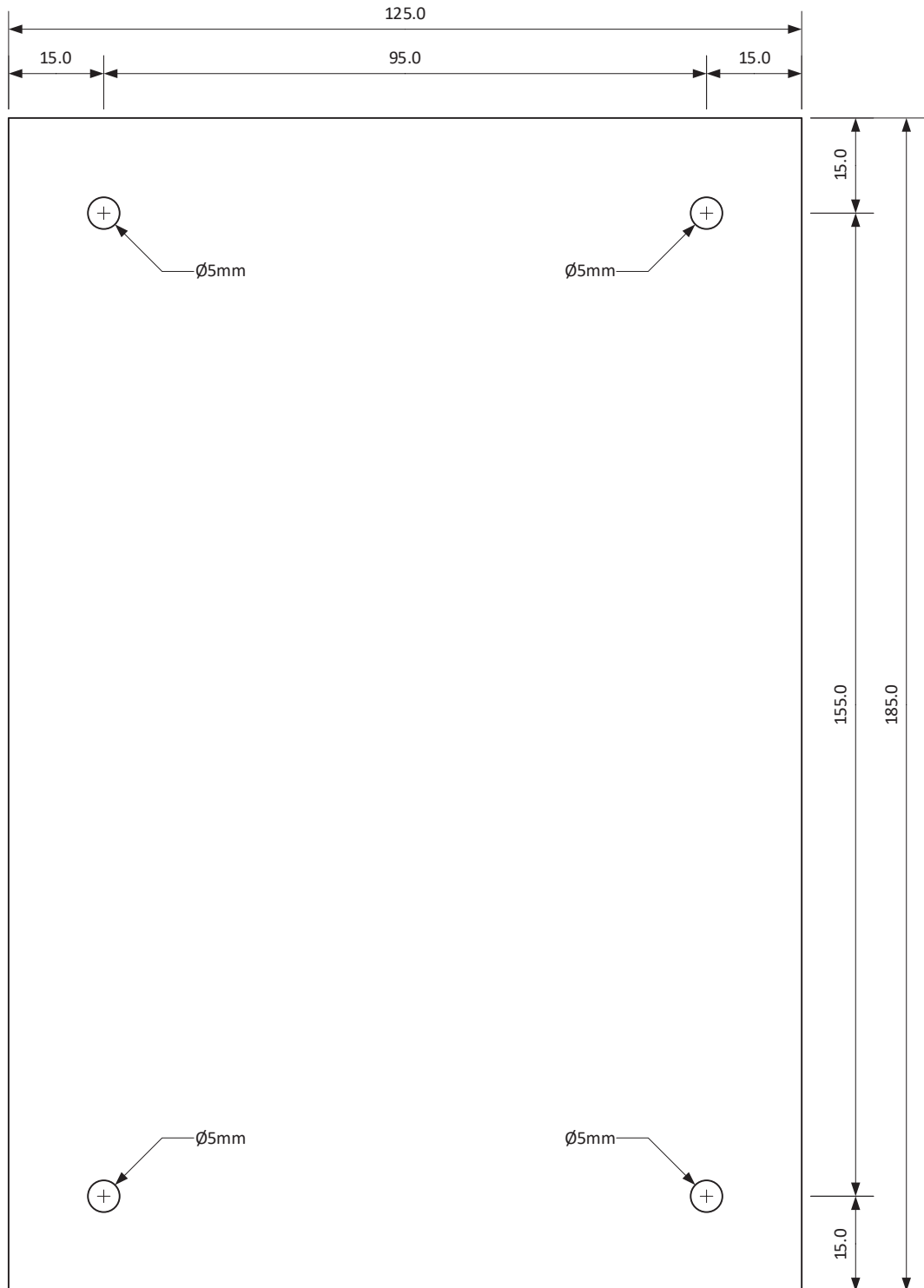


Fig. 4 Drill drawing in mm

Article numbers and spare parts

| Short designation | Article number |
|---------------------------------|-----------------------|
| SEC-MFS-25 magnet filter system | 11-2300104-01-01 |
| MFS EP replacement cartridge | 6900402 |
| MFS ED replacement cover seal | 6900465 |

Technical data

| | |
|--|-------------------------------|
| Type | SEC-MFS-25 |
| High-energy magnet filter element | RS 22/250 |
| Magnetic energy product | 385 KJ/m ³ |
| Permitted ambient temperature | -30°C to +60°C |
| Material and dimensions of pipe connection | PVC, Ø 40 mm or Ø 25 mm |
| Housing material | Polycarbonate grey (RAL 7035) |
| Dimensions (H x W x D) | 312 x 125 x 99 mm |
| Weight | 1,512 g |
| Packaging | Cardboard |
| Approval | VdS |