



# Granule screw

## DDW-M-DS80-100(200)

Gravimetric



### General Information

The DS80 screw feeder is capable of reliably metering granules as well as free-flowing and fine-grained bulk ingredients at higher feed rates. There are two feeder types, the type S for standard, or the E for enhanced.

The [type S](#) has the following components: screw drive assembly, 100 dm<sup>3</sup> or 200 dm<sup>3</sup> (l) extension hopper, hopper lid, 3 phase drive unit connected to the screw tube by quick release clamps and feed screw. Cleaning and screw change for the type S is done by opening the latch and pulling the screw out with the drive assembly.

The [type E](#) has the same components as the type S but includes a valve drain for [complete ingredient discharge](#) and a [sliding guide](#) to allow the screw drive assembly to be disconnected from the screw and moved to one side allowing [full screw removal](#) from the rear.

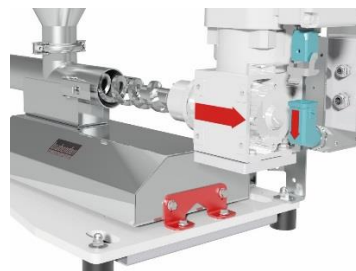
These components are mounted on the analog [weighing system](#) MS6, or the digital weighing system DLS6, both featuring a high resolution robust load cell with serial data transmission and advanced filtering technology.

The unit conforms to CE directives.



### Model Specifications

Screw drive	AC 230/400V/460V
Drive power	0.37 kW (0.5 HP)
Screw speed	270 min <sup>-1</sup>
Screw speed optional	142 min <sup>-1</sup>
Agitator in screw trough	No
Agitator drive	--
Drive power	--



[DDW-MS\(DLS\)6-DS80-S-100\(200\)](#)



[DDW-MS\(DLS\)6-DS80-E-100\(200\)](#)

### Control Modules

Control and speed modules are offered either mounted onto the feeder ([Congrav® CM-E](#)) or are available for mounting in a separate control panel ([Congrav® CB-E](#) or [Congrav® CB-S](#)).

Controls can communicate directly to most host/ PLC systems or to Brabender Technologie Congrav® Operator Interfaces.

### Technical Drawings and Dimensions

	gravimetric feeders	
	Control module CB	Control module CB
S-type (standard)	<a href="#">DDW-MS(DLS)6-DS80-S-100</a>	<a href="#">DDW-MS(DLS)6-DS80-S-100 CM</a>
E-Type (enhanced)	<a href="#">DDW-MS(DLS)6-DS80-E-100</a>	<a href="#">DDW-MS(DLS)6-DS80-E-100 CM</a>
S-type (standard)	<a href="#">DDW-MS(DLS)6-DS80-S-200</a>	<a href="#">DDW-MS(DLS)6-DS80-S-200 CM</a>
E-type (Enhanced)	<a href="#">DDW-MS(DLS)6-DS80-E-200</a>	<a href="#">DDW-MS(DLS)6-DS80-E-200 CM</a>



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### Available Screw Sizes and Feed Rates

Screw type	Designation Ø / ρ [mm]	Tube designation	Tube dia.Ø [mm]	Max. speed [min <sup>-1</sup> ]	Max. feed rate * [dm <sup>3</sup> /h]	Max. feed rate * [cuft/hr]
<a href="#">Spiral screw</a>	S 43/27	843	88.9x2.3	142 (270) / 100Hz	670 (1274)	23.7 (45.0)
	S 43/42	843	88.9x2.3	142 (270) / 100Hz	1074 (2043)	37.9 (72.1)
	S 52/39	843	88.9x2.3	142 (270) / 100Hz	1095 (2082)	38.7 (73.5)
	S 5262	843	88.9x2.3	142 (270) / 100Hz	1803 (3428)	63.7 (121.1)
	S 67/45	843	88.9x2.3	142 (270) / 100Hz	1566 (2978)	55.3 (105.2)
	S 67/71	843	88.9x2.3	142 (270) / 100Hz	2555 (4858)	90.2 (171.6)

\* Theoretical values at 100% screw filling level and motor speed. Depending on the flow characteristics the screw filling level may decrease to 50%. Further limitations must be considered for gravimetric feeding, as max. speed should be reduced to allow for bulk density variations. [How to read the table of screws](#)

### Technical Specification

Ambient temperature:	0°C to +45°C / (32°F to 113°F)
Humidity of the air:	up to 85% without condensation
max. underpressure/overpressure:	3 hPa (3 mbar) / (1.2 Inches of water)
Ingredient temperature:	0°C to +60°C / (32°F to 122°F) (others upon request)
max. bulk density (gravimetric) with hopper size 100 dm <sup>3</sup> :	1.5 kg/dm <sup>3</sup> (96 lb/cuft) (others upon request)
max. bulk density (gravimetric) with hopper size 200 dm <sup>3</sup> :	0,74 kg/dm <sup>3</sup> (46 lb/cuft) (MS6); 1,36 kg/dm <sup>3</sup> (85 lb/cuft) (DLS6) (others upon request)
Screw trough, screw tube, hopper lid:	1.4301 (304)
Hopper lid:	1.4301 (304) <a href="#">for automatic refilling with vent pipe</a>
Spiral screws:	1.4571 (316)
Vertical outlet:	polyurethane, food-proof acc. to LMBG
Non-contact components:	Steel painted (RAL 7035), aluminium
Screw drive:	0.37 Kw (1/2 HP), IP65; ISO class F; TEFC; frequency-controlled
Power supply:	AC 230/400 V or 266/460 V – 60Hz **
Ambient temperature:	0°C to +45°C / (32°F to 113°F)
Net weighing range MS6 / DLS6 with hopper size 100 dm <sup>3</sup> :	159 kg (350 lb) / 284 kg (626 lb)
Net weighing range MS6 / DLS6 with hopper size 200 dm <sup>3</sup> :	147 kg (324 lb) / 272 kg (600 lb)

\*\* 3 phase motors are designed for a power supply of: 230/400 V, 50 (60) Hz, and for the operation in TT networks, TN networks or networks with earthed neutral. For different networks adaptation measures are necessary.

### Options and Accessories

- Flexible [inlet and vent connection](#)
- [Filter bag](#) for vent
- Vertical outlet with [flexible connection](#)
- Horizontal outlet with [flexible connection](#)
- Interchangeable screws
- [Maintenance disconnect box](#), [electrical quick disconnect](#)
- Versions for higher or lower temperatures
- Cleaning and refill systems upon request