

OPTIMIX

2A 8-720

2A 15-720

2A 22-720



Application

Submersible motor
 Dry matter content up to 4 %
 Substrate temperature up to 55°C
 pH-value 5.5 - 8.2

Motor

Motor power: 0.8 / 1.5 / 2.0 kW, 8-poles
 230 / 400 V, 50 Hz, special tension on request
 Protection class IP 68, up to 10 m submergence
 PTC thermistors 130 °C for overheat protection
 High efficiency class
 Own oil circulation, turbine oil

Bearing

Bearing flange with mechanical seal of SiC/SiC
 Shaft of ss304
 Bearing flange with separate oil chamber
 Longlife 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

Propeller

3-blade high efficiency propeller, dynamically balanced, self-cleaning

Optimix 2A	0.8 kW	propeller LD 250 S	738 rpm
Optimix 2A	1.5 kW	propeller LD 320 S	728 rpm
Optimix 2A	2.2 kW	propeller LD 380 S	714 rpm

ss304, hardened ss304 or ss316

Guide mast connection

Guide mast support with 4 rollers for smooth height adjustment:
 60 / 80 mm square mast
 Special sizes on request

Corrosion protection

Guiding unit of ss304

Electric cable

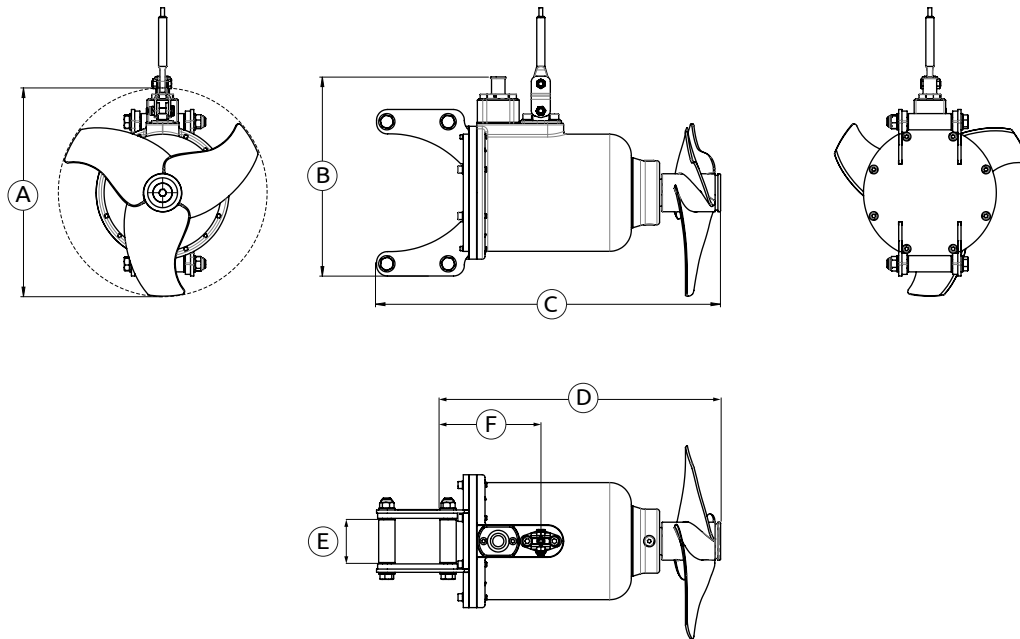
Standard length 10 m, with pressed-on cable gland
 Microbe resistant cable 4 x 2.5 + 2 x 1 mm², Ø 20 mm
 Strain relief 800 N

OPTIMIX

2A 8-720

2A 15-720

2A 22-720



Dimensions / Weight

Type	A [Ø in mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	Weight approx. [kg]			
2A 8-720	250	370	635	506	60 / 80	196	75			
2A 15-720	320	370	635	506	60 / 80	196	75			
2A 22-720	380	370	635	506	60 / 80	196	75			

Technical data

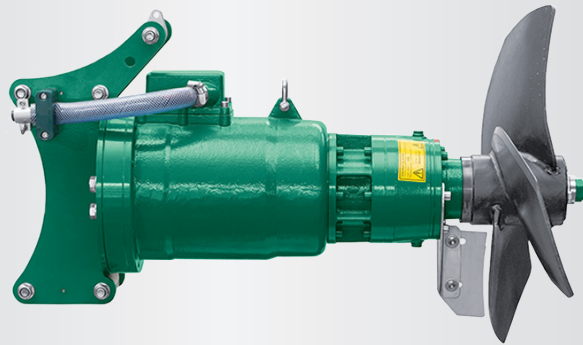
Type	Rated Power [kW]	Rated Voltage [V]	Full load current [A]	Frequency [Hz]	Power factor cos φ	Propeller speed [rpm]	Propeller diameter [mm]	Axial force [kN]	Flow velocity [m/s] *	Pumping rate [m³/min]	Pumping rate [m³/h]
2A 8-720	0.8	400	3.95	50	0.37	738	250	0.24	2.55	7	420
2A 15-720	1.5	400	4.7	50	0.56	728	320	0.43	2.92	13	800
2A 22-720	2.2	400	5.9	50	0.68	714	380	0.66	3.15	21	1.240

Subject to technical changes

* measured in water and 1.2 m distance

OPTIMIX

2G 40-180
2G 40-250
2G 90-280
2G 90-380
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 / 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
 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 x 4 + 4 x 1.5 mm², ø 20 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	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 15 kW: 100 / 120 / 150 mm square mast

Bearing

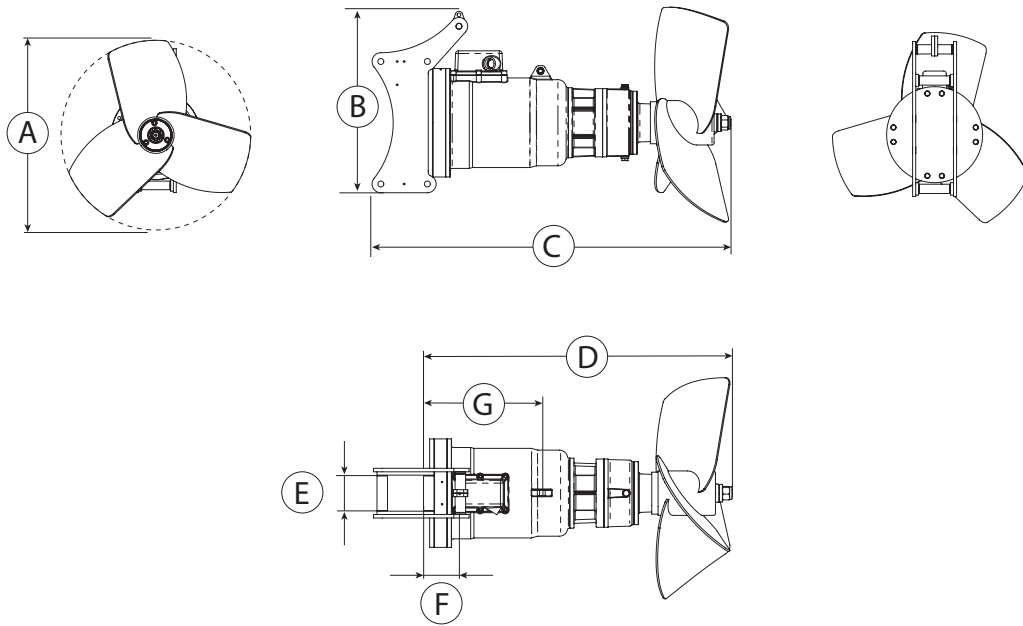
Bearing flange with mechanical seal SiC/SiC
 2 tapered roller bearings to absorb the axial forces
 Shaft of hardened steel
 Bearing flange with separat oil chamber filled with Longlife gear oil
Accessory: POM protection to minimize abrasion

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 fro 9 and 15 kW, soft start or frequency converter



OPTIMIX

2G 40-180
2G 40-250
2G 90-280
2G 90-380
2G 150-380

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 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 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

OPTIMIX

2G 30-710

2G 40-950



Application

Submersible motor
 Dry matter content up to 8 %
 Substrate temperature up to 55°C
 pH-value 6.5 - 8.2

Motor

Motor power: 3.0 kW, 4.0 kW
 400 V, 50 Hz, special tension on request
 Protection class IP 68, up to 10 m submergence
 PTC thermistors 130 °C for overheat protection
 Own oil circulation, turbine oil

Electric cable

Standard length 10 m, with pressed-on cable gland
 Microbe resistant cable 4 x 2.5 + 2 x 1 mm², Ø 20 mm
 Strain relief 800 N

Corrosion protection

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

Propeller

3-blade high efficiency propeller, dynamically balanced

Optimix 2G	3.0 kW	propeller LD 380	710 rpm
Optimix 2G	4.0 kW	propeller LD 310	950 rpm

Galvanized, hardened steel, ss304 or hardened ss304

Guide mast connection

Guide mast support with 4 rollers for smooth height adjustment:
 80 / 100 / 120 mm square mast
 Special sizes on request

Bearing

Bearing flange with mechanical seal of SiC/SiC
 2 Tapered roller bearings to absorb the axial forces
 Bearing flange with separate oil chamber
 Oil Longlife

Ex zone

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

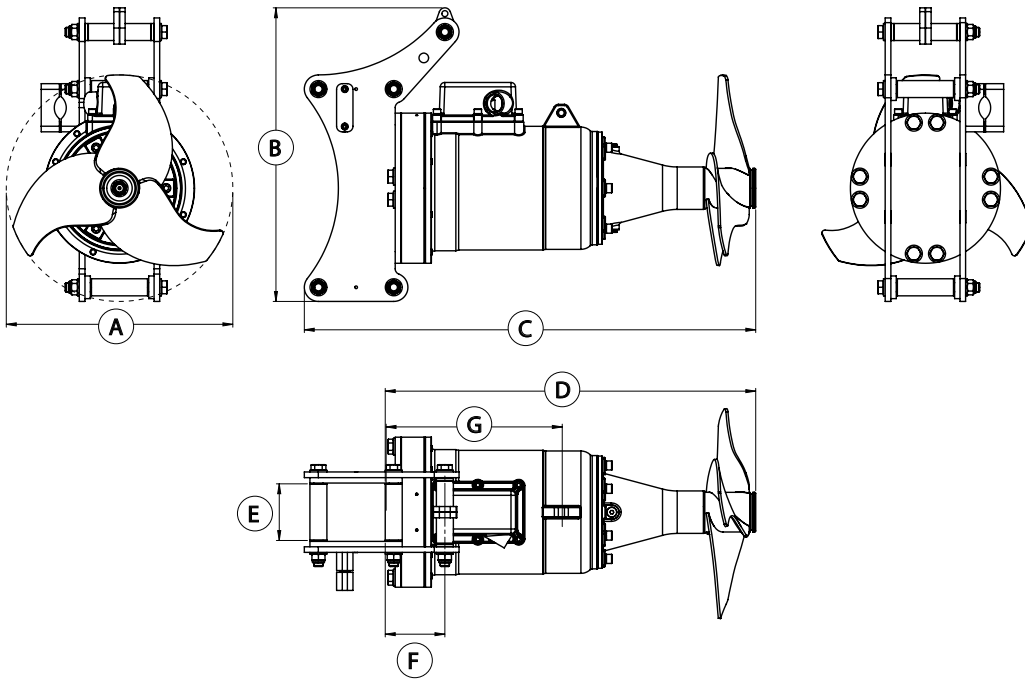
Control box (optional)

Soft start or frequency converter

OPTIMIX

2G 30-710

2G 40-950



Dimensions / Weight

Type	A [Ø in mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	Weight approx. [kg]		
2G 30-710	380	520	800	650	80 / 100 / 120	105	310	150		
2G 40-950	310	520	800	650	80 / 100 / 120	105	310	150		

Technical data

Type	Rated Power [kW]	Rated Voltage [V]	Full load current [A]	Frequency [Hz]	Power factor cos φ	Propeller speed [rpm]	Propeller diameter [mm]	Axial force [kN]	Flow velocity [m/s] *	Pumping rate [m ³ /min]	Pumping rate [m ³ /h]
2G 30-710	3.0	400	7.8	50	0.68	710	380	0.7	3.6	24	1.420
2G 40-950	4.0	400	8.6	50	0.79	950	310	0.7	3.0	13	770

Subject to technical changes

* measured in water and 1.2 m distance