RBG 1000 D

This device disperses particles at positive pressure values of up to 3 bar. Optional operation with low pressure from 300 mbar absolute is possible. The feedstock reservoirs with a diameter of 7, 10, 14, or 20 mm are pressure-resistant.For operation with low pressure, special pressure-resistant feedstock reservoirs are needed. Their piston is strongly connected to the feeding unit by a claw. This enables an undisturbed operation with low pressure.The solid material reservoir with a diameter of 28 mm is not pressure-resistant but can be used with the RBG 1000 D under atmospheric conditions.

In the RBG 1000 D pressure-resistant version, compressed air is used as the disgerger gas. Operation with nitrogen or other inert gases is not permitted.

OPERATION PRINCIPLE

Benefits

- Pressure-resistant to 3 bar over pressure
- Optional: Low pressure operation from 300 mbar absolute, remote control orcomputer-controlled
- 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

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	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 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

Applications

- All applications pressure resistant up to 3 bar overpressure
- Testing of compressed air filters
- 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

Mehr Informationen:
https://www.palas.de/en/product/rbg1000d