

# Submersible Agitator Optimix 2G 90-90



**Powerfull  
Innovative Design  
High efficiency**



## Application

Biogas and liquid manure tanks  
Dry matter content up to 12 %  
Substrate temperature up to 55°C  
pH-value 6.5 - 8.2

## Motor

Power: 12.2 hp  
60 Hz, other voltages on request  
Protection class IP 68, up to 33 ft submergence  
3 x PTC 130°C in windings for thermal protection  
Own oil circulation, turbine oil

## Gear & Bearing

Robust, two stage planetary gear  
Reduction ration  $i = 19.6$   
Mechanical seal SiC/SiC  
Two tapered-roller bearings for axial and radial loads  
Hardened steel spline shaft,  $\varnothing 2$  in.  
Separate oil fill with long life gear oil  
Oil change interval 10,000 operation hours

## Ex-Zone

Authorized for Ex-Zone 2  
ATEX Classification  $\text{CE} \text{ II 3G Ex nAck IIA T4 Gc}$

## Propeller

3-blade high efficiency propeller, dynamically balanced  
Optimix 2G 90-90 12.2 hp / Propeller LT 1400 / 90 rpm  
Standard painted, optional ss 304 (V2A) or hardened steel

## Guide mast connection

Guide mast support with 4 rollers for smooth height adjustment.  
Depending version, available for 4 / 4.7 / 6 in 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

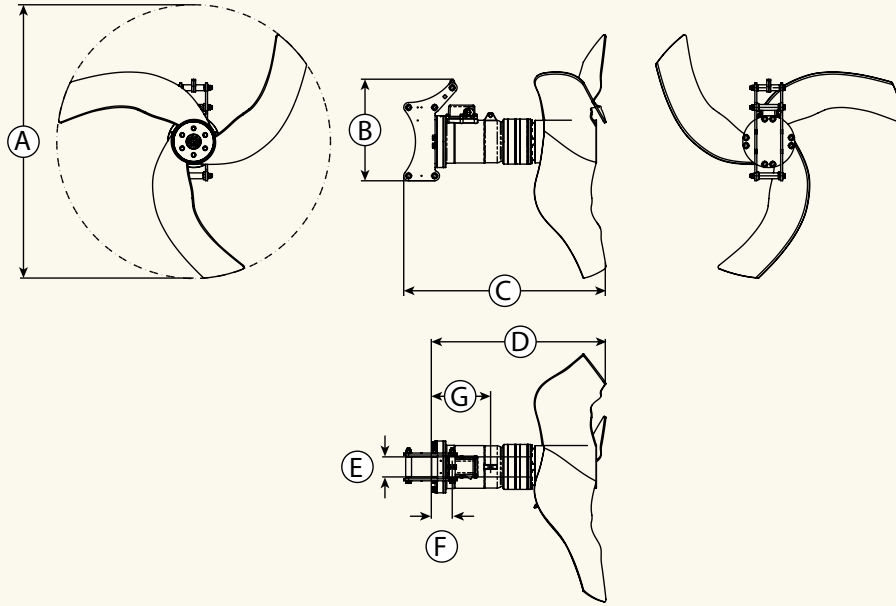
## Electric Cable

Microbe and abrasion resistant cable  
0.28 x 0.16 in<sup>2</sup> + 0.16 x 0.06 in<sup>2</sup>,  $\varnothing 0.8$  in,  
Standard length 33 ft,  
Pressed-on cable gland,  
Strain relief 800 N

## Control box (optional)

Soft start or frequency converter

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Dimensions											
Type	A [in]	B [in]	C [in]	D [in]	E [in]	F [in]	G [in]				
2G 90-90	55	20.5	40.5	34	4 / 4.7 / 6	4	11.5				

Technical Data											
Type	Rated Power [hp]	Frequency [Hz]	Gear reduction ratio	Propeller speed [rpm]	Propeller diameter [in]	Axial force [kN]	Flow velocity [ft/s] *	Pumping rate [gal/min]	Weight approx. [lbs]		
2G 90-90	12 hp	60	19.6	90	39.4	2,8	6.9	147936	441		

Subject to technical changes

\* measured in water with a distance of 3.9 ft