

# RBG 2000 D



This device disperses particles at positive pressure values of up to 3 bar.

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 D exclusively under atmospheric conditions.

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

## BENEFITS

- Pressure-resistant at positive pressure values of up to 3 bar
- 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

- 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 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/ $\text{cm}^3$
Volume flow	40 – 80 $\text{NL}/\text{min}$
Mass flow (particles)	1 – 560 $\text{g}/\text{h}$ (with an assumed compacted density of $1 \text{ g}/\text{cm}^3$ )
Filling height	180 mm
Filling quantity	36 g (reservoir $\varnothing = 16 \text{ mm}$ ), 56 g (reservoir $\varnothing = 20 \text{ mm}$ ), 110 g (reservoir $\varnothing = 28 \text{ mm}$ ), 144 g (reservoir $\varnothing = 32 \text{ mm}$ )
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	Up to 3 $\text{bar}_g$ overpressure
Compressed air connection	Quick coupling
Feed rate	5 – 700 $\text{mm}/\text{h}$
Reservoir inner diameter	16, 20, 28 mm
Aerosol outlet connection	Dispersion cover type A: $\varnothing_{\text{inside}} = 5 \text{ mm}$ , $\varnothing_{\text{outside}} = 8 \text{ mm}$ ; Dispersion cover type D: $\varnothing_{\text{inside}} = 5 \text{ mm}$ , $\varnothing_{\text{outside}} = 8 \text{ mm}$
Dispersion lid	Type A, Type D
Dimensions	1.160 • 530 • 500 mm (H • B • T)
Weight	Approx. 40 kg