

OPTIMIX

2A 135-280

2A 135-380



Application

Submersible motor for ex-zone 1 or aggressive media with low pH-values
 Dry matter content up to 12 %
 Substrate temperature up to 52°C
 pH-values 5.5 - 8.2 / optional ss316 pH-values 4.5 - 8.2

Motor

Motor power: 13.5 kW
 400V, 50Hz, special tensions on request
 Protection class IP 68, up to 10 m submergence
 PTC thermistors for thermal protection
 Separat oil chamber, turbine oil

Gear

Flange mounted planetary gear
 Reduction ratio $i = 5.25$ or 3.83
 Longlife gear oil
 Change oil after 4,000 operating hours

Electric Cable

Pressed cable gland, cable standard length 10 m
 Cable $7 \times 4 + 4 \times 1 \text{ mm}^2 \varnothing 20 \text{ mm}$, shielded
 Resistant against biomass microbes
 Strain relief 800 N

Corrosion protection

Housing and guiding unit in ss304
 Optional completely manufactured in ss316

Propeller

3-blade propeller, dynamically balanced

Optimix 2A	13.5 kW	propeller HD+800	280 rpm
Optimix 2A	13.5 kW	propeller HD+620	380 rpm

ss304, hardened ss304 or ss316


Guide mast connection

Guide mast support with 4 rollers for smooth height adjustment:
 13.5 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 in hardened steel
 Separat oil chamber, longlife gear oil
Accessory: POM protection to minimize abrasion

Ex zone

Authorized for Ex-Zone 1
 CE  II 2G Ex eb h IIA T3 Gb

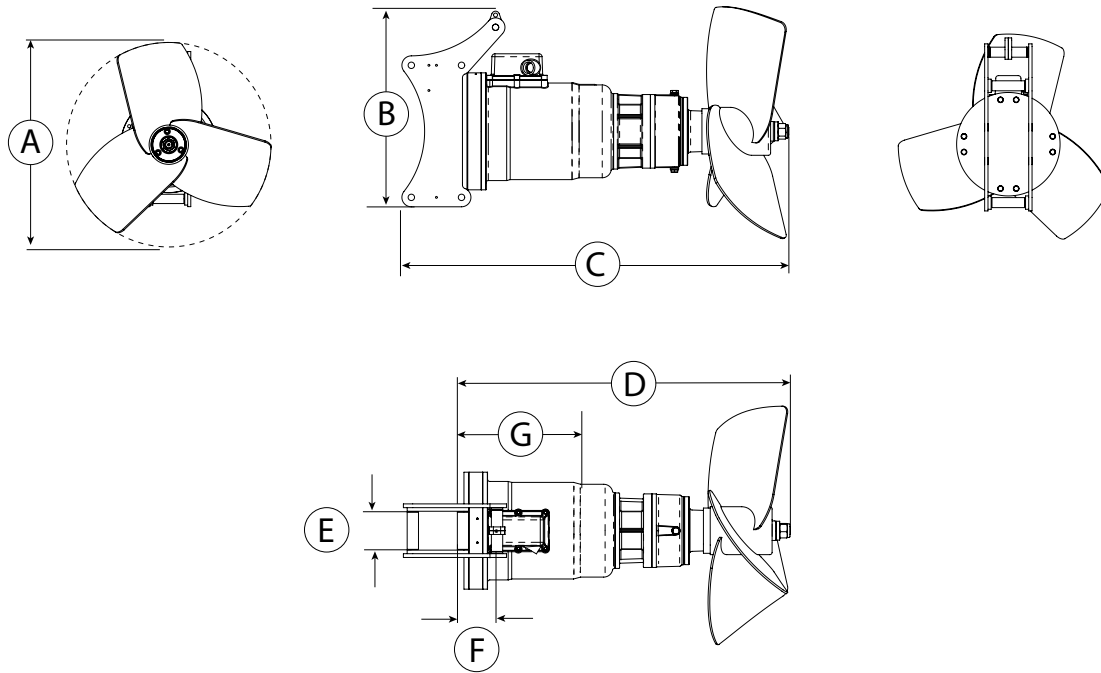
Control box (optional)

Soft start or frequency converter

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Dimensions / Weight

Type	A [Ø in mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	Weight approx. [kg]			
2A 135-280	800	520	1,195	995	100 / 120 / 150	105	385	190			
2A 135-380	620	520	1,160	960	100 / 120 / 150	105	385	190			

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 [m ³ /min]	Pumping rate [m ³ /h]
2A 135-280	13.5	400	24	50	0.90	5.25	280	800	2.9	3.2	94	5.640
2A 135-380	13.5	400	24	50	0.90	3.83	380	620	2.55	3.7	64	3.850

Subject to technical changes

* measured in water and 1.2 m distance