# 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 $\mu$m
- 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 $\mu$m |
| 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