

PFM 20

Dust measuring device

01 PFM 20 Dust measuring device

The PFM 20 is an in-situ quantitative dust concentration measuring device designed to continuously measure total suspended dust from a duct or stack. The analysis is based on the triboelectric measuring principle. The PFM 20 consists of an in-situ probe with probe head and probe rod. The probe rod has a high-temperature coating for insulation. It is surrounded by a sleeve and an insulating body and is thus electrically isolated from the housing. The signal module with the evaluation electronics is located in the probe head.

Advantages and features

- Simple design, no sensitive or mechanically moved parts
- One-side installation, no mechanical alignments or adjustment, no special tools needed for installation
- Compact probe head and coated probe rod with customizable length and power supply options
- Plug-and-measure device simple to maintain: clamp connection allows a quick inserting as well as taking out of the probe which simplifies any kind of service activities like checks or cleaning
- IP 65 protected, therefore no weather protection needed (-20 to 50°C)
- Remote setup possibilities via included PC software
- Low operational costs, no time-consuming cleaning operations
- Lowest certified range 0–7.5 mg/m³ dust, max. measuring range 0...250 mg/m³ dust
- Automatic zero and reference point check
- Flow velocity compensation
- Modbus RS 485, analogue and digital signal output
- Robust design ensures analog stability and long lifespan (>10–15 years)
- Linearity test module available as an option
- Connectivity for external display and operation unit optionally available

International Certifications

- TÜV certification according to the German and European requirements, EU Directive 2010/75/EU and 2015/2193/EC, EN 14181 and EN15267-1.2.3
- MCERTS certified in United Kingdom

Further versions are available as derivatives from PFM 20 design and are used for filter monitoring:

- Qualitative dust monitoring certified acc. to DIN EN 15859
- Dust monitoring with or without display
- Dust monitoring suitable for high temperature range from 280 up to 900°C

