

## OPTIMIX 3G 100-135



### Application

Submersible motor  
Dry matter content up to 12 %  
Substrate temperature up to 55°C  
pH-value 6.5 - 8.2

### Motor

Motor power: 10.0 kW, 8-poles  
400 V, 50 Hz, Special voltages on request  
Protection class IP 68, up to 10 m submergence  
PTC 130°C thermistors (for thermal protection)  
Separate oil chamber, turbine oil

### Gear

Flange mounted planetary gear  
Reduction ratio  $i = 5.35$   
Longlife gear oil  
Oil change after 8,000 operating hours

### Corrosion protection

Ductile cast iron housing (GGG40)  
Agitator has an two component epoxy coating  
Agitator is galvanically isolated from the guide mast

### Cable

Pressed cable gland, cable standard length 10 m  
Cable 4 x 10 + 4 x 1 mm<sup>2</sup>, Ø 26 mm,  
Resistant against biomass  
Strain relief 800 N

### Propeller

3-blade high efficiency propeller, dynamically balanced  
Optimix 3G | 10 kW | propeller XT 1200-12 | 135 rpm  
Hardened steel or ss304

### Guide mast connection

Guide mast support with 4 rollers for smooth height adjustment: 10 kW: 120 / 150 mm square mast

### Bearing

Bearing flange with mechanical seal SiC/SiC  
2 Tapered roller bearings to absorb the axial thrust  
Shaft Ø 45 mm  
Separate oil chamber, Longlife gear oil  
POM protection to minimize abrasion

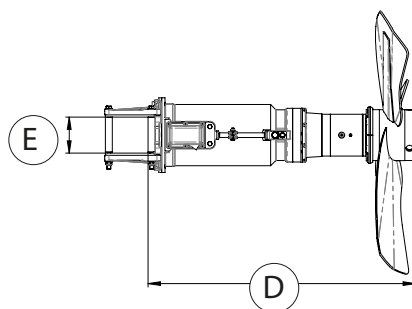
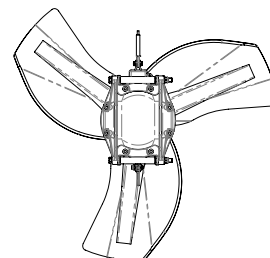
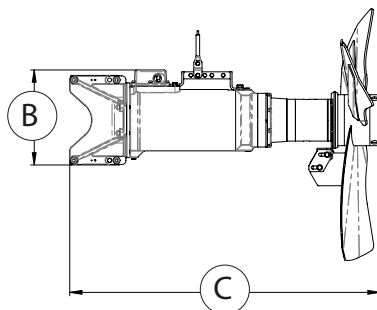
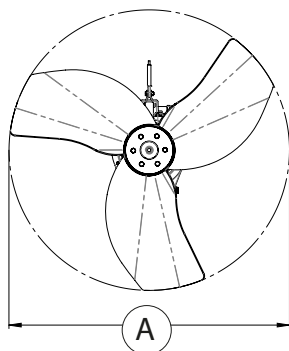
### Ex zone

Authorized for Ex-Zone 2  
ATEX Classification   II 3G Ex ec h IIA T3 Gc

### Control switch

Requirement on site: Frequency converter is absolutely necessary  
Soft start only after consulting SUMA Rührtechnik GmbH

## OPTIMIX 3G 100-135



### Dimensions / Weight

Type	A [mm]	B [mm]	C max. [mm]	D [mm]	E [mm]	Weight approx. [kg]
3G 100-135	1,200	407	1,328	1,144	150	310

### Technical data

Type	Rated Power [kW]	Rated Voltage [V]	Full load current [A]	Frequency [Hz]	Power factor cos $\phi$	Gear reduction ratio	Propeller speed [rpm]	Propeller diameter [mm]	Axial force [kN]	Flow velocity [m/s] *	Pumping rate [m <sup>3</sup> /min]	Pumping rate [m <sup>3</sup> /h]
3G 100-135	10.0	400	30.2	50	0.58	5.35	135	1,200	4.8	3.5	230	13.780

Subject to technical changes

\* measured in water and 1.2 m distance