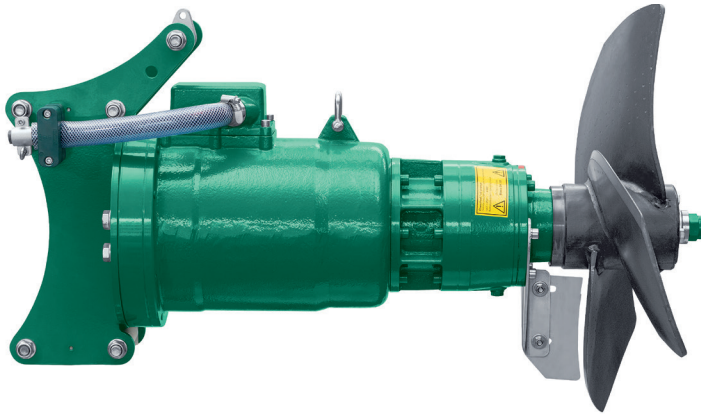


Submersible motor OPTIMIX

2G 40-220
2G 40-305
2G 90-330
2G 90-460
2G 150-460



Application

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

Motor

Motor power: 4.0 kW (6 poles)
 9.0 / 15.0 kW (4 poles)
 60 Hz, 460 V +/- 5%
 Protection class IP 68, up to 10 m submergence
 PTC thermistors 130 °C for thermal protection
 Own oil circulation, turbine oil

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 - 460)

Corrosion protection

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

Electric Cable

Pressed-on cable gland
 Standard length 10 m
 7 x 4 + 4 x 1,5 mm², ø 20 mm
 Resistant against biomass microbes
 Strain relief 800 N

Propeller

3-blade high efficiency propeller, dynamically balanced

Optimix 2G	4 kW	propeller HD+ 640	220 rpm
Optimix 2G	4 kW	propeller HD+ 540	305 rpm
Optimix 2G	9 kW	propeller HD+ 640	330 rpm
Optimix 2G	9 kW	propeller HD+ 500	460 rpm
Optimix 2G	15 kW	propeller HD+ 580	460 rpm

Standard is hardened steel, optional galvanized or ss304

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

Special sizes on request

Bearing

Bearing flange with mechanical seal SiC/SiC
 2 tapered roller bearings to absorb the axial forces
 Shaft of hardened steel
 Separat oil chamber, longlife gear oil
 Oil change interval after 8,000 operating hours

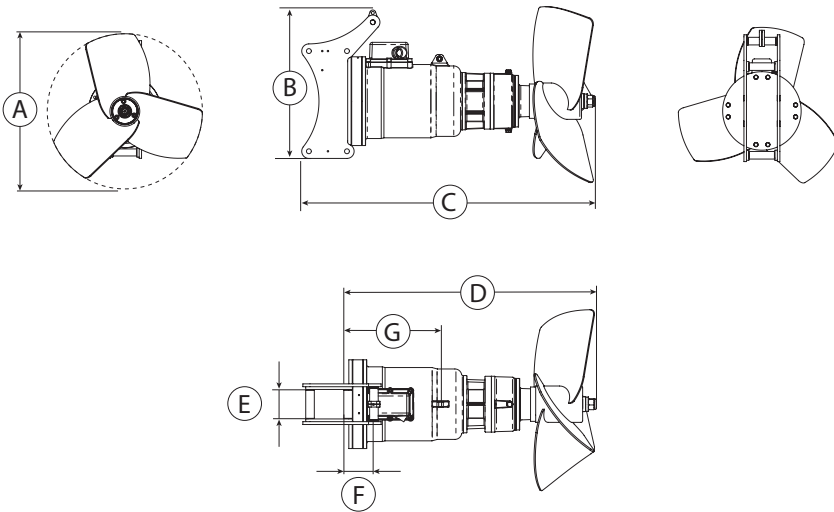
Accessory: POM protection to minimize abrasion

Control box (optional)

Star-delta switch, soft start or frequency converter

Submersible motor OPTIMIX

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2G 150-460



Dimensions												
Type	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]					
2G 40-220	640	520	1,085	890	80 / 100 / 120	105	305					
2G 40-305	540	520	1,050	855	80 / 100 / 120	105	305					
2G 90-330	640	520	1,085	885	80 / 100 / 120	105	300					
2G 90-460	500	520	1,050	850	80 / 100 / 120	105	300					
2G 150-460	580	520	1,100	900	100 / 120 / 150	105	335					

Technical Data												
Type	Rated Power [kW]	Rated Voltage [V]	Rated current [A]	Frequency [Hz]	Power factor cos ϕ	Gear reduction ratio	Propeller speed [rpm]	Propeller diameter [mm]	Axial force [kN]	Flow velocity [m/s] *	Pumping rate [m ³ /min]	Weight approx. [kg]
2G 40-220	4.0	460	7.6	60	0.75	5.25	220	640	1.0	2.3	44	170
2G 40-305	4.0	460	7.6	60	0.75	3.83	305	540	1.0	2.4	32	170
2G 90-330	9.0	460	15.5	60	0.84	5.25	330	640	2.1	3.3	62	170
2G 90-460	9.0	460	15.5	60	0.84	3.83	460	500	1.9	3.1	34	170
2G 150-460	15.0	460	25.3	60	0.82	3.83	460	580	3.0	4.3	65	180

Subject to technical changes

* measured in water and 1.2 m distance