

AEROSOL SENSOR WELAS® 2500 P



Depending on the aerosol composition to be measured, i.e., the carrier gas component and the particle material, pressure changes in the carrier gas can significantly influence the particle size distribution, e.g., due to condensation or evaporation.

For this reason, the aerosol sensors *welas*® 2070 P through to *welas*® 2500 P are equipped with a heatable cuvette to ensure isobaric and isothermal sampling down to the sensor's measurement volume.

The cuvettes are made of relaxed aluminum (black) by default. If the sensor is used in aggressive and corrosive aerosols, the cuvette can be made of stainless steel or other special materials, such as Hastelloy.

Sealed additional disks prevent aerosol from the cuvette from escaping into the surroundings. This even offers an advantage in measuring toxic substances under ambient pressure.

The additional disks are easy to clean and replace by the operator.

工作原理

优势

- 传感器更换便捷
- 2000 系列传感器体积小、结构稳固
- 各传感器在粒径与浓度测量结果上具有良好的一致性
- 可将传感器直接安装于采样点，有效减少长采样管路中的颗粒物损失
- 支持原位测量的传感器
- 2000 系列（无加热型）可用于爆炸性环境中的测量
- 易于清洁
- 操作简便
- 运行可靠
- 维护需求低
- 有助于降低运营成本

标准和证书

ASHRAE 52.2

技术数据

测量范围(数量浓度)	$0 - 4 \cdot 10^3$ particles/cm ³
测量范围(粒径)	0.3 – 105 μ m (3 measurement ranges)
体积流量	5 l/min (others on demand)
Thermodynamic conditions	+10 – +40°C, \leq 10 bar _g
Light source	Xenon arc lamp 35 W
Cuvette	Pressure-resistant
Dimensions	50 • 250 • 100 mm (H • W • D)
重量	Approx. 2.8 kg

应用领域

- 测定车内空调滤清器、发动机空气滤清器、室内空气过滤器、压缩空气过滤器、真空吸尘器过滤器、可清洗过滤器、静电除尘器、油分离器、冷却润滑剂分离器、湿式洗涤器、旋风分离器及其他分离设备的分离效率
- 等温等压条件下的粒径测量与定量测定，应用于汽车、化工、制药及食品等行业
- 快速瞬态过程分析
- 烟雾探测器检测
- 云形成过程中的颗粒生成研究
- 排放测量
- 环境浓度测量



Mehr Informationen:

<https://www.palas.de/zh/product/aerosolsensorwelas2500p>