

# PMFT 1000 F



The PMFT 1000 F tests respiratory protection particle filters better than the standards EN 143, ISO 16900-3, and NIOSH 42 CFR 84 with additional accurate analysis of filter mask efficiency for SARS-CoV-2 (size approximately 120 nm to 160 nm). In addition, testing face masks based on EN 149/EN 13274-7 standards is possible. Both total photometric penetration and fractional efficiency are tested, e.g., the efficiency in the whole size range, respectively, 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  $\mu\text{m}$
- 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 RD (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 aerosols (e.g. DEHS), latex particles (PSL)
Test area of the medium	100 cm <sup>2</sup>
Measuring range (total penetration)	0.0005 - 100 %
Measurement range (size)	0.145 – 40 µm
Volume flow	1 – 27 m <sup>3</sup> /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)



Further information:  
<https://www.palas.de/product/pmft-1000-f>