



OPTIMIX

2G 55-75

2G 90-75



Application

Submersible motor for biogas and manure tanks
 Dry matter content up to 12 %
 Substrate temperature up to 55°C
 pH-value 6.5 - 8.2

Motor

Power: 5.5 / 9.0 kW
 400 V, 50 Hz, other voltages 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 / Bearing

Robust, two stage planetary gear
 Reduction ratio $i = 19.6$
 Mechanical seal SiC/SiC
 2 tapered-roller bearings to absorb the axial forces
 Hardened steel spline shaft, $\varnothing 50$ mm
 Separate oil fill with long life gear oil
 Oil change interval 12,000 operation hours

Ex-zone

Authorized for Ex-Zone 2
 ATEX Classification  II 3G Ex nA ck IIA T3 Gc

Propeller

3-blade high efficiency propeller, dynamically balanced

Optimix 2G 55-75	5.5 kW	LT 1400-G6	75 rpm
Optimix 2G 90-75	9.0 kW	LT 1400	75 rpm

Painted or hardened steel

Guide mast connection

Guide mast support with 4 rollers for smooth height adjustment
 Depending version, available for 100 / 120 / 150 mm square mast
 Special sizes on request

Corrosion protection

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

Cable

Pressed-on cable gland
 Standard length 10 m
 Cable $7 \times 4 + 4 \times 1,5$ mm², $\varnothing 20$ mm
 Microbe resistant
 Strain relief 800 N

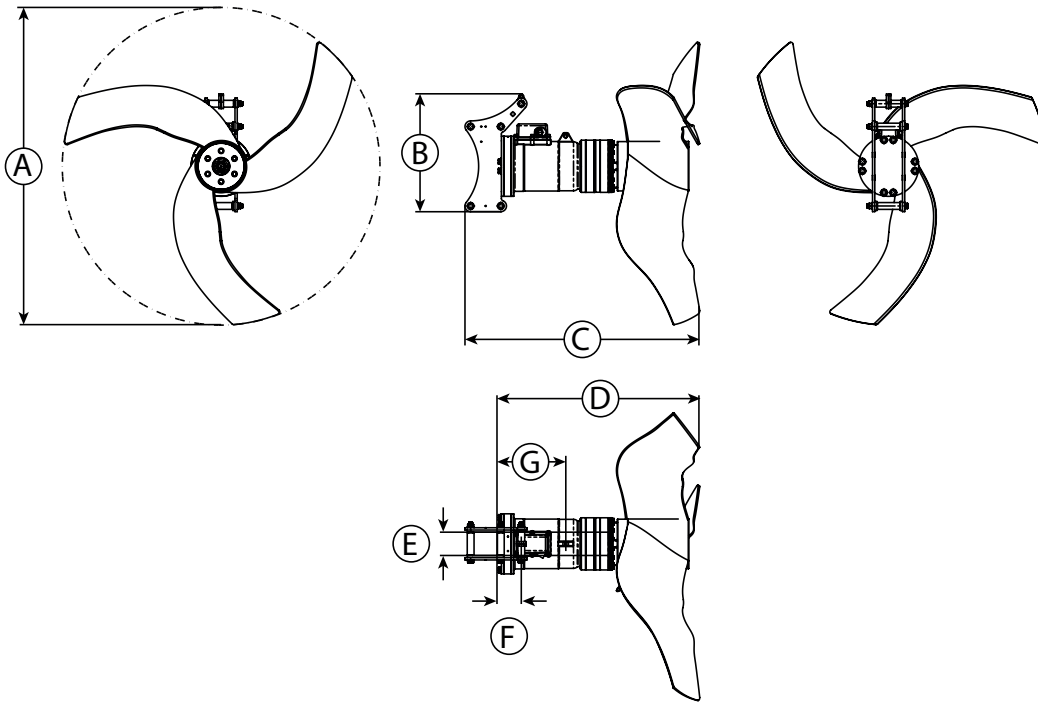
Control box (optional)

Soft start or frequency converter

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Dimensions

Type	A [∅ in mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]				
2G 55-75	1,400	520	1,200	1,000	100 / 120 / 150	105	300				
2G 90-75											

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]	Weight approx. [kg]
2G 55-75	5.5	400	10.7	50	0.83	19.6	75	1,400	2.6	1.8	150	200
2G 90-75	9.0	400	18	50	0.86	19.6	75	1,400	2.9	1.8	150	200

Subject to technical changes

* measured in water and 1.2 m distance