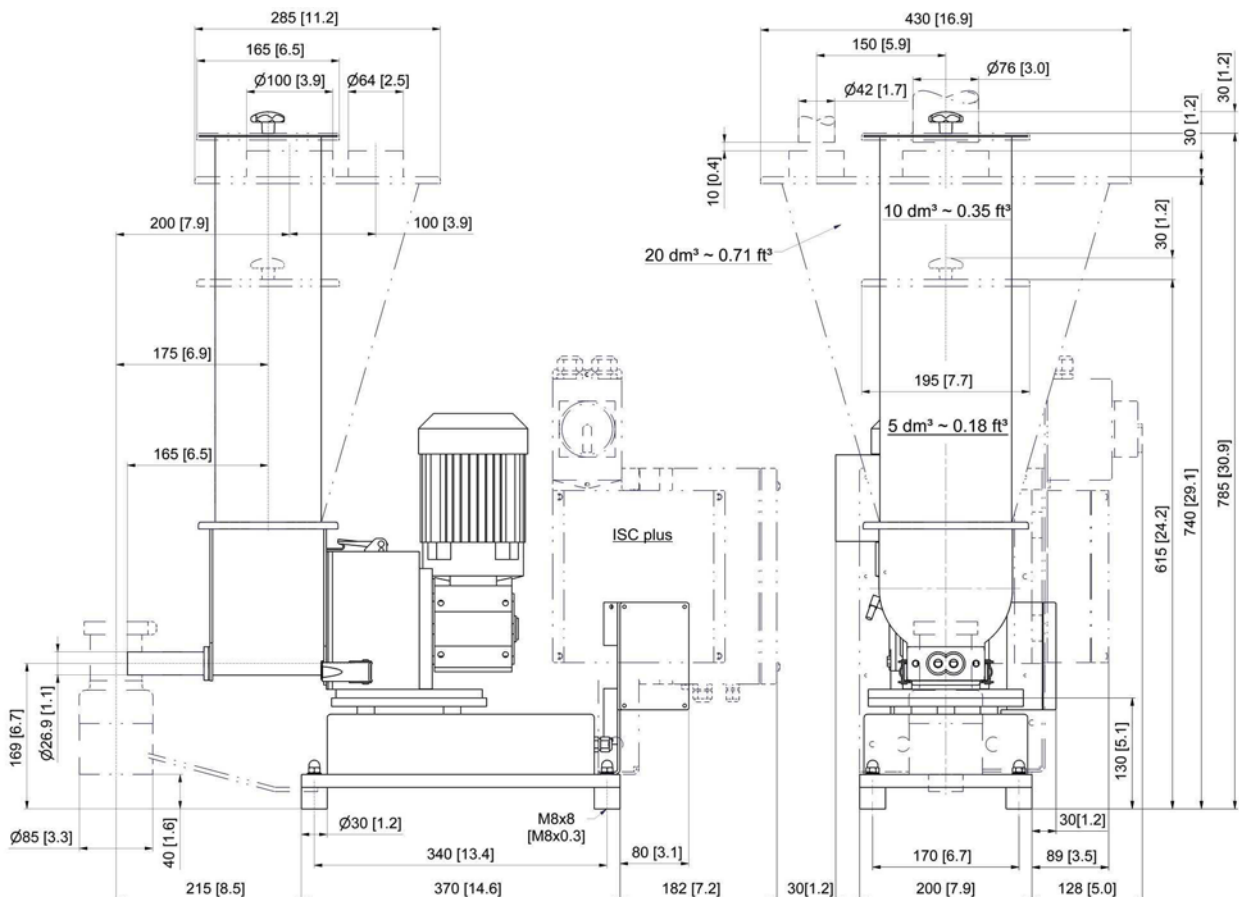
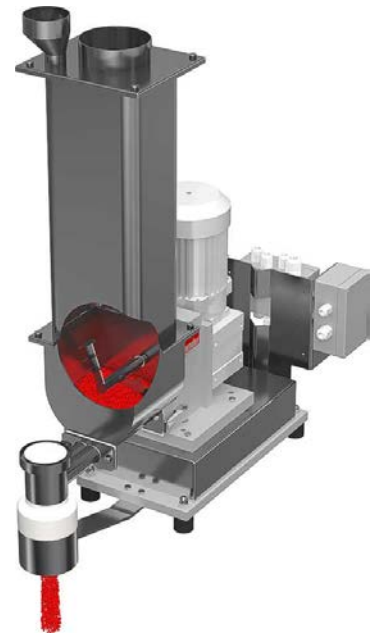


# Brabender Loss-in-Weight Feeder DDW-MD2(3)-DDSR20-5(10)[20]

The Brabender DDW-MD2(3)-DDSR20-5(10)[20] loss-in-weight feeder, the gravimetric version of the Brabender DDSR20 twin screw feeder, is capable of reliably and accurately metering difficult flowing powders at low feed rates, particularly poor flowing or floodable ingredients. The feeder has the following main components: a free-standing mounting base/scale with a digital load cell ("DigiMASS-2"), a Brabender twin screw feeder DDSR20 with a horizontal stirring agitator in the screw trough, and an extension hopper for ingredient storage. The DigiMASS-2 load cell has the following features: a theoretical resolution of 4,000,000:1, twin vibrating wire technology which compensates for temperature change and external vibration, filtering software, and a serial interface ensuring high-speed data communication. The screw feeder provides mass flow of ingredient and consistent screw filling since the stirring

agitator prevents bridging and promotes ingredient flow into the screw. Extension hoppers are available with 5 dm<sup>3</sup> (0.18 ft<sup>3</sup>), 10 dm<sup>3</sup> (0.35 ft<sup>3</sup>) or 20 dm<sup>3</sup> (0.71 ft<sup>3</sup>) 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") and interchangeable twin screws. 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 dm<sup>3</sup>/0.18 ft<sup>3</sup> extension hopper approx. 29 kg (64 lb)  
 Weight with 10 dm<sup>3</sup>/0.35 ft<sup>3</sup> extension hopper approx. 31 kg (68 lb)  
 Weight with 20 dm<sup>3</sup>/0.71 ft<sup>3</sup> extension hopper approx. 35 kg (77 lb)

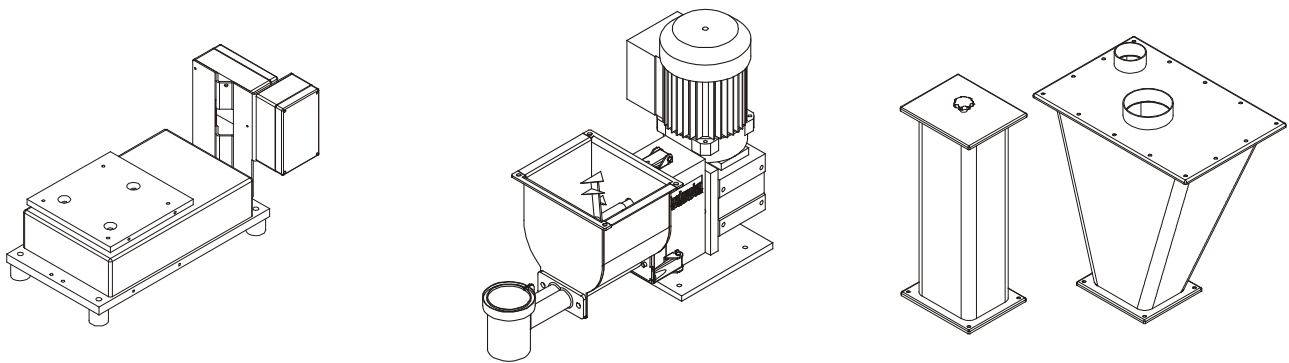
Dimensions in mm (in)

## 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 (dm <sup>3</sup> /hr)*	Max. feed rate (ft <sup>3</sup> /hr)*
<b>Double Spiral Screw (SS)</b>	SS 13/10	200	24.0 x 2.0	485 (240) [85] / 100Hz	60 ( 30) [11]	2.12 (1.05) [0.37]
	SS 13/10	223	26.9 x 2.3	485 (240) [85] / 100Hz	125 ( 62) [22]	4.42 (2.19) [0.77]
	SS 13/15	200	24.0 x 2.0	485 (240) [85] / 100Hz	98 ( 48) [17]	3.45 (1.71) [0.60]
	SS 13/15	223	26.9 x 2.3	485 (240) [85] / 100Hz	195 ( 97) [34]	6.90 (3.41) [1.21]
<b>Twin Spiral Screw (TS)</b>	TS 18/13	200	24.0 x 2.0	485 (240) [85] / 100Hz	150 ( 74) [26]	5.29 (2.62) [0.93]
	TS 18/13	223	26.9 x 2.3	485 (240) [85] / 100Hz	199 ( 98) [35]	7.01 (3.47) [1.23]
	TS 18/19	200	24.0 x 2.0	485 (240) [85] / 100Hz	237 (117) [41]	8.36 (4.14) [1.47]
	TS 18/19	223	26.9 x 2.3	485 (240) [85] / 100Hz	308 (152) [54]	10.88 (5.38) [1.91]
	TS 18/29	200	24.0 x 2.0	485 (240) [85] / 100Hz	380 (188) [67]	13.43 (6.65) [2.35]
	TS 18/29	223	26.9 x 2.3	485 (240) [85] / 100Hz	489 (242) [86]	17.27 (8.55) [3.03]
<b>Twin Concave Screw (TC)</b>	TC 20/12	200	24.0 x 2.0	485 (240) [85] / 100Hz	35 ( 17) [ 6]	1.23 (0.61) [0.22]
	TC 20/11	223	26.9 x 2.3	485 (240) [85] / 100Hz	67 ( 33) [12]	2.38 (1.18) [0.42]
	TC 20/20	223	26.9 x 2.3	485 (240) [85] / 100Hz	139 ( 69) [24]	4.92 (2.43) [0.86]

\* 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 240 rpm/100 Hz and 85 rpm/100 Hz.



#### Mounting Base / Scale MD2(3)

- Free-standing mounting base with vibration isolation feet and junction boxes
- Digital load cell DigiMASS-2 (2 vibrating wires)
- Approx. net weighing ranges:
  - 11 kg/24 lb (MD2) or 24 kg/53 lb (MD3) (5 dm<sup>3</sup>/0.18 ft<sup>3</sup> extension hopper)
  - 9 kg/20 lb (MD2) or 22 kg/49 lb (MD3) (10 dm<sup>3</sup>/0.35 ft<sup>3</sup> extension hopper)
  - 5 kg/11 lb (MD2) or 18 kg/40 lb (MD3) (20 dm<sup>3</sup>/0.71 ft<sup>3</sup> extension hopper)

#### Twin Screw Feeder DDSR20

- Stainless steel housing
- Exchangeable twin screw
- Variable frequency driven 3 phase AC gear motor (0.18 kW, 230/400 V, IP65, TEFC), screw speed 485 rpm/100 Hz (optional 240 rpm/100 Hz, 85 rpm/100 Hz)
- Horizontal stirring agitator in the screw trough (driven from screw drive)
- Ingredient contact surfaces are stainless steel SS 1.4301 (304)

#### Extension Hoppers

- Extension hoppers
  - 5 dm<sup>3</sup> (0.18 ft<sup>3</sup>), straight walled
  - 10 dm<sup>3</sup> (0.35 ft<sup>3</sup>), straight walled
  - 20 dm<sup>3</sup> (0.71 ft<sup>3</sup>), 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 twin 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

#### 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<sup>®</sup> Operator Interfaces (see Congrav<sup>®</sup> Works Standards)



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Issue 4.0 (April 16)  
Supersedes 6.0 (June 14)