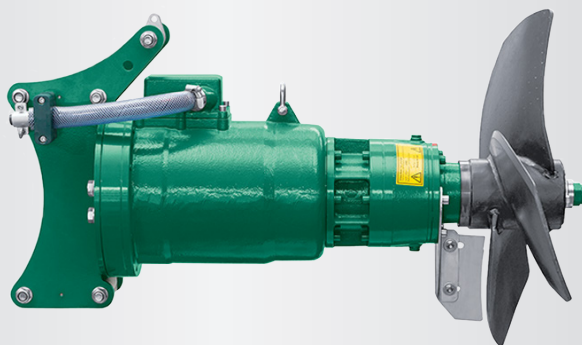




OPTIMIX

2G 40-180

2G 40-250

2G 90-280

2G 90-380

2G 110-280

2G 110-380

2G 150-380

Application

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

Motor

Motor power: 4.0 / 9.0 / 11.0 / 15.0 kW
400 V, 50 Hz, special tension on request
Protection class IP 68, up to 10 m submergence
PTC thermistors for thermal protection
High efficiency
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 for 2G 150 - 380

Corrosion protection

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

Electric Cable

Pressed-on cable gland
Standard length 10 m
 $7 \times 4 + 4 \times 1.5 \text{ mm}^2$, $\varnothing 20 \text{ mm}$
Resistant against biomass
Strain relief 800 N

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	11 kW	propeller HD+ 820	280 rpm
Optimix 2G	11 kW	propeller Hd+ 620	380 rpm
Optimix 2G	15 kW	propeller HD+ 660	380 rpm

Hardened steel, ss304 or galvanized

Guide mast connection

Guide mast support with 4 rollers for smooth height adjustment:

for 4 / 9 kW: 80 / 100 / 120 mm square mast
for 11 / 15 kW: 100 / 120 / 150 mm square mast

Bearing

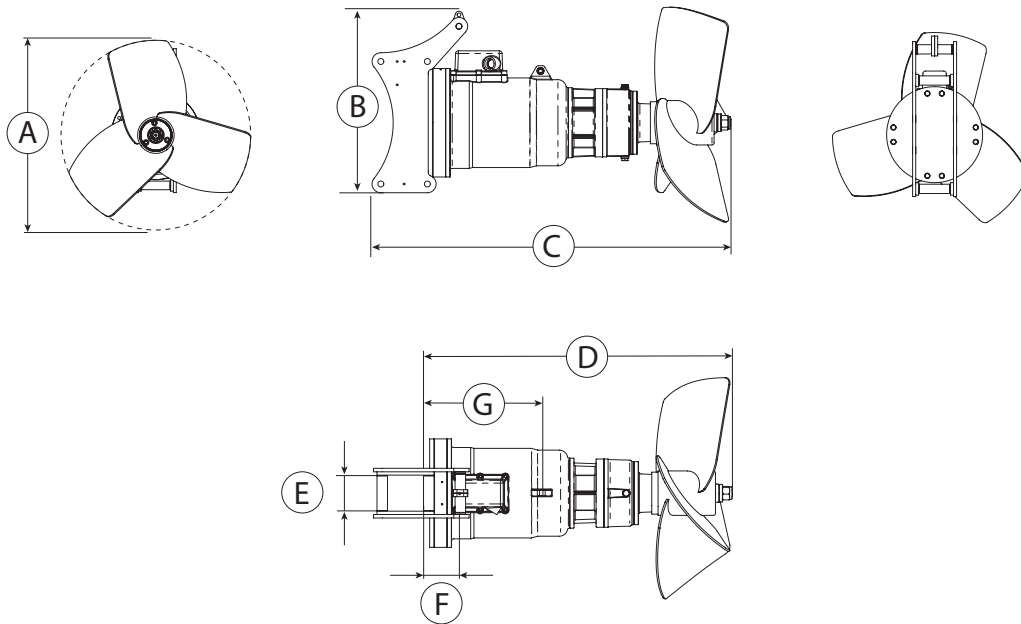
Bearing flange with mechanical seal SiC/SiC
2 tapered roller bearings to absorb the axial forces
Shaft of hardened steel
Bearing flange with separate oil chamber filled with longlife gear oil
Accessory: POM protection to minimize abrasion

Ex-Zone

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

Control box (optional)

Star-delta switch for 9, 11 and 15 kW, soft start or frequency converter



OPTIMIX

2G 40-180
2G 40-250
2G 90-280
2G 90-380
2G 110-280
2G 110-380

Dimensions / Weight

Type	A [Ø in mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	Weight approx. [kg]		
2G 40-180	700	520	1,085	890	80 / 100 / 120	105	305	170		
2G 40-250	620	520	1,050	855	80 / 100 / 120	105	305	170		
2G 90-280	800	520	1,085	885	80 / 100 / 120	105	300	170		
2G 90-380	580	520	1,050	850	80 / 100 / 120	105	300	170		
2G 110-280	820	520	1,100	900	100 / 120 / 150	105	335	180		
2G 110-380	620	520	1,100	900	100 / 120 / 150	105	335	180		
2G 150-380	660	520	1,100	900	100 / 120 / 150	105	335	180		

Technical data

Type	Rated Power [kW]	Rated Voltage [V]	Full load 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 [m³/min]	Pumping rate [m³/h]
2G 40-180	4.0	400	8.8	50	0.77	5.25	180	700	0.85	2.0	44	2,680
2G 40-250	4.0	400	8.8	50	0.77	3.83	250	620	0.95	2.2	38	2,290
2G 90-280	9.0	400	17.7	50	0.83	5.25	280	800	2.8	3.2	93	5,640
2G 90-380	9.0	400	17.7	50	0.83	3.83	380	580	1.9	3.4	52	3,080
2G 110-280	11.0	400	22.5	50	0.77	5.25	280	820	3.6	4.1	128	7,680
2G 110-380	11.0	400	22.5	50	0.77	3.83	380	620	2.55	3.7	64	3,850
2G 150-380	15.0	400	29.1	50	0.83	3.83	380	660	3.1	4.1	80	4,860

Subject to technical changes

* measured in water and 1.2 m distance

As per: 2022-09

© SUMA Rührtechnik GmbH | Martinszeller Str. 21 | DE-87477 Sulzberg
 Phone: +49 8376 / 92131 - 0 | Fax: - 19 | info@suma.de | www.suma.de/en