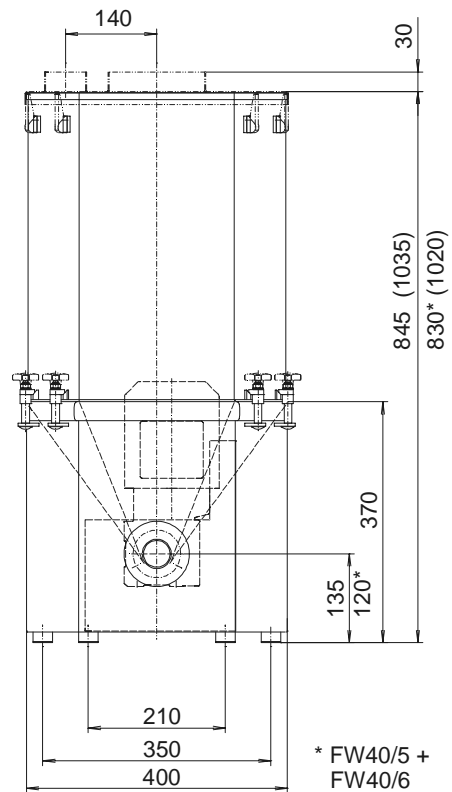
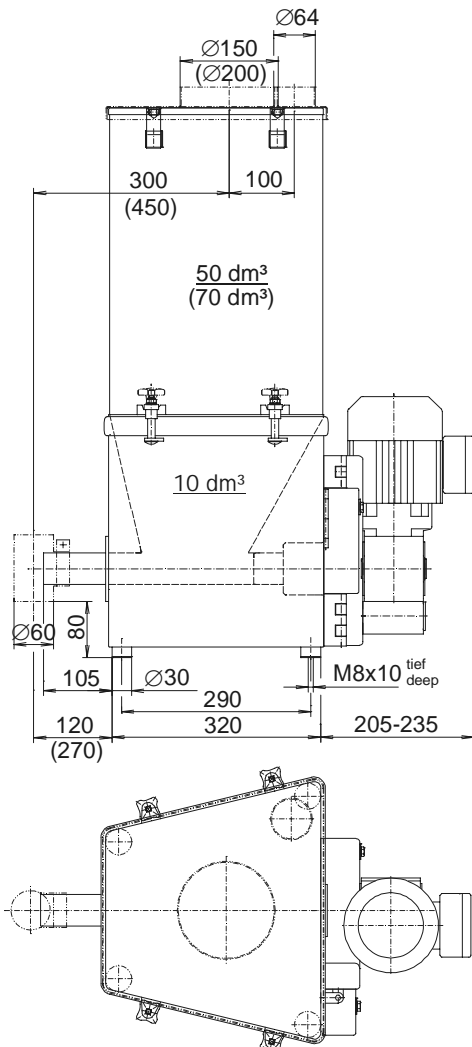


# Brabender FlexWall® Plus Feeder Type FW40 Plus

The Brabender FlexWall® Plus Feeder Type FW40 Plus is a compact universal metering feeder for virtually all bulk ingredients and fibres. It is available as a volumetric unit or with a built-in Brabender weighing module as a loss-in-weight feeder for gravimetric feeding. The unit consists of a trapeziform stainless steel exterior housing, a flexible polyurethane hopper with external massage paddles, a single or twin screw with screw tube and a frequency-controlled three-phase current motor driving the screw and the paddles. The trapezoid design and the paddle principle ensuring full agitation of the entire ingredient compartment induce free mass flow and an optimum screw filling level without ingredient deterioration. To suit a variety of ingredients, the paddle agitation amplitudes can

be varied. Single and twin screws are interchangeable. The unique design of the Brabender FlexWall® Plus Feeder permits easy disassembly and cleaning. The polyurethane hopper features a lip, which seals to the upper edge of the stainless steel housing, and can easily be removed for wet cleaning. The super compact trapeziform design allows to configure up to 6 feeders or more around a central point of discharge in an extraordinarily space-saving manner. Suitable support structures can be supplied. Operation, service and maintenance do not require lateral feeder access. For backward screw exchange from the rear feeder end a version can be supplied featuring a slewable motor. A further variant without paddles is also available. The unit conforms to CE directives.



Weight without extension hopper approx. 30-40 kg  
 Weight with extension hopper approx. 40-50 kg

# Technical Data\*

## Available Screw Sizes and Feed Rates

| Screw Type                                           | Ø mm x p mm   | Tube Designation | Tube Dia. mm | Speed r.p.m.        | Max. Feed Rate dm³/hr* |
|------------------------------------------------------|---------------|------------------|--------------|---------------------|------------------------|
| Spiral Screw (S)<br>(TA = with<br>trough activation) | S 20/15 (TA)  | 210              | 25.0 x 2.0   | 335 (192**) / 100Hz | 70 (40**)              |
|                                                      | S 20/19 (TA)  | 210              | 25.0 x 2.0   | 335 (192**) / 100Hz | 94 (54**)              |
|                                                      | S 20/24 (TA)  | 210              | 25.0 x 2.0   | 335 (192**) / 100Hz | 125 (72**)             |
|                                                      | S 24/27 (TA)  | 260              | 30.0 x 2.0   | 335 (192**) / 100Hz | 213 (122**)            |
|                                                      | S 24/35 (TA)  | 260              | 30.0 x 2.0   | 335 (192**) / 100Hz | 283 (162**)            |
|                                                      | S 28/22 (TA)  | 320              | 38.0 x 3.0   | 335 (192**) / 100Hz | 234 (134**)            |
|                                                      | S 28/35 (TA)  | 320              | 38.0 x 3.0   | 335 (192**) / 100Hz | 393 (225**)            |
|                                                      | S 33/35       | 350              | 38.0 x 1.5   | 335 (192**) / 100Hz | 535 (307**)            |
|                                                      | S 43/27       | 443              | 48.3 x 2.0   | 335 (192**) / 100Hz | 642 (368**)            |
|                                                      | S 43/42       | 443              | 48.3 x 2.0   | 335 (192**) / 100Hz | 1075 (616**)           |
| Blade Screw (B)                                      | B 28/28       | 320              | 38.0 x 3.0   | 335 (192**) / 100Hz | 230 (132**)            |
|                                                      | B 32/38       | 350              | 38.0 x 1.5   | 335 (192**) / 100Hz | 452 (259**)            |
|                                                      | B 40/32       | 443              | 48.3 x 2.0   | 335 (192**) / 100Hz | 526 (302**)            |
|                                                      | B 40/46       | 443              | 48.3 x 2.0   | 335 (192**) / 100Hz | 787 (451**)            |
| Granule Screw (S)                                    | S 20/15       | 320              | 38.0 x 3.0   | 335 (192**) / 100Hz | 135 (78**)             |
|                                                      | S 20/19       | 320              | 38.0 x 3.0   | 335 (192**) / 100Hz | 177 (102**)            |
|                                                      | S 20/24       | 320              | 38.0 x 3.0   | 335 (192**) / 100Hz | 230 (132**)            |
|                                                      | S 24/27       | 350              | 38.0 x 1.5   | 335 (192**) / 100Hz | 338 (194**)            |
|                                                      | S 24/35       | 350              | 38.0 x 1.5   | 335 (192**) / 100Hz | 446 (256**)            |
|                                                      | S 28/22       | 443              | 48.3 x 2.0   | 335 (192**) / 100Hz | 416 (238**)            |
|                                                      | S 28/35       | 443              | 48.3 x 2.0   | 335 (192**) / 100Hz | 682 (391**)            |
| Fibre Screw (F)                                      | F 3322/35-K23 | 350              | 38.0 x 1.5   | 335 (192**) / 100Hz | 176 (101**)            |
|                                                      | F 3322/35-K12 | 350              | 38.0 x 1.5   | 335 (192**) / 100Hz | 297 (170**)            |
|                                                      | F 4032/46-K15 | 443              | 48.3 x 2.0   | 335 (192**) / 100Hz | 648 (372**)            |
| Twin Concave<br>Screw (TC)***                        | TC 20/12      | 200 T            | 24.0 x 2.0   | 335 (192**) / 100Hz | 48 (28**)              |
|                                                      | TC 20/11      | 223 T            | 26.9 x 2.3   | 335 (192**) / 100Hz | 93 (53**)              |
|                                                      | TC 20/20      | 223 T            | 26.9 x 2.3   | 335 (192**) / 100Hz | 192 (110**)            |

\* Theor. values at 100 % screw filling level and motor speed. Depending on the flow characteristics the screw filling level may decrease down to 50 %.

\*\* Values in brackets refer to feeders with optional 192 min<sup>-1</sup> drive motors (standard in case of model FW40/5)

\*\*\* Twin screws only available for model FW40/0 with slewable motor

## Models

| Type   | Motor    | kW   | min <sup>-1</sup> | Paddles |
|--------|----------|------|-------------------|---------|
| FW40/0 | slewable | 0.37 | 335*              | yes     |
| FW40/1 | slewable | 0.37 | 335*              | no      |
| FW40/5 | firm     | 0.37 | 192               | yes     |
| FW40/6 | firm     | 0.37 | 335*              | no      |

\* optionally 192 min<sup>-1</sup>

## Drive

### Three-Phase Motor (Direct Drive)

Wattage 0.37 kW, enclosure protection min. IP 55, insulation class F

### Frequency Converter FC-B1/FC-V1.1

(see the according Works Standards)

## Materials

- Stainless steel exterior housing, hopper PU (white), food-proof in compliance with the German Foodstuff and Consumer Goods Act (LMBG)
- Ingredient-touched steel parts at least SS 1.4301 ≈ AISI 304 (blade screws SS 1.4305 ≈ AISI 303, whirled)

## Accessories / Options

- 50dm<sup>3</sup> extension hopper, SS 1.4301
- 70 dm<sup>3</sup> extension hopper, SS 1.4301
- Cover with inlet pipe and vent pipe
- Laid-on cover with handle

- Downspout at screw tube outlet
- Flexible connection sleeves
- Screw speed monitoring system
- Screw extension 150 mm (not for blade and twin screws)
- Exchange screws and screw tubes
- Hopper made of anti-static material
- Explosion-proof design complying with EU Directive 94/9/EG (ATEX 95)
- "Easy Change" version with interchangeable feed modules
- Version in "Hygienic Design"
- Gravimetric version as loss-in-weight feeder with built-in digital load cell DigiMASS-2 (see Works Standard "DDW-MD5-FW40 Plus-50[70]" )



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