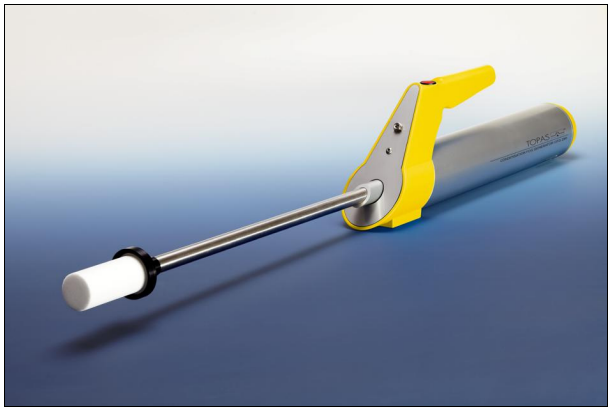
Condensation Fog Generator CFG 290



Condensation Fog Generator CFG 290

The hand-held Condensation Fog Generator CFG 290 can be used in clean rooms and for clean room components for visualization and tracking of air flows according to ISO 14644-3 Annex B7 and VDI 2083-3.

Principle

The fog generation in the CFG 290 is based on the evaporation of fog fluid at about 300° C and subsequent condensation. The fluid consists of polyhydric alcohol and ultrapure water. Because of the hygroscopic effect of the alcohol droplets a part of the surrounding humidity is absorbed and stabilized as fog droplets.

The Condensation Fog Generator generates a very dense, highly visible fog. This cloud of fog has a longer life in rooms. Any deposition of fog droplets on surfaces evaporate after some time without any residue. According to the priciple this kind of fog is sterile, non-toxic and free of oil and grease.

The Condensation Fog Generator is designed for mobile use. Power is supplied by a modern Li-Po battery.

The device can be equipped with various fog distributing systems by means of a connection at the outlet of the aerosol.

Special Advantages

- Very short preparation time between fog triggering and fog generation (few seconds only)
- Very dense fog by controlled injection of condensation air
- Lowest emission of fog fluid mass at the same level of visualization performance by deposition of larger droplets of fog inside the device
- Immediate termination of fog generation, no re-evaporation
- Minimal disturbance of the basic flow by means of a very thin injection probe
- Long battery life due to special evaporator and microprocessor control

Applications

- Visualization of airflows in rooms and air-conditioning systems
- Particularly suitable for use in clean rooms
- Visual leak tests of systems and components
- General use as test aerosol or challenge aerosol, e.g. for filter testing

Fog output from an injection probe of the CFG 290

Specifications

Details

The outstanding feature of the CFG is a special evaporator ensuring the fog generation after triggering the fog output in a very short time (few seconds only). The heating power is applied only for the actual time of generation. No stand-by heating is required because of the short reaction time. This technology provides a long battery life and a long period of use in mobile operation. Through an innovative new solution (utility model protection) it is possible to immediately stop the production of fog, thus eliminating a usually annoying re-evaporation.

The fog outlet of the injection probe is equipped with a separator. There the condensate droplets from the injection probe as well as very large droplets of the fog are deposited.
The large droplets would add little to the visualization power and only bring a higher excess amount of fog fluid into the test area.

By forced feeding of the condensed air (no injector effect) the portion of air can be controlled and different distribution systems be used for the fog. In the fog distribution system the CFG 290 can create sufficient overpressure to ensure uniform outflow into the environment at several openings.

Aerosol distributing rake with outflowing aerosol

Technical Data

Evaporator temperature	approx. 300 °C
Tank capacity for the fog fluid	80 ml
Consumption of fog fluid (continuous operation)	approx. 1.5 ml/min
Fog fluid	Mixture of a polyhydric alcohol with ultrapure water
Option	Aerosol distributing rake
Power supply	LiPo accumulator; 11.2 V; 2.1 Ah
Dimensions	L 440 mm (without injection probe); T 70 mm; H 120 mm
Weight	1.2 kg

QMS certified to
DIN EN ISO 9001.

12 100 11908 TMS

For more information please visit our website at www.topas-gmbh.de

Specifications are subject to change without notice.

Topas GmbH
Technologie-orientierte
Partikel-, Analysen- und Sensortechnik
Oskar-Röder-Str. 12 · D-01237 Dresden

Phone +49 (351) 21 66 43 - 0
Fax +49 (351) 21 66 43 55
E-mail office@topas-gmbh.de
Internet www.topas-gmbh.de