RBG solo

Low-concentration solid particle aerosols produced from powders are required for many research, development, and quality assurance applications and calibrating particle measurement devices. The RBG system disperses reliable non-cohesive powders such as mineral dusts, active pharmaceutical ingredients, pollen, etc., in the size range of < 200 μm and with a fine fraction of < 100 nm. Monolithic solid materials like blackboard chalk are finely dispersed with the highest dosing constancy.The unique advantage of this dosing and dispersion system is that in the RBG system, mass flows range from approx. 40 mg/h up to approx. 800 g/h are dispersed with the highest level of dosing constancy.

RBG solo has an integrated pump and can be operated independently of a compressed air supply.

Benefits

- Very high short-term and long-term dosing constancy
- Dispersion of virtually all non-cohesive dusts
- Easy and fast exchange of different solid material reservoirs and dispersing covers
- Integrated pump replaces compressed air supply
- Automatic determination and adjustment of the mass flow
- Pulse mode
- All unit parameters on LCD-display at a glance
- Remote operation with included software
- Device easy to clean
- Little maintenance required
- Low operating expenses

Applications

- Filter industry:
  - Determination of fractional separation efficiency
  - Determination of total separation efficiency
  - Long-term dusting
  - Filter media and ready-made filters
  - Dust removal filters
  - Vacuum cleaners and vacuum cleaner filters
  - Car interior filters
  - Engine air filters
- Calibration of particle measurement devices
- Flow visualization
- Inhalation tests
- Tracer particles for LDA, PIV, etc.
- Coating of surfaces

DATASHEET

粒径范围	0.1 – 200 μm	颗粒物最大数量浓度	Approx.10^7 particles/cm³
体积流量	8–40 Nl/min	Mass flow (particles)	0.04 – 800 g/h (with an assumed compacted density of 1 g/cm^3)
Filling height	110 mm	Filling quantity	2.7 g (reservoir Ø = 7 mm), 5.5 g (reservoir Ø = 10 mm), 17 g (reservoir Ø = 14 mm), 35 g (reservoir Ø = 20 mm), 88 g (reservoir Ø = 32 mm) (with an assumed compacted density of 1 g/cm^3)
Interfaces	USB type B	Power supply	115–230 V, 50/60 Hz
Particle material	Non-cohesive powders and bulks	Dosing time	Several hours nonstop
Carrier/dispersion gas	Air, nitrogen	Maximum counter pressure	0.1 barg
Compressed air connection	Quick coupling	Feed rate	1 – 1,000 mm/h
Reservoir inner diameter	7, 10, 14, 20, 32 mm	Aerosol outlet connection	Øinside= 5 mm, Øoutside = 8 mm
Dispergierdeckel	Type A, type B, type C, type D	Dimensions	515 • 330 • 240 mm (H • W • D)
Weight	Approx. 19 kg		