

Brabender FlexWall® Plus Feeder FW80/1(2)[7]

The Brabender 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 stainless steel trapezoidal exterior, a flexible polyurethane hopper, external massage paddles (the FW80/1 model is without paddles), a feed screw, a feed screw tube, a 3 phase AC motor and a trapezoidal extension hopper for ingredient storage. Extension hoppers are available with 100 dm³ (3.5 ft³) or 200 dm³ (7.1 ft³) volume.

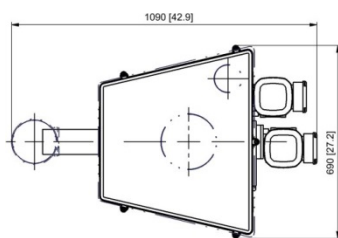
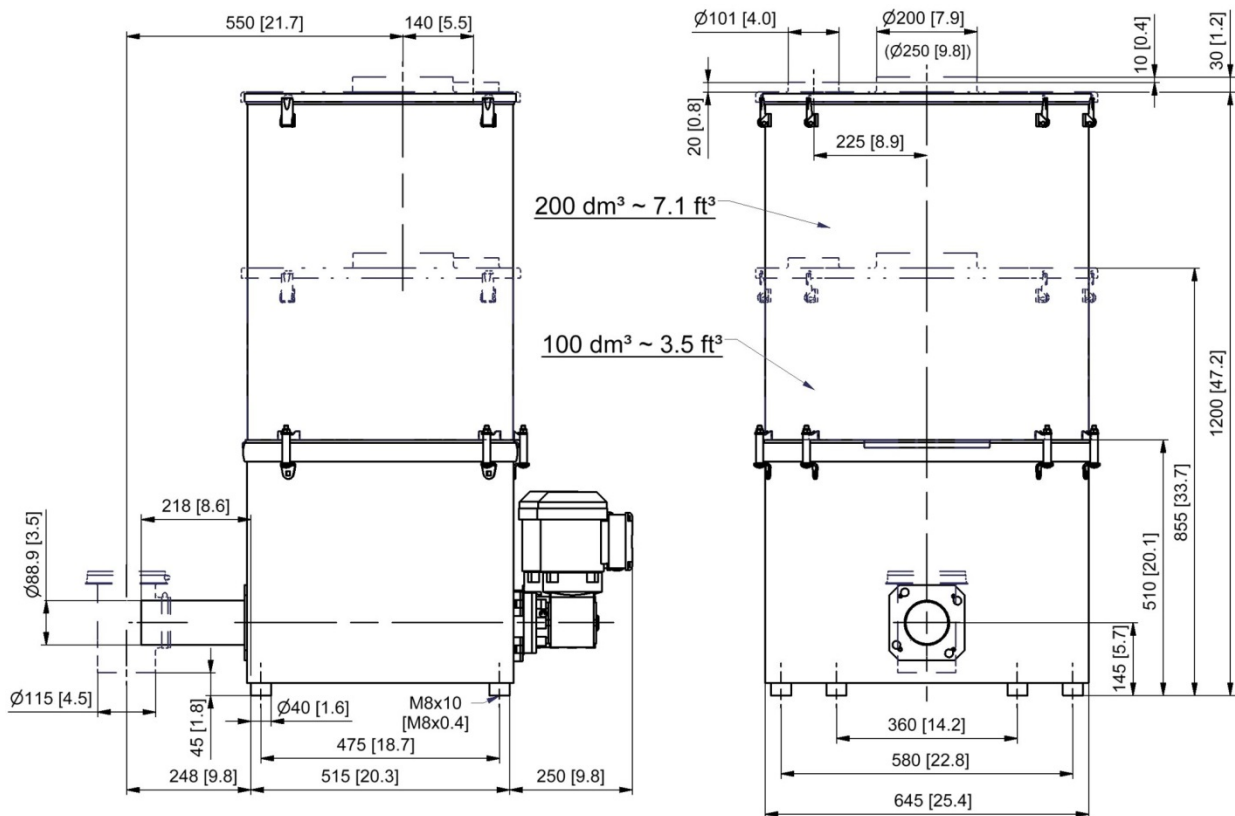
These components work together to provide consistent screw filling and mass flow of ingredient without degradation since the trapezoidal hopper shape naturally induces ingredient flow and the motor driven (amplitude adjustable) paddles flex the polyurethane hopper walls to promote ingredient flow into the screw. The FW80/2 and the FW80/7 use a separate motor for the external

massaging paddles to allow paddle speed adjustment for difficult flowing ingredients. Free flowing ingredients can use the non agitated FW80/1 feeder.

Other advantages of the Brabender FlexWall® Plus feeder are that it is easily disassembled for wet or dry cleaning as the polyurethane hopper is molded to easily fit on the stainless steel housing, and that 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 a scale to allow gravimetric loss-in-weight feeding and interchangeable screws. For screw removal from the rear models with hinged motors are available.

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.



Dimensions in mm (in)

Model	Motor	kW	rpm (optional)	Paddles	Separate paddle drive	kW
FW80/1	hinged	0.37	192 (335)*	no	no	---
FW80/2	hinged	0.37	192 (335)	yes	yes	0.37
FW80/7	fixed	0.37	192 (335)	yes	yes	0.37

- Weight without extension hopper approx. 80 kg/176 lb
 - Weight with 100 dm³/3.5 ft³ extension hopper approx. 100 kg/221 lb
 - Weight with 200 dm³/7.1 ft³ extension hopper approx. 110 kg/243 lb

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)	17.8 (31.1)
	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%.



FlexWall®Plus Feeder FW80

- Stainless steel trapezoidal housing
- Interchangeable screws
- Paddle-massaged flexible polyurethane hopper (FW80/1 is without paddles)
- Variable frequency driven 3 phase AC motor* (0.37 kW, IP65, insulation class F, TEFC), max. screw speed optionally 192 or 335 rpm. FW80/1 and FW80/2 have hinged motors.
- FW80/2 and FW80/7 only: second 3 phase AC motor* for separate paddle drive (0.37 kW, IP65, insulation class F, TEFC)
- Ingredient contact surfaces are polyurethane and SS 1.4301 (304), blade screws are PUR except B40/32 and B40/46 = SS 1.4305 (303)



Flexible Hopper

- Polyurethane (white)
- Food grade in compliance with the German Foodstuff and Consumer Goods Act (LMBG) or FDA
- Optional anti-static or chemically resistant hoppers available



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

- Vertical downspout on screw tube outlet (PUR)
- Flexible connections
- Exchange screws and screw tubes
- Screw extension 300 mm/11.8 in (not available for blade screws)
- Screw speed monitoring system

Options

- Explosion-proof designs
- Sanitary and hygienic designs
- Gravimetric loss-in-weight feeder with scale MD6 or MS6 (see separate Works Standards)
- Designs for higher or lower ingredient and/or ambient temperatures

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)

* 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.



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