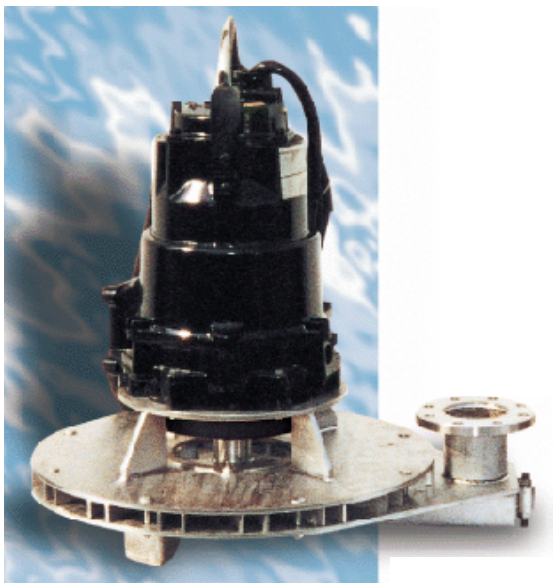
Flygt's range of submersible aerators adopts a superior proven technology in handling municipal and industrial waste water. Adapted and modified to local and international conditions, the Submersible Aerator has been in use for a number of years.



A Simple Principle

In every Flygt Submersible Aerator, a star-shaped turbine impeller draws in air via a flanged air intake pipe. At the same time, water enters through openings between the motor and aerator housing. This becomes thoroughly mixed with the incoming air before being discharged at high speed through a radial series of diffusers.

A Better Solution

Flygt Submersible Aerators have distinct advantages over more traditional systems. Oxygenation efficiency is exceptionally high. There is also a good degree of flexibility too, as the range of units available ensures that whatever your operating conditions, we can offer the right oxygenation capacity. Most importantly, the aerator's major components are 100% stainless steel.

Installation

The Submersible Aerator is normally installed in a stationary position at the bottom of the aeration tank, where it is supported by its own weight, its low centre of gravity ensuring greater stability. Alternatively, it can be attached to a float or raft for the aeration of lakes, pools, large lagoons and rivers. In both instances, the units can be easily installed or removed for periodic maintenance and inspection.

Fields of Application

Activated Sludge Plants

- To replace existing aeration equipment during breakdown or long term maintenance.
- To create and maintain a viable biological treatment capability in new plants.

Industrial Effluent Treatment Plants

- To upgrade existing treatment capacity without major capital investment.
- To create and maintain a viable chemical and biological treatment capability in new plants.

Fish Farms

- To increase oxygen levels vital for successful fish breeding.

River and Surface Water

- To meet emergency oxygenation requirements.
- To generally upgrade water quality.

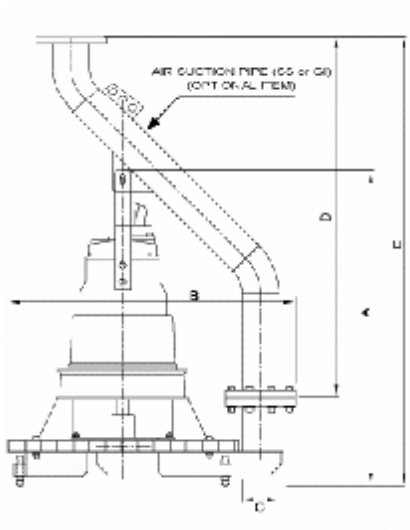
Advantages at a Glance

- Significant energy savings resulting from high oxygen transfer efficiencies plus intensive agitation during operation.
- Ease of installation and maintenance.
- Reduced likelihood of blockage.
- Low noise disturbance due to submerged operation.
- No health hazard from splashing of waste water.
- All weather operation.

✧ Submersible Aerators

TECHNICAL SPECIFICATIONS

Dimension & Weight - Standard Units



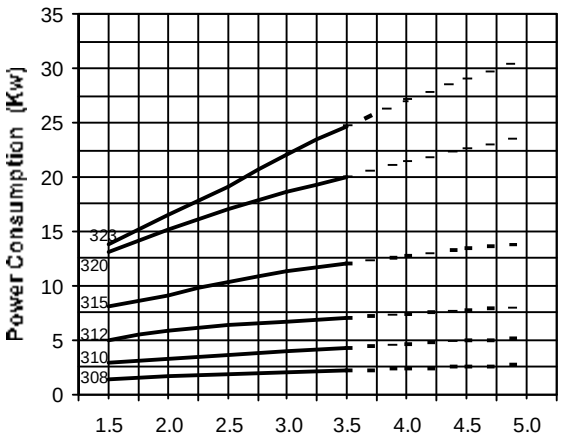
Model	Power kW	Current Amps	Dimensions (mm)					Weight kg
			A	B	C	D	E	
SA 308	2.4	4.5	530	623	50	720	916	67
SA 310	4.4	8.5	618	623	50	720	916	96
SA 312	5.9	11	656	845	80	833	1047	140
SA 315	13.5	25	948	900	100	1176	1450	354
SA 320	22	40	1327	1083	125	1600	1956	491
SA 323	30	54	1368	1222	150	1660	2057	525

Materials

Aerator	
Bottom Plate	AISI 304
Top Plate	AISI 304
Motor Ring	AISI 304
Motor Ring Support	AISI 304
Collar	AISI 304
Wear Ring	Bronze
Impeller	AISI 304
Nuts & Bolts	AISI 304
Stand	AISI 304
Diffuser Parts	Nylon 6 (SA308, SA310, SA312, SA315)
	AISI 304 (SA320, SA323)

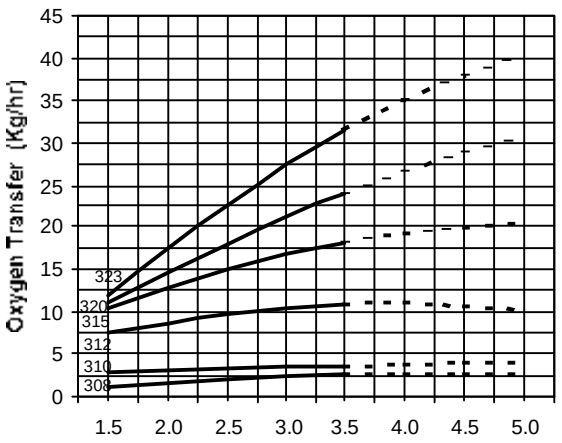
Motor Data	
Electric Motor	Squirrel Cage Class F Insulation
Mechanical Shaft seals	SA308 Upper - Carbon/Ceramic Lower - Ceramic/Ceramic SA310 Upper - Ceramic/Graphite Lower - Carbide/Ceramic SA312 Upper - Carbon/Tungsten Carbide Lower - Tungsten Carbide/ Tungsten Carbide SA315 Upper - Carbon/Tungsten Carbide Lower - Tungsten Carbide/ Tungsten Carbide SA320 Upper - Carbon/Tungsten Carbide Lower - Tungsten Carbide/ Tungsten Carbide SA323 Upper - Carbon/Tungsten Carbide Lower - Tungsten Carbide/ Tungsten Carbide
Casing	Cast Iron BS 1452 GR 14 (Finish Black Chlorinated Rubber Paint)
Motor Shaft	Stainless Steel/Steel
O-Ring	Nitrite Rubber (70 ℃ IRH)
Bearings	Upper - Single Row Lower - Double Row

Flygt Submersible Aerator
POWER CONSUMPTION
Air under atmospheric pressure (50 cycles)



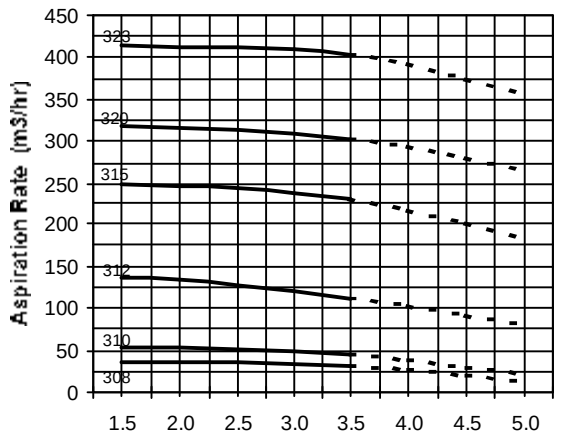
Consult factory for submergence more than 3.5 m

Flygt Submersible Aerator
OXYGEN TRANSFER
Air under atmospheric pressure (50 cycles)



Consult factory for submergence more than 3.5 m

Flygt Submersible Aerator
ASPIRATION RATE
Air under atmospheric pressure (50 cycles)



Consult factory for submergence more than 3.5 m