# FET 300

To reliably determine the quality and efficiency of filter elements, it is crucial to test energy consumption (pressure drop), loading, particle separation efficiency, and total penetration.

Accurate measurement requires adaptation of the test channel with regard to flow guidance and aerosol distribution to the size of the filter elements.

Palas has over 40 years of experience in filter testing and continuously develops test rigs of the highest quality to meet various requirements.

The FET 300 enables defined testing of filter elements up to 305 • 305 mm, such as ventilation filters, HEPA/ULPA filters, vacuum cleaner filters, and car cabin filters.

Designed for optimum flow guidance, the channel can also use adapters for smaller filter elements.

Coarse filters up to ULPA filters are tested for separation via particle size and differential pressure. The FET 300 measures better ...

## Benefits

- Accurate, versatile testing
  - Measurement according to ISO 29463-5, as well as ISO 16890 (ISO ePM$_1$; ISO ePM $_{2.5}$), possible in one channel
  - Use of measurement technology in FET 100 and FET 600; dual channels on request
  - Extensive range of applications for separation efficiency measurement from 0.02 to 40 $\mu$m
  - Measurement of dust holding capacity possible
- Flexibility and ease of use
  - Customization of filter adapters, flow channel, and measuring ranges possible for optimal test performance
  - Modular compact design for middle-sized filter elements, low space requirement
  - Horizontal design for minimization of particle losses
  - Calibration of raw gas/pure gas not necessary because only one sampling and one measuring device is used
- Safety
  - Logged results based on relevant standards
  - Factory-tested and calibrated test stands

## Applications

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

## Features

- Messung des Fraktionsabscheidegrades und des

## DATASHEET

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|---|---|---|---|
| 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 $\mu$m | Volume flow | 2–200 $m^3$/h - pressurized operation |
| Differential pressure measurement | 0 – 1,200 Pa selectable, 0 – 2,500 Pa selectable, 0 – 5,000 Pa selectable | Size filter element | 305 • 305 • 305 mm (H • W • D) |