

Brabender Loss-in-Weight Feeder DDW-MD6-FW80/5(6)-100(200)

The Brabender DDW-MD6-FW80/5(6)-100(200) loss-in-weight feeder, the gravimetric version of the FW80 FlexWall® Plus feeder, is capable of reliably and accurately metering bulk ingredients and fibers with temperatures from 0 to 50°C (32-122°F). The feeder has the following main components: a free-standing base/scale with a digital load cell ("DigiMASS-2"), a Brabender FlexWall®Plus feeder (FW80/5 with a paddle-massaged flexible polyurethane hopper or FW80/6 without paddles), 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 FlexWall®Plus feeder provides consistent screw filling and mass flow of ingredient without degradation since the trapezoidal hopper shape

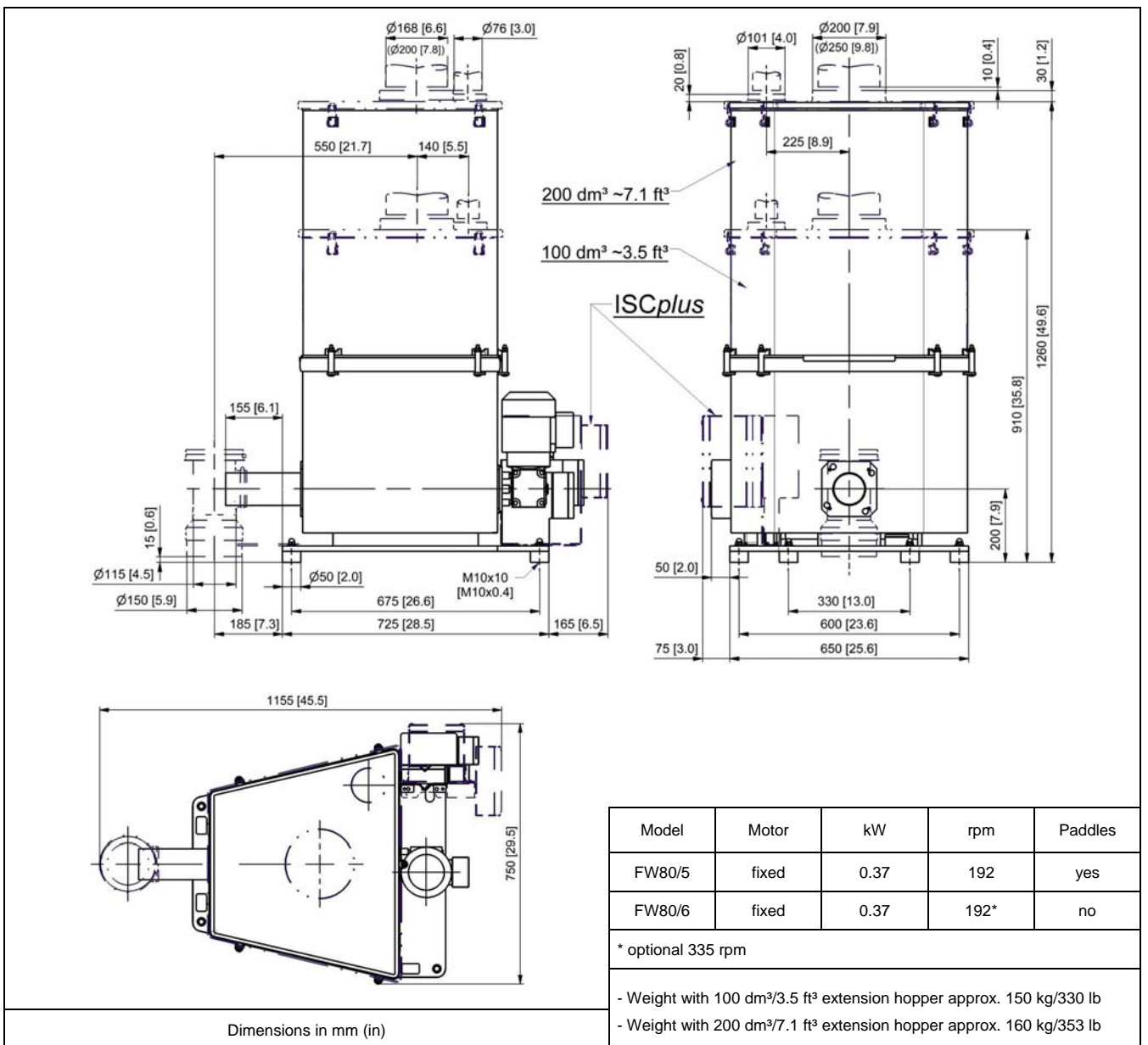
naturally induces ingredient flow and the motor driven (amplitude adjustable) paddles flex the polyurethane hopper walls to promote ingredient flow into the screw (FW80/5). Free flowing ingredients can use the non agitated FW80/6.

Extension hoppers are available with 100 dm³ (3.5 ft³) or 200 dm³ (7.1 ft³) volume.

All components are fully mounted and internally wired to junction boxes. The compact trapezoidal shape allows up to 6 feeders to be compactly arranged around a central feed point. All service is from the front or back.

Options include versions with onboard control / speed control electronics and interchangeable screws.

Ingredient contact steel parts are made of stainless steel. Mild steel parts are painted light grey (RAL 7035). Environmental conditions: 0 to 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 (dm³/hr)*	Max. feed rate (ft³/hr)*
Spiral Screw (S) (TA = trough agitation)	S 43/27 (TA)	443	48.3 x 2.0	192 (335) / 100Hz	368 (642)	13.0 (22.7)
	S 43/42 (TA)	443	48.3 x 2.0	192 (335) / 100Hz	616 (1075)	21.7 (37.9)
	S 52/39 (TA)	563	60.3 x 2.0	192 (335) / 100Hz	796 (1388)	28.1 (49.0)
	S 52/62 (TA)	563	60.3 x 2.0	192 (335) / 100Hz	1349 (2354)	47.6 (83.1)
	S 67/45	715	76.1 x 2.3	192 (335) / 100Hz	1615 (2818)	57.0 (99.5)
	S 67/71	715	76.1 x 2.3	192 (335) / 100Hz	2662 (4644)	94.0 (164.0)
	S 79/45	843	88.9 x 2.3	192 (335) / 100Hz	2286 (3989)	80.7 (140.9)
	S 79/82	843	88.9 x 2.3	192 (335) / 100Hz	4363 (7613)	154.1 (268.9)
	Pellet Screw (S)	S 43/27	563	60.3 x 2.0	192 (335) / 100Hz	505 (881)
S 43/42		563	60.3 x 2.0	192 (335) / 100Hz	837 (1461)	29.6 (51.6)
S 52/39		715	76.1 x 2.3	192 (335) / 100Hz	1155 (2015)	40.8 (71.2)
S 52/62		715	76.1 x 2.3	192 (335) / 100Hz	1942 (3388)	68.6 (119.6)
S 67/45		843	88.9 x 2.3	192 (335) / 100Hz	2090 (3646)	73.8 (128.8)
S 67/71		843	88.9 x 2.3	192 (335) / 100Hz	3430 (5984)	121.1 (211.3)
Blade Screw (B)	B 40/32	443	48.3 x 2.0	192 (335) / 100Hz	302 (526)	10.6 (18.6)
	B 40/46	443	48.3 x 2.0	192 (335) / 100Hz	451 (787)	15.9 (27.8)
	B 50/45	563	60.3 x 2.0	192 (335) / 100Hz	773 (1349)	27.3 (47.6)
	B 50/70	563	60.3 x 2.0	192 (335) / 100Hz	1240 (2163)	43.8 (76.4)
	B 79/50	843	88.9 x 2.3	192 (335) / 100Hz	2211 (3858)	78.1 (136.2)
	B 79/88	843	88.9 x 2.3	192 (335) / 100Hz	4066 (7095)	143.6 (250.5)
Fiber Screw (F)	F 5230/45-K20	563	60.3 x 2.0	192 (335) / 100Hz	561 (on request)	19.8 (on request)
	F 5245/60-K20	563	60.3 x 2.0	192 (335) / 100Hz	871 (on request)	30.8 (on request)
	F 7945/60-K39	843	88.9 x 2.3	192 (335) / 100Hz	1790 (on request)	63.2 (on request)
	F 7945/60-K20	843	88.9 x 2.3	192 (335) / 100Hz	2213 (on request)	78.2 (on request)

* 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.



Base / Scale MD6

- Free-standing mounting base with vibration isolation feet and junction boxes
- Digital load cell DigiMASS-2 (two vibrating wires)
- Approx. net weighing ranges:
 - 235 kg/518 lb (100 dm³/3.5 ft³ extension hopper)
 - 225 kg/496 lb (200 dm³/7.1 ft³ extension hopper)



FlexWall® Plus Feeder FW80 Plus

- Stainless steel trapezoidal housing
- Interchangeable screws
- Flexible polyurethane hopper, paddle-massaged (FW80/5) or without paddles (FW80/6)
- Variable frequency driven 3 phase AC motor (0.37 kW, IP65, insulation class F, TEFC), max. screw speed 192 rpm (alternatively max. 335 rpm for model FW80/6)
- Ingredient contact surfaces are polyurethane and SS 1.4301 (304), blade screws PUR except B40/32 and B40/46 = SS 1.4305 (303)



Extension Hoppers

- Trapezoidal extension hoppers
 - 100 dm³ (3.5 ft³), straight walled
 - 200 dm³ (7.1 ft³), straight walled
- 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 screws and screw tubes
- Screw extension 300 mm / 11.8 in (not available for blade screws)
- Maintenance disconnect box
- JetFilter for vent pipe

Options

- Version without discharge connection pipe
- Screw tube without vertical downspout
- Pressure compensation
- Explosion-proof designs
- Sanitary and hygienic designs
- Designs for higher or lower 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® Operator Interfaces (see Congrav® Works Standards)



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Issue 9.0 (September 13)
Supersedes 2.0 (February 08)