

Aerosol generator with refill unit for loading compressed air filters under positive pressure up to 7 barg



## Description

The AGF 3000 was specially developed to supply compressed air filters as per ISO 12500 until the compressed air filter is saturated. The AGF 3000 system comprises an aerosol generator and an automatic refill unit.



Fig. 1: AGF 3000 with refill unit

The AGF 3000 is equipped with a binary nozzle developed by Palas®, which is also able to achieve very high mass flows of up to 29 g/h. The AGF 3000 aerosol generator is designed to be pressure-resistant up to 7 bar positive pressure (higher pressure values upon request).

### Startup

The liquid to be dispersed is simply filled in the reservoir. The mass flow is adjusted using the volume flow through the nozzle. The volume flow via the special binary nozzle is continuously controlled using a mass flow controller.

The filling level in the reservoir is monitored by a sensor. If the minimum filling level is not reached, then the separate refill unit automatically fills the reservoir on the aerosol generator to the maximum filling level.

## Benefits

- Pressure-resistant up to 7 barg
- For continuous loading with refill unit
- High mass flow of up to 29 g/h
- Minimization of compressed air filter loading time
- Very exact volume flow control with use of mass flow controller

## Datasheet

<i>Parameter</i>	<i>Description</i>
<b>Volume flow</b>	10 – 70 NI/min
<b>Dimensions</b>	180 • 240 mm (Ø • H, AGF 3000) 240 • 440 mm (Ø • H, refill unit)
<b>Weight</b>	Approx. 4 kg (AGF 3000) Approx. 10 kg (refill unit)
<b>Mass flow (particles)</b>	4 – 29 g/h
<b>Aerosol outlet connection</b>	Ø <sub>inside</sub> = 26 mm, Ø <sub>outside</sub> = 29 mm
<b>Special features</b>	Pressure-resistant up to 10 bar (overpressure), automatical refill unit
<b>Mean particle diameter (number)</b>	0.4 µm (DEHS)
<b>Filling quantity</b>	Approx. 7 l

## Applications

- ISO 12500
- Testing compressed air filters
- Loading compressed air filters

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