

# MFP 1000



The MFP filter test rig is a modular filter testing system for flat filter media and small filters. The MFP 1000 can be used to determine pressure loss curve on the medium without a dust coating, fraction separation efficiency, or burden and fraction separation efficiency during application of the burden within shortest times – reliably and therefore cost-effectively.

The corresponding aerosol generator can be used depending on the standard or application.

## BENEFITS

- Particle size measurements from 120 nm
- Internationally comparable measurement results
- High reproducibility of the testing method
- Easy use of different test aerosols, e.g. SAE Fine and Coarse, NaCl/KCl, DEHS
- Sequence programs for pressure loss measurements, measurements of fraction separation efficiency and burden measurements
- Short set-up times
- Cleaning and calibration can be performed by the customer
- Easy use of the measurement technology components – even in other applications
- Mobile setup, easy to move on castors
- Validation of the clear function of individual components and the overall system during pre-delivery acceptance testing and upon delivery
- Low-maintenance

## APPLICATIONS

- For filter media and small mini-filters
- Product development and during production monitoring
- Fast and cost efficient testing of fractional efficiency with dust, oil or salt based on ISO 11155-1 (cabin air filters), ISO 5011 (engine pre-air filters), EN 779/ Ashrae 52.2/ ISO 16890 (room air filters)

## MODEL VARIATIONS



### MFP 1000 HEPA

Version with additional dilution for measuring high filter efficiencies

<https://www.palas.de/en/product/mfp1000hepa>

## FEATURES

- Measurement of fractional efficiency and pressure loss vs. volume flow
- Use of the Promo<sup>®</sup> 1000 aerosol spectrometer
- 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

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## DATASHEET

|                                   |  |
|-----------------------------------|--|
| Aerosols                          | Dusts (e.g., SAE dusts), salts (e.g., NaCl, KCl), liquid aerosols (e.g., DEHS) |
| Test area of the medium           | 100 cm <sup>2</sup>  |
| Measurement range (size)          | 0.12 – 40 μm   |
| Measurement range (mass)          | Up to 1,000 mg/m <sup>3</sup> (depending on the version)                       |
| Volume flow                       | 1 – 35 m <sup>3</sup> /h - pressurized operation                               |
| Power supply                      | 115 – 230 V, 50/60 Hz  |
| Differential pressure measurement | 0 – 1,200 Pa selectable, 0 – 2,500 Pa selectable, 0 – 5,000 Pa selectable      |
| Inflow velocity                   | 5 cm/s – 1 m/s (others on request)   |
| Compressed air supply             | 6 – 8 bar  |
| Dimensions                        | 1,800 • 600 • 900 mm (H • W • D)   |

## NORMS AND CERTIFICATES

ISO 11155-1, ASHRAE 52.2, ISO 5011, ISO 16890, ISO 29463-3, EN 1822-3 (HEPA), ISO 29463-3 (HEPA), EN 779, EN 1822