

Long-axis agitator Giantmix FR stationary

FR3 110-400

FR4 150-400

FR5 185-400

**Powerful
High efficiency
Low cost maintenance**



Application

Dry matter content up to 14 %
Substrate temperature up to 70°C
pH-value 6.5 - 8.2

Bearing

2 tapered roller bearings to absorb the axial forces
Mechanical seals in SiC/SiC, independent of rotation direction
Interim bearings for the drive shaft, slide bearing

Technical Data

Tube length 2.5 / 3.0 m
Tube Ø 101.6 x 4.0 or 5.7 mm in ss304
Option: Rubber compression seal Ø 200 mm galvanized
Sound pressure level 75 dB(A)
Installation up to 6 m below substrate level possible
Oil inspection glass for monitoring the tightness
Optional PTO with protection unit for an alternative tractor operation (max. HD+ 700)
Agitator completely in modular design

Propeller

3-blade high efficiency propeller, dynamically balanced

FR3:	11,0 kW	400 rpm	propeller HD+ 580
FR4:	15,0 kW	400 rpm	propeller HD+ 620
FR5:	18,5 kW	400 rpm	propeller HD+ 660

Standard in ss304
optional ss316 or hardened steel

Motor

11.0 / 15.0 / 18.5 kW : 4 poles
400 V, 50 Hz, special tensions on request
PTC thermistors PTC 160°C as overheat protection
Ex-Motor (Series) Ex II 3G Ex nA II T3 Gc
Special version with 13.5 kW Ex II 2G Ex e IIA T3 Gb
Optional: rain protection hood (ss304)

Ex-Zone

Ex-Zone 2 (outside the tank) and Zone 1 (inside the tank)
Special version FR4 with 13.5 kW for Zone 1 (outside tank)
Classification mechanical components:
 CE Ex II 2G ck IIA T3

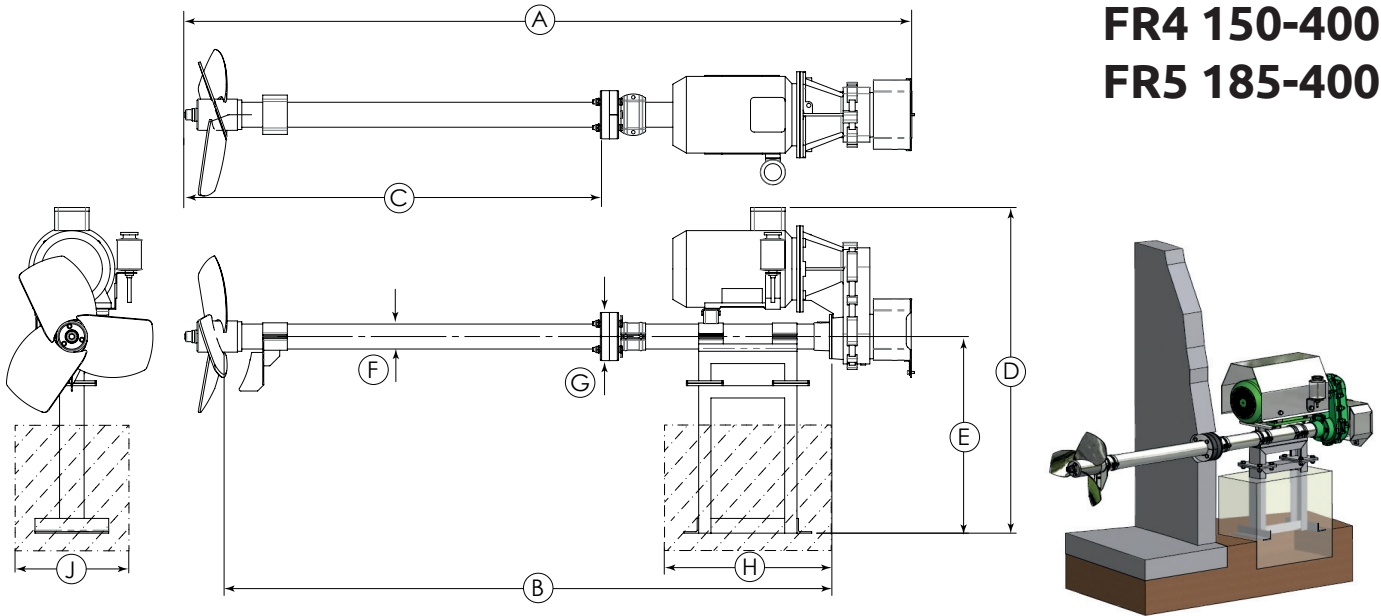
Gear

Spur gear drive, helical teeth, low noise level
Reduction ratio $i = 3.69$
Oil chamber, gear oil SAE85W-140 / API GL-5
Oil change interval after 2,000 operating hours

Control box (optional)

Star-delta-switch, soft starter, frequency converter
Delivery without connecting cable

Long-axis agitator Giantmix FR stationary

FR3 110-400
FR4 150-400
FR5 185-400


Dimensions

Type	A [m]	B [m]	C [m]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	J [mm]				
FR3-5	3 / 3.5	2.5 / 3	1.6 / 2.1	1,325	800	101.6	200	800	500				

Technical Data

Type	Rated Power [kW]	Propeller speed [rpm]	Rated Voltage [V]	Rated current [A]	Frequency [Hz]	Power factor cos φ	Gear reduction ratio	Propeller diameter [mm]	Axial force [kN]	Flow velocity [m/s] *	Pumping rate Water [m ³ /min]	Weight approximate [kg]
FR3	11.0	400	400	21.0	50	0.87	3.69	580	2.2	3.4	52	300
FR4	15.0	400	400	27.3	50	0.86	3.69	620	2.6	3.9	68	300
FR5	18.5	400	400	34.0	50	0.85	3.69	660	3.3	4.3	84	300

Subject to technical changes

* measured in water and 1.2 m distance