DFP 3000

The compressed air filter test rig DFP 3000 delivers fully-automated measurements of fraction separation efficiency for compressed air filters under overpressure up to 7 bar, offering better results than ISO 12500. On request, we can also supply an additional filter holder for flat filter media. The fraction separation efficiency is measured with the new aerosol spectrometer Promo® 3000 P , which is equipped with pressure-resistant welas® aerosol sensors for raw gas and clean gas measurements. The largely automated setup of the test sequence, the clearly defined individual components, and the individually adjustable sequence programs of the filter test software FTControl deliver the high reliability of our measurement results.

BENEFITS

- Particle measurements at a glance
- Internationally comparable measurement results and high reproducibility of the testing method
- Easy use of different test aerosols, e.g., DEHS, SAE Fine and Coarse
- Flexibly programmable sequence programs for pressure loss measurements, measurements of fraction separation efficiency, and burden measurements
- Fully-automatic and reproducible test sequence, including pressure and volume flow control
- Easy to operate
- 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
- Low-maintenance

APPLICATIONS

- Testing of complete filters better than ISO 12500
- Testing of filter media
- Determination of the drainage amount during burdening

DATASHEET

Aerosols	Liquid aerosols (e. g. DEHS)
Measurement range (number C_N)	Up to 10^6 particles/cm^3
Measurement range (size)	
	$0.2 - 40\ \mu m$, $0.3 - 40\ \mu m$ (at 7 bar$_g$)
Volume flow	$1 - 60$ Nm^3/h or $10 - 200$ Nm^3/h- pressurized operation
Power supply	$115 - 230$ V, 50/60 Hz
Differential pressure measurement	$0 - 3{,}000$ Pa
Compressed air supply	10 bar
Pressure	$1 - 7$ bar$_g$ relative
Dimensions	$3000 \cdot 1300 \cdot 600$ mm (H • W • D)

NORMS AND CERTIFICATES

ISO 12500