

# AGF 10.0 D



In contrast to the AGF 10.0, the AGF 10.0 D is pressure-resistant up to 10 bar overpressure and can therefore be used in applications with an absolute pressure of up to 11 bar, e.g. for testing compressed air filters and optical flow measurement methods in overpressure up to 10 bar.

## 工作原理

### PRESSURE-RESISTANT AEROSOL GENERATOR

Unlike the AGF 10.0, the AGF 10.0 D is pressure-resistant up to 10 bar positive pressure and is thus able to be used for applications with an absolute pressure value of up to 11 bar, e.g., to test compressed air filters and optical flow measurement procedures with positive pressure values of up to 10 bar.

The AGF series aerosol generators can atomize liquids with a binary nozzle.

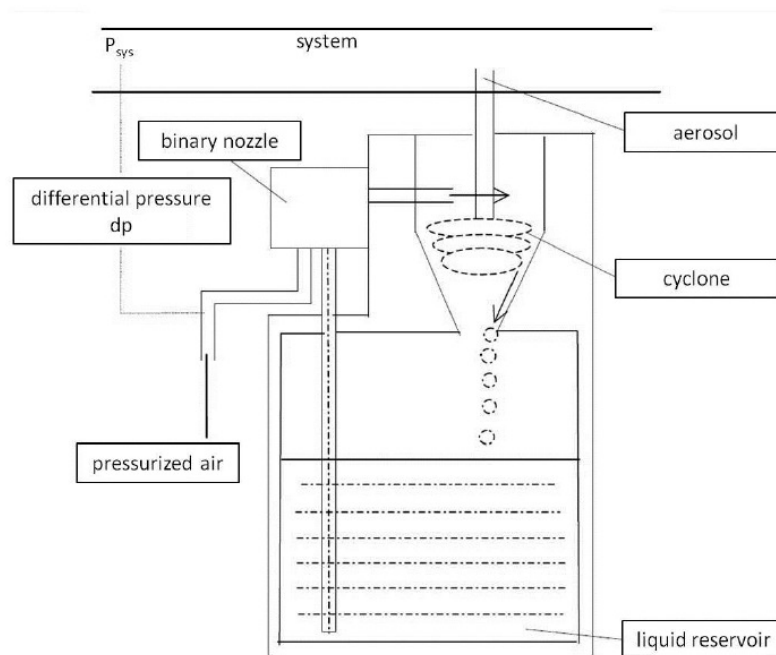


Fig. 1: Schematic diagram of the aerosol generator

Compressed air is supplied to a binary nozzle. The primary pressure on the nozzle can be adjusted to between 0 and 10 bar above the ambient pressure. The volume flow through the AGF 10.0 D should be determined using a pressure-tight flow meter and must be between 14 and 35 L/min. The negative pressure in the nozzle suction the liquid to be atomized from a reservoir. The volume flow of the liquid and thus the aerosol concentration can be adjusted via a needle valve integrated in the nozzle.

## 优势

- Generation of high mass flows of up to approx. 25 g/h
- Exact adjustment of the operating parameters
- Number concentration ( $C_N$ ) can be varied by the factor 10
- Particle size distribution remains virtually constant, if  $C_N$  is modified
- Number distribution maximum is within the MPPS range
- Virtually no power losses
- Optimal concentration, no coagulation losses
- Resistant to numerous acids, bases, and solvents
- Robust design, stainless steel housing
- Easy to operate
- Long dosing time

## 标准和证书

VDI 3491-6

## 技术数据

体积流量	14 – 35 l/min
Mass flow (particles)	< 20 g/h (DEHS)
Filling quantity	300 ml
Particle material	DEHS, DOP, Emery 3004, paraffin oil, other non-resinous oils
Dosing time	> 24 h
Compressed air connection	Quick coupling
Aerosol outlet connection	$\varnothing_{\text{inside}} = 20 \text{ mm}$ , $\varnothing_{\text{outside}} = 30 \text{ mm}$
Mean particle diameter (number)	0.5 $\mu\text{m}$
Particle diameter (maximum)	10 $\mu\text{m}$
Dimensions	200 • 300 mm ( $\varnothing$ • L)
重量	Approx. 8 kg
Special features	Pressure-tight up to 10 bar

## 应用领域

- 洁净室技术
  - 符合ISO 14644 和VDI 2083 标准的验收测试及泄漏测试
  - 泄漏测试、适合性测试
  - 恢复率测试
- 过滤器测试、质量控制
  - 滤芯
  - 汽车空调滤清器
  - 过滤介质、颗粒空气过滤器、HEPA/ULPA 过滤器
  - 压缩空气过滤器
- 示踪颗粒
  - 正压值高达10 bar 的光学流量测量程序 (AGF 10.0 D 型号)
  - 吸入实验
  - 激光多普勒测速仪 (LDV)
- 计数颗粒测量方法的校准
  - 雾化粒径 < 5  $\mu\text{m}$  的乳胶悬浮液
- 烟雾探测器测试



Mehr Informationen:  
<https://www.palas.de/zh/product/agf10d>