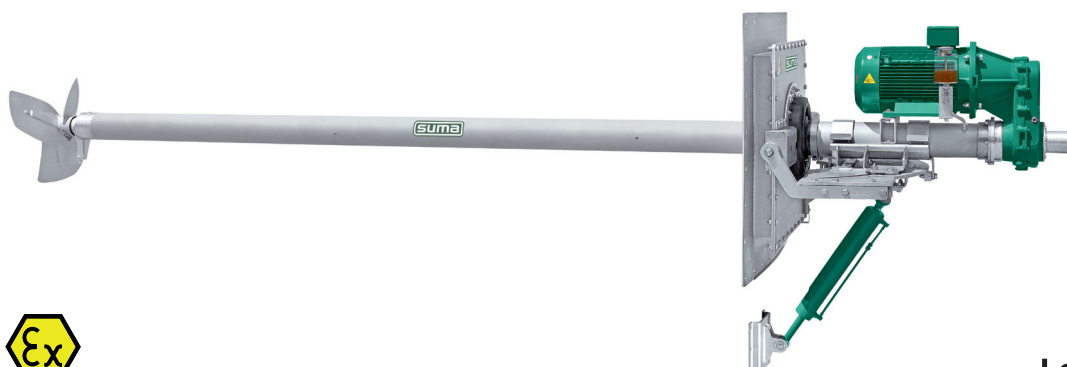


Long-axis agitator Giantmix FT



FT1 75-200
FT3 110-275
FT4 150-275
FT4 150-400
FT5 185-275
FT5 185-400
FT6 220-400

Powerfull
High efficiency
Low cost maintenance



Application

Biogas tanks
(Fermenter - Post digester - End storage tanks)
Dry matter content up to 14 %
Substrate temperature up to 70°C
pH-value 6.5 - 8.2

Technical Data

Tube length 4.0 / 5.0 / 5.5 / 6.0 m
Tube Ø 159 x 5 mm, ss304 inclusive robust tube within tube technology
Sealing plate 120x120 cm (143x143), ss304 ss316 on request
Sound pressure level 75 dB(A)
Sealing membranes of EPDM60
Installation up to 8 m below substrate level
Oil inspection glass for monitoring the tightness
Agitator completely manufactured in modular design
Option: power take-off with protection for alternative operation with tractor (max. HD+ 700)

Motor

7.5 kW : 8-poles
15.0 / 18.5 / 22.0 kW : 4-poles
400 V, 50 Hz, special tensions on request
PTC thermistors 160°C (overheat protection)
Ex-Motor  II 3G Ex nA IIA T3 Gc
Special design 13.5 kW:  II 2G Ex e IIA T3 Gb
Option: rain protection hood (ss304)

Gear

Planetary gear, helical teeth, low noise level
Reduction ratio $i = 3.83$ or 5.31
Own oil circuit gear oil SAE85W-140 / API GL-5
Oil change all 2,000 operating hours

Bearing

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

Propeller

3-blade high efficiency propeller, dynamically balanced

FT1:	7.5 kW	200 rpm	Propeller HD+ 850
FT3:	11.0 kW	275 rpm	Propeller HD+ 800
FT4:	15.0 kW	275 rpm	Propeller HD+ 850
FT4:	15.0 kW	400 rpm	Propeller HD+ 660
FT5:	18.5 kW	275 rpm	Propeller HD+ 880
FT5:	18.5 kW	400 rpm	Propeller HD+ 700
FT6:	22.0 kW	400 rpm	Propeller HD+ 750

Standard in ss304, optional ss316 or hardened steel

Adjustment range

Lateral adjustment $\pm 30^\circ$ through handspindle
Tilt adjustment up to $\pm 30^\circ$ through hydraulic cylinder
Tank openings: 800 x 800 mm (plate 120 cm)
1,000 x 1,000 mm (plate 143 cm)

Ex-Zone

Ex-Zone 2 (outside tank) and Zone 1 (inside tank)
Special design FT4 13.5 kW for Zone 1 (outside)
Classification mechanical components:

 II 2G ck IIA T3

Control switch (optional)

Soft start or frequency converter
Delivery without connecting cable

Long-axis agitator Giantmix FT

FT1 75-200

FT3 110-275

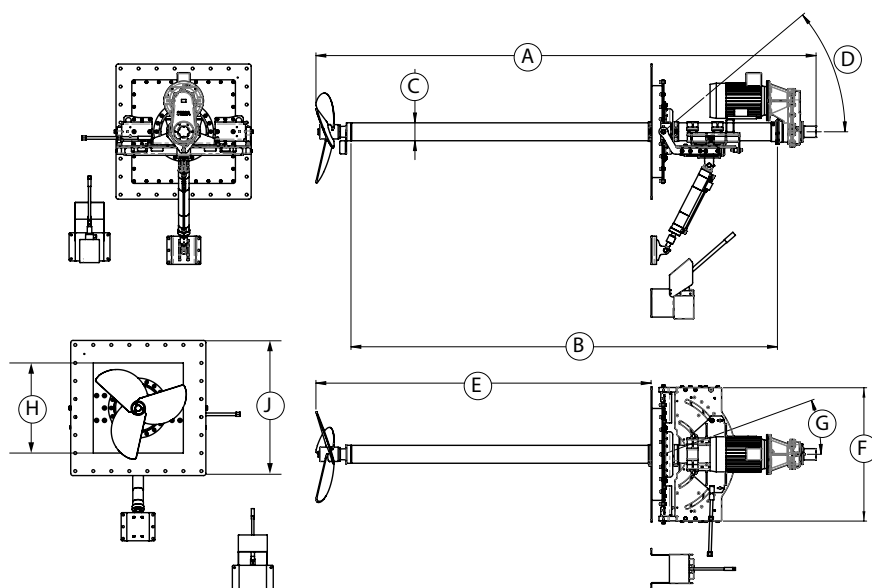
FT4 150-275

FT4 150-400

FT5 185-275

FT5 185-400

FT6 220-400



Dimensions

Type	A [m]	B [m]	C [mm]	D	E [m]	F [m]	G	H [m]	J [m]
FT 1-6	4.6 / 5.6 6.1 / 6.6	4.0 / 50 5.5 / 6.0	ø 159	max. ± 30°	3.3 / 4.3 4.8 / 5.3	1.227	± 30°	0.8	1.2 / 1.43

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 [m³/min]	Weight approximate [kg]
FT1	7.5	200	400	18.0	50	0.70	3.69	850	2.0	2.6	85	950
FT3	11.0	275	400	21.0	50	0.87	5.31	800	3.0	3.2	95	950
FT4	15.0	275	400	27.3	50	0.86	5.31	850	4.1	3.6	119	950
FT4	15.0	400	400	27.3	50	0.86	3.69	660	3.3	4.3	84	950
FT5	18.5	275	400	34.0	50	0.85	5.31	880	4.4	3.7	132	950
FT5	18.5	400	400	34.0	50	0.85	3.69	700	3.9	4.3	94	950
FT6	22.0	400	400	42.0	50	0.83	3.69	750	4.5	4.5	115	950

Subject to technical changes

* measured in water and 1.2 m distance

© SUMA Rührtechnik GmbH | Martinszeller Str. 21 | DE-87477 Sulzberg

Phone: +49 8376 / 92131 - 0 | Fax: - 19 | E-Mail: info@suma.de

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