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 rig working principle better than EN 143, ISO 16900-3, 42 CFR 84, EN 149, EN 13274-7 and GB 2626
- Determination of photometric total penetration for the size range according to standard
- Includes two aerosol generators for NaCl and for oil
- Integrated corona discharger CD 2000 A
- Testing of fractional efficiency, e.g., efficiency in whole size range of 145 nm up to 40 μm
- Exact analysis of filter and filter mask efficiency for SARS-CoV-2 (size approx. 120 nm up to 160 nm). Efficiency also displayed at 145 nm
- Future proof: Works with any kind of aerosol without adjustments
- Further measurement of differential pressure, e.g., as well within different face velocities to simulate test of breathing resistance
- Face velocity adjustable between 1.5 70 cm/s
- Product for fast quality assurance **and** continuous optimization in R&D (display of size distribution)
- Attractive two years maintenance package for availability of test rig
- Can be operated with standard filter threads according to EN 148-1
- Measurement of filter efficiencies up to 99.9995 %

APPLICATIONS

- Testing of full face mask filters for use with standard filter fittings according to EN 148-1
- · Measurement of total penetration of respirators
- Exact analysis of filter mask efficiency, e.g. coronavirus
- Media test for HEPA quality



DATASHEET

Aerosols	Salts (e.g. KCl, NaCl), liquid ae- rosols (e.g. DEHS), latex partic- les (PSL)	Test area of the medi- um	100 cm ²
Measuring range (total penetration)	0.0005 - 100 %	Measurement range (size)	0.145 – 40 μm
Volume flow	$1 - 27 \text{ m}^3/\text{h}$ - 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 re- quest)	Compressed air supply	6 – 8 bar
Dilution factor	1:27/1:700	Test conditions accor- ding to standard	+19 – +23 °C
Dimensions	Approx. 1,800 • 600 • 900 mm (H • W • D)		

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