

Brabender Screw Feeder DSR28

The Brabender DSR28 screw feeder is capable of reliably and accurately metering bulk ingredients at low feed rates.

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

Extension hoppers are available with 5 dm³ (0.18 ft³), 10 dm³ (0.35 ft³) or 20 dm³ (0.71 ft³) volume.

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

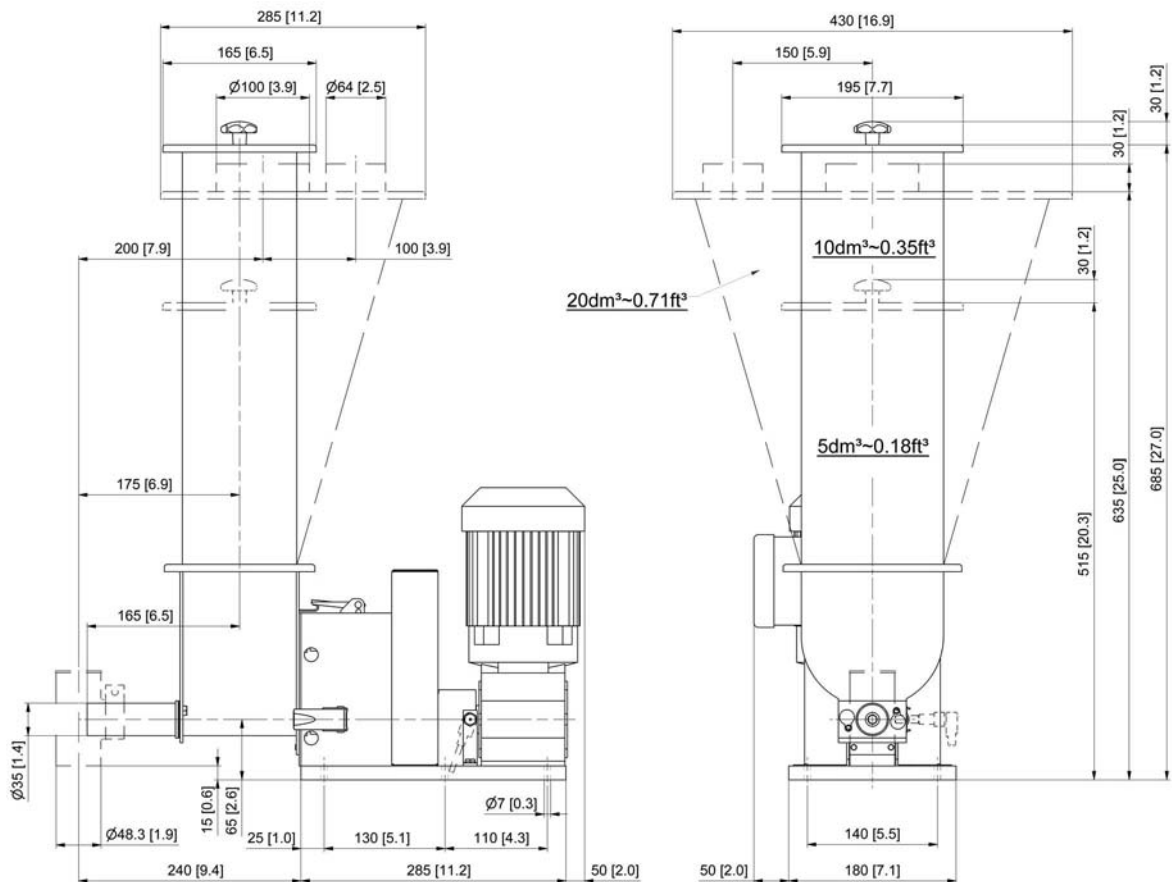
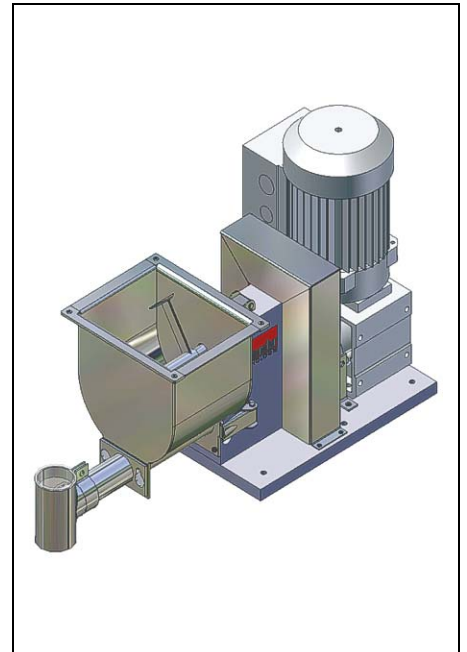
Other advantages of the DSR28 screw feeder are that it is easily disassembled for cleaning and that it permits easy ex-

change of feed screws.

Options include a scale to allow gravimetric loss-in-weight feeding, a special stirring agitator with shorter blades for pellet feeding, interchangeable screws, hopper covers and a downspout 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. 18 kg (35 lb)

Weight with 5 dm³/0.18 ft³ extension hopper approx. 21 kg (46 lb)

Weight with 10 dm³/0.35 ft³ extension hopper approx. 23 kg (51 lb)

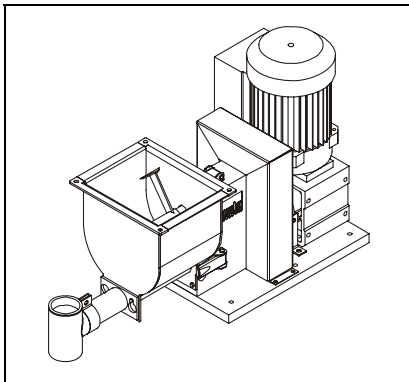
Weight with 20 dm³/0.71 ft³ extension hopper approx. 27 kg (60 lb)

Technical Data

Available screw sizes and feed rates

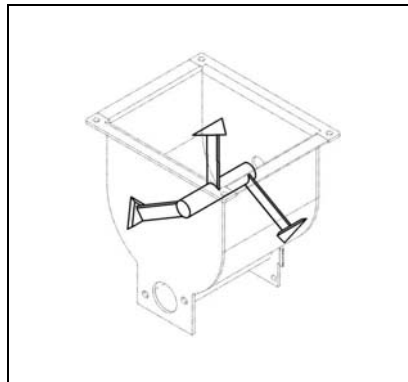
Screw Type	Ø (mm) x p (mm)	Tube designation	Tube dia. (mm)	Speed (rpm)	Max. feed rate (dm ³ /hr)*	Max. feed rate (ft ³ /hr)*	
Spiral Screw (S) (TA = trough agitation)	S 13/10 (TA)	160	20.0 x 2.0	254 (134) [66] / 100Hz	16 (8) [4]	0.55 (0.29) [0.14]	
	S 13/15 (TA)	160	20.0 x 2.0	254 (134) [66] / 100Hz	26 (13) [7]	0.90 (0.48) [0.23]	
	S 20/15 (TA)	210	25.0 x 2.0	254 (134) [66] / 100Hz	53 (28) [14]	1.87 (0.99) [0.49]	
	S 20/19 (TA)	210	25.0 x 2.0	254 (134) [66] / 100Hz	72 (38) [19]	2.53 (1.33) [0.66]	
	S 20/24 (TA)	210	25.0 x 2.0	254 (134) [66] / 100Hz	95 (50) [25]	3.35 (1.77) [0.87]	
	S 24/35	260	30.0 x 2.0	254 (134) [66] / 100Hz	215 (113) [56]	7.59 (4.00) [1.97]	
	S 28/22	320	38.0 x 3.0	254 (134) [66] / 100Hz	178 (94) [46]	6.27 (3.31) [1.63]	
	S 28/35	320	38.0 x 3.0	254 (134) [66] / 100Hz	298 (157) [77]	10.52 (5.55) [2.73]	
	Pellet Screw (S)	S 13/10	210	25.0 x 2.0	254 (134) [66] / 100Hz	28 (15) [7]	1.00 (0.53) [0.26]
		S 13/15	210	25.0 x 2.0	254 (134) [66] / 100Hz	46 (24) [12]	1.61 (0.85) [0.42]
S 20/15		320	38.0 x 3.0	254 (134) [66] / 100Hz	96 (50) [25]	3.38 (1.78) [0.88]	
S 20/19		320	38.0 x 3.0	254 (134) [66] / 100Hz	128 (67) [33]	4.51 (2.38) [1.17]	
S 20/24		320	38.0 x 3.0	254 (134) [66] / 100Hz	167 (88) [44]	5.91 (3.12) [1.54]	
S 24/35		320	38.0 x 3.0	254 (134) [66] / 100Hz	298 (157) [77]	10.52 (5.55) [2.73]	

* 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 134 rpm/100 Hz and 66 rpm/100 Hz.



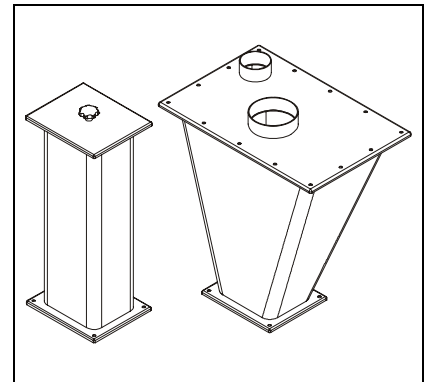
DSR28 Screw Feeder

- Stainless steel housing
- Exchangeable screw
- Screw trough with stirring agitator
- Variable frequency driven 3 phase AC gear motor (0.25 kW, 230/400 V, IP65, TEFC), screw speed 254 rpm/100 Hz (optional 134 rpm/100 Hz, 66 rpm/100 Hz)
- Ingredient contact surfaces are stainless steel SS 1.4301 (304)



Multifunctional Agitator

- Multifunctional stirring agitator
 - Mixes the bulk ingredient
 - Prevents bridging and ratholing
 - Promotes ingredient mass flow
 - Ensures consistent screw filling
- Chain driven from screw drive
- Stainless steel SS 1.4301 (304)



Extension Hoppers

- Extension hoppers
 - 5 dm³ (0.18 ft³), straight walled
 - 10 dm³ (0.35 ft³), straight walled
 - 20 dm³ (0.71 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 screw tube outlet
- Flexible connections
- Exchange screws
- Exchange screw tubes
- Safety grate for manual refill
- Screw speed monitoring system

Options

- Explosion-proof designs
- Stirring agitator with shorter blades for pellet feeding
- 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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