



Granule screw

DDW-M-DS28

Gravimetric



General Information

The [DS28](#) screw feeder is capable of reliably metering granules as well as free-flowing and fine-grained bulk ingredients at low feed rates. The feeder is made up of two main components. A removeable feed assembly consisting of a 10-liter hopper, lid, feed screw and screw tube. This is coupled to a base drive via a gear coupling and includes the baseplate, load cell, 3 phase gear motor and drive assembly.

The [DS28](#) screw feeder can be [easy disassembled](#) for wet or dry cleaning: the quick release clamps enables removal of the complete unit from the 3 phase motor. The drive remains with the weighing system.

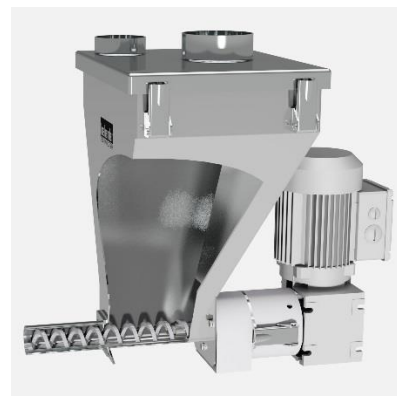
These components are mounted on a robust high-resolution analogue [MS2](#) or digital [MD2](#) weighing system, both featuring serial communication and advanced filtering technology.

The unit conforms to CE directives.



Model Specifications

Screw drive	AC 230/400V/460V
Drive power	0.12 kW (0.16 HP)
Screw speed	254 min ⁻¹
Screw speed optional	66 min ⁻¹
Agitator in the screw trough	No
Agitator drive	--
Drive Power	--



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 CM
Analog weighing system MS2	DDW-MS2-DS28-10	DDW-MS2-DS28-10 CM
Digital weighing system MD2	DDW-MD2-DS28-10	DDW-MD2-DS28-10 CM



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Available Screw Sizes and Feed Rates

Screw type	Designation Ø / p [mm]	Tube designation	Tube dia. [mm]	Max. speed [min ⁻¹]	Max. feed rate* [dm ³ /h]	Max. feed rate* [cuft/hr]
Spiral screw	S 13/10	210	25.0x2.0	66 (254) / 100Hz	8 (30)	0.3 (1.1)
	S 13/15	210	25.0x2.0	66 (254) / 100Hz	12 (47)	0.4 (1.7)
	S 20/15	320	35.0x1.5	66 (254) / 100Hz	27 (103)	1.0 (3.6)
	S 20/19	320	35.0x1.5	66 (254) / 100Hz	35 (134)	1.2 (4.7)
	S 20/24	320	35.0x1.5	66 (254) / 100Hz	45 (174)	1.6 (6.1)
	S 24/35	320	35.0x1.5	66 (254) / 100Hz	78 (302)	2.8 (10.7)

* 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 Specifications

Ambient temperature:	0°C to +45°C / (32°F to 113°F)
Humidity of the air:	up to 85% without condensation
Max. vacuum/pressure:	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):	1.2 kg/dm ³ (75 lb/cuft) (others upon request)
Screw trough, screw tube, hopper cover:	1.4301 (304)
Hopper cover:	1.4301 (304) automatic refilling or manual refilling
Spiral screws, vertical outlet:	1.4571 (316)
Non-contact components:	Steel painted (RAL 7035), aluminium
Screw drive:	0.12 kW (0.16 HP), IP65; ISO class F; TEFC; frequency-controlled
Power supply:	AC 230/400 V - 50Hz or 266/460 V - 60Hz **
Net weighing range MS2:	12 kg (26.5 lb)
Net weighing range MD2:	12 kg (26.5 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