MFP 2000



The MFP filter test rig is a modular filter testing system for flat filter media and small mini-filters.The MFP 2000 can be used to determinepressure loss curve on the medium without a dust coating,fraction separation efficiency, orburden and fraction separation efficiency during application of the burdenwithin shortest times – reliably and therefore cost-effectively.

The aerosol generators are easy to interchange and coordinated with the overall system. As a result, filter tests can be performed quickly and easily with the different test aerosols. With the aid of the light scattering spectrometer Promo® 2000, clear and reliable determination of the aerosol concentration and the particle size and therefore an accurate determination of the fraction separation efficiency can be ensured.

The largely automated setup of the test sequence together with the clearly defined ...

Benefits

- Particle size measurements from 0.2 μm
- 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.
- Testing based on ISO 11155-1 (cabin air filters)
- Testing based on ISO 5011 (engine pre-air filters)
- Testing based on ISO 16890 (room air filters),
- EN 1822-3 (HEPA filters)
- CEN EN 143 and other standards in various versions

Features

- Measurement of fractional efficiency and pressure loss vs. volume flow
- Use of the Promo® 2000 aerosol spectrometer
- Customized filter adapters and adaptations in the air duct possible
- On-site calibration and adjustment (particle size and volume flow)

DATASHEET

Aerosols	Dusts (e.g., SAE dusts), salts (e.g., NaCl, KCl), liquid aerosols (e.g., DEHS)
Test area of the medium	100 cm^2
Measurement range (size)	0.2 – 40 μm
Measurement range (mass)	Up to 1,000 mg/m^3 (depending on the version)
Volume flow	1 – 35 m^3/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, ISO 5011, ISO 16890, EN 1822-3, CEN EN 143