

Solar-OLOID Brief Deskription



The illustrated Solar-Oloid (Type 200) runs successfully since the summer of 2015 in a small test pond in Berlin. This solution was created in cooperation of the companies alfred rexroth GmbH & Co. KG and the Inversions-Technik GmbH. Even in Berlin (52.5° north latitude and southeasterly orientation of the panels) the OLOID runs reliably 10 to 12 hours every day.

The Solar-OLOID convinces mainly by its independent power supply through which it can be operated in ponds without incoming power supply. The Solar-OLOID is energy efficient, especially with regard to fossil fuels, and less expensive, because the costly installation of a power supply line is not needed.

The system is built to last, the backup batteries are lithium-based with a long service life. The solar controller guarantees that the batteries are not getting discharged completely. The control system is simple and robust in the field of PV systems.

Type Oloid 200 B Solar Type Oloid 400 B Solar

Performance Adjustable inclination 0-45° for all applications world wide (all latitudes)

Up to 12h run-time with selfcontained power supply

Overvoltage and discharge protection

Success Self-contained power supply

Energy and cost-effective





Solar-OLOID Technical Data

OLOID Type 200 B	OLOID Type 400 B
Mechanical and electrical data	
OLOID-body: 194 mm, stainless steal	OLOID-body: 365 mm, stainless steal
Housing: Aluminum anodized	Housing: Aluminum anodized
Driving unit: stainless steal 1.4435	Driving unit: stainless steal 1.4435
DC motor IP65, 24 V	DC motor IP65, 24 V
Nominal output: 117 W	Nominal output: 140 W
Net power consumption at 125 rpm: 50 W	Net power consumption at 55 rpm: 120 W
(agitation position)	(agitation position)
Weight: 11 kg	Weight: 37 kg
Circulation- and aeration capacity	
Measured at 125 rpm	Measured at 55 rpm
Flow: 30 m horizontally, up to 3 m vertically	Flow: 100 m horizontally, 3 – 6 m vertically
Flow rate: 150 m ³ /hour	Flow rate: 700 m ³ /h
Oxygen introduction: up to 50 g O ₂ /h	Oxygen introduction: up to 250 g O_2/h
Oxygen transfer efficiency: up to 1,65 kg O ₂ /kWh	Oxygen transfer efficiency: up to 1,25 kg O ₂ /kWh
For solar operation	
24 V LiFePO4-batteries and solar controller	
Photovoltaic:	Photovoltaic:
2 polycrystalline solar modules (IP65) a 150 Wp	3 polycrystalline solar modules (IP65) a 150 Wp
Dimensions 2 x (1508 x 680 x 31 mm)	Dimensions 3 x (1508 x 680 x 31 mm)
Adjustable inclination of the solar modules from 0 to 45 $^\circ$	
Floats	
Version PE: 2 floats (PE) connected with a bridge (PE) +	Version PE: 2 floats (PE) connected with a bridge (PE)
Substructure for PV modules made of aluminum	+ Substructure for PV modules made of aluminum
Dimensions: (B x L) 1900 x 1510 mm	Dimensions: (B x L) 1539 x 2470 mm
Weight: 85kg	Weight: 105kg
OLOID: Height adjustable in 5 positions	OLOID: Height adjustable in 5 positions