RBG 1000 SD







This device disperses particles at positive pressure values of up to 3 bar and can also use nitrogen, in addition to air, as the dispersing gas.

Optional operation with low pressure from 300 mbar absolute is possible.

The 7-, 10-, 14- or 20-mm feed stock reservoirs are pressure-resistant.

For operation with low pressure special pressure-resistant feed stock reservoirs are needed. Their piston is strongly connected to the feeding unit by a claw. This enables an undisturbed operation with low pressure. Old RBG models can be upgraded with this function by Palas®.

The solid material reservoir with a diameter of 28 mm is not pressure-resistant, but can be used with the RBG 1000 SD under atmospheric conditions.

BENEFITS

- Pressure-resistant up to 3 barg overpressure
- Optional:Low pressure operation from 300 mbar absolute
- Nitrogen as dispersing gas
- Optional: Remote control or computer-controlled

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



DATASHEET

Particle size range	$0.1-100~\mu \mathrm{m}$	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 \emptyset = 7 mm), 5.5 g (reservoir \emptyset = 10 mm), 10.8 g (reservoir \emptyset = 14 mm), 22 g (reservoir \emptyset = 20 mm), 43 g (reservoir \emptyset = 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, nitrogen	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: $\varnothing_{\text{inside}} = 5 \text{ mm}$, $\varnothing_{\text{outside}} = 8 \text{ mmDispersion cover type B:}$ $\varnothing_{\text{inside}} = 3.6 \text{ mm}$, $\varnothing_{\text{outside}} = 6 \text{ mmDispersion cover type:}$ $\varnothing_{\text{inside}} = 2.5 \text{ mm}$, $\varnothing_{\text{outside}} = 6 \text{ mm}$
Dispersion cover	Type A, type B, type C, type D	Dimensions	465 • 320 • 200 mm (H • W • D)
Weight	Approx. 19 kg		