



PFM 06 ED Product Information



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.

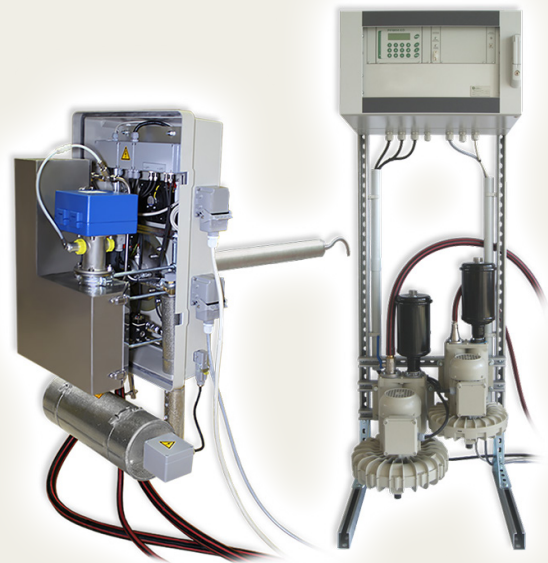
Dust concentration measuring

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.

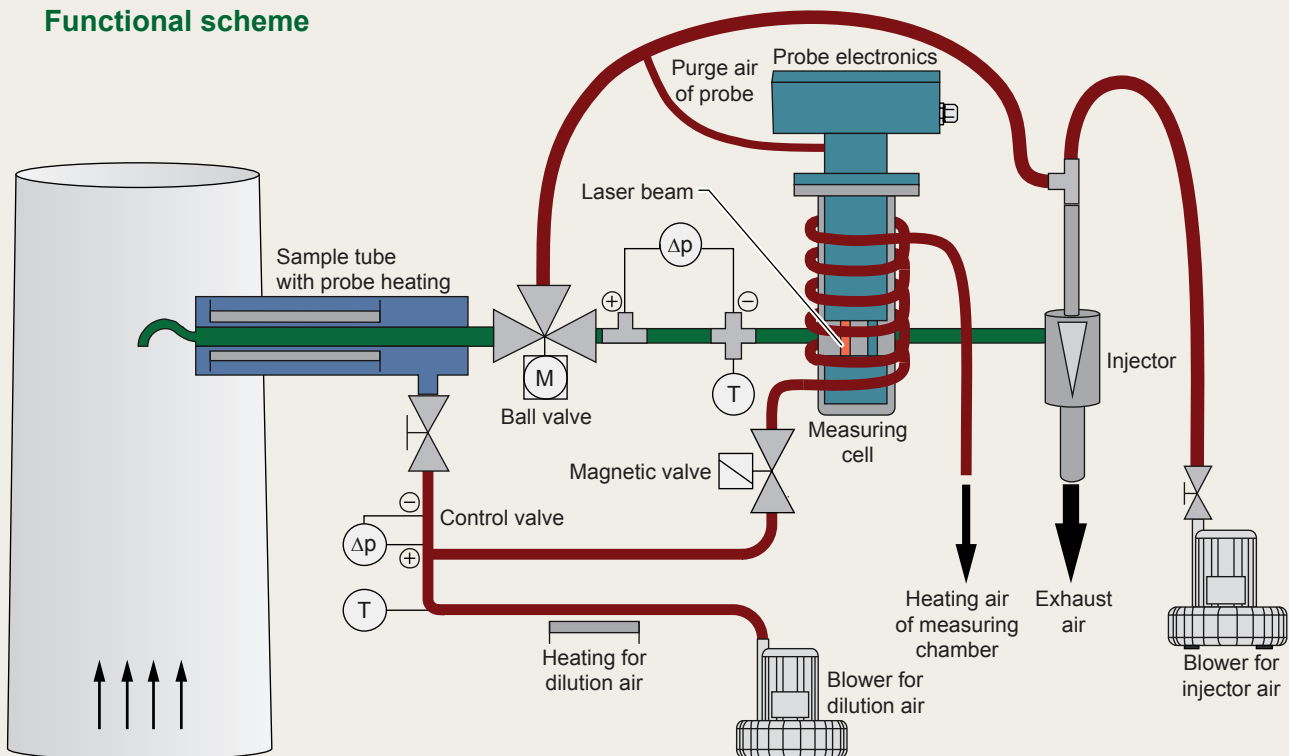
The sucked off measuring gas is continuously diluted and dried with hot and dust-free ambient air.

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.

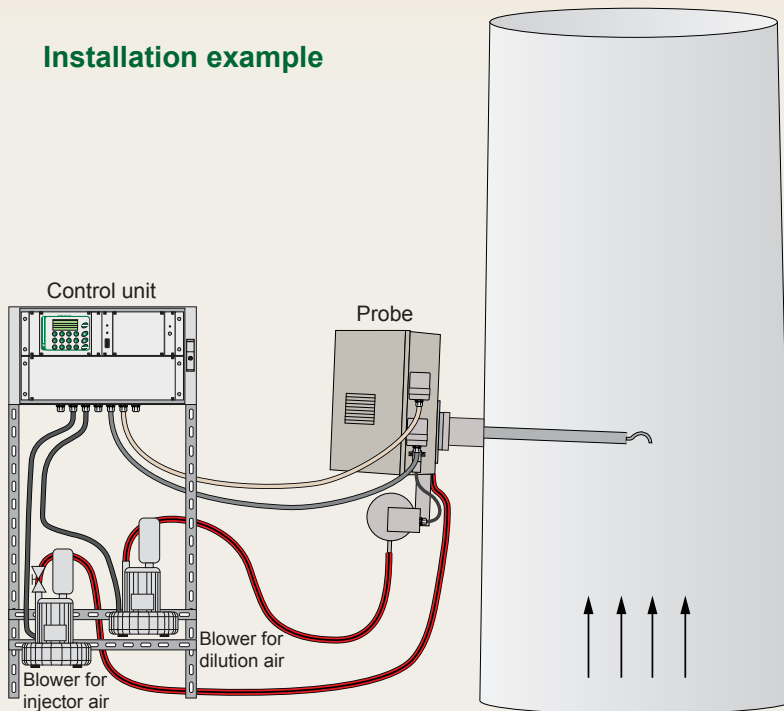
In the electronics of the control unit the signal of the optical unit is converted to an equivalent dust signal.



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/m^3 by input of calibration parameters
- isokinetic sampling possible
- first-class price-performance ratio

Technical data

Power supply:	3L, N, PE, 400 V AC 50 Hz, 4 kVA (max. 5x 4 mm ²)
Protection class:	1
Operational availability:	after 5 to 15 min (without preheating)
Measuring method:	dust: optical dust measurement with laser beam (scattered light), extractive
Measuring range:	dust in operation: 0...15 mg/m^3 (max. 500 mg/m^3)
Calibration:	via gravimetric comparison measurement
Media temperature:	max. 180 °C
Exhaust humidity:	rel. humidity: 100%
Pressure against ambience:	-30...+2 hPa
Ambient temperature:	-20...+50 °C
Flow of measuring gas:	6...12 m^3/h (sucked measuring gas and dilution air)
Operating device:	steel sheet housing on profile rack (incl. blowers) approx. 600 mm x 1760 mm x 670 mm (w x h x d), approx. 90 kg, IP 65; display: 4-line LC display
Probe:	extractive sampling with GRP weather protection casing approx. 610 mm x 1050 mm x 1500 mm (w x h x d), approx. 65 kg, IP 55 immersion depth: max. 1000 mm; probe cable length max. 25 m
Flange:	DN 80 PN 6, special type: tube \varnothing 100 mm
Analogue outputs:	4 x 4...20 mA, galvanically separated with common ground, burden max. 1 k Ω
Digital outputs:	6 x potential-free contact, max. 35 V UC, 0.4 A
Digital input:	optional, external switch contact for switchover of measuring/purging
Clip contacts:	max. 2.5 mm ²
Suitability test:	DIN EN 15267, QAL1, ID: 0000035014

Special models are possible on request.