

SEQUENTIAL SAMPLER SEQ47/50

FEATURES

- ⇒ Operated and controlled by integrated LVS3 or MVS6 sampler (Kleinfiltergerät)
- ⇒ Controlling of operating-m³/h and standard-m³/h (0 °C or 20 °C, 760 mm Hg) by orifice plate
- ⇒ Tough construction for outdoor use (width: 19"); easy transportable by casters
- ⇒ Sampling of all PM fractions and total dust
- ⇒ Long maintenance intervals of the fractionating inlets
- ⇒ Measurement of filter temperature, filter will be automatically heated (exceedance of dew point)
- ⇒ Cooled inlet system and enclosed sampled filters within the magazine, no losses of particulate volatile material
- ⇒ Suction pipe with large interior diameter no particles losses at the interior wall
- ⇒ Use of different filter holders for filter diameters of 47 and 50 mm



PM10 Inlet according to CEN EN 12341 PM2.5 Inlet equivalent to WINS

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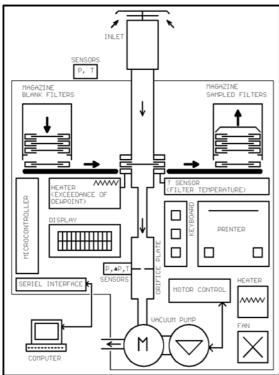
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Description

The sequential sampler **SEQ47/50** is designed for outdoor use at all temperatures and environmental conditions. The sampler can also be installed into a 19"-rack.

The sequential sampler is operated by a built-in LVS3 or MVS6 device. The magazines for the blank and sampled filters are able to load 15 filter holders, each. By enclosing the upper sampled filter holder and the superimposition of the following filter holders within the magazine the air volume above each filter is so small that particulate volatile material can't evaporate into the air. Additionally, the complete sampling system up to the filter is cooled by sheet air. By that, also after a sampling period of 15 days a reliable determination of the particle masses collected on the filters is guaranteed.

Besides the **standard filter holders** for filters having a diameter of 47 mm or 50 mm, also such filter holders are applicable which are, e. g., in use in the USA for 47mm-filters (**WINS filter holders**) or similar types of filter holders.



BLOCK DIAGRAM SEQ47/50

The air flow's temperature is measured directly behind the filter which is currently sampled. If the temperature falls below the dew point during winter operation under ambient air conditions the filter temperature will be increased so much (3 to 5 °C above ambient temperature) that soaking or icing of the filter will be avoided.

The device's housing consists of stainless steel sheet metal of 1.5 mm thickness with a lockable door. The further solid construction guarantees a maintenancefree operation of the sampler.

Inlets

- ⇒ Use of all **PMX Inlets** (without filter holder) for the flow rates of **2.3m³/h** and **1.0 m³/h**
- ⇒ PM10 measurement according to CEN EN 12341
- ⇒ Total dust measurement using the inlet according to VDI 2463 Part 10 (Fig. 3)

The suction tube between the inlet and the filter is dimensioned so large (interior diameter of 26 mm) that particle losses at the tube's interior wall can't occur.

Technical Data

Flow rate

LVS3 uncontrolled approx. $3.5 \text{ m}^3\text{/h}$ controlled $1.0\text{-}1.6\text{-}2.0\text{-}2.3 \text{ m}^3\text{/h}$ and standard-m $^3\text{/h}$

MVS6 uncontrolled approx. 6 m³/h controlled 2.0-2.3-3.0-4.0 m³/h and standard-m³/h

Sampling time

minimum 1 h - maximum 168 h per filter

Power supply

230 V, 50/60 Hz

Consumption

approx. 250 VA (LVS3 version) resp. approx. 300 VA (MVS6 version)

Filter diameter

47 - 50 mm

Diameter of laden filter surface 40 mm

Dimensions

Width 477 mm Depth 295 mm Height with inlet 1.5 m

Weight

approx. 40 kg

Noise level according to DIN 2058 in a distance of 8 m

<< 35 dBA

Subject to alterations Ed.02/04