Dr. Födisch Umweltmesstechnik AG
Zwenkauer Strasse 159
04420 Markranstädt
Germany

Phone: +49 34205 755-0
Fax: +49 34205 755-40
E-mail: sales@foedisch.de
Internet: www.foedisch.de

PFM 06 ED

Product Information

- EN 15267-3 tested
- QAL1 certified
- TUV Approved
- Annual Inspection

The dust concentration measuring device PFM 06 ED is used for continuous extractive measurement of dust contents in wet and sticky exhaust gases. Thereby an isokinetic gas sampling is possible.

The device is suitability tested according to DIN EN 15267 and certified in compliance with QAL1.

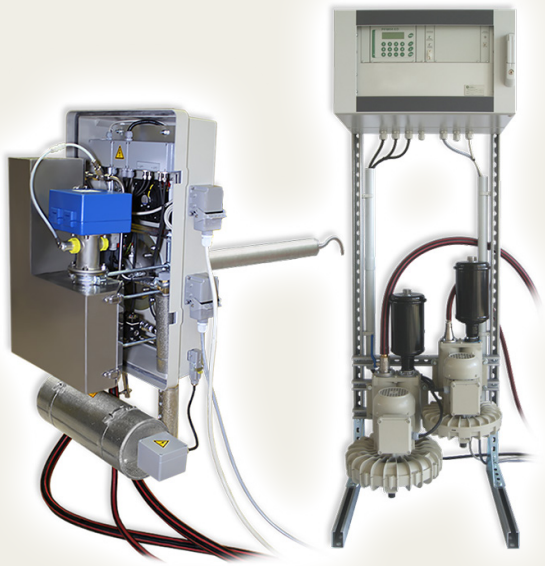
Dust concentration measuring

For measurement the measuring gas is sampled from the process by a temperature-controlled probe and conveyed to a measuring cell which contains an optical measuring unit.

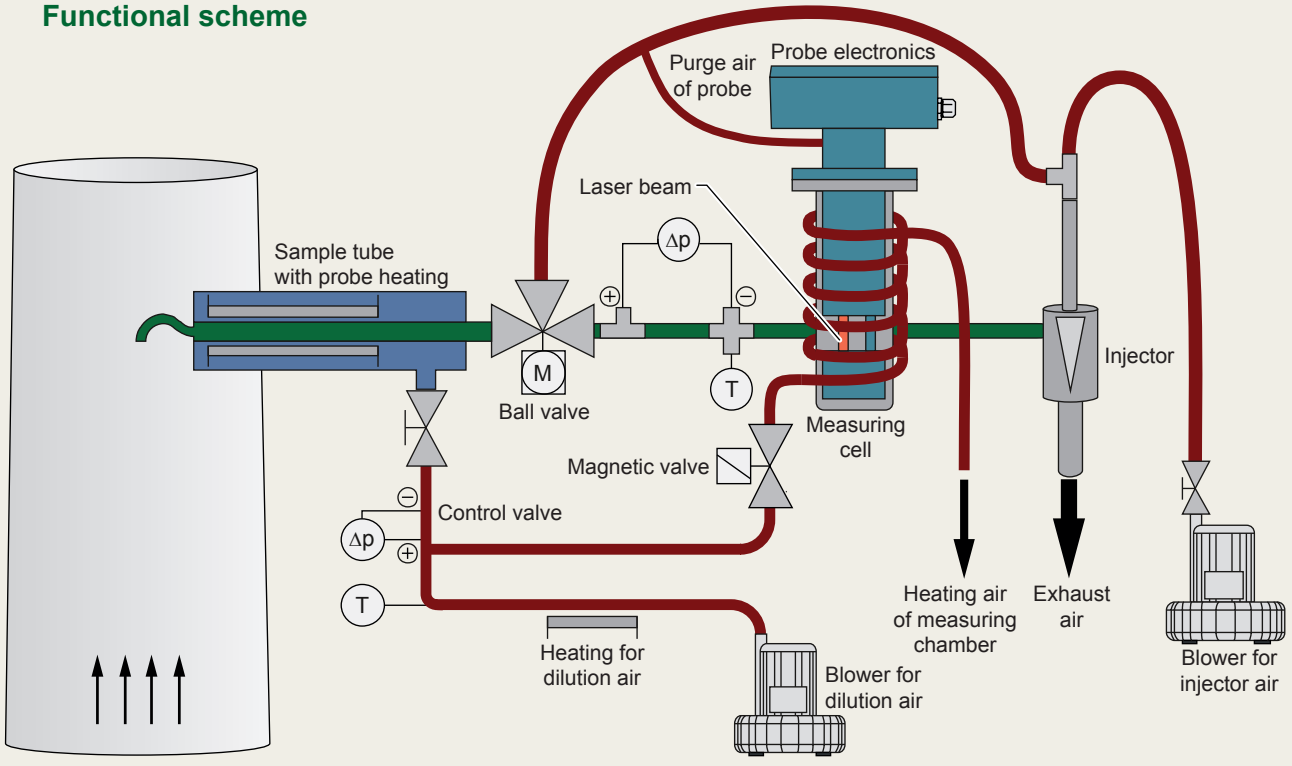
The sucked off measuring gas is continuously diluted and dried with hot and dust-free ambient air.

The active principle of dust measurement is based on the optical scattered light measurement. Therefore a laser lance unit is arranged in a cylindrical chamber (measuring cell) and streamed with the conditioned measuring air.

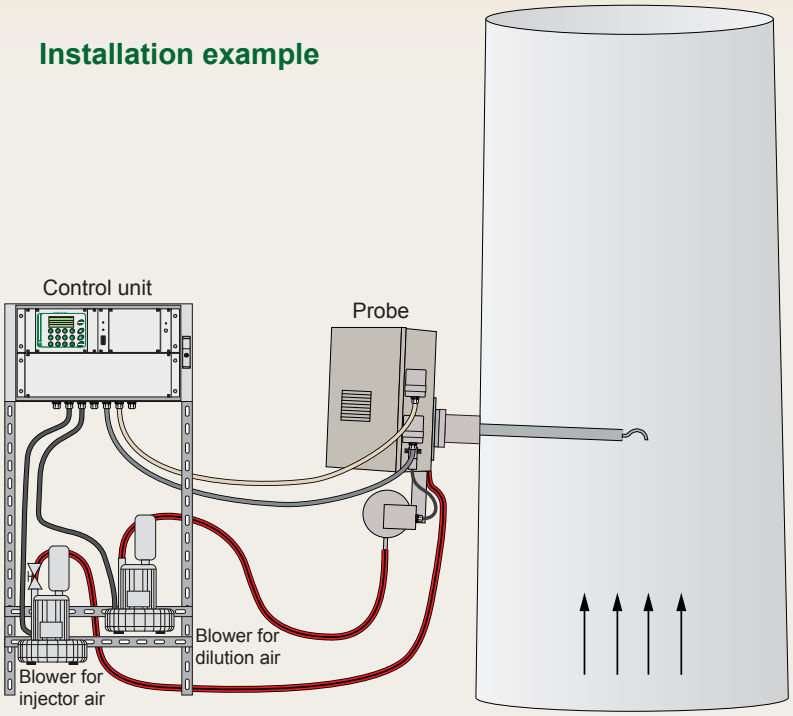
In the electronics of the control unit the signal of the optical unit is converted to an equivalent dust signal.



Functional scheme



Installation example



Highlights of the device

- extractive dust measurement in wet and sticky exhaust
- special device consisting of probe and control unit
- relatively small required space
- compact device → only 1 sample fitting with integrated or separated return fitting necessary
- display option in mg/m³ by input of calibration parameters
- isokinetic sampling possible
- first-class price-performance ratio

Technical data

Control unit:	steel sheet housing on profile rack (incl. blowers) 600 mm x 1700 mm x 500 mm (w x h x d), approx. 90 kg, IP 55
Probe:	extractive sampling with GRP weather protection casing 500 mm x 750 mm x 1000 mm (w x h x d), approx. 65 kg, IP 55
Flange:	DN 80 PN 6, special design: tube ∅ 100 mm
Measuring method:	dust: optical dust measurement with laser beam (scattered light), extractive
Measuring range:	dust i. o.: 0...15 mg/m³ (max. 500 mg/m³)
Calibration:	by gravimetric comparison measurement
Display:	4-line LC display
Media temperature:	max. 180 °C
Exhaust humidity:	rel. humidity: 100%
Pressure on ambience:	-30...+2 hPa
Ambient temperature:	-20...+50 °C
Flow of measuring gas:	6...12 m³/h (sucked off measuring gas and dilution air)
Power supply:	3L, N, PE, 400 V AC 50 Hz, 4 kVA
Analogue outputs:	4 x 4...20 mA, galvanically isolated with combined ground, burden max. 1 kΩ
Digital outputs:	6 x potential-free contact, max. 35 V UC, 0.4 A
Digital input:	optional, external switch contact for changeover of measuring/purging
Clip contacts:	max. 2.5 mm²
Suitability test:	DIN EN 15267, QAL1, ID: 0000035014

Special models are possible on request.