PMFT 1000 F



The PMFT 1000 F tests particle filters for full-face masks better than the standards EN 143, ISO 16900-3, and NIOSH 42 CFR 84, with additional precise analysis of filter mask efficiency for SARS-CoV-2 (size approx. 120 nm to 160 nm). Furthermore, the testing of face masks based on the standards EN 149/EN 13274-7 and GB 2626 is possible.

The tests measure the photometric total penetration and the fractional separation efficiency, i.e., the efficiency based on particle size and the particle size-dependent penetration.

Benefits

- Test bench performance exceeds EN 143, ISO 16900-3, 42 CFR 84, EN 149, 13274-7, and GB 2626
- Determination of total photometric penetration for the size range according to standard
- Supplied with two aerosol generators for NaCl and oil
- Integrated corona discharge with CD 2000 A
- Testing of fractional efficiency, e.g., efficiency across the entire size range from 145 nm to 5 μm
- Accurate analysis of filter and filter mask efficiency for SARS-CoV-2 (size approx. 120 nm to 160 nm). Efficiency analysis at 145 nm
- Future-proof: Works with any type of aerosol without adjustments
- Additional measurement of the differential pressure, e.g. also at different flow velocities to simulate breathing resistance
- Flow velocity adjustable between 1.5 and 70 cm/s
- Product for rapid quality assurance **and** continuous optimization in R&D (Representation of size distribution)
- Can be used with standard filter fittings according to EN 148-1
- Measurement of filter efficiencies up to 99.9995%

Applications

- Überprüfung von Vollschutzmaskenfiltern zur Verwendung mit Norm-Filterverschraubungen nach EN 148-1
- Messung der Gesamtpenetration von Atemschutzmasken
- Exakte Analyse von Filtermaskeneffizienz für bspw. Coronavirus
- Medientest für HEPA-Qualität

DATASHEET

Aerosols	Salts (e.g. KCl, NaCl), liquid aerosols (e.g. DEHS), latex particles (PSL)
Test area of the medium	100 cm^2
Measuring range (total penetration)	0.0005 - 100 %
Measurement range (size)	0.145 – 40 μm
Volume flow	1 – 27 m^3/h - pressurized operation
Power supply	115 – 230 V, 50/60 Hz
Installation conditions	+10 – +40 °C
Differential pressure measurement	0 – 1,200 Pa
Inflow velocity	1.5 – 70 cm/s (others on request)
Compressed air supply	6 – 8 bar
Dilution factor	1 : 27 / 1 : 700
Test conditions according to standard	+19 – +23 °C
Dimensions	Approx. 1,800 • 600 • 900 mm (H • W • D)

NORMS AND CERTIFICATES

CCF (Covid Certified Filter), EN 149, EN 13274-7, GB 2626, 42 CFR 84