ABS Nopon submersible aerator mixer OKI 1000

The ABS Nopon submersible aerator mixer OKI 1000 is a heavy duty machine suitable for applications in continuous and/or intermittent aeration of both municipal and industrial wastewater. It can withstand many harsh types of wastewater with no performance degradation and will tackle intermittent process problems better than most alternatives.

In the OKI compressed air is distributed through a flexible hose down to the machine. Air enters through the stator and is passed on to the rotating rotor. The rotor has narrow slits close to the centre where air is dispersed. As the rotor sucks water from underneath the machine bubbles of air disperse into the water passing the slits. The aerated water exits the machine through the stator tubes ensuring even water and air distribution all around the basin.

The low speed rotation ensures that flocks are maintained. The turbulence at the tip of the rotor blades enables high oxygen transfer.

Features

- □ Adjustable oxygen transfer
- □ Good pumping capacity
- □ Superb anti-clogging performance
- □ Good corrosion resistance
- □ Steady alpha factor
- □ Lifetime sustainable high aeration efficiency
- □ Especially suited for heavy duty and intermittent processes
- Easy and quick installation without emptying the tank
- □ Liftable for easy maintenance
- □ No air cooling in deep tanks
- Usually delivered complete including suitable airhose, lifting cable and electrical cables making installation safe and easy

The ABS Nopon submersible aerator mixer OKI 1000 series is a natural choice for industrial and municipal applications. The high quality gear motor guarantees performance and long lasting operational life minimizing the maintenance costs.

Product range

Available in 18 different models to meet the most various types of aeration and mixing requirements.

Model		Α	AM	AM2
1070	А	05	07	05
	В	07	11	07
	С	11	15	11
1090	Α	15	18	15
	В	18	25	18
	С	22	30	20

Example OKI 1090B-18A

design of the stator & rotor

(1 for OKI 1000 series and ${\bf 2}$ for OKI 2000 series)

090 nominal diameter of the rotor [cm]

B SOTR and power characteristics

18 rated power of the motor is 18,5 kW

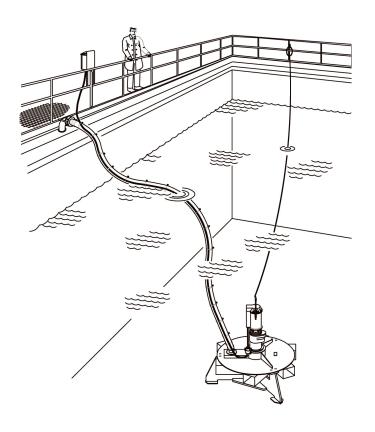
A aerator (mixing without air is not possible)

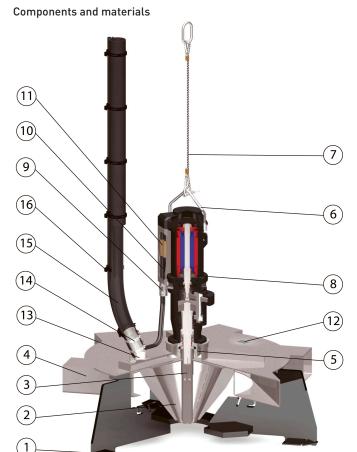
AM aerator + mixer (mixing without air at high speed)

AM2 aerator + mixer (mixing without air at low speed)



Installation example





	Description	(Main)Material	
1	Frame	Fe37B, epoxy painted	
2	Rotor	AISI 316	
3	Rotor screw	AISI 316	
4	Stator and stator ducts	AISI 316	
5	Heavy duty shaft seal	AISI 316	
6	Lifting bail	AISI 316	
7	Lifting cable	AISI 316	
8	Drive unit (geared motor)	Cast iron, epoxy painted	
9	Cable support	AISI 316	
10	Cables	Neoprene rubber sheath	
11	Airlock	Resin	
12	Nameplate	AISI 316	
13	Hose flange (with seal)	AISI 316	
14	Hose clamps	AISI 316	
15	Process air hose	EPDM (reinforced)	
16	Hose straps	EPDM	

Technical specification

	OKI 1070 - series	OKI 1090 - series
Protection type	IP68	IP68
Standard voltage ⁽¹	400 V / 50 Hz	400 V / 50 Hz
Temperature control	Thermal switch 130°C	Thermal switch 130°C
Main dimension [mm]	1770x1835x2100	2195x2280x2300
(lenght x depth x height)[2		
Unit weight [kg] ^{[2[4}	920-1020	1500-1550
Installation depth [m]	4-10	4-12
SOTR [kg 02/ h] ^{[2[3}	41-57	105-140
Air flow rate [m³/ min, 20°C] ^{[2[5]}	0-15	0-30

¹⁾ Other options for 50 Hz: 230 V, 380 V, 415 V, 500 V, 660 V and 690 V. Also available for 60 Hz: 230 V, 440 V, 460 V and 575 V.





²⁾ Depends on the model

^{3]} At 8 meters

^{4]} Without accessories

⁵⁾ Depends on installation depth