

Brabender FlexWall® Plus Feeder FW40/5(6)

The Brabender FW40 FlexWall® Plus feeder is capable of reliably and accurately metering bulk ingredients and fibers with temperatures from 0 to 50°C (32-122°F).

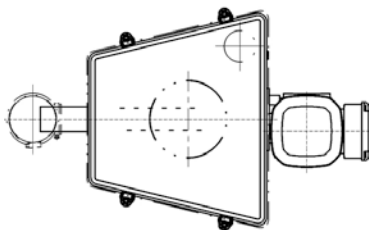
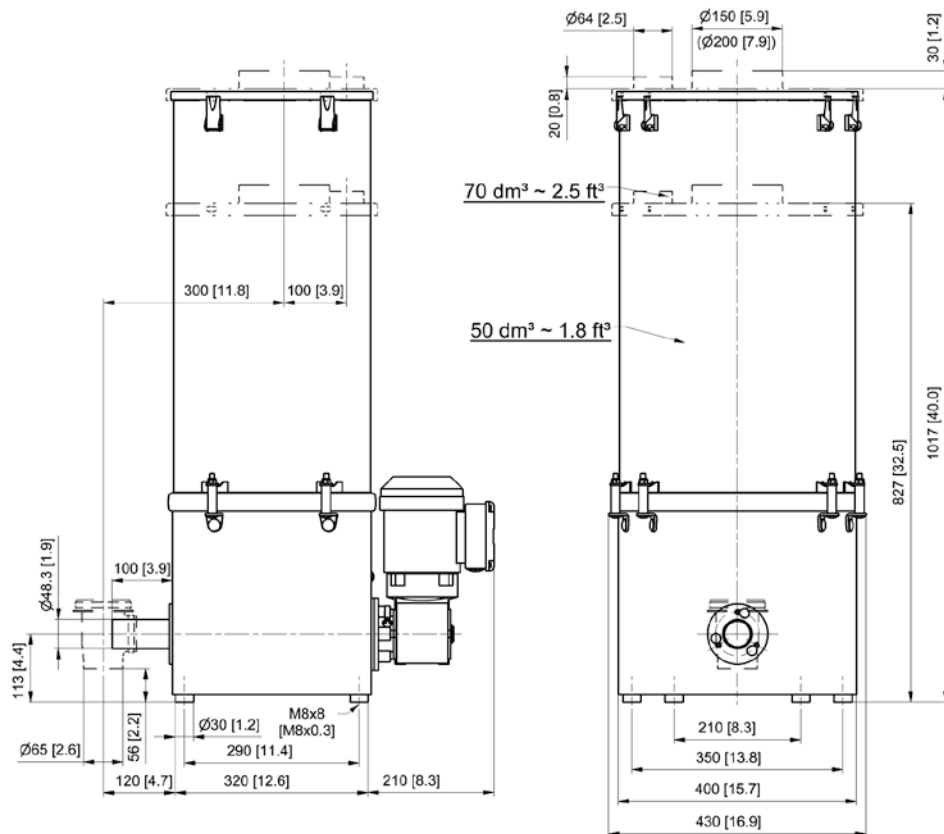
The feeder has the following main components: a stainless steel trapezoidal exterior, a flexible polyurethane hopper, external massage paddles (the FW40/6 model is without paddles), a feed screw, a feed screw tube, a 3 phase AC motor and a trapezoidal extension hopper for ingredient storage. Extension hoppers are available with 50 dm³ (1.8 ft³) or 70 dm³ (2.5 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. Free flowing ingredients can use the non agitated FW40/6 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. 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
FW40/5	fixed	0.37	192	yes
FW40/6	fixed	0.37	192 (335)	no

* Models with hinged motors and/or separate paddle drives: see separate Works Standard "Brabender FlexWall® Plus Feeder FW40/1(2)/7"

- Weight without extension hopper approx. 32 kg/71 lb
- Weight with 50 dm³/1.8 ft³ extension hopper approx. 42 kg/93 lb
- Weight with 70 dm³/2.5 ft³ extension hopper approx. 45 kg/99 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 (dm ³ /hr)**	Max. feed rate (ft ³ /hr)**
Spiral Screw (S) (TA = trough agitation)	S 20/15 (TA)	210	25.0 x 2.0	192 (335) / 100 Hz	40 (70)	1.4 (2.4)
	S 20/19 (TA)	210	25.0 x 2.0	192 (335) / 100 Hz	54 (94)	1.9 (3.3)
	S 20/24 (TA)	210	25.0 x 2.0	192 (335) / 100 Hz	72 (125)	2.5 (4.4)
	S 24/27 (TA)	260	30.0 x 2.0	192 (335) / 100 Hz	122 (213)	4.3 (7.4)
	S 24/35 (TA)	260	30.0 x 2.0	192 (335) / 100 Hz	162 (283)	5.7 (9.9)
	S 28/22 (TA)	320	38.0 x 3.0	192 (335) / 100 Hz	134 (234)	4.7 (8.2)
	S 28/35 (TA)	320	38.0 x 3.0	192 (335) / 100 Hz	225 (393)	7.9 (13.7)
	S 33/35	350	38.0 x 1.5	192 (335) / 100 Hz	307 (535)	10.7 (18.7)
	S 43/27	443	48.3 x 2.0	192 (335) / 100 Hz	368 (642)	12.9 (22.5)
	S 43/42	443	48.3 x 2.0	192 (335) / 100 Hz	616 (1075)	21.6 (37.6)
	Pellet Screw (S)	S 20/15	320	38.0 x 3.0	192 (335) / 100 Hz	72 (126)
S 20/19		320	38.0 x 3.0	192 (335) / 100 Hz	96 (168)	3.4 (5.9)
S 20/24		320	38.0 x 3.0	192 (335) / 100 Hz	127 (221)	4.4 (7.7)
S 24/27		350	38.0 x 1.5	192 (335) / 100 Hz	189 (330)	6.6 (11.5)
S 24/35		350	38.0 x 1.5	192 (335) / 100 Hz	251 (438)	8.8 (15.3)
S 28/22		443	48.3 x 2.0	192 (335) / 100 Hz	232 (405)	8.1 (14.2)
S 28/35		443	48.3 x 2.0	192 (335) / 100 Hz	385 (672)	13.5 (23.5)
S 33/35		443	48.3 x 2.0	192 (335) / 100 Hz	429 (749)	15.0 (26.2)
Blade Screw (B)		B 28/28	320	38.0 x 3.0	192 (335) / 100 Hz	132 (230)
	B 32/38	350	38.0 x 1.5	192 (335) / 100 Hz	259 (452)	9.1 (15.8)
	B 40/32	443	48.3 x 2.0	192 (335) / 100 Hz	302 (526)	10.6 (18.4)
	B 40/46	443	48.3 x 2.0	192 (335) / 100 Hz	451 (787)	15.8 (27.5)
Fiber Screw (F)	F 3322/35-K23	350	38.0 x 1.5	192 (335) / 100 Hz	101 (176)	3.5 (6.2)
	F 3322/35-K12	350	38.0 x 1.5	192 (335) / 100 Hz	170 (297)	6.0 (10.4)
	F 4032/46-K15	443	48.3 x 2.0	192 (335) / 100 Hz	372 (648)	13.0 (22.7)

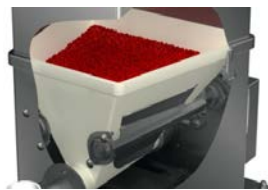
* Max. screw speed 335 rpm only available for model FW40/6

** 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 FW40

- Stainless steel trapezoidal housing
- Interchangeable screws
- Paddle-massaged flexible polyurethane hopper (FW40/6 is without paddles)
- 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 FW40/6)
- Ingredient contact surfaces are polyurethane and SS 1.4301 (304), blade screws are 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
 - 50 dm³ (1.8 ft³), straight walled
 - 70 dm³ (2.5 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 150 mm/5.9 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 MD5 or MS5 (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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