

# FiberXpert DDW-M-FX

Gravimetric

## General Information



The [FiberXpert](#) Feeder is ideal for feeding long, irregularly cut and non-flowing ingredients.

The feeder has the following main components:

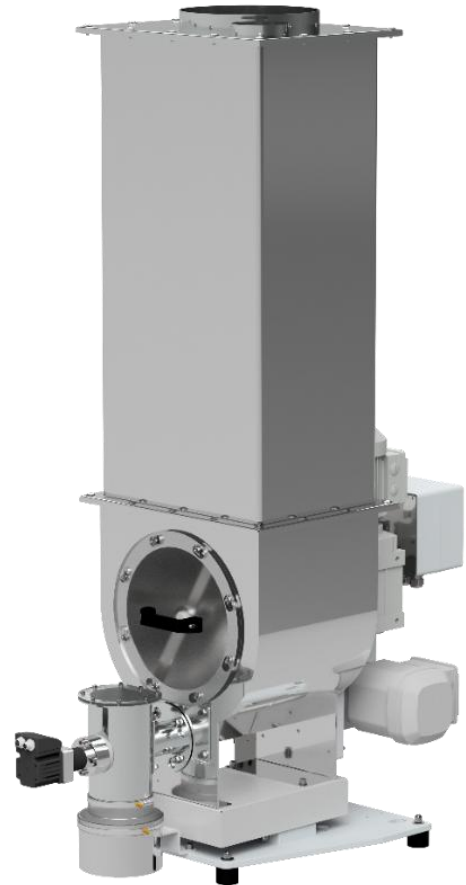
A [scale](#), a stainless steel [screw trough](#) with a large inlet cross-selection, an [inspection port](#) for easy cleaning and maintenance, an screw trough agitator, a 3 phase agitator motor, a [blade screw](#) with 3 phase motor, a screw tube, a [pulsation](#) reducing rotating flow blade with motor at the outlet and a [steep-wall extension hopper](#) for ingredient storage.

The FiberXpert is suitable for the feeding:

Natural wood and carbon fibers, PP, PET and bottle flakes, shredded plastic or carpet fiber, cellulose, acrylic, aramid, PPS, polyamide, polymer or polyester fibers, film chips and shredded film strips from film edge trimming, fiber reinforcements or fillers for compounding and biopolymers.

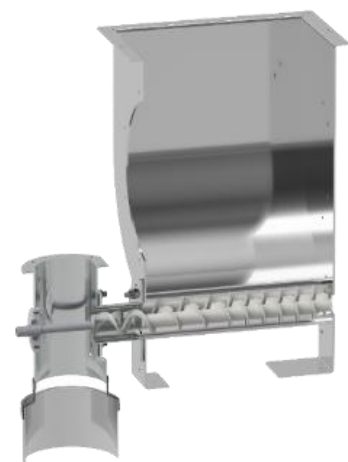
The gravimetric version includes the MD [weighing system](#) featuring a high-resolution digital load cell with serial data transmission or a MS, with strain gauge load cell with advanced filtering technology.

The unit conforms to CE directives.



## Model Specification

|                          |                                         |
|--------------------------|-----------------------------------------|
| <b>DDW-M5-FX50-100</b>   | Loss-in-weight feeder                   |
| DDW- <b>M5</b> -FX50-100 | Load cell designation                   |
| DDW-M5- <b>FX50</b> -100 | FiberXpert and Screw diameter (mm)      |
| DDW-M5-FX50- <b>100</b>  | Hopper volume and trough capacity (dm³) |



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## Control Modules

Control and speed modules can be feeder mounted ([Congrav® CM-E](#)) or available for mounting in a separate control panel ([Congrav® CB-E](#) or [Congrav® CB-S](#)).

Controllers can communicate directly to most host/ PLC systems or to Brabender Technologie Congrav® Operator Interfaces.

## Technical Drawings and Dimensions

| Model sizes                | hopper                              | Control module CB | Control module CM                   |
|----------------------------|-------------------------------------|-------------------|-------------------------------------|
| <a href="#">FX50-100</a>   | <a href="#">100 dm<sup>3</sup></a>  | DDW-M-FX50-100    | DDW-M-FX50-100 CM                   |
| <a href="#">FX80-200</a>   | <a href="#">200 dm<sup>3</sup></a>  | DDW-M-FX80-200    | <a href="#">DDW-M-FX80-200 CM</a>   |
| <a href="#">FX120-740</a>  | <a href="#">740 dm<sup>3</sup></a>  | DDW-M-FX120-740   | <a href="#">DDW-M-FX120-740 CM</a>  |
| <a href="#">FX225-2000</a> | <a href="#">2000 dm<sup>3</sup></a> | DDW-M-FX225-2000  | <a href="#">DDW-M-FX225-2000 CM</a> |

## Feed rate range

| Model sizes                | Min. feed rate<br>[dm <sup>3</sup> /h] / [cuft/hr]* | Max. Feed rate<br>[dm <sup>3</sup> /h]/[cuft/hr]* | * Theoretical rate to be confirmed by testing of minimum and maximum rates. |
|----------------------------|-----------------------------------------------------|---------------------------------------------------|-----------------------------------------------------------------------------|
| <a href="#">FX50-100</a>   | 5 / 0.2                                             | 550 / 19                                          |                                                                             |
| <a href="#">FX80-200</a>   | 10 / 0.4                                            | 1160 / 41                                         |                                                                             |
| <a href="#">FX120-740</a>  | 50 / 1.8                                            | 3400 / 120                                        |                                                                             |
| <a href="#">FX225-2000</a> | 100 / 3.5                                           | 19.900 / 703                                      |                                                                             |

## Net weighing range/ max. bulk density

| Load cell    | FX50-100                                                                | FX80-200                                                                | FX120-740                                                               | FX225-2000                                                                    |
|--------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| MD5          | 10 kg / 0,1 kg/dm <sup>3</sup><br>(22 lb / 0,1 kg/dm <sup>3</sup> )     | -                                                                       | -                                                                       | -                                                                             |
| MD6          | 240 kg / 0,2 kg/dm <sup>3</sup><br>(529.1 lb / 0,2 kg/dm <sup>3</sup> ) | 176 kg / 0,2 kg/dm <sup>3</sup><br>(388 lb / 0,2 kg/dm <sup>3</sup> )   | -                                                                       | -                                                                             |
| MS5          | 15 kg / 0,15 kg/dm <sup>3</sup><br>(33.1 lb / 0,15 kg/dm <sup>3</sup> ) | -                                                                       | -                                                                       | -                                                                             |
| MS6          | 210 kg / 0,2 kg/dm <sup>3</sup><br>(463 lb / 0,2 kg/dm <sup>3</sup> )   | 146 kg / 0,2 kg/dm <sup>3</sup><br>(321.9 lb / 0,2 kg/dm <sup>3</sup> ) | -                                                                       | -                                                                             |
| MS (FX120)   | -                                                                       | -                                                                       | 284 kg / 0,2 kg/dm <sup>3</sup><br>(626.1 lb / 0,2 kg/dm <sup>3</sup> ) | -                                                                             |
| MS (FX225 A) | -                                                                       | -                                                                       | -                                                                       | 91 kg / 0,05 kg/dm <sup>3</sup><br>(200.6 lb / 0,05 kg/dm <sup>3</sup> )      |
| MS (FX225 B) | -                                                                       | -                                                                       | -                                                                       | 219 kg / 0,11 kg/dm <sup>3</sup><br>( 482.8 lb kg / 0,11 kg/dm <sup>3</sup> ) |



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## Technical Specification

|                                             |                                                                                                                                                                                                                  |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ambient temperature:                        | 0°C to +45°C (32°F to 113°F)                                                                                                                                                                                     |
| Humidity:                                   | up to 85% non-condensing                                                                                                                                                                                         |
| max. vacuum/pressure:                       | 3 hPa (3 mbar) (1.2 Inches of water)                                                                                                                                                                             |
| Product temperature:                        | 0°C to +50°C (32°F to 122°F)                                                                                                                                                                                     |
| Screw trough, extension hopper, hopper lid: | 1.4301 (304 SS)                                                                                                                                                                                                  |
| Screws, screw tubes, outlets:               | 1.4571 (316 SS), 1.4301 (304 SS)                                                                                                                                                                                 |
| Non-contact components:                     | plated or painted steel (RAL 7035)                                                                                                                                                                               |
| Extension hopper                            | Hopper lid for <a href="#">automatic</a> or <a href="#">manual refilling</a>                                                                                                                                     |
| Screw drive:                                | IP65, 230/400 V, frequency-controlled, performance depending on size                                                                                                                                             |
| Agitator drive:                             | IP65, 230/400 V, frequency-controlled, performance depending on size                                                                                                                                             |
| Propellor drive:                            | IP65, 24-48V resp. 230/400V, servo drive or frequency-controlled                                                                                                                                                 |
| Power supply:                               | AC 230/400V ** (110VAC/1PH/60hz, 230/460VAC/3PH/60 hz)                                                                                                                                                           |
| Noise level                                 | < 70 dB                                                                                                                                                                                                          |
| * other values upon request                 | ** 3 phase motors are designed for a power supply of: 230/400 V, 50 (60) Hz, and for the operation in TT, TN networks or networks with earthed neutral conductor. For different networks adaptors are necessary. |

## Options and Accessories

- Flexible [inlet and vent connections](#)
- Flexible [outlet connections](#)
- Interchangeable screws and screw tubes
- Versions for higher and lower temperatures than standard
- Explosion-proof versions as per device 2014/34/EU (ATEX) or NFPA
- Maintenance disconnection box
- [Filter bag](#) or [JetFilter](#) for vent pipe
- Pressure compensation for the outlet or the [feeder hopper](#)
- Cleaning and refill systems upon request
- Turntable, cart mounting

