

Brabender Twin Screw Feeder DDSR40B

The Brabender DDSR40B twin screw feeder is capable of reliably and accurately metering extremely difficult flowing bulk ingredients with temperatures from 0 to 60°C (32-140°F) at medium feed rates.

The feeder has the following main components: a stainless steel screw trough, a horizontal stirring agitator in the screw trough, a 3 phase AC motor for the agitator, a twin feed screw, a screw tube, a 3 phase AC gear motor driving the twin screw, and an extension hopper for ingredient storage. 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.

The DDSR40B twin screw feeder has a particularly large ingredient inlet. Together with a straight walled 100 dm³ (3.5 ft³) or

steep sided 200 dm³ (7.1 ft³) extension hopper and the stirring agitator it provides reliable mass flow even with ingredients that would otherwise require mechanical agitation in the extension hopper.

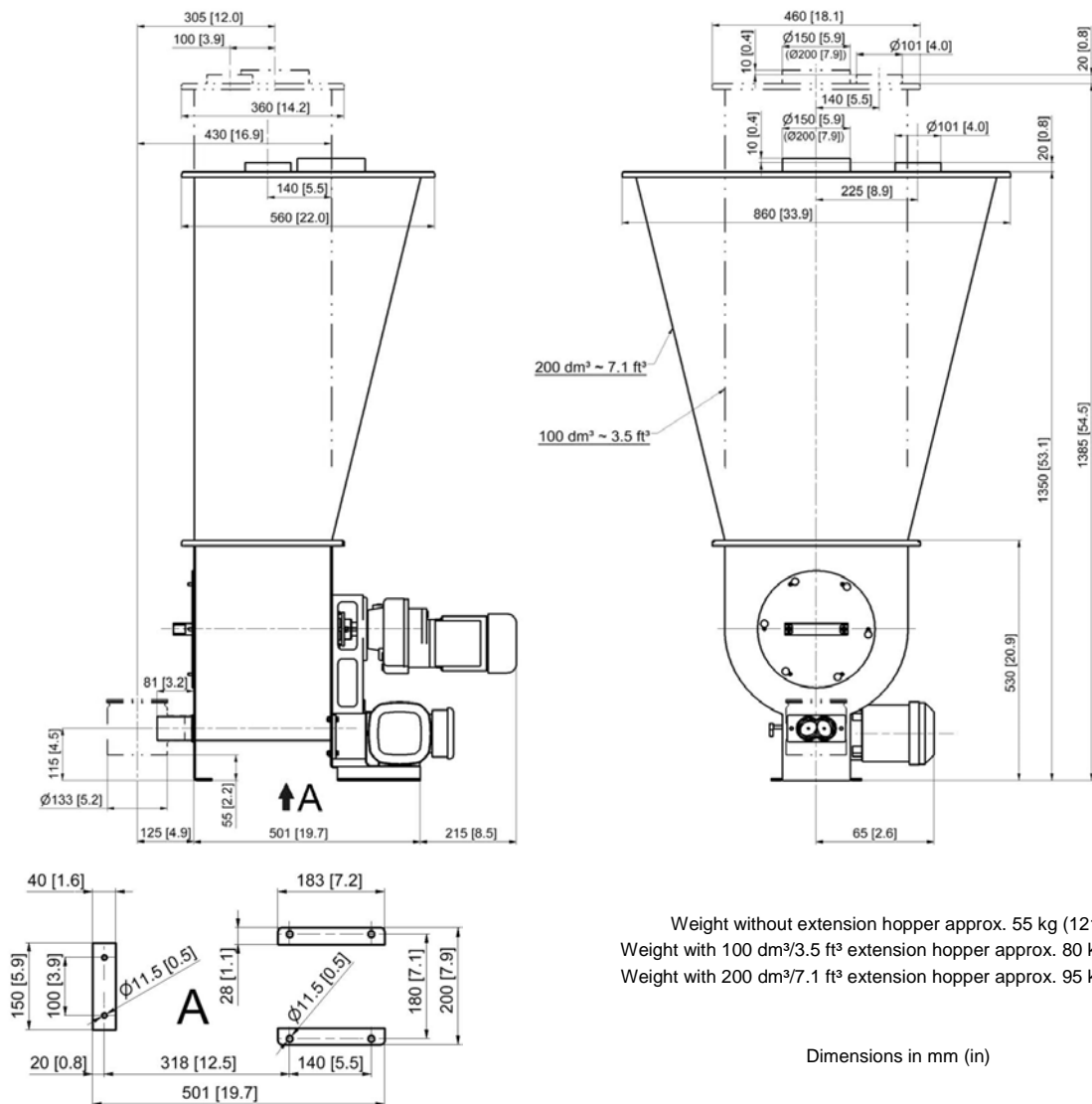
Other advantages of the DDSR40B twin screw feeder are that it easily disassembles for cleaning and that it permits easy exchange of feed screws.

Options include a scale to allow gravimetric loss-in-weight feeding, interchangeable screws and hopper covers.

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

Environmental conditions: 0-45°C (32-113°F), up to 85% humidity without condensation.

The feeder conforms to CE directives.

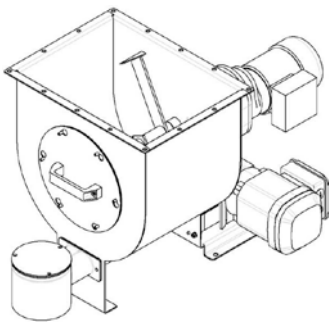


Technical Data

Available screw sizes and feed rates

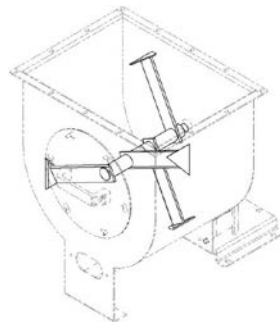
Screw Type	Ø (mm) x p (mm)	Tube designation	Tube dia. (mm)	Max. speed (rpm)	Max. feed rate (dm ³ /hr)*	Max. feed rate (ft ³ /hr)*
Double Spiral Screw (SS)	SS 33/22	419	48.3 x 3.2	385 / 100Hz	800	28.3
	SS 33/22	470	53.0 x 3.0	385 / 100Hz	1208	42.7
	SS 33/35	419	48.3 x 3.2	385 / 100Hz	1311	46.3
	SS 33/35	470	53.0 x 3.0	385 / 100Hz	1960	69.2
Twin Spiral Screw (TS)	TS 40/27	419	48.3 x 3.2	385 / 100Hz	1384	48.9
	TS 40/27	470	53.0 x 3.0	385 / 100Hz	1671	59.0
	TS 40/42	419	48.3 x 3.2	385 / 100Hz	2247	79.4
	TS 40/42	470	53.0 x 3.0	385 / 100Hz	2693	95.1
Twin Blade Screw (TB)	TB 40/28	419	48.3 x 3.2	385 / 100Hz	1141	40.3
	TB 40/43	419	48.3 x 3.2	385 / 100Hz	1853	65.4
Twin Concave Screw (TC)	TC 40/12	419	48.3 x 3.2	385 / 100Hz	150	5.3
	TC 40/23	419	48.3 x 3.2	385 / 100Hz	288	10.2
	TC 40/27	470	53.0 x 3.0	385 / 100Hz	686	24.2
	TC 40/50	470	53.0 x 3.0	385 / 100Hz	1604	56.6

* Theoretical values at 100% screw filling level and motor speed. Depending on the flow characteristics the screw filling level may decrease to 50%.



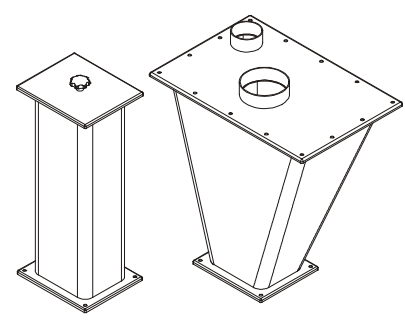
DDSR40B Twin Screw Feeder

- Stainless steel housing with bolted access door
- Exchangeable twin screws
- Screw trough with stirring agitator
- Variable frequency driven 3 phase AC gear motor (0.37 kW, 230/400 V, IP65, TEFC), screw speed max. 385 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
 - Stainless steel SS 1.4301 (304)
- Driven by a separate 3 phase AC motor (0.12 kW, 230/400 V, IP65, TEFC), agitator speed 6.8 rpm/50 Hz



Extension Hoppers

- Extension hoppers
 - 100 dm³ (3.5 ft³), straight walled
 - 200 dm³ (7.1 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

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

Options

- Explosion-proof designs
- Gravimetric loss-in-weight feeder with scale MD6 or MS6 (see separate Works Standards)
- Designs for higher or lower ingredient and/or ambient temperatures

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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