

## Product description

- Direct drive high efficiency floating device for aeration and mixing of wastewater in activated sludge WWTP.
- Fine bubble formation due to optimal transfer of kinetic energy on the water surface.
- Two-part float with motor and propeller
- Guiding in the basin by 2 vertical stainless steel chains

## Applications

- SBR plants
- Activated sludge plants

## Advantages

- Very long life time
- High efficiency motor
- High mixing efficiency and high  $\alpha$ -factor
- Adaptable to variations of the water level
- Low aerosol emissions
- Simple and fast installation
- Two-part float for installation in basins with 600 mm-opening
- Easy handling due to separate units of engine and float
- Low maintenance
- Particularly cost-effective design
- Low weight

## Materials

- Motor housing made of stainless steel
- Propeller made of PE (AQUA 8-M) or stainless steel (AQUA 8-T)
- Float and spray cone made of PE
- Immersion tube, fastening material and guiding chains made of stainless steel

## Working principle

The AQUA 8 generates an upward directed flow by its propeller. The accelerated water hits the baffle plate, which is located just above the water line, there it is deflected horizontally and generates a highly turbulent flow on the water surface. The turbulence creates extremely fine air bubbles, which are then pushed downwards by the flow. The result is an excellent oxygen transfer. The generated cylindrical flow leads to a perfect oxygen dispersion and at the same time to a complete mixing of the tank.



Type	AQUA 8-M	AQUA 8-T
<b>Dimensions</b>		
Total height:	850 mm	
Immersion depth:	700 mm	
Diameter:	800 mm	
Weight:	35 kg	39 kg
<b>Motor data</b>		
Input power ( $P_1$ ):	1.1 kW	1.8 kW
Shaft power ( $P_2$ ):	0.75 kW	1.5 kW
Propeller speed:	1400 rpm	1385 rpm
Number of phases:	1 ~	3 ~
Operating voltage:	230 V	$\Delta$ 230/Y400 V
Frequency:	50 Hz (60 Hz as an option)	
Rated current:	5.2 A	$\Delta$ 5.8/Y3.8 A
Operating temperature:	5 – 30°C	5 – 40°C
Start:	DOL	
Protection class:	IP 68	
Isolation class:	F	
Motor weight:	17 kg	21 kg
Cable length:	15 m	10 m
<b>Process Data</b>		
SOTR <sub>max</sub> in clean water:	1.52 kg O <sub>2</sub> /h	1.98 kg O <sub>2</sub> /h
Max aerated surface:	7.50 m <sup>2</sup>	
Max width to length ratio of the tank:	2 to 1	
Aeration diameter (high turbulence):	3.50 m	
Maximal water depth:	2.50 m	
Minimal water depth:	1.00 m	