Application

AQUA submersible aerators are ideal for aeration and mixing in activated sludge tanks in small sewage treatment plants. The fact that they were specially developed for gentle handling of the activated sludge plus high energy efficiency and the very fine air bubbles produced make these aerators the ideal selection for SBR treatment systems.

The specially shaped protection ring and the optimised propeller design avoid unnecessary disintegration of the sensitive activated sludge and ensure ultra fine air bubbles.

Good settlement and the maintenance of the developed sludge structure leads to ideal conditions for nitrification and by this means ensure an excellent treatment performance by the biological process.

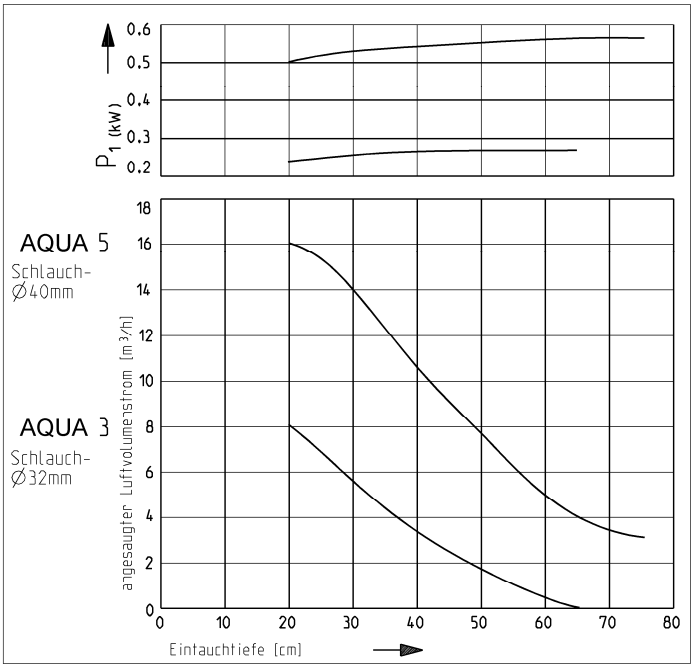
Both models of submersible aerator can be combined with the ATBlift submersible pump, which has been specially developed for mini treatment plants, to provide a powerful and easy to maintain SBR technology. The shape and construction of both the ATBlift and the AQUA units have been selected to ensure conformity with other common units in the market made by other manufacturers.

This gives a maximum of comfort when carrying out repairs on existing SBR systems supplied by other manufacturers.

A particular feature emphasising the service friendly nature of the units is the easy fit cable inlet at the upper lid of the pump. A screw-on plug-in system allows a free choice of cable length and avoids troublesome cable repair work when changing aerators or pumps in an SBR system.

Depending on chemical resistance and usage limits both submersible aerators are also suitable for other applications (pond aeration, stirring and mixing of liquids with no solids present.

Characteristic line



Tested in: clear water at 20 °C
Tank surface: > 3 m□
Water depth: 1,5 m

- Low power requirements
- High air input reduces the running
- times needed
- Fine bubble air input
- Safe to run dry
- Quick release cable inlet, encapsulated in resin to prevent moisture entering Motor
- Neutral product design
- 1 : 1 exchangeability with other common units on the market

Type	Cable H07RN	Max. Height x Width	Intake connection	Weight appr.	Code No.
AQUA 3	without cable gland	320 x 149 mm	1“	3,0 kg	68500040
AQUA 3	with 10 m cable gland	320 x 149 mm	1“	4,2 kg	68500037
AQUA 5	without cable gland	347 x 156 mm	1¼“	4,0 kg	68500041
AQUA 5	with 10 m cable gland	347 x 156 mm	1¼“	5,2 kg	68500039

Electrical Data

Type	Type of current	Voltage Volt	Motor rating P_1	kW P_2	RPM min^{-1}	F.L.C. Ampere	Motorprotection
AQUA 3	1-phase	1/N/PE~230	0,27	0,17	2828	1,3	integrated
AQUA 5	1-phase	1/N/PE~230	0,56	0,40	2683	2,5	integrated

Technical Data

Aerator
Vertical, submersible, aerator housing with diffuser and suction inlet, propeller with flow optimised air channels.

Bearings
Common shaft for pump and motor mounted in ball bearings, maintenance free with permanent grease lubrication

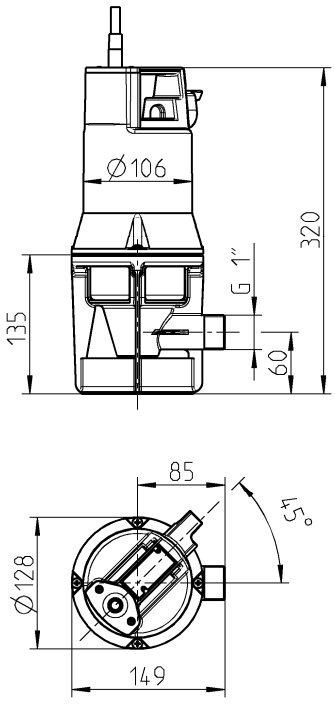
Seal
Shaft seal with three stages of lip seals and intermediate oil chamber, safe to run dry

Motor
Fully submersible, protection type IP68, insulation class B, motor thermostat for safety switch off on overheating with automatic switch-on after cooling sufficiently, quick release cable inlet, encapsulated in resin to prevent moisture entering motor should cable damage occur

Materials
Motor housing, shaft and fasteners of stainless steel, aerator, suction housing and propeller of plastic (GRP), rubber insulated power cable.

Scope of supply
Pump supplied ready for connection with 10 m cable or alternatively without power cable.

Dimension AQUA 3 (mm)



Dimension AQUA 5 (mm)