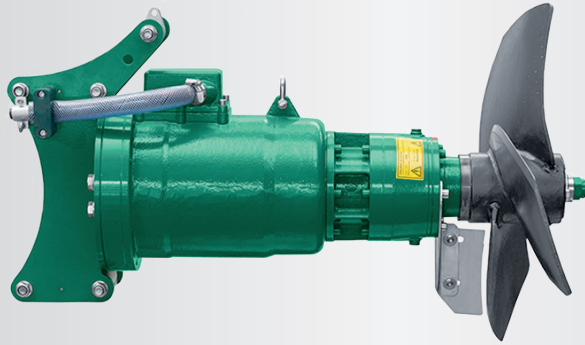


OPTIMIX

2G 90-330

2G 90-460

2G 150-460



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

Motor power: 12.0 / 20 hp, 60Hz
 Protection class IP 68, up to 33 ft 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 for 2G 150 - 460

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 33 ft
 $0.28 \times 0.16 + 0.16 \times 0.06 \text{ in}^2$, $\varnothing 0.8 \text{ in}$
 Resistant against biomass
 Strain relief 180 lbf

Propeller

3-blade high efficiency propeller, dynamically balanced

Optimix 2G	12.0 hp	propeller HD+ 640	330 rpm
Optimix 2G	12.0 hp	propeller HD+ 500	460 rpm
Optimix 2G	20.0 hp	propeller HD+ 580	460 rpm

Standard is hardened steel, optional ss304 or galvanized

Guide mast connection

Guide mast support with 4 rollers for smooth height adjustment:

for 12 hp: 3.15 / 3.94 / 4.72 in square mast
 for 20 hp: 3.94 / 4.72 / 5.9 in 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 $\text{CE Ex II 3G Ex ec h IIA T3 Gc}$

Control box (optional)

Star-delta switch, soft start or frequency converter

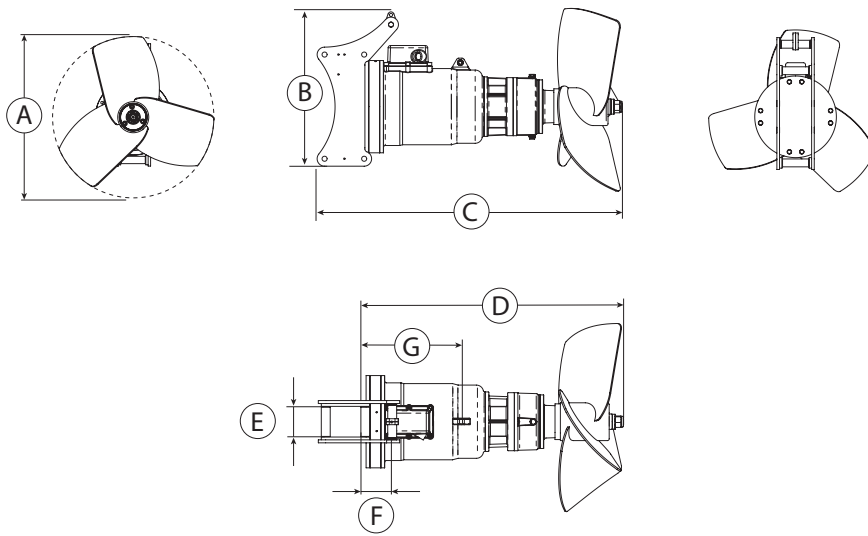


OPTIMIX

2G 90-330

2G 90-460

2G 150-460



Dimensions

Type	A [∅ in in]	B [in]	C [in]	D [in]	E [in]	F [in]	G [in]				
2G 90-330	25.0	20.5	42.7	34.8	3.15 / 3.94 / 4.72	4.1	11.8				
2G 90-460	19.7	20.5	41.3	33.5	3.15 / 3.94 / 4.72	4.1	11.8				
2G 150-460	22.9	20.5	43.3	35.4	3.94 / 4.72 / 5.9	4.1	13.2				

Technical data

Type	Rated Power [kW]	Frequency [Hz]	Gear reduction ratio	Propeller speed [rpm]	Propeller diameter [in]	Axial force [lbf]	Flow velocity [ft/s] *	Pumping rate [gal/min]	Weight approx. [lbs]		
2G 90-330	12.0	60	5.25	330	25.0	472	10.8	16,378	374		
2G 90-460	12.0	60	3.83	460	19.7	427	10.2	8,981	374		
2G 150-460	20.0	60	3.83	460	22.9	674	14.1	17,171	367		

Subject to technical changes

* measured in water and 3.94 ft distance

As per: 2018-07

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