# Brabender Loss-in-Weight Feeder DDW-MS6-DDSR40B-100(200)

The Brabender DDW-MD6-DDSR40B-100(200) loss-in-weight feeder, the gravimetric version of 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 free-standing mounting base/scale with a highaccuracy strain gauge load cell, a Brabender twin screw feeder DDSR40B with a horizontal stirring agitator in the screw trough, and an extension hopper for ingredient storage.

The twin screw feeder provides mass flow of ingredient and consistent screw filling since the stirring agitator prevents bridging and promotes ingredient flow into the screw.

The feeder has a particularly large ingredient inlet. To-gether with a straight walled 100 dm<sup>3</sup> (3.5 ft<sup>3</sup>) or steep sided 200 dm<sup>3</sup> (7.1 ft<sup>3</sup>) extension hopper and the stirring agitator it provides reliable mass flow even with ingredients that would otherwise require mechanical agitation in the extension hopper.

All components are fully mounted and wired to junction boxes.

Options include versions with onboard control / speed control electronics ("ISC plus") and interchangeable twin screws.

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.





Weight with 100 dm<sup>3</sup>/3.5 ft<sup>3</sup> extension hopper approx. 120 kg (265 lb) Weight with 200 dm<sup>3</sup>/7.1 ft<sup>3</sup> extension hopper approx. 135 kg (298 lb)

Dimensions in mm (in)

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# **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 (dm³/hr)*	Max. feed rate (ft³/hr)*
Double Spiral Screw (SS)	SS 33/22 SS 33/22 SS 33/35 SS 33/35	419 470 419 470	48.3 x 3.2 53.0 x 3.0 48.3 x 3.2 53.0 x 3.0	385 / 100Hz 385 / 100Hz 385 / 100Hz 385 / 100Hz 385 / 100Hz	800 1208 1311 1960	28.3 42.7 46.3 69.2
Twin Spiral Screw (TS)	TS 40/27 TS 40/27 TS 40/27 TS 40/42 TS 40/42	419 470 419 470	48.3 x 3.2 53.0 x 3.0 48.3 x 3.2 53.0 x 3.0	385 / 100Hz 385 / 100Hz 385 / 100Hz 385 / 100Hz 385 / 100Hz	1384 1671 2247 2693	48.9 59.0 79.4 95.1
Twin Blade Screw (TB)	TB 40/28 TB 40/43	419 419	48.3 x 3.2 48.3 x 3.2	385 / 100Hz 385 / 100Hz	1141 1853	40.3 65.4
Twin Concave Screw (TC)	TC 40/12 TC 40/23 TC 40/27 TC 40/27 TC 40/50	419 419 470 470	48.3 x 3.2 48.3 x 3.2 53.0 x 3.0 53.0 x 3.0	385 / 100Hz 385 / 100Hz 385 / 100Hz 385 / 100Hz 385 / 100Hz	150 288 686 1604	5.3 10.2 24.2 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%. In addition, max. speed should be reduced to allow for bulk density variations.



#### Mounting Base / Scale MD6

- Free-standing mounting base with vibration isolation feet and junction boxes
- High-accuracy strain gauge load cell
- Approx. net weighing ranges:
  215 kg/474 lb
  - (100 dm<sup>3</sup>/3.5 ft<sup>3</sup> extension hopper) • 200 kg/441 lb
  - (200 dm<sup>3</sup>/7.1 ft<sup>3</sup> extension hopper)



#### Twin Screw Feeder DDSR40B

- Stainless steel housing
- Exchangeable twin screws
- Variable frequency driven 3 phase AC gear motor (0.37 kW, 230/400 V, IP65, TEFC), screw speed max. 385 rpm/100 Hz
- Horizontal stirring agitator in the screw trough (driven by a separate 3 phase AC motor 0.12 kW, 230/400 V, IP65, TEFC, agitator speed 6.8 rpm/50 Hz)
- Ingredient contact surfaces are stainless steel SS 1.4301 (304)



## Extension Hoppers

- Extension hoppers
  - 100 dm<sup>3</sup> (3.5 ft<sup>3</sup>), straight walled
  - 200 dm<sup>3</sup> (7.1 ft<sup>3</sup>), 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

- Flexible connections
- · Exchange twin screws
- Exchange screw tubes
- Safety grate for manual refill
- · JetFilter for vent pipe

## Options

- Version without discharge connection pipe
- Screw tube without vertical downspout
- Pressure compensation
- Explosion-proof designs
- Designs for higher or lower ingredient and/or ambient temperatures

## 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<sup>®</sup> Operator Interfaces (see Congrav<sup>®</sup> Works Standards)



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