

Brabender Weigh-Belt Feeder DBW-G1-600

The Brabender weigh-belt feeder DBW-G1-600 is capable of reliably and accurately metering normal to well flowing bulk ingredients with temperatures from 0 to 50° C (32-122° F).

The feeder features high accuracy, stable design and compact dimensions with high feed rates. By changing the mode of operation on the controller, it can be used as a continuous metering feeder, for batching or as a measuring belt feeder for continuous gravimetric flow metering.

The weigh-belt feeder has the following main components: a strong sheet-metal housing, an integral torsion free cantilever belt frame and an integrated weighing system.

Cleaning and maintenance are easy due to removable doors allowing quick access to the interior. The belt can be easily removed from the side.

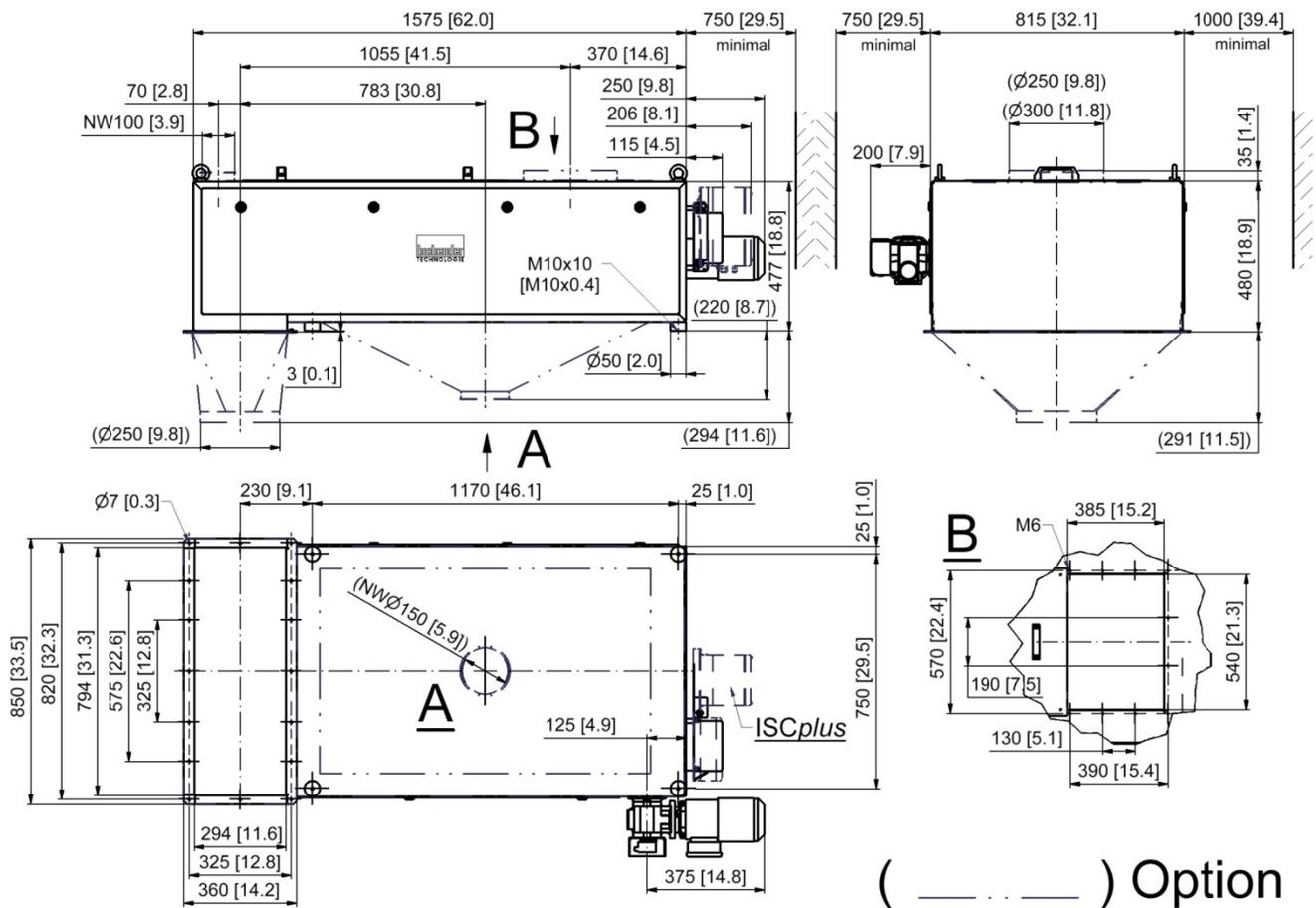
For poor flowing or floodable bulk ingredients the Brabender weigh-belt feeder is available in combination with a speed controlled pre-feeder.

Another option is a version with integral control/speed control electronics.

Ingredient contact steel parts and the exterior housing are made of stainless steel 1.4301 (304).

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

The feeder conforms to CE directives.



Weight approx. 280 kg (617.3 lb)

Dimensions in mm (in)

Technical Data

Feed Rate

- Feed rate 50 kg/h - 50 metric tons/h (max. 50 m³/h) ≈ 110 lb/h - 110,231 lb/h (max. 1,765 ft³) with free flowing ingredients (reference medium: bulk density 1 kg/dm³ ≈ 62.4 lb/ft³, grain size 1 mm ≈ 0.04 in)
- Turndown ratio 20:1 (100:1 when using manual layer height adjustment gate)

Weighing System

- High-accuracy strain gauge load cell
- IP65 (≈ NEMA4) rated enclosure
- Rated load 10 kg (22 lb)

Belt

- Width 600 mm (23.6 in)
- Ingredient contact surfaces are of food-proof polyurethane
- Roller contact surface: polyester (PET)

Belt Drive

- Variable frequency driven 3 phase AC motor*
- Wattage (depending on feed rate)
 - 0.18 kW (speed 5.7 min⁻¹)
 - 0.25 kW (speed 19 min⁻¹)
 - 0.37 kW (speed 29 min⁻¹)
 - 0.37 kW (speed 42 min⁻¹)
- Voltage 230/400 V
- IP65 (≈ NEMA4) rated enclosure, TEFC
- Insulation class F

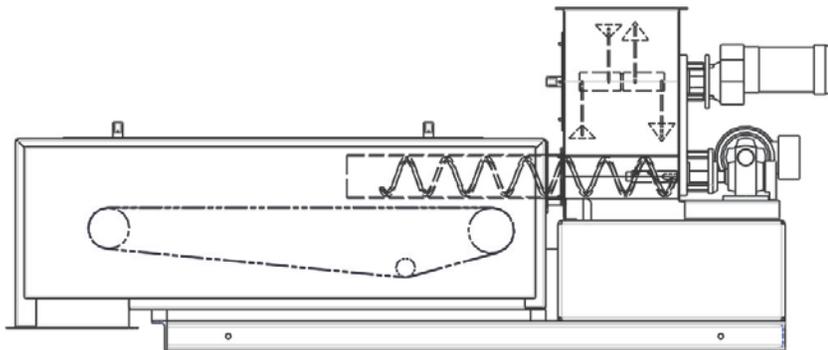
* All Brabender 3 phase AC motors need a supply voltage of 230/400 V, 50 (60) Hz and a grounded neutral (TT, TN). In case of power supply systems not in compliance with these requirements, adaptation measures must be taken. We will be pleased to advise you.

Accessories/Options

- Round inlet pipe, Ø 200 mm (7.9 in)
- Round outlet pipe, Ø 250 mm (9.8 in)
- Flexible inlet sleeve
- Flexible outlet sleeve
- Manual slide gate valve (inlet)
- Dust suction pipe on outlet side
- Dust collection hopper
- Storage hopper
- Belt movement monitoring system (speed sensor on idle roller)
- Explosion proofing (ATEX)
- Sanitary and hygienic designs "
- Pre-feeders

Controls

Feeder control and speed modules are offered either mounted on the feeder or for mounting in a separate panel. Controls can communicate directly to most host/PLC systems or to Brabender Congrav[®] Operator Interfaces (see Congrav[®] Works Standards)



Example: weigh-belt feeder with speed controlled pre-feeder



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