

# RBG 2000 SD



This device disperses particles at positive pressure values of up to 3 bar and is able to use, besides air, nitrogen as dispersion gas.

Please note: The 16-, 20-, and 28-mm solid material reservoirs are pressure-resistant; the 32-mm solid material reservoir is not pressure-resistant. The solid material reservoir with a diameter of 32 mm is able to be used in the RBG 2000 SD exclusively under atmospheric conditions.

Nitrogen cannot be used as the dispersing gas in the pressure-resistant version of the RBG 2000.

## BENEFITS

- Optimal short-term and long-term dosing constancy
- Double the dosing time in comparison with the RBG 1000
- Disperses virtually any non-cohesive dusts
- Easy to switch out different solid material reservoirs and dispersion covers
- Easy to determine and adjust the mass flow
- Able to adjust higher mass flows than the RBG 1000
- Pulse mode
- Easy to clean
- Quick and easy to operate
- Reliable function
- Low maintenance
- Reduces your operating expenses

## APPLICATIONS

- Filter industry
  - Determination of fractional separation efficiency
  - Determination of total separation efficiency
  - Long-term dusting
  - Filter media and assembled filters
  - Dust filters
  - Vacuum cleaners and vacuum filters
  - Car interior filters
  - Engine air filters
- Calibrating particle measurement devices
- Flow visualization
- Inhalation experiments
- Tracer particles for LDV, PIV, etc.
- Surface coatings

## DATASHEET

Particle size range	0.1 – 100 $\mu\text{m}$
Maximum particle number concentration	Ca. $10^7$ particles/cm <sup>3</sup>
Volume flow	40 – 80 NL/min
Mass flow (particles)	1 – 560 g/h (with an assumed compacted density of 1 g/cm <sup>3</sup> )
Filling height	180 mm
Filling quantity	36 g (reservoir $\varnothing$ = 16 mm), 56 g (reservoir $\varnothing$ = 20 mm), 110 g (reservoir $\varnothing$ = 28 mm), 144 g (reservoir $\varnothing$ = 32 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	16, 20, 28, 32 mm
Aerosol outlet connection	Dispersion cover type A: $\varnothing_{\text{inside}} = 5$ mm, $\varnothing_{\text{outside}} = 8$ mm; Dispersion cover type D: $\varnothing_{\text{inside}} = 5$ mm, $\varnothing_{\text{outside}} = 8$ mm
Dispersion lid	Type A, Type D
Dimensions	1.160 • 530 • 500 mm (H • B • T)
Weight	Approx. 40 kg