

Brabender Twin-Screw Feeder Type DDSR 40

The Brabender Twin-Screw Feeder Type DDSR 40 feeds bulk ingredients with problematic flow characteristics in a medium feed rate range, particularly poorly flowing or floodable ingredients. It is designed for ease of servicing and permits quick disassembly and cleaning.

The Brabender Twin-Screw Feeder Type DDSR 40 consists of a stainless steel screw hopper with integrated agitator, a twin screw for ingredient dispense and a frequency-controlled three-phase current motor driving the screw. Depending on the refill mode, feed rate and storage requirement it can be combined with an extension hopper of either 60 dm³ or 110 dm³ volume.

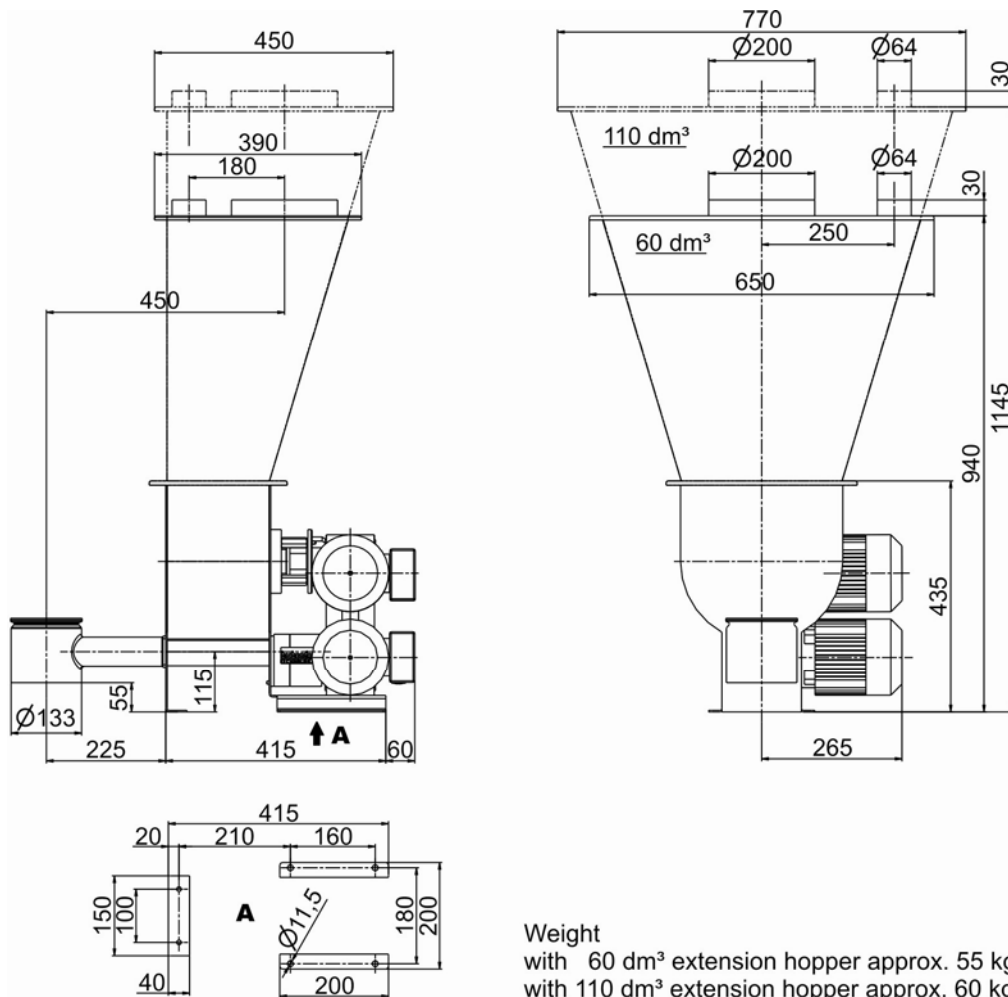
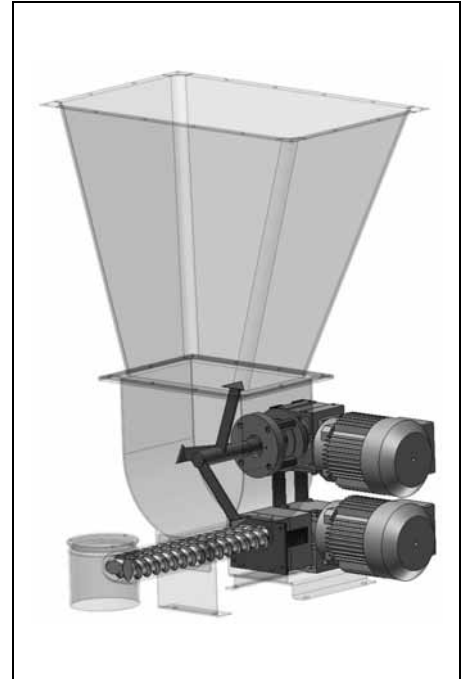
Substantial for proper function of the system is reliable ingredient supply to

the twin screw. The hopper agitator homogenizes the ingredient and ensures a constant screw filling level: the prerequisite to high feeding accuracy. The different screw profiles are of a universal design and fully interchangeable.

The feeder can be used as a stand-alone volumetric unit or combined with a Brabender scale and a micro-computer controller from the Congrav[®] controller 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.



Technical Data*

Available Srew Sizes and Feed Rates

Screw Type	Ø mm x p mm	Tube Designation	Tube Dia. mm	Speed r.p.m.	Max Feed Rate dm³/hr*
Double Spiral Screw (SS)	SS 33/22	419	48.3 x 3.2	385 / 100Hz	800
	SS 33/22	470	53.0 x 3.0	385 / 100Hz	1208
	SS 33/35	419	48.3 x 3.2	385 / 100Hz	1311
	SS 33/35	470	53.0 x 3.0	385 / 100Hz	1960
Twin Spiral Screw (TS)	TS 40/27	419 T	48.3 x 3.2	385 / 100Hz	1384
	TS 40/27	470 T	53.0 x 3.0	385 / 100Hz	1671
	TS 40/42	419 T	48.3 x 3.2	385 / 100Hz	2247
	TS 40/42	470 T	53.0 x 3.0	385 / 100Hz	2693
Twin Blade Screw (TB)	TB 40/28	419 T	48.3 x 3.2	385 / 100Hz	1141
	TB 40/43	419 T	48.3 x 3.2	385 / 100Hz	1853
Twin Concave Screw (TC)	TC 40/12	419 T	48.3 x 3.2	385 / 100Hz	150
	TC 40/23	419 T	48.3 x 3.2	385 / 100Hz	288
	TC 40/27	470 T	53.0 x 3.0	385 / 100Hz	686
	TC 40/50	470 T	53.0 x 3.0	385 / 100Hz	1604

* The max. feed rates mentioned above are theoretical values referring to 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

Three-phase current motor

Wattage: 0.37 kW
Voltage: 230/400 V, 50 Hz resp. multi-voltage range as per IEC 38
Speed: 270 min⁻¹ at 100 Hz
Enclosure: IP 65, insulation class F

Agitator Drive

Three-phase current motor

Wattage: 0.12 kW
Voltage: 230/400 V, 50 Hz resp. multi-voltage range as per IEC 38
Speed: 1320/12 min⁻¹ at 50 Hz
Enclosure: 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).
Details: see separate Works Standards

Materials

Ingredient-touched SS 1.4301 ≈ AISI 304 (twin concave screws and twin blade screws SS 1.4305 ≈ AISI 303), mild steel parts painted (RAL 7035)

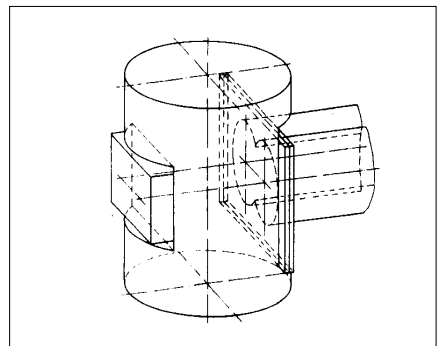
Accessories / Options

- Extension hopper, SS 1.4301 ≈ AISI 304, conical, volume 60 or 110 dm³
- Special extension hopper 200 dm³, SS 1.4301 (≈ AISI 304)
- Cover with inlet pipe and vent pipe
- Laid-on cover with handle
- Safety grid, SS 1.4301 (≈ AISI 304)
- Nozzle for level sensor
- Special extension hopper, round with discharge agitator, 100 dm³, SS 1.4301 (≈ AISI 304)
- Flexible connection sleeves

- Exchange screws and screw tubes
- Pole-changing screw motor
- Explosion-proof designs

Fields of Application

Volumetric or - in conjunction with a Brabender scale - gravimetric feeding (see Brabender Works Standards on Loss-in-Weight Feeders DDW-H32-DDSR40-60[110] and DDW-MD5[6]-DDSR40-60[110])



Downspout (standard)

brabender

TECHNOLOGIE

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