

## GIANTMIX FR SP

**FR1 75-240**

**FR3 110-330**

**FR3 110-480**

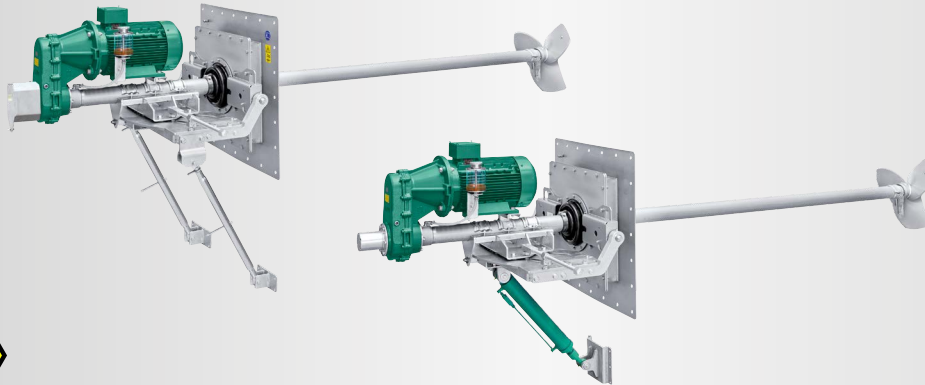
**FR4 150-330**

**FR4 150-480**

**FR5 185-330**

**FR5 185-480**

**FR6 220-480**



### Application

Rod agitator  
 Dry matter content up to 14 %  
 Substrate temperature up to 160 F  
 pH-values 6.5 - 8.2

### Technical Data

Tube length 9.8 / 13.0 ft  
 Agitator shaft  $\varnothing$  4 x 0.15 in (max. 9.8 ft)  
 or 0.2 in ss3304, ss316 version on request  
 Sealing plate/-frame 3.2x3.2 ft / 3.9x3.9 ft / 4.7x4.7 ft in  
 ss304, ss316 version on request  
 Sound pressure 75 dB(A)  
 Sealing membranes of EPDM60  
 Installation up to 26.2 ft beneath substrate level, deeper  
 immersion depths on request  
 As standard with upper link  
 Oil equalizing container for monitoring the tightness  
 Agitator completely manufactured in modular design  
 POM protection to minimize abrasion

### Motor

10 hp: 8-poles, 15 | 20 | 25 | 30 hp: 4-poles (IE3 - motor)  
 PTC thermistors as overheat protection  
 Ex-Motor II 3G Ex nA IIC T3 Gc  
 Special design 18 hp: II 2G Ex eb IIC T3 Gb  
 Optional rain protection hood (stainless 304)

### Gear

Spur gear drive, helical teeth, low noise level  
 Reduction ratio  $i = 3.69$  or  $5.31$   
 Isolated oil circuit, SAE 85W-140 / API GL-5  
 2,000 operating hours between oil changes

### Bearing

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

### Propeller

3-blade high efficiency propeller, dynamically balanced

FR1:	10 hp	240 rpm	Propeller HD+ 800
FR3:	15 hp	330 rpm	Propeller HD+ 660
FR3:	15 hp	480 rpm	Propeller HD+ 500
FR4:	20 hp	330 rpm	Propeller HD+ 750
FR4:	20 hp	480 rpm	Propeller HD+ 540
FR5:	25 hp	330 rpm	Propeller HD+ 780
FR5:	25 hp	480 rpm	Propeller HD+ 580
FR6:	30 hp	480 rpm	Propeller HD+ 620

ss304, optional ss316 or hardened steel

### Adjustment range

Horizontal adjustable  $\pm 25^\circ$  through spindle  
 Vertical adjustable through upper link ( $\pm 11^\circ$ ), optional  
 through hydraulic cylinder up to  $\pm 30^\circ$  or through pinion rack  
 Tank openings 27.5x27.5 in (38.6 in plate)  
 31.5x31.5 in (47 in plate)  
 394x394 in (56 in plate)

### Ex-Zone

Ex-zone 2 (outside tank) and zone 1 (inside tank)  
 Special system FR with 18 hp for Zone 1 (outside)  
 Classification mechanical components  
 II 2G Ex h IIA T3 Gb

### Controls (optional)

Star-delta-switch (max. 20 hp), soft start or  
 frequency converter  
 Delivery without connection cable



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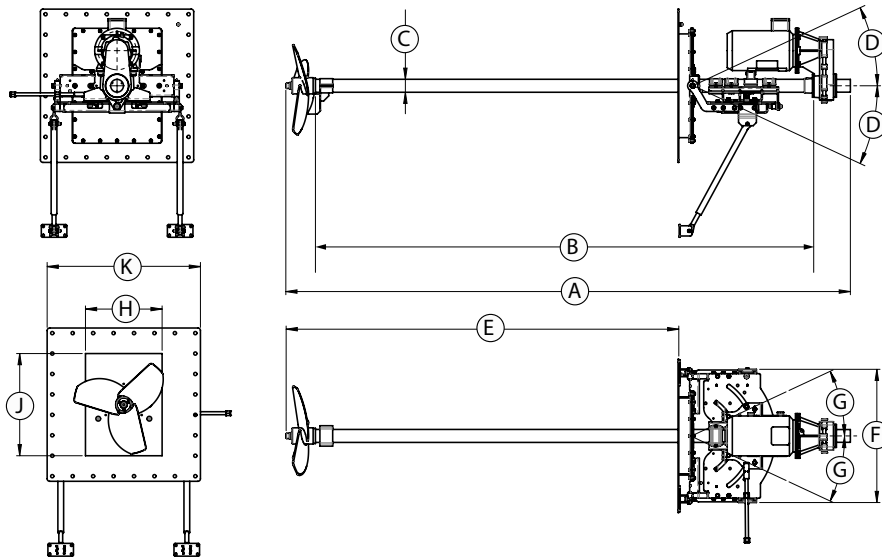
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### Dimensions

Type	A Ø [ft]	B [ft]	C [in]	D	E [ft]	F [ft]	G	H [ft]	J [ft]	K [ft]
FR3 / FR4 / FR5 / FR6	11.5 /	9.5 /	4	± 11° /	6.9 /	3.6	± 25°	1.9	1.9	3.2
FR1 / FR3 / FR4 (330 rpm)	14.8	12.8		± 30°	10.2				2.6	3.9

### Technical data

Type	Rated Power [hp]	Propeller speed [rpm]	Frequency [Hz]	Gear reduction ratio	Propeller diameter [in]	Axial force [lbf]	Flow velocity [ft/s] *	Pumping rate water [gal/min]	Weight approximate [lbs]
FR1	10.0	240	60	3.69	31.5	450	9.8	23,247	1,433
FR3	15.0	330	60	5.31	26.0	517	10.8	17,171	1,433
FR3	15.0	480	60	3.69	19.7	495	11.8	10,567	1,433
FR4	20.0	330	60	5.31	29.5	696	12.1	25,096	1,433
FR4	20.0	480	60	3.69	21.3	606	13.8	14,529	1,433
FR5	25.0	330	60	5.31	30.7	764	12.1	27,210	1,433
FR5	25.0	480	60	3.69	22.8	719	13.5	16,379	1,433
FR6	30.0	480	60	3.69	24.4	854	13.8	19,284	1,433

Subject to change without notice

\* measured in water at 3.94 ft distance

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