RBG 1000 ID







The dispersion unit and the electrical control unit can be set up up to 2 m apart from each other.

The return speed for container changeover is optimized on the RBG 1000 I and is faster than on the other RBG variants. It is only approx. 1 minute.

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

The feedstock reservoirs with a 7, 10, 14, or 20 mm diameter 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 28 mm diameter feedstock reservoir is not pressure resistant, but can be used in the RBG 1000 ID when dosing in atmospheric conditions.

In the RBG 1000 D pressure-resistant version, compressed air is used as the disgerger ...

BENEFITS

- Pressure resistant up to 3 barg overpressure
- Optional: negative pressure operation from 300 mbar absolute, remote control or computer control
- Highest short-term and long-term dosing consistency
- Disperses practically all non-cohesive dusts
- Easy exchange of different solids containers and dispersion lids
- · Easy determination and adjustment of mass flow
- Pulse operation
- · Easy cleaning of the unit
- · Quick and easy operation
- · Reliable function
- Low maintenance
- Reduces your operating costs

APPLICATIONS

- All applications pressure-resistant up to 3 barg overpressure
- Dispersion of radioactive substances
- Dispersion of pharmaceutical powders
- 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 | Maximum counter pressure | 0.2 barg |
| Compressed air connection | Quick coupling | Feed rate | 5 – 700 mm/h |
| Reservoir inner diameter | 7, 10, 14, 20, 28 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 | Dispersion unit: 430 • 300 • 180 mm (H • W • D) |
| Weight | Approx. 19 kg | | |
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