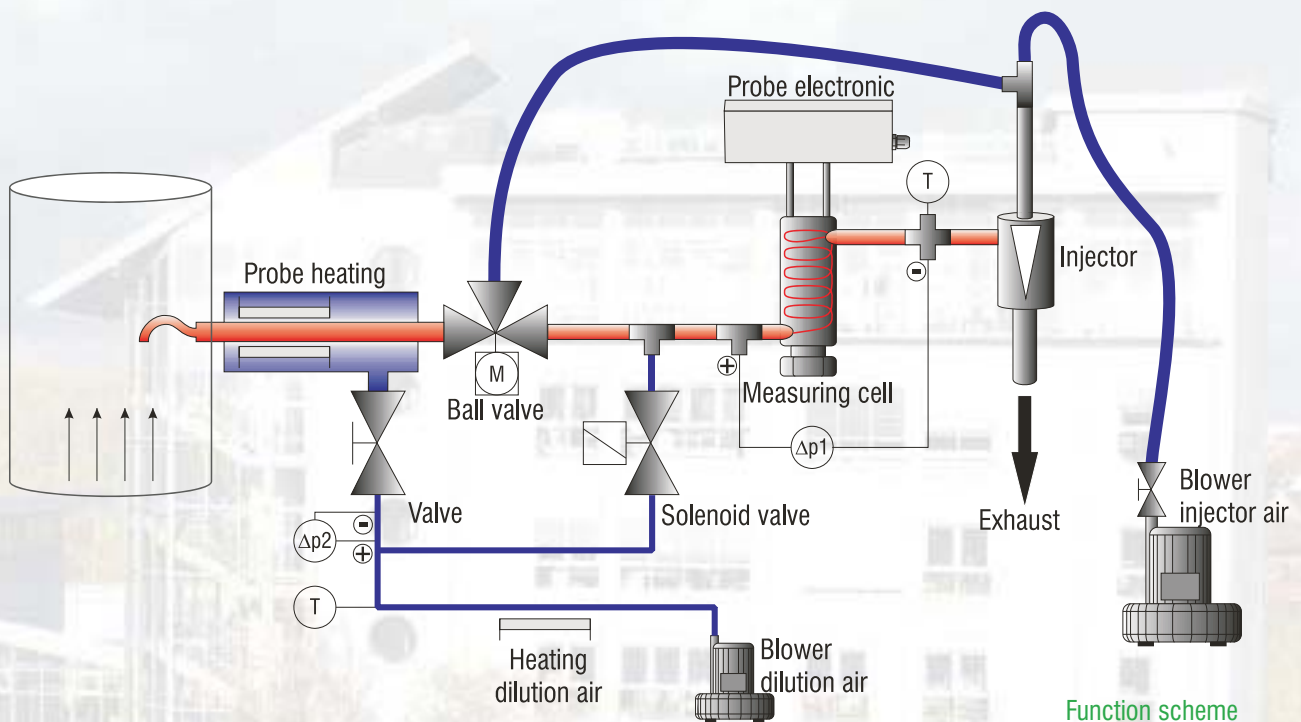




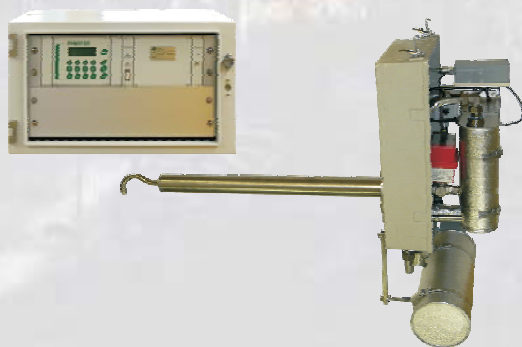
## Product information PFM 97 ED

The dust concentration measuring device PFM 97 ED is used for continuous extractive measurement of dust contents in wet and sticky gases. A temperature-controlled probe sucks off measuring gas from the process and feeds it to a measuring cell holding a triboelectric measuring unit.



### The dust concentration measuring device PFM 97 ED

In order to produce evaluable measuring signals and to protect the measuring cell respectively the gas paths of the measuring device the gas sucked off is diluted continuously with hot, dry and dust-free ambient air.



Probe with triboelectric unit

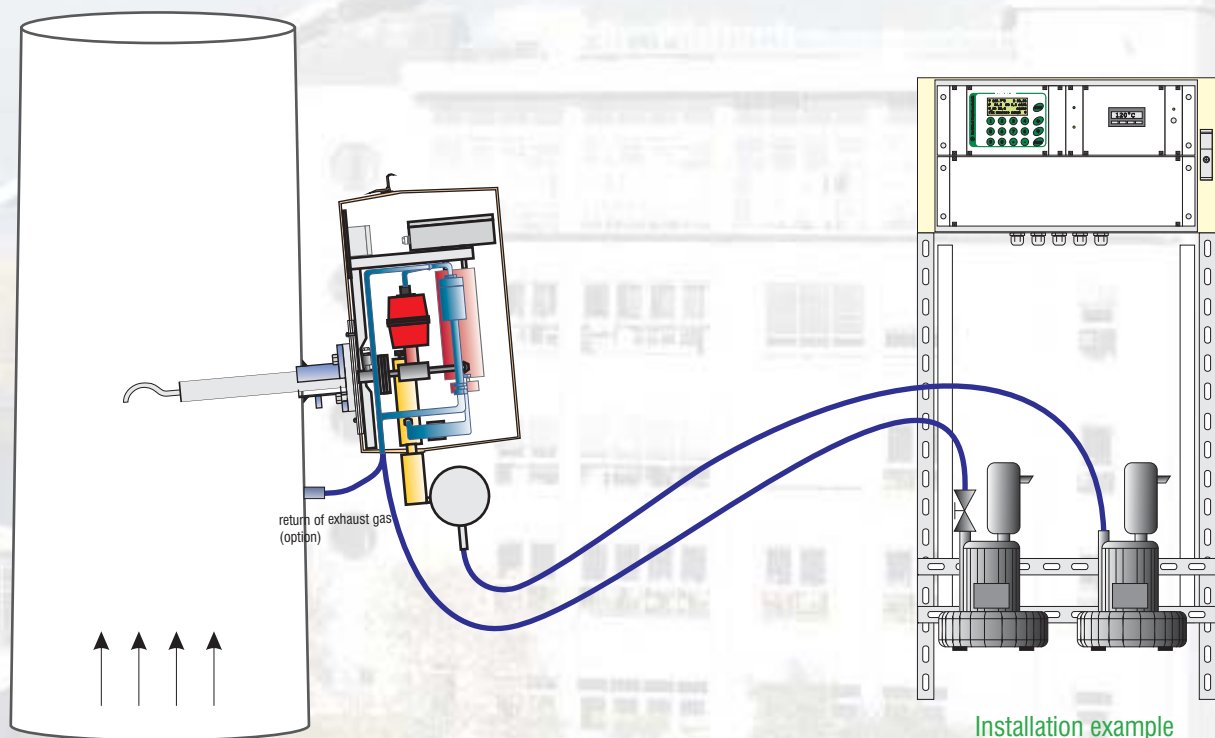
The principle of the dust measurement is based on triboelectricity. The measuring gas flow is sucked through the tribo cell with the help of an injector. The flow is monitored by the measurement of the differential pressure over the tribo cell. The tribo cell is designed as spin chamber at whose inner walls two tribo probes are fixed. The measuring gas flow enters tangentially into the measuring chamber.

The measuring signal is converted into an equivalent dust signal in the electronic of the control unit.



## Highlights of the device

- Extractive dust measurement in wet and sticky gases
- Special device consisting of probe and control unit
- Relatively little place requirement
- Compact device, only 1 sampling flange necessary (with integrated or separate return flange)
- display possibility in  $\text{mg}/\text{m}^3$  after input of calibration parameters
- excellent price /performance ratio



## General technical data

Control unit:	steel-sheet case, mounted on profile frame (incl. blower)
Probe:	extractive sampling with GRP-weather protection hood
Measuring principle:	dust: triboelectric sensor
Measuring range dust:	dust i.o.: 0 ... 15 (max. 500) $\text{mg}/\text{m}^3$
Calibration:	by gravimetric reference measurements
Display:	4-line LCD-display
Media temperature:	max. 280 °C (higher temperatures on request)
Ambient temperature:	-20 ... +50 °C
Analogue outputs:	4 x 4 ... 20 mA (thereof 1 x dust and operational parameters)
Digital signals:	6 potential-free contacts (failure, maintenance, limit value 1 and 2, maintenance request, measuring range)
Power supply:	400 VAC / 50 - 60 Hz