Aerosol generator

Ⅰ、Product introduction

The aerosol generator is an instrument that uses a Laskin nozzle to generate DOP aerosols. It features a built-in regulating valve that allows for operation with either 4 or 10 nozzles. The output aerosol concentration can reach 10 μg/L to 100 μg/L at an airflow rate of 1.4 m³/min to 56.6 m³/min. The aerosol performance indicators meet national standards, making it suitable for leak testing of cleanrooms and filters in medical device testing laboratories, disease control centers, hospitals, pharmaceutical companies, and filter manufacturers.

Ⅱ、Technical Features

The unique airflow design ensures stable airflow and more uniform particle output; it can generate various types of aerosols, such as DOP, DOS, and PAO;
The spray concentration is adjustable with a wide adjustment range.

Ⅲ、Execution standard:

YY0569-2005 Biological Safety Cabinets
GB/T13554-2008 High-Efficiency Air Filters
GB50591-2010 Cleanroom Construction and Acceptance Specifications (Related Intellectual Property)
GB27948-2020 General Requirements for Air Disinfectants
GB/T38504-2020 Evaluation Methods for Spray Disinfection Effectiveness

Ⅳ、Technical indicators

Main Parameters	Parameter range	resolution ratio	margin of error
Working Pressure	（60-150）kPa	1kPa	±0.5%
Particle Size Generated	0-10um		
Single Generation Time	＞1h		
Suitable Airflow	300-3400m³/h		
Airborne Particle Output Range	（1.4-56.6）m3/min		
Suspended Particle Concentration	100 μg/L at a flow rate of 5.6 m³ /min		
Suspended Particle Concentration	10 μg/L at a flow rate of 56.6 m³ /min		
Generation Type	4－10 Laskin nozzles		
Compressed Air	built-in compressor		
Gas Type	Particles of various diameters (cold generation)		
Main Unit Dimensions	(200 x 500 x 280)）mm		
Instrument Noise	<65dB（A）		
Total Weight	About 18Kg		
Operating Power Supply	AC220V±10%,50Hz		
Power Consumption	≤500W		

V、Notes:

To prevent damage to your aerosol generator, please carefully read the following safety instructions before using this device and keep this manual properly so that all product users can refer to it at any time.

① Before use, add approximately 800ml of PAO solution to the oil tank. The liquid level should be around the middle of the level indicator.

② The instrument should not operate continuously for more than one hour. When continuous operation is required, stop spraying every hour and allow it to cool for 15 minutes.

③ After use, do not immediately disconnect the power. Disconnect the power after 20 minutes of cooling to allow the heat inside the instrument to dissipate quickly.

④ When the pressure gauge reading exceeds 150kPa, the instrument will activate the pressure protection device, automatically releasing pressure and producing a "popping" sound. This is normal; the user simply needs to reduce the pressure.

⑤ When the instrument is not used for a long time, the remaining PAO in the oil tank should be drained to prevent leakage.

⑥ This instrument comes with a 16mm diameter pipe as standard. A 16mm to 8mm quick-connect plug is included. Users can connect other pipe sizes as needed.

⑦ If the pressure gauge pointer is slightly off when the instrument is turned off, this is normal and does not affect the normal use of the instrument.

Note:

The connecting pipe for the Φ8 quick-connect adapter should not exceed 10cm, otherwise it will cause excessive pressure in the oil tank and piping, thus damaging the main unit. Damage caused by exceeding the specified length is not covered under warranty and will be the responsibility of the user!

VI、Packing List:

This is the standard factory packing list; the actual configuration is subject to the shipping packing list.

1. Aerosol generator main unit: 1 unit
2. Spray tube Φ16 reinforced tube, 3m: 1 piece
3. Locking hose clamp Φ16-26: 2 pieces
4. Φ16 to Φ10 pipe adapter: 1 piece
5. Φ10 to Φ8 conversion two-way connector: 1 piece
6. PAO-4 oil: 1 liter
7. 220V power cord: 1 piece