

Mobile filter diagnosis device



Mobile system for checking filter systems based on the tribo-electric measuring principle

APPLICATION

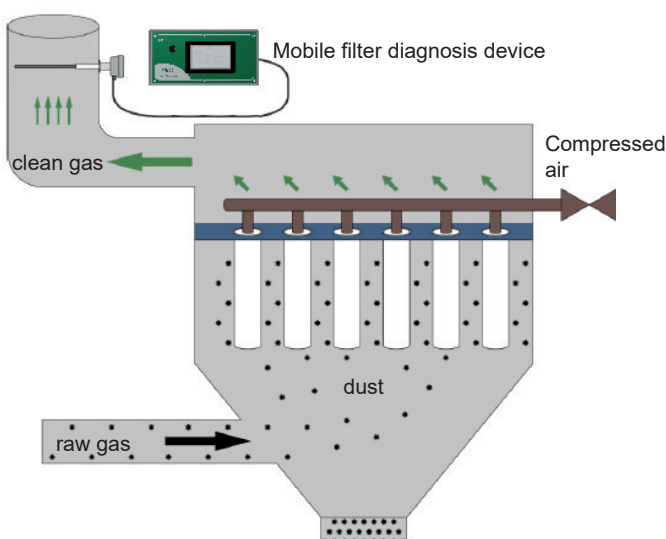
The PFM 20 m is used for temporary monitoring of the clean gas dust content after dedusting systems. Used as a filter monitor, the device is an effective tool for early detection and localization of damage to filtering separators.

Monitoring and evaluating the measurement results also allows targeted maintenance measures.

YOUR BENEFITS AT A GLANCE

- design as portable case → easy and safe handling of the complete system
- immediate evaluation of the clean gas dust content after filter systems
- flexible use by variable length of the probe rod
- graphic presentation and storage by integrated recorder
- user-friendly software for setting parameters
- data transfer and software update via USB interface
- easy mounting

INSTALLATION EXAMPLE



PRECONDITIONS ON SITE

- ambient temperature: -20...+50 °C
- flow velocity min. 5 m/s
- installation place with run-in/run-out zone of min. 5-fold/2-fold length of duct diameter
- process connection Tri-Clamp fastener



(configuration example)

DESIGN

The device is a complete measuring system which is designed as a portable case. It consists of a measuring case with an integrated operating unit and an electronic recorder for graphic presentation and storage. Via the USB interface on the front panel the recorded data can be transferred and software updates can be installed.

The lower segment of the case is a combined box with PFM 20 m and all necessary accessories (e.g. probe, connecting cables).

TECHNICAL DATA

Housing:	complete measuring system designed as portable measuring case and accessories box (case IP54; measuring device IP 65)
Dimensions:	ca. 400 mm x 360 mm x 180 mm (w x h x d)
Weight:	ca. 10 kg
Probe:	tribo-electric probe consisting of probe head with mountable probe rods; IP65; protection class 1; probe rod: electrically isolated from housing, variable length though combinable parts; length of probe: 100/300/500/700 mm insulator length after flange: 150 mm; probe connection cable: 5 m (max. distance to the case), other lengths on request (max. 25 m)
Display / Operating:	operating unit: 7" touch display, display of status messages and measurement results, changing parameters, language selection: German, English
Data storage	storage of data in the internal memory of the evaluation and electronics unit, USB interface for data transfer and software updates
Ambient temperature:	-20...+50 °C
Relative humidity:	no special sensitivity
Dew-point spread:	min. +5 K
Measuring gas temperature:	max. 280 °C
Flow velocity:	min. 5 m/s
Measuring range of dust:	raw signal: 0...250 mV (0...250 mg/m³)
Operational availability:	ca. 1 min. after switching on the power supply
Calibration:	by gravimetric comparison measurements (for trend measurement and filter analysis not required)
Process connection:	Tri-Clamp fastener with 1" screw-in adapter (default), optional flange DN25 PN6
Power supply:	100-240 V AC, 50-60 Hz, 15 W
<i>Special models are possible on request.</i>	