

RBG 1000 IGD



This device disperses particles at positive pressure values of up to 3 bar. The dispersion unit and the electrical control unit can be set up up to 2 m apart from each other. The return speed for container changeover is optimized on the RBG 1000 I and is faster than on the other RBG variants. It is only approx. 1 minute. The RBG 1000 IGD has a higher gear ratio. This means that at very low feed rates (< 10 mm/h), the feed rate can be better adjusted by means of a potentiometer. The maximum feed rate is 300 mm/h. The feedstock reservoirs with a diameter of 7, 10, 14, or 20 mm are pressure-resistant. The feedstock reservoir with a diameter of 28 mm is not pressure-resistant but can be used with the RBG 1000 IGD under atmospheric conditions.

In the RBG 1000 IGD 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 up to 3 barg overpressure
- Optional: negative pressure operation from 300 mbar absolute, remote control or computer control
- Highest short-term and long-term dosing consistency
- Disperses practically all non-cohesive dusts
- Easy exchange of different solids containers and dispersion lids
- Easy determination and adjustment of mass flow
- Pulse operation
- Easy cleaning of the unit
- Quick and easy operation
- Reliable function
- Low maintenance
- Reduces your operating costs

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 – 185 g/h (with an assumed compacted density of 1 g/cm ³)
Filling height	70 mm
Filling quantity	2.7 g (reservoir \varnothing = 7 mm), 5.5 g (reservoir \varnothing = 10 mm), 10.8 g (reservoir \varnothing = 14 mm), 22 g (reservoir \varnothing = 20 mm), 43 g (reservoir \varnothing = 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	1 – 300 mm/h
Reservoir inner diameter	7, 10, 14, 20, 28 mm
Aerosol outlet connection	Dispersion cover type A: $\varnothing_{\text{inside}}$ = 5 mm, $\varnothing_{\text{outside}}$ = 8 mm; Dispersion cover type B: $\varnothing_{\text{inside}}$ = 3,6 mm, $\varnothing_{\text{outside}}$ = 6 mm; Dispersion cover type: $\varnothing_{\text{inside}}$ = 2,5 mm, $\varnothing_{\text{outside}}$ = 6 mm
Dispersion lid	Type A, type B, type C, type D
Dimensions	Dispersion unit: 1,800 • 430 • 300 mm (H • W • D)
Weight	Approx. 19 kg

APPLICATIONS

- All applications pressure-resistant up to 3 barg overpressure
- Dispersion of radioactive substances
- Dispersion of pharmaceutical powders
- 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/rbg1000igd>