



Features

- Screw feeder based on a proved concept.
- Screw feeder diameters 30 and 50 mm.
- Special bucket shape to empty the residue.
- Different extension hoppers possible.
- Conveying lengths according to the customer's requirements.
- Cost-effective design by means of the integrated stirrer. The stirrer is driven by tooth belt.
- Drive of screw and stirrer by frequency controlled three-phase AC gear box motor with thermal protection.
- Robust construction for complete operating safety, even under the harsh production conditions.

Application

- For dosing dry, powdered and granular bulk materials.
- Stirrer with variable geometry allows dosage of poorly flowing materials.
- Dosage rate up to 5.5 litre / minute, variable up to 1:10, depending on the screw diameter, rotation speed and type of bulk material.
- As a discharge for silo installations and big-bags.
- Also available as loss-in-weight feeder type EAD-B/10 in combination with a platform scale.
- Can be operated as a separate unit with manual filling.
- In conjunction with the shut-off valves of the DS-KLV, DS-KLG or DS-ASG series, also usable as a variable feeding element, e.g. for single and multi-component scales type ED-90, ED-91 and ED-21.

Operating principle

- The screw feeder functions according to the moving auger principle where the bulk material is moved forwards in a tube by a rotating screw. With a horizontal arrangement of the feed screw, friction-induced rotation of the bulk material with the screw is prevented by its own weight. With this arrangement, however, the bulk material must not completely cover the screw lead and its core shaft as this would eliminate sliding surfaces and cause the rotation of the material with the screw. Consequently, the external diameter of the dosing screws in our units gradually becomes wider towards the point of discharge.

Standard equipment

Dosing hopper: 10 litre net volume.

- Inlet flange for suspended attachment to existing hoppers, or mounting for supply hoppers and extension hoppers, covers, etc.

- Trough shaped bucket to empty the residue with integrated stand plate.

Screw feeder:

- Solid, single-flight blade screw (double-flight in the discharge area) with core shaft and progressively increased external diameter
- Dosing star to break up the bulk material at the discharge position.
- Outlet tube corresponding to the conveying length and the screw diameter.
- Made of steel St37 ground coat and final coat on customer's request.

Accessories / Options

- Concentric gasket to partition of the outlet when integrating the customers own receiving hoppers.
- Cover with concentric gasket, inlet pipe- and / or control nozzle.
- Supply extension hoppers, volumes according to the clients requirements.
- Angled connecting piece at the outlet for transition to down pipes.
- Clamping link to additionally support the outlet tube.
- Bulk material contacted parts in stainless steel.
- Inclined conveyors on request.
- Flap closures as shut-off valves to avoid inflight material.

Technical Data

- Typical conveying capacity with 50 Hz (depending on product, specifications without warranty)

DSR-10/30	0.6 l/Min	FQ regulation (0.06 ... 0.9)
DSR-10/50	3.0 l/Min	FQ regulation (0.3 ... 5)

- Maximum recommend feed lengths up to 1500 mm and longer on special requests.
- Feed screw lead (inclination) 30 or 50 mm, depending upon the outside diameter
- Outside pipe diameter 40 or 60 mm, depending upon the screw diameter.
- Permissible ambient temperatures 0 °C to + 50 °C.
- Power of the three-phase current motor drive, according to dosage requirements up to 0.55 kW.

Standards and norms

- According to conformity explanation the valid European standards
- EC declaration
- Devices in ATEX-version in preparation

Dosing Device DSR-10



Dimensions of basic equipment dosing device DSR-10

Unit of measurement: mm

