FET 100



The FET 100 enables testing of the smallest filter elements up to 100 x 100 mm, such as medical filters, vacuum cleaner end filters, and fan filters. Coarse filters up to ULPA filters are tested for particle size separation and differential pressure. The FET 100 measures better than required by the standards. Thanks to individual adapters and customer-specific adjustments in the air duct, the FET system can be used for a wide variety of filter elements.

Benefits

- Applicability of many test standards in one channel (according to ISO 29463-5 and 29463-3, as well as ISO 16890 (ISO ePM_1; ISO $ePM_{2.5}$)
- Double channels on request
- Particularly wide range of applications for separation efficiency measurement from 0.02 to 40 μm
- Measurement of dust storage capacity possible
- Customization for optimal test execution possible
- Horizontal design to minimize particle losses
- No need to balance raw gas and clean gas, as there is only one sampling and one measuring device
- Protocoled results based on the relevant standards
- Test benches tested and calibrated ex works

Features

- Connection of Promo® aerosol spectrometers and SMPS systems
- Customized filter adapters and adaptations in the air duct possible
- On-site calibration and adjustment (particle size and volume flow)
- Checking the volume flow and pressure loss using a perforated plate

Applications

- Quality control for
  - HEPA/ULPA clean room filters
  - Cabin air filters
  - Cabin filters
  - Engine air filters
  - Compressor supply air filters
- Development
- Measurement of MPPS according to ISO 29463-5 and ISO 29463-3
- Measurement of the fractional separation efficiency according to ISO 16890
- Determination of the pressure loss at different volume flows
- Determination of dust holding capacity

DATASHEET

Aerosols	Dusts (e.g., SAE dusts), salts (e.g., NaCl, KCl), liquid aerosols (e.g., DEHS), latex particles (PSL)
Measuring range (total penetration)	Up to 0.0005 %
Measurement range (size)	0.02–100 μm
Volume flow	1 – 27 m^3/h - pressurized operation
Differential pressure measurement	0 – 1,200 Pa selectable, 0 – 2,500 Pa selectable, 0 – 5,000 Pa selectable
Size filter element	100 • 100 • 100 mm (H • W • D)

NORMS AND CERTIFICATES

ISO 29463-5, ISO 16890, ISO 11155-1/3, DIN 71460