



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 RGB 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 over-pressure
- 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 $\text{NI}/\text{min}$ | Mass flow (particles)                 | 1 – 560 g/h (with an assumed compacted density of 1 $\text{g}/\text{cm}^3$ )   |
| 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    | Air                            | Maximum counter pressure              | Up to 3 bar <sub>g</sub> 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: $\varnothing_{\text{inside}} = 5$ mm, $\varnothing_{\text{outside}} = 8$ mm; Dispersion cover type D: $\varnothing_{\text{inside}} = 5$ mm, $\varnothing_{\text{outside}} = 8$ mm |
| Dispersion cover          | Type A, Type D                 | Dimensions                            | 1.160 • 530 • 500 mm (H • B • T)   |
| Weight                    | Approx. 40 kg                  |                                       |  |