

## Brabender Twin Screw Feeder DDSR20

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 stainless steel screw trough, a horizontal stirring agitator in the screw trough, a twin feed screw, a screw tube, a 3 phase AC gear motor and an extension hopper for ingredient storage.

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.

These components work together to provide mass flow of ingredient and consistent screw filling since the stirring agitator prevents bridging and promotes ingredient flow into the screw.

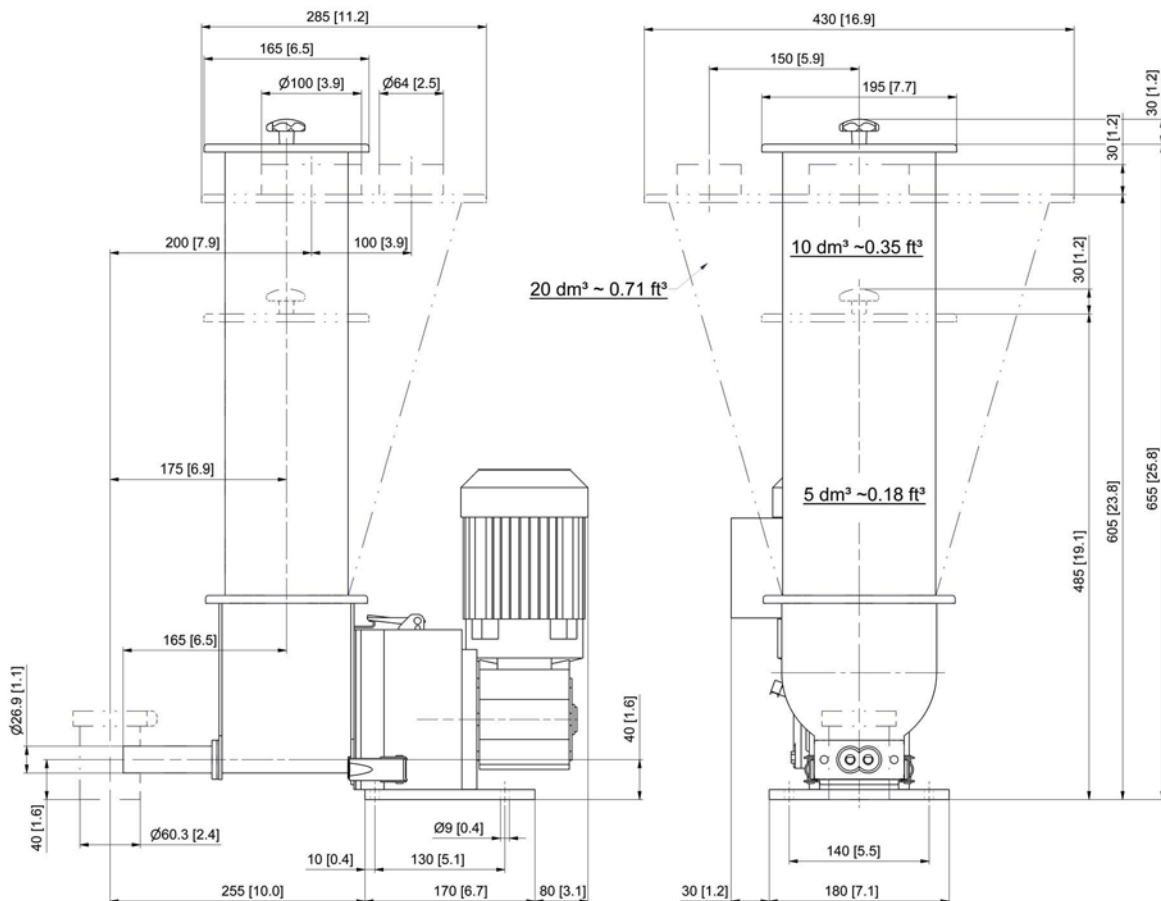
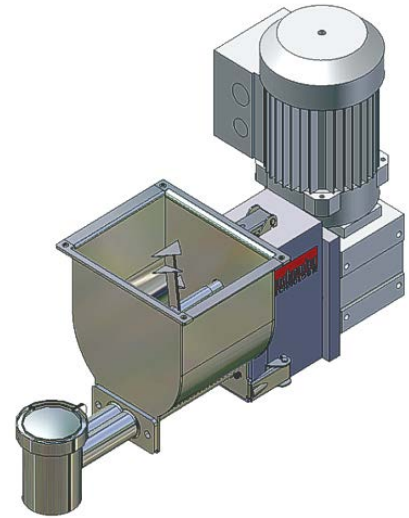
Other advantages of the DDSR20 twin screw

feeder are that it is easily disassembled for cleaning and that it permits easy exchange of feed screws.

Options include a scale to allow gravimetric loss-in-weight feeding, interchangeable screws, hopper covers and a down-spout on the feeder outlet.

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 without extension hopper approx. 16 kg (35 lb)  
 Weight with 5 dm<sup>3</sup>/0.18 ft<sup>3</sup> extension hopper approx. 19 kg (42 lb)  
 Weight with 10 dm<sup>3</sup>/0.35 ft<sup>3</sup> extension hopper approx. 21 kg (46 lb)  
 Weight with 20 dm<sup>3</sup>/0.71 ft<sup>3</sup> extension hopper approx. 25 kg (55 lb)

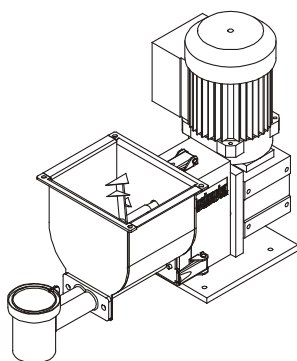
Dimensions in mm (in)

## Technical Data

### Available screw sizes and feed rates

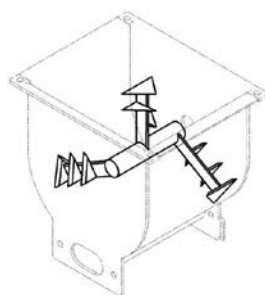
Screw Type	Ø (mm) x p (mm)	Tube designation	Tube dia. (mm)	Speed (rpm)	Max. feed rate (dm <sup>3</sup> /hr)*	Max. feed rate (ft <sup>3</sup> /hr)*
<b>Double Spiral Screw (SS)</b>	SS 13/10	200	24.0 x 2.0	485 (240) [85] / 100Hz	60 ( 30) [11]	2.12 (1.05) [0.37]
	SS 13/10	223	26.9 x 2.3	485 (240) [85] / 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%.  
Values in brackets refer to optional motors 240 rpm/100 Hz and 85 rpm/100 Hz.



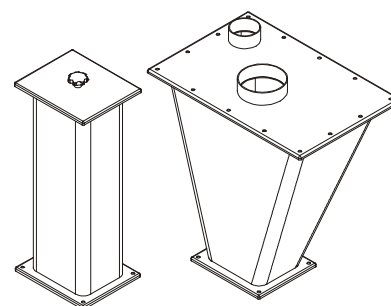
#### DDSR20 Twin Screw Feeder

- Stainless steel housing
- Exchangeable twin screw
- Screw trough with stirring agitator
- 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)
- Ingredient contact surfaces are stainless steel SS 1.4301 (304)



#### Multifunctional Agitator

- Multifunctional stirring agitator
  - Prevents bridging and ratholing
  - Promotes ingredient mass flow
  - Ensures consistent screw filling
- Driven from screw drive
- 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

- Vertical downspout on screw tube outlet
- Flexible connections
- Exchange twin screws
- Exchange screw tubes
- Safety grate for manual refill
- Screw speed monitoring system

#### Options

- Explosion-proof designs
- Gravimetric loss-in-weight feeder with scale MD2, MD3, MS2 or MS3 (see separate Works Standards)

#### Frequency Converters

Frequency converter FC-B1 for wall mounting, or frequency converter FC-V1.1 for control cabinet installation (see separate Works Standards), or Allen Bradley Powerflex 40 variable frequency drive (North America only)



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