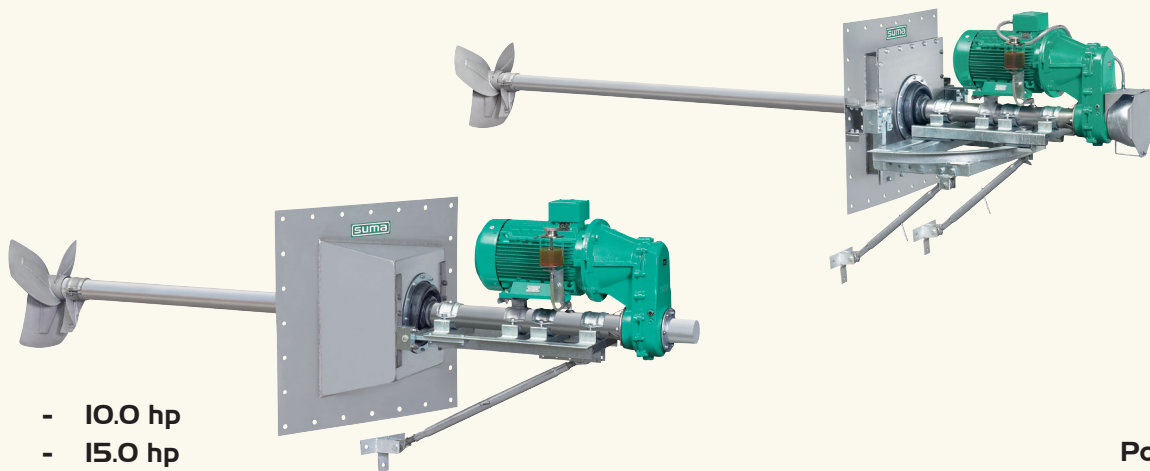


Long axis agitator GIANTMIX FR



- Typ FRI - 10.0 hp
- Typ FR3 - 15.0 hp
- Typ FR4 - 20.5 hp
- Typ FR5 - 25.0 hp

Powerfull
High efficiency
Low cost maintenance

Application

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

Technical data

Tube length 9.8 / 13.1 ft
Tube Ø 4 x 0.16 or x 0.22 in, ss304
Sealing plate / frame 38.6 x 38.6 inch ss304
ss316 on request
Sound pressure level 72 dB(A)
Installation up to 9.8 ft below substrate level
Oil inspection glass as a service indicator (monitoring the impermeability)
Option: Power take-off with protection for an alternativ tractor operation

Motor

Low speed: 10 hp - 8-poles / 15 & 20.5 hp - 6-poles
High speed: 20.5 / 25 hp - 4-poles
60 Hz, special tensions on request
Thermo-control 3 x PTC 160°C (overheat protection)
Ex-Motor (Series) II 3G Ex nA IIA T3 Gc
Special design 13.5 kW: II 2G Ex e IIA T3 Gb

Gear

Spur gear drive, helical teeth, low noise level
Reduction ratio $i = 3.69$
Oil chamber, gear oil SAE 85W-140 / API GL-5
Oil change after 2,000 operating hours

Bearing

Bearing housing with oil chamber
2 tapered roller bearings for thrust
Mechanical seals SiC/SiC,
Interim bearings for the drive shaft

Propeller

3-blade high efficiency propeller, dynamically balanced

- FR1: 10.0 hp / propeller HD+ 750 / 240 rpm
- FR3: 15.0 hp / propeller HD+ 700 / 315 rpm
- FR4: 20.5 hp / propeller HD+ 750 / 315 rpm
- FR5: 25.0 hp / propeller HD+ 580 / 480 rpm

Standard is ss304, optional hardened steel

Adjustment range

- Sealing plate 30° (38.6 x 38.6 in) ss304 for a lateral adjustment of the agitator, tilt adjustment
- Slewing ring $\pm 25^\circ$ (38.6 x 38.6 in) with sealing frame and cover ss304, for lateral adjustment of the agitator, vertically and horizontally adjustable
- Option: in ss316 and other plate sizes

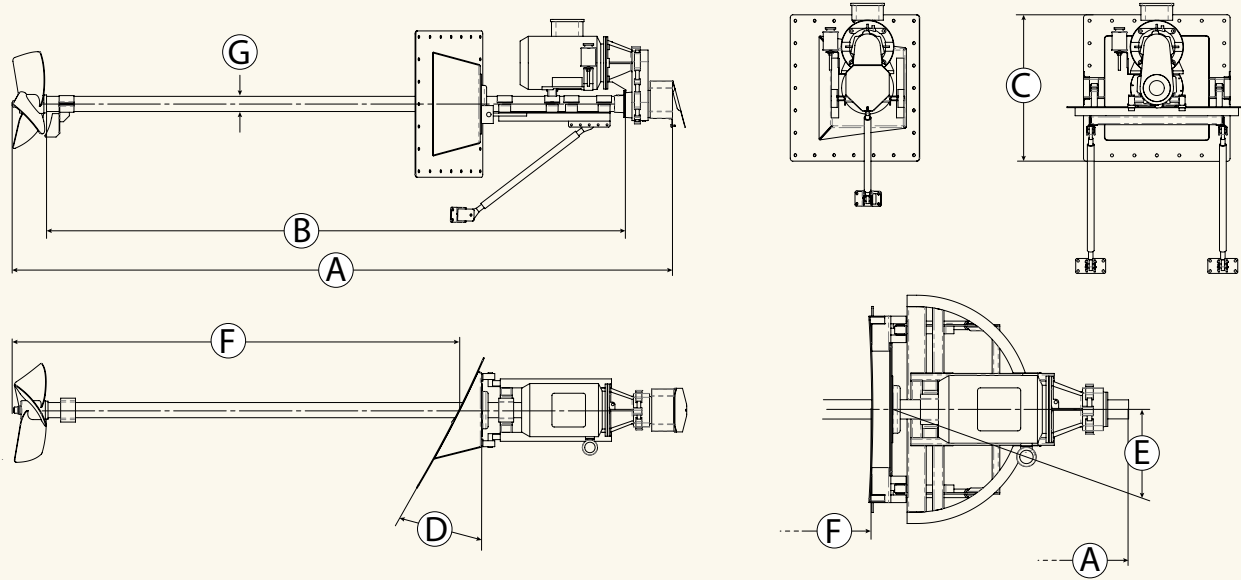
Ex-Zone (tube and gear)

Ex-Zone 2 (outside the tank) and
Zone 1 (inside the tank)
Special design FR 18.5 hp for Zone 1 (outside)
Classification mechanical components
 II 2G ck IIA T4

Control switch (optional)

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

Long axis agitator GIANTMIX FR



Dimensions

Type	A [ft]	B [ft]	C [in]	D	E	F [ft]	G [in]		
FR 30°	11.5 / 15.0	9.8 / 13	38.6	30°	-	6.9 / 10.2	ø 4		
FR DK	11.5 / 15.0	9.5 / 12.8	38.6	-	max. 25°	6.9 / 10.2	ø 4		

Technical Data

Type	Rated Power [hp]	Frequency [Hz]	Gear reduction ratio	Propeller speed [rpm]	Propeller diameter [in]	Axial force [kN]	Flow velocity [ft/s] *	Pumping rate Water [gal/min]	Weight approximate [lbs]		
FR1	10	60	3.69	240	29.5	1.7	9.8	20341.25	1212.5		
FR3	15	60	3.69	315	27.6	2.6	10.3	19284.56	1212.5		
FR4	20.5	60	3.69	315	29.5	3.1	11.8	24303.83	1212.5		
FR5	25	60	3.69	480	22.8	3.2	14.1	17171.18	1212.5		

Subject to technical changes.

* measured in water with a distance of 3.9 ft