

Brabender Loss-in-Weight Feeder DDW-MS2(3)-DSR28-5(10)[20]

The Brabender DDW-MS2(3)-DSR28-5(10)[20] loss-in-weight feeder, the gravimetric version of the Brabender DSR28 screw feeder, is capable of reliably and accurately metering bulk ingredients at low feed rates.

The feeder has the following main components: a free-standing mounting base/scale with a high-accuracy strain gauge load cell, a Brabender screw feeder DSR28 with a horizontal stirring agitator in the screw trough, and an extension hopper for ingredient storage.

The screw feeder provides mass flow of ingredient and consistent screw filling since the stirring agitator mixes the ingredient, prevents bridging and promotes ingredient flow into the screw. Extension hoppers are available with 5 dm³ (0.18 ft³), 10 dm³ (0.35 ft³) or 20 dm³ (0.71 ft³) volume, depending on the ingredient and feed rate.

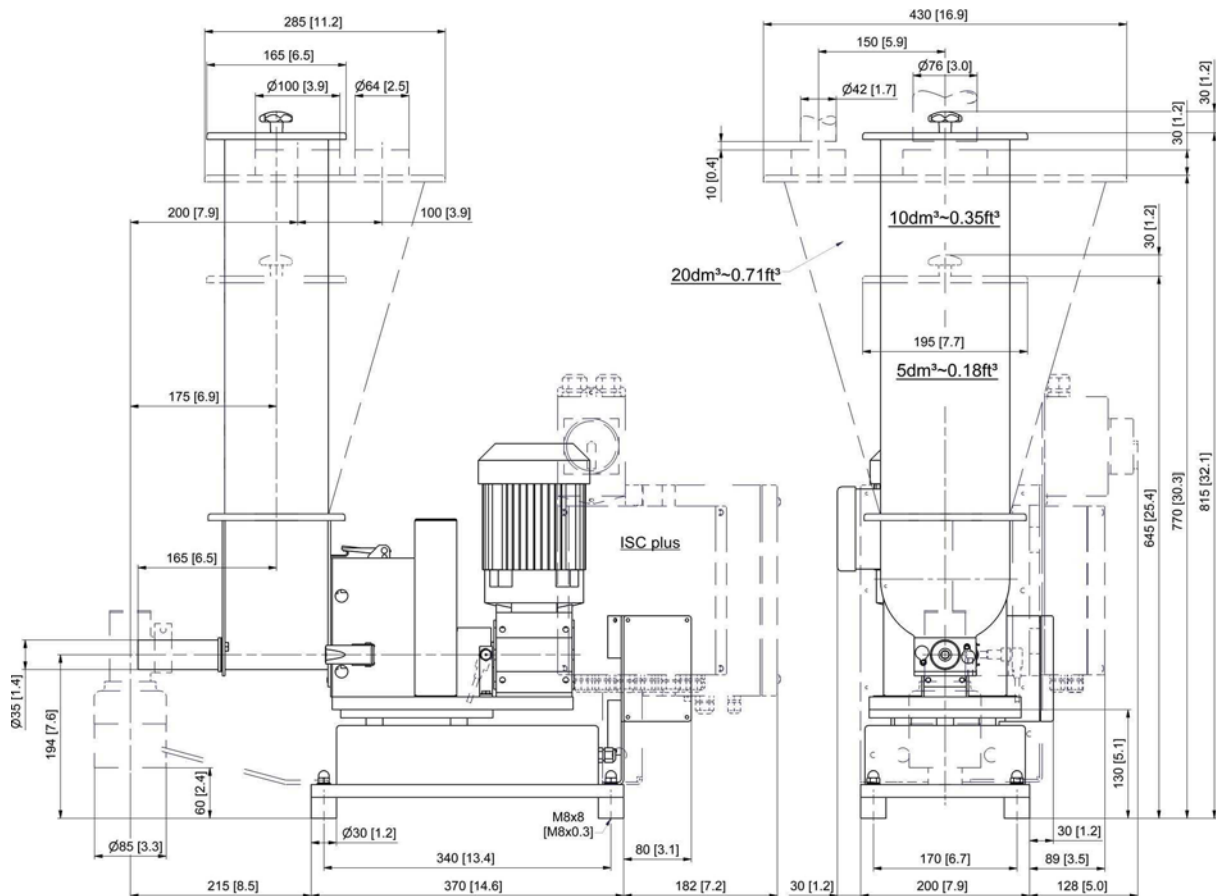
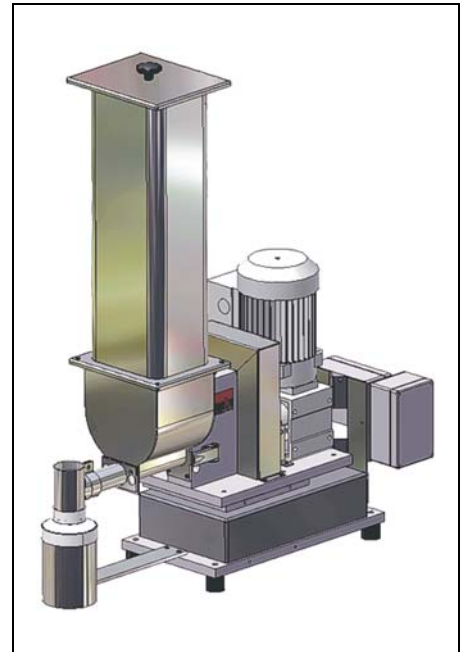
All components are fully mounted and wired to

junction boxes.

Options include: versions with onboard control / speed control electronics ("ISC plus"), interchangeable screws, and a special stirring agitator with shorter blades for pellet feeding.

Ingredient contact steel parts are made of stainless steel. Mild steel parts are painted light grey (RAL 7035).

The feeder conforms to CE directives.



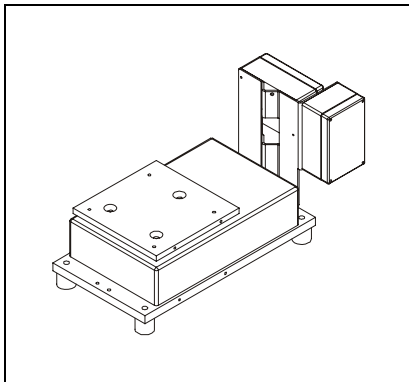
Weight with 5 dm³/0.18 ft³ extension hopper approx. 31 kg (68 lb)
 Weight with 10 dm³/0.35 ft³ extension hopper approx. 33 kg (73 lb)
 Weight with 20 dm³/0.71 ft³ extension hopper approx. 37 kg (82 lb)

Technical Data

Available screw sizes and feed rates

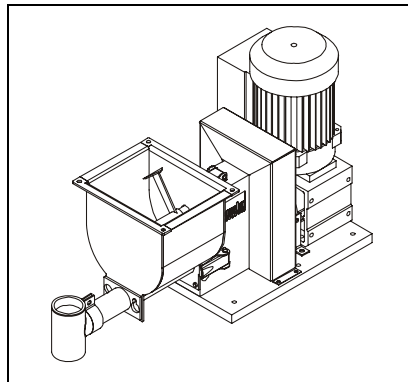
Screw Type	Ø (mm) x p (mm)	Tube designation	Tube dia. (mm)	Speed (rpm)	Max. feed rate (dm³/hr)*	Max. feed rate (ft³/hr)*
Spiral Screw (S) (TA = trough agitation)	S 13/10 (TA)	160	20.0 x 2.0	254 (134) [66] / 100Hz	16 (8) [4]	0.55 (0.29) [0.14]
	S 13/15 (TA)	160	20.0 x 2.0	254 (134) [66] / 100Hz	26 (13) [7]	0.90 (0.48) [0.23]
	S 20/15 (TA)	210	25.0 x 2.0	254 (134) [66] / 100Hz	53 (28) [14]	1.87 (0.99) [0.49]
	S 20/19 (TA)	210	25.0 x 2.0	254 (134) [66] / 100Hz	72 (38) [19]	2.53 (1.33) [0.66]
	S 20/24 (TA)	210	25.0 x 2.0	254 (134) [66] / 100Hz	95 (50) [25]	3.35 (1.77) [0.87]
	S 24/35	260	30.0 x 2.0	254 (134) [66] / 100Hz	215 (113) [56]	7.59 (4.00) [1.97]
	S 28/22	320	38.0 x 3.0	254 (134) [66] / 100Hz	178 (94) [46]	6.27 (3.31) [1.63]
	S 28/35	320	38.0 x 3.0	254 (134) [66] / 100Hz	298 (157) [77]	10.52 (5.55) [2.73]
	Pellet Screw (S)	S 13/10	210	25.0 x 2.0	254 (134) [66] / 100Hz	28 (15) [7]
S 13/15		210	25.0 x 2.0	254 (134) [66] / 100Hz	46 (24) [12]	1.61 (0.85) [0.42]
S 20/15		320	38.0 x 3.0	254 (134) [66] / 100Hz	96 (50) [25]	3.38 (1.78) [0.88]
S 20/19		320	38.0 x 3.0	254 (134) [66] / 100Hz	128 (67) [33]	4.51 (2.38) [1.17]
S 20/24		320	38.0 x 3.0	254 (134) [66] / 100Hz	167 (88) [44]	5.91 (3.12) [1.54]
S 24/35		320	38.0 x 3.0	254 (134) [66] / 100Hz	298 (157) [77]	10.52 (5.55) [2.73]

* Theoretical values at 100% screw filling level and motor speed. Depending on the flow characteristics the screw filling level may decrease to 50%. In addition, max. speed should be reduced to allow for bulk density variations. Values in brackets refer to optional motors 134 rpm/100 Hz and 66 rpm/100 Hz.



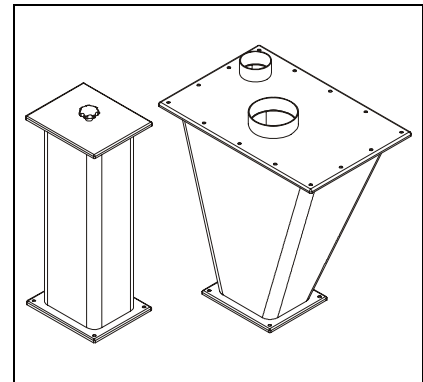
Mounting Base / Scale MS2(3)

- Free-standing mounting base with vibration isolation feet and junction boxes
- High-accuracy strain gauge load cell
- Approx. net weighing ranges:
 - 9 kg/20 lb (MS2) or 29 kg/64 lb (MS3) (5 dm³/0.18 ft³ extension hopper)
 - 7 kg/15 lb (MS2) or 27 kg/60 lb (MS3) (10 dm³/0.35 ft³ extension hopper)
 - 3 kg/7 lb (MS2) or 23 kg/51 lb (MS3) (20 dm³/0.71 ft³ extension hopper)



Screw Feeder DSR28

- Stainless steel housing
- Exchangeable screw
- Variable frequency driven 3 phase AC gear motor (0.25 kW, 230/400 V, IP65, TEFC), screw speed 254 rpm/100 Hz (optional 134 rpm/100 Hz, 66 rpm/100 Hz)
- Horizontal stirring agitator in the screw trough (chain driven from screw drive)
- Ingredient contact surfaces are stainless steel SS 1.4301 (304)



Extension Hoppers

- Extension hoppers
 - 5 dm³ (0.18 ft³), straight walled
 - 10 dm³ (0.35 ft³), straight walled
 - 20 dm³ (0.71 ft³), steep sided
- Cover with inlet pipe and vent pipe for automatic refill, or
- Lift off cover with handle for manual refill
- Stainless steel SS 1.4301 (304)

Accessories

- Flexible connections
- Exchange screws
- Exchange screw tubes
- Safety grate for manual refill

Options

- Version without discharge connection pipe
- Screw tube without vertical downspout
- Pressure compensation
- Explosion-proof designs
- Stirring agitator with shorter blades for pellet feeding

Controls

Feeder control and speed modules are offered either mounted on the feeder or for mounting in a separate panel. Controls can communicate directly to most host/PLC systems or to Brabender Congrav® Operator Interfaces (see Congrav® Works Standards)



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