**Emission monitors dust**

**FWE200**

***Description***

The FWE200 dust measuring device is designed to measure dust concentrations in wet flue gas. The gas is extracted via a sampling probe and heated above dew point. Droplets in the gas are vaporized, making it impossible for them to falsify the measurement results. The scattered light principle enables even very low dust concentrations to be measured.

***Specification***

Measured values: Scattered light intensity, dust concentration (after gravimetric comparison measurement)

Performance-tested measurement: Dust concentration

Measurement principle: Scattered light forward

Spectral range: 640 nm ... 660 nm

Laser, protection class 2, power < 1 mW

Dust concentration: 0 ... 5 mg/m³ / 0 ... 200 mg/m³

Certified measuring ranges: Dust concentration 0 ... 15 mg/m³ / 0 ... 50 mg/m³

Response time (t90): 0.1 s ... 600 s Freely adjustable

Accuracy: ± 2 % Of measuring range full scale

Process temperature: PVDF probe ≤ +120 °C, Hastelloy probe ≤ +220 °C

Process pressure: –20 hPa ... 20 hPa

Process gas velocity: 4 m/s ... 20 m/s

Process gas humidity: Max. 10 g/m³ liquid water without water vapour

Ambient temperature: –20 °C ... +50 °C

Conformities-Approved for plants requiring approval  
2001/80/EC (13. BImSchV)  
2000/76/EC (17. BImSchV)  
27.BImSchV  
TA-Luft (Prevention of Air Pollution)  
EN 15267  
EN 14181  
MCERTS  
U.S. EPA PS-11 compliant

Electrical safety: CE

Enclosure rating: System IP54, Electronics enclosure IP65