

## Brabender Loss-in-Weight Feeder DDW-MD5(6)-DDSR40-35(60)[110]

The Brabender DDW-MD5(6)-DDSR40-35(60)[110] loss-in-weight feeder, the gravimetric version of the Brabender DDSR40 twin screw feeder, is capable of reliably and accurately metering difficult flowing powders at medium feed rates, particularly poor flowing or floodable ingredients.

The feeder has the following main components: a free-standing mounting base/scale with a digital load cell ("DigiMASS-2"), a Brabender twin screw feeder DDSR40 with a horizontal stirring agitator in the screw trough, and an extension hopper for ingredient storage.

The DigiMASS-2 load cell has the following features: a theoretical resolution of 4,000,000:1, twin vibrating wire technology which compensates for temperature change and external vibration, filtering software, and a serial interface ensuring high-speed data communication.

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.

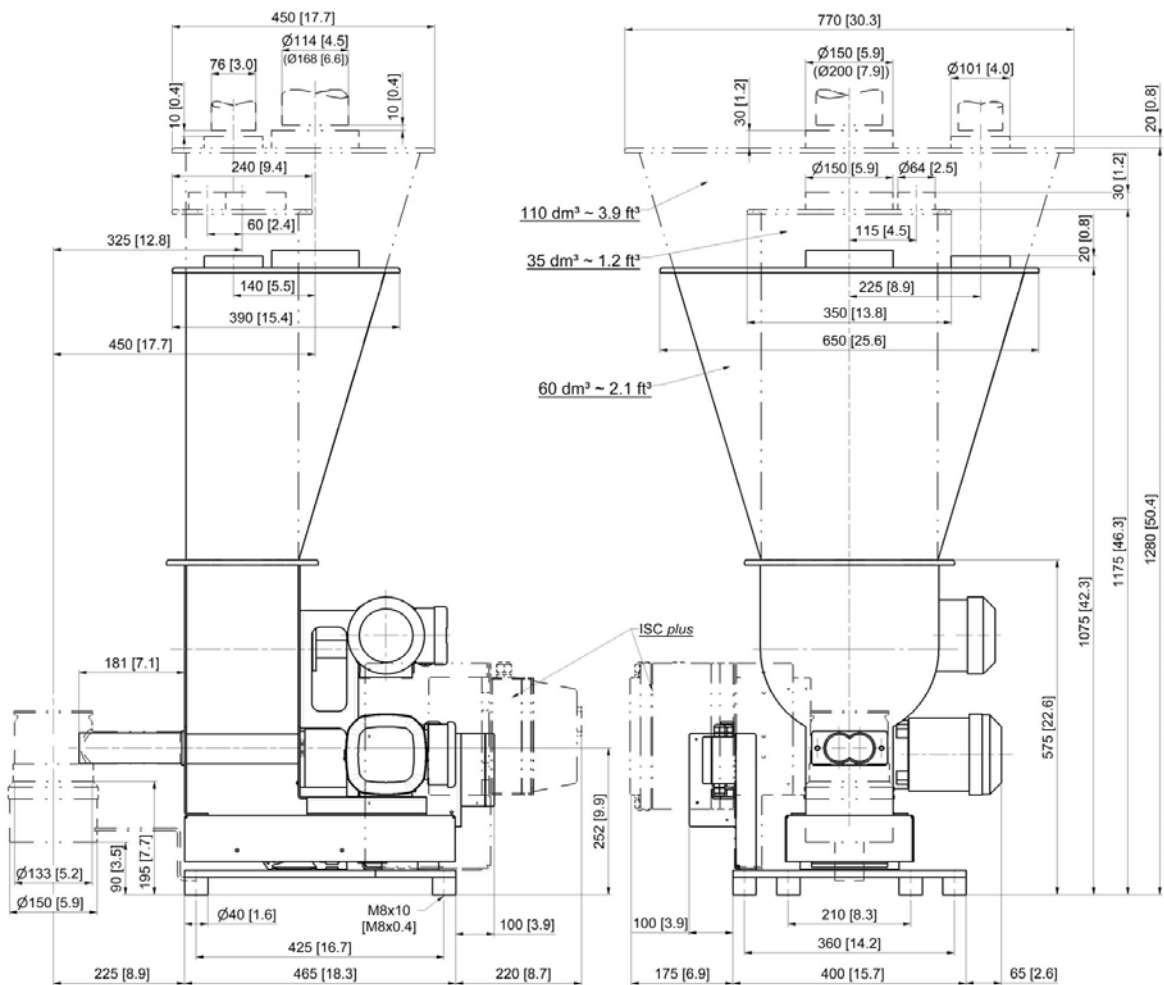
Extension hoppers are available with 35 dm<sup>3</sup> (1.2 ft<sup>3</sup>), 60 dm<sup>3</sup> (2.1 ft<sup>3</sup>) or 110 dm<sup>3</sup> (3.9 ft<sup>3</sup>) volume, depending on the ingredient and feed rate.

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).

The feeder conforms to CE directives.



Weight with 35 dm<sup>3</sup>/1.2 ft<sup>3</sup> extension hopper approx. 85 kg (187 lb)

Weight with 60 dm<sup>3</sup>/2.1 ft<sup>3</sup> extension hopper approx. 90 kg (198 lb)

Weight with 110 dm<sup>3</sup>/3.9 ft<sup>3</sup> extension hopper approx. 95 kg (209 lb)

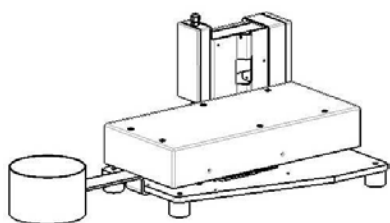
Dimensions in mm (in)

## Technical Data

### Available screw sizes and feed rates

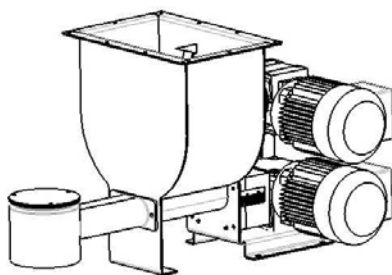
Screw Type	Ø (mm) x p (mm)	Tube designation	Tube dia. (mm)	Max. speed (rpm)	Max. feed rate (dm <sup>3</sup> /hr)*	Max. feed rate (ft <sup>3</sup> /hr)*
<b>Double Spiral Screw (SS)</b>	SS 33/22	419	48.3 x 3.2	385 / 100Hz	800	28.3
	SS 33/22	470	53.0 x 3.0	385 / 100Hz	1208	42.7
	SS 33/35	419	48.3 x 3.2	385 / 100Hz	1311	46.3
	SS 33/35	470	53.0 x 3.0	385 / 100Hz	1960	69.2
<b>Twin Spiral Screw (TS)</b>	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
<b>Twin Blade Screw (TB)</b>	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
<b>Twin Concave Screw (TC)</b>	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%. In addition, max. speed should be reduced to allow for bulk density variations.



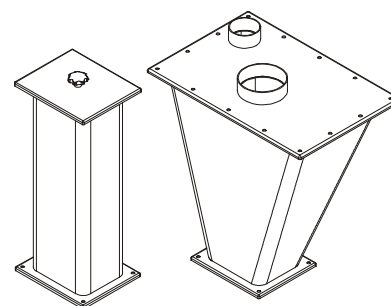
#### Mounting Base / Scale MD5(6)

- Free-standing mounting base with vibration isolation feet and junction boxes
- Digital load cell DigiMASS-2 (2 vibrating wires)
- Approx. net weighing ranges:
  - 45 kg/99 lb (MD5) or 275 kg/606 lb (MD6) (35 dm<sup>3</sup>/1.2 ft<sup>3</sup> extension hopper)
  - 40 kg/88 lb (MD5) or 270 kg/595 lb (MD6) (60 dm<sup>3</sup>/2.1 ft<sup>3</sup> extension hopper)
  - 35 kg/77 lb (MD5) or 265 kg/584 lb (MD6) (110 dm<sup>3</sup>/3.9 ft<sup>3</sup> extension hopper)



#### Twin Screw Feeder DDSR40

- Stainless steel housing
- Exchangeable twin screw
- 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 12 rpm/50 Hz)
- Ingredient contact surfaces are stainless steel SS 1.4301 (304)



#### Extension Hoppers

- Extension hoppers
  - 35 dm<sup>3</sup> (1.2 ft<sup>3</sup>), straight walled
  - 60 dm<sup>3</sup> (2.1 ft<sup>3</sup>), steep sided
  - 110 dm<sup>3</sup> (3.9 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

#### 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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