

▶ DosWeigh Belt

- **Micro feeder for precise weighing and dosing processes**
- **Especially for abrasive and breakable bulk materials**
- **Mechanically compact design**
- **For capacities from 5 to 500 l/h**
- **Very high output accuracy**



DESCRIPTION:

The micro feeder DosWeigh Belt is a gravimetric dosing system with a mini-conveyor belt operating as a discharging device. Therefore, the DosWeigh Belt is specifically suitable for:

- breakable and brittle bulk materials like almonds, nuts, cereals and similar goods which can be dosed by means of a conveyor belt without getting damaged, or
- abrasive and fine-grained bulk materials which cause considerably less abrasion during discharge.

With the DosWeigh Belt these substances can be weighed continuously or in batches with a discharge accuracy of up to 0.5 %.

The micro feeder DosWeigh Belt consists of a weighing hopper with a flange-connected mini conveyor belt. Both units are positioned on a base construction with a 4-point support. An adjustable layer thickness blind at the hopper exit facilitates a controlled material distribution in length and width. The dimensions of the conveyor belt are chosen in accordance with the application. The speed of the mini conveyor belt is largely adjustable to the gear reduction ratio, thus achieving the accurate dosage.

FUNCTIONING:

The micro feeder works gravimetrically. The material flow rate is recorded and analysed during the output.

The continuous material output within the weighing container is recorded by the load cells. Optionally, the belt speed can be measured via an encoder.

The signal of the load cells is recorded and analysed by a control unit. Depending on the control unit, data about current and added weight are available. By means of a differential weighing process, it can also calculate the current output capacity in kg/h.



TECHNICAL DATA:

Micro feeder DosWeigh Belt

Conveying capacity:	from 5 to 500 l/h, subject to belt width and belt speed
Measuring error:	up to +/- 0.5 % in the range from 20 to 100 % of max. throughput capacity compared to a known weighed material test sample
Operating temperature range:	nominal 0°C to + 50°C
Dimensions:	see drawing
Delivery includes:	box with substructure, load cells and junction box, discharge belt with drive, adjustable layer thickness blind, material brake within the hopper (optionally)

Load cells:	4 precision strain gauge load cells with OIML R 60 approval, accuracy class C3 (C4)
Design:	stainless steel
Power supply:	5-15 V DC (via control unit)
Output signal:	2 mV/V
Output resistance:	350 Ω
Electronic overload:	double nominal load
Connection:	6-wire cable
Combined measuring error:	nominal +/- 0.2 % of nominal load (+/- 0.015 % at C4)
Protection:	IP 68

Weighing container:	in stainless steel
Volume:	by default approx. 30 l, subject to conveyor capacity
Base frame:	painted steel RAL 5010 or upon request stainless steel

Conveyor belt:	
Achievement:	dependent on the requirements of bulk material, by default in a solid aluminium frame construction, with a flat PVC belt
Standard length of belt:	800 mm
Standard width of belt:	300 mm
Drive:	worm gear motor 230/400 V
Supplies:	lateral guidance, belt enclosure, discharging hopper, drive Parameterisation (optionally)
ATEX:	optionally zone 22 (device category 3D)