RBG 1000 D



This device disperses particles at positive pressure values of up to 3 bar. Optional operation with low pressure from 300 mbar absolute is possible.

The feedstock reservoirs with a diameter of 7, 10, 14, or 20 mm are pressure-resistant.

For operation with low pressure, special pressure-resistant feedstock 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 D under atmospheric conditions.

In the RBG 1000 D pressure-resistant version, compressed air is used as the disgerger gas. Operation with nitrogen or other inert gases is not permitted.

BENEFITS

- Pressure-resistant to 3 bar over pressure
- Optional: Low pressure operation from 300 mbar absolute, remote control orcomputer-controlled
- Highest short-term and long-term dosing constancy
- Disperses virtually all non-cohesive dusts
- Easy exchange of different solid material reservoirs and dispersing covers
- Easy determination and adjustment of the mass flow
- Pulse mode
- Device easy to clean
- Quick and easy to operate
- Reliable operation
- Little maintenance required
- 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 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

PALAS

DATASHEET

Particle size range	$0.1-100~\mu { m m}$	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	Maximum counter pressure	0.2 barg
Compressed air con- nection	Quick coupling	Feed rate	5 – 700 mm/h
Reservoir inner diame- ter	7, 10, 14, 20 mm	Aerosol outlet connec- tion	Dispersion cover type A: $Ø_{inside} = 5 \text{ mm}, Ø_{outside} = 8 \text{ mmDispersion cover type B:}$ $Ø_{inside} = 3.6 \text{ mm}, Ø_{outside} = 6 \text{ mmDispersion cover type:}$ $Ø_{inside} = 2.5 \text{ mm}, Ø_{outside} = 6 \text{ mm}$
Dispersion cover	Type A, type B, type C, type D	Dimensions	465 • 320 • 200 mm (H • W • D)
Weight	Approx. 19 kg		