

Loss-In-Weight Feeder EAD-B/25



Features

- Net weighing range by default: up to 25 kg / 25 litres, extensible for 100 kg/100 litres for example.
- Depending on screw geometry, dosing capacities between 0.1 and 25.0 dm³/min are attainable.
- Dosing and weighing accuracy of about ± 5 g in batch mode and about ± 0.1 % when constantly dosing is feasible.
- Functional, tried and trusted concept as a result of long-term deployment which have been always adjusted to requirements.
- Very high dosing and weighing accuracy.
- Dosing good bucket with residual discharge.
- Screw diameter Ø30, Ø50 and Ø80mm.
- Optional with stirrer, driven by a separate screw gear motor with PTC thermal protection. The stirring unit is retrofit able.
- Drive over frequency adjustable screw gearbox motor with PTC thermal protection.
- Strain gauge sensor.
- Optimal tare / net ratio.
- Absolute dependability, also under harsh operating conditions by very solid construction.

Application

- Wherever the precise dosing of powdery or granule type products in compliance with the related laboratory accuracy standards - even under harsh operating conditions - is required.
- Can be applied to weigh in products or materials admix them to compounds or to fill them into receptacles.
- Also suitable for poorly flowing and/or bridging types of products due to integrated stirring device.

Functional principle

- The device operates in accordance with the gravimetric dosing principle realised with a screw feeder integrated in a full load weighing system. Bulk material and tare load are being weighed both at the same time.
- The dosing material hoppers are either filled manually or all automatically, e.g. by means of dosing devices of the DSR-25 series. It must be made sure that no bulk material follows into the hopper while the dosing procedure is in process.
- Optimum control sequences are achieved when applying a digital weighing and dosing system of the MWS series (see separate description).

Basic configuration

- Conveying distance by default: 500 mm.

- Dosing hopper's useful capacity: 25 dm³.
- Double-lead full blade feed screw, Ø30, Ø50 or Ø80mm. Power transmission effected via rigid coupling that is sealed by means of a shaft sealing ring.
- Screw driven by a frequency adjustable screw gear motor.
- Strain gauge transducer with mechanical overload protection to protect against pressure and tensile loads.
- Base plate with vibration dampers for mounting on the on site base frame.
- Electric connection of strain gauge sensor by plug.

Additional and special equipment

- Product touching parts made of stainless steel (1.4301).
- Stirrer with separate gear motor (three-phase AC), also retrofit able.
- Automatic control weight test, weight put-on via pneumatic cylinders, controlled over a 5/2-way magnetic valve. Control of the test position via read contact.
- Stop valves of type DS-KLG or DS-KLV (see separate description).
- Supply bucket by customer wish.
- Lid with concentric gasket, filling or control nozzle.
- Special geometry of screw or stirrer on request.

Technical data

- Typical dosing performance at 50 Hz:
(Material dependent, values without engagement)

EAD-B25/30	0,6 l/Min	FU-mode (0,06....0,9)
EAD-B25/50	3,0 l/Min	FU-mode (0,3.....5)
EAD-B25/80	15 l/Min	FU-mode (1,5.....25)

- Electric connection of the strain gauge transducer and the control weight test via two coded plug connectors on the casing back.
- Output signal of the strain gauge sensor: 2 mV/V.
- Supply voltage of the magnetic valve (if control weight test is integrated): 24 V_{DC}.
- Power supply for the motor: 400V_{AC} / 50Hz.
- Compressed air supply: 5 to 6 bar, connection G 1/8" (only if control weight test is integrated).
- Allowed ambient temperature: 0°C to +50°C.

Standards and admittances

- Declaration of conformity according to the valid European standards.
- CE-label
- Devices in ATEX-version in preparation

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Dimensions of the standard equipped scale EAD-B/25

Unit of measurement: mm.

