RBG 1000



The RBG system disperses reliable non-cohesive powders such as mineral dusts, active pharmaceutical ingredients, pollen, etc., in size range of < 100 μm and with a fine fraction of < 100 nm. Also, monolithic solid materials such as blackboard chalk are finely dispersed with the highest dosing constancy.The unique advantage of this dosing and dispersion system is that in the case of the RBG 1000, mass flows ranging from approx. 10 mg/h up to approx. 430 g/h are dispersed with the highest level of dosing constancy.

Optional:

- Pressure-resistant up to 3 bar
- Low-pressure operation from 300 mbar (absolute pressure), operation with nitrogen

Benefits

- Highest short-term and long-term dosing constancy
- Disperses virtually all non-cohesive dusts
- Easy exchange of different solid material reservoirs and dispersing covers
- Easy determination and adjustment of the mass flow
- Pulse mode
- Device easy to clean
- Quick and easy to operate
- Reliable operation
- Little maintenance required
- Reduces your 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
- Calibration of particle measurement devices
- Flow visualization
- Inhalation tests
- Tracer particles for LDA, PIV, etc.

Model Variations

...model available in additional variations

DATASHEET

Particle size range	0.1 – 100 μm
Maximum particle number concentration	Ca. 10^7 particles/cm^3
Volume flow	0.5 – 5.0 m^3/h
Mass flow (particles)	0.04 – 430 g/h (with an assumed compacted density of 1 g/cm^3)
Filling height	70 mm
Filling quantity	2.7 g (reservoir Ø = 7 mm), 5.5 g (reservoir Ø = 10 mm), 10.8 g (reservoir Ø = 14 mm), 22 g (reservoir Ø = 20 mm), 43 g (reservoir Ø = 28 mm)
Power supply	115 – 230 V, 50/60 Hz
Particle material	Non-cohesive powders and bulks
Dosing time	Several hours nonstop
Pre-pressure	4 – 8 bar
Carrier/dispersion gas	Random (generally air)
Maximum counter pressure	0.2 barg
Compressed air connection	Quick coupling
Feed rate	5 – 700 mm/h
Reservoir inner diameter	7, 10, 14, 20, 28 mm
Aerosol outlet connection	Dispersion cover type A: $Ø_{inside}$= 5 mm, $Ø_{outside}$ = 8 mmDispersion cover type B: $Ø_{inside}$= 3.6 mm, $Ø_{outside}$ = 6 mmDispersion cover type: $Ø_{inside}$= 2.5 mm, $Ø_{outside}$ = 6 mm
Dispersion lid	Type A, type B, type C, type D
Dimensions	465 • 320 • 200 mm (H • W • D)
Weight	Approx. 19 kg