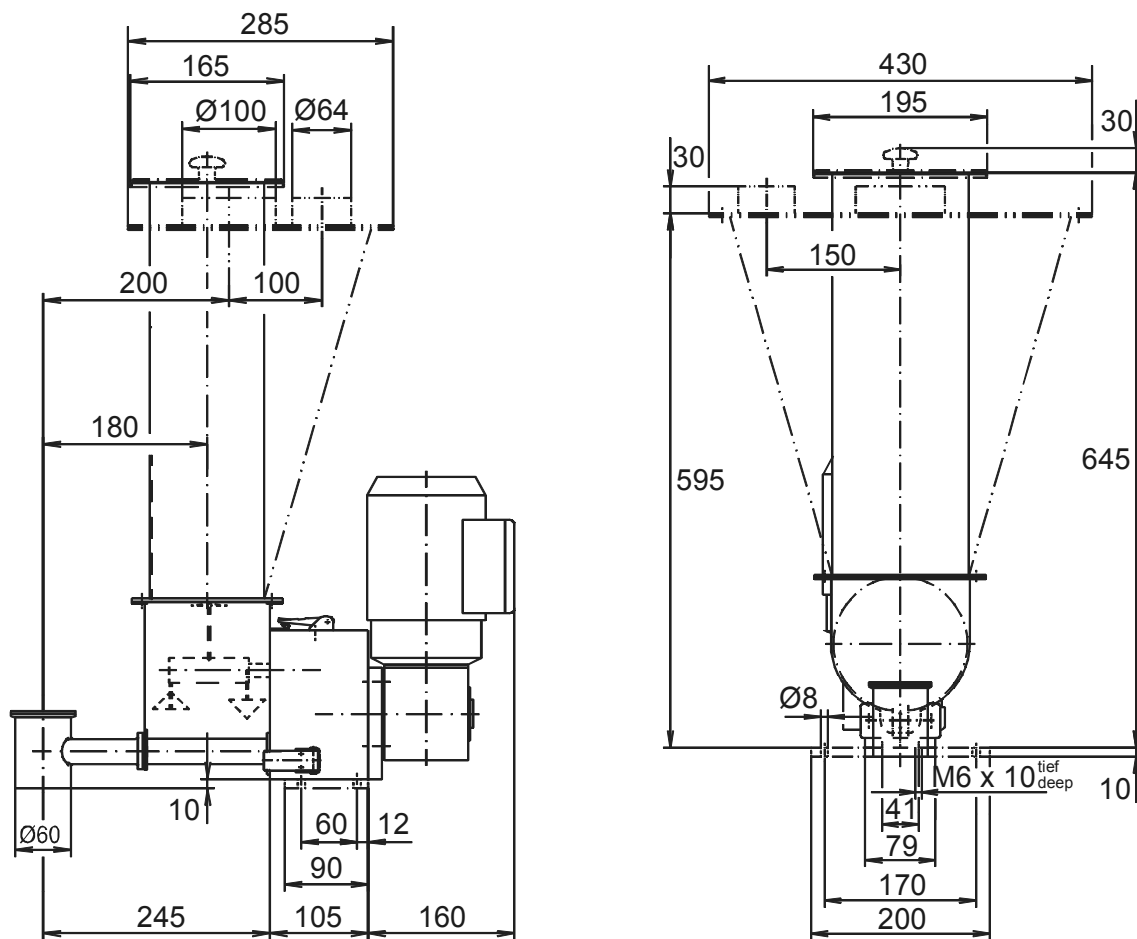
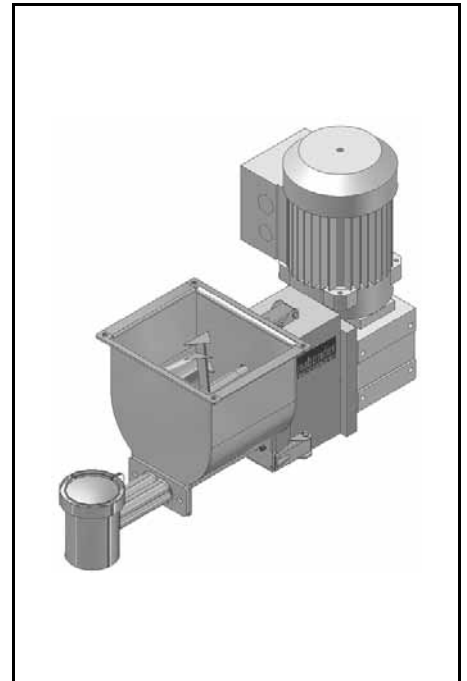


## Brabender Twin-Screw Feeder Type DDSR 20

The Brabender Twin-Screw Feeder Type DDSR20 feeds powders with problematic flow characteristics at low feed rates, in particular poorly flowing or floodable ingredients. It is designed for ease of servicing and quick dismantling and cleaning. Around the twin-shaft drive unit the individual component groups, screw tubes and screws can easily be mounted and dismantled by hand. The Brabender Twin-Screw Feeder Type DDSR20 consists of a stainless steel screw trough with interior trough agitator, a twin screw for ingredient dispense and a frequency-controlled three-phase current motor driving the screw. Depending on refill method, feed rate and storage requirements it can be combined with either a 10 dm<sup>3</sup> or 20 dm<sup>3</sup> extension hopper.

The crucial point for proper function of the system is the ingredient supply to the screws. Here, the trough agitator provides for homogenization of the ingredient and for even filling of the screw at a constant level: the prerequisite to high-accuracy feeding. The universal design of the different screw profiles permits easy interchanging of the screws.

The feeder can be employed as a stand-alone volumetric unit or, combined with a Brabender scale and a microcomputer controller from the Congrav<sup>®</sup> product line or the Brabender SCC Field Bus System, as a gravimetric loss-in-weight feeder. All parts in touch with the ingredient are made of stainless steel. The unit conforms to CE directives.



Weight with 10 dm<sup>3</sup> extension hopper approx. 19 kg, with 20 dm<sup>3</sup> extension hopper approx. 23 kg

# Technical Data\*

## Available Srew Sizes and Feed Rates

Screw Type Ø mm x p mm	Tube Designation	Tube Dia. mm	Screw Speed r.p.m.	Max. Feed Rate dm³/hr*
Double Spiral Screw	Optional	Optional		
SS 13/10	200 T	24.0 x 2.0	485 (240) [85] / 100 Hz	55 (28) [10]
SS 13/15	223 T	26.9 x 2.3	485 (240) [85] / 100 Hz	92 (45) [16]
Twin Spiral Screw				
TS 18/13			485 (240) [85] / 100 Hz	140 (70) [24]
TS 18/19			485 (240) [85] / 100 Hz	224 (111) [39]
TS 18/29			485 (240) [85] / 100 Hz	335 (167) [59]
Twin Concave Screw				
TC 20/12	200 T	24.0 x 2.0	485 (240) [85] / 100 Hz	35 (17) [ 6]
TC 20/11	223 T	26.9 x 2.3	485 (240) [85] / 100 Hz	67 (32) [11]
TC 20/20	223 T	26.9 x 2.3	485 (240) [85] / 100 Hz	139 (67) [24]

\* The max. feed rates mentioned above are theoretical values based on a screw filling level and a motor speed of 100 % each. Depending on the flow characteristics of the ingredient the screw filling level may decrease down to 50 %.

### Screw Drive / Agitator Drive

#### Three-phase current motor

Wattage: 0.18 kW  
 Voltage: 230/400 V  
 Speed: 68/50 Hz; 136/100 Hz  
 (Options: 34/50 Hz; 68/100 Hz  
 12/50 Hz; 24/100 Hz)  
 Protection: IP 65, insulation class F

### Speed Controller

#### Frequency Converter FC-B1

in an IP55 housing (setpoint potentiometer or external control by 0-5 (10) V, 0(4)-20 mA), or

#### Frequency Converter FC-V1.1

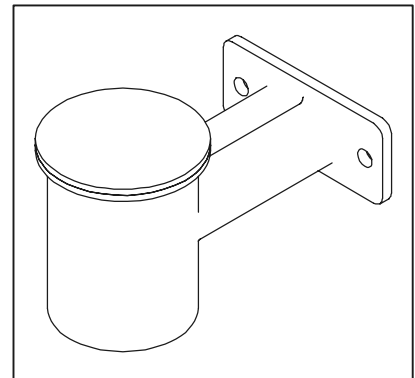
for control cabinet installation (external control by 0-5(10) V, 0(4)-20 mA or by setpoint potentiometer)

### Materials / Finish

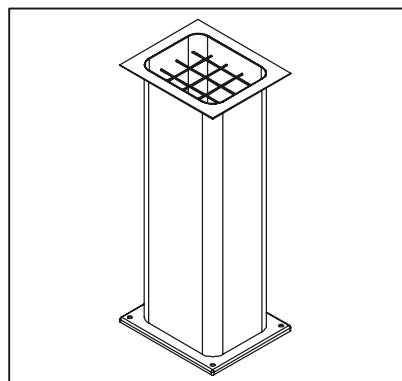
Parts in touch with the ingredient SS 1.4301 (≈ AISI 304), mild steel parts painted light grey as per RAL 7035

### Accessories / Options

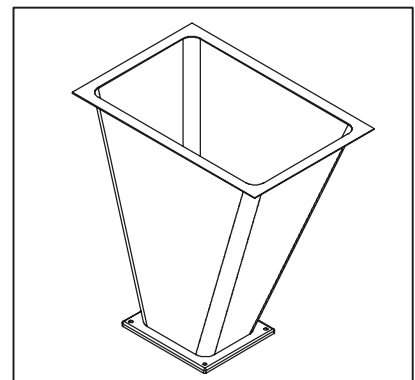
- Hopper, SS 1.4301 (≈ AISI 304), 10 dm³ (rectangular) or 20 dm³ (conical)
- Cover with handle, 1.4301
- Safety grid, 1.4301
- Motor with reduced speed
- Exchange screws and screw tubes
- Base plate
- Gravimetric version as loss-in-weight feeder with Brabender scale (see Works Standard "Loss-in-Weight Feeder Type DDW-MD2[3]-DDSR20")



Downspout (standard)



Rectangular hopper, volume 10 dm³



Conical hopper, volume 20 dm³



An ISO 9001/EN 29001 Certified Company

\*Modifications reserved. All data describe our products in a general manner. They are no agreement on or warranty of characteristics in the sense of § 434 or guarantee in the sense of § 443 of the German Civil Code or similar regulations and effect no liability.

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