

## Submersible motor OPTIMIX

**2G 40-180**

**2G 40-250**

**2G 90-280**

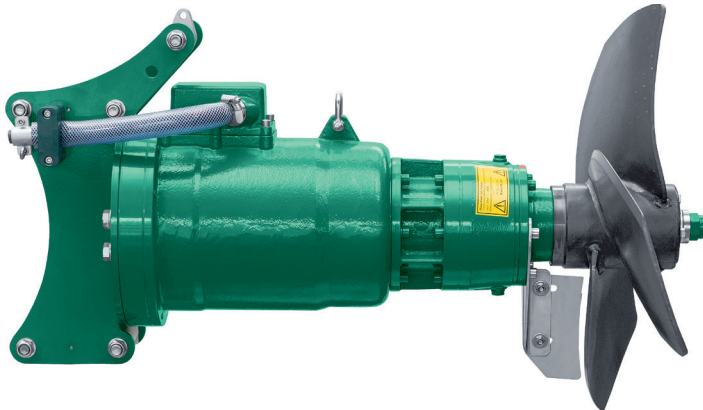
**2G 90-380**

**2G 150-380**

**Powerful**

**Flexible application**

**High efficiency**



### Application

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

### Propeller

3-blade high efficiency propeller, dynamically balanced

Optimix 2G	4 kW	propeller HD+ 700	180 rpm
Optimix 2G	4 kW	propeller HD+ 620	250 rpm
Optimix 2G	9 kW	propeller HD+ 800	280 rpm
Optimix 2G	9 kW	propeller HD+ 580	380 rpm
Optimix 2G	15 kW	propeller HD+ 660	380 rpm

Standard is ss304, optional hardened steel or galvanized

### Motor

Motor power: 4.0 / 9.0 / 15.0 kW  
400 V, 50 Hz, special tension on request  
Protection class IP 68, up to 10 m submergence  
PTC thermistors 130 °C for thermal protection  
Own oil circulation, turbine oil

### Guide mast connection

Guide mast support with 4 rollers for smooth height adjustment:

for 4 / 9 kW: 80 / 100 / 120 mm square mast  
for 15 kW: 100 / 120 / 150 mm square mast

### Gear

Flange mounted planetary gear,  
reduction ratio  $i = 3.83 / 5.25$   
Own oil circulation, longlife gear oil  
Change oil after 10,000 operating hours  
or 4,000 operating hours (2G 150 - 380)

### Bearing

Bearing flange with mechanical seal SiC/SiC  
2 tapered roller bearings to absorb the axial forces  
Shaft of hardened steel  
Bearing flange with separat oil chamber filled with Longlife gear oil

### Corrosion protection

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

### Ex-Zone

Authorized for Ex-Zone 2  
ATEX Classification  $\text{CE} \text{ Ex II 3G Ex nAck IIA T3 Gc}$

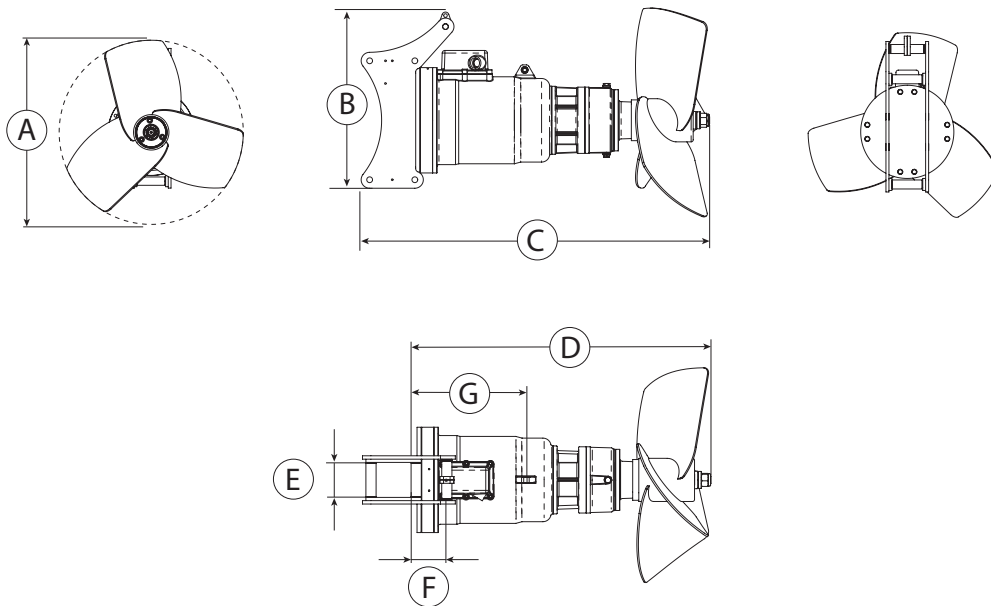
### Electric Cable

Pressed-on cable gland  
Standard length 10 m  
 $7 \times 4 + 2 \times 1,5 \text{ mm}^2$ ,  $\varnothing 20 \text{ mm}$   
Resistant against biomass  
Strain relief 800 N

### Control box (optional)

Star-delta switch, soft start or frequency converter

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**2G 150-380**

Dimensions										
Type	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]			
2G 40-180	700	520	1.085	890	80 / 100 / 120	105	305			
2G 40-250	620	520	1,050	855	80 / 100 / 120	105	305			
2G 90-280	800	520	1,085	885	80 / 100 / 120	105	300			
2G 90-380	580	520	1,050	850	80 / 100 / 120	105	300			
2G 150-380	660	520	1,100	900	100 / 120 / 150	105	335			

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]	Weight approx. [kg]
2G 40-180	4.0	400	8.6	50	0.79	5.25	180	700	0.85	2.0	44	170
2G 40-250	4.0	400	8.6	50	0.79	3.83	250	620	0.95	2.2	38	170
2G 90-280	9.0	400	18	50	0.86	5.25	275	800	2.9	3.2	93	170
2G 90-380	9.0	400	18	50	0.86	3.83	380	580	2.0	3.4	52	170
2G 150-380	15.0	400	29	50	0.86	3.83	380	660	3.1	4.1	80	180

Subject to technical changes

\* measured in water and 1.2 m distance

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