Aeration



Aqua-Wheel 0.55 kW

Aqua-Wheel

LINN aerators in action! Videos at www.linn.eu The **Aqua-Wheel** paddle-wheel aerators work by considerably increasing the surface area of the water, giving much improved exchange of gases between the air and water. They do this by breaking the water into tiny droplets and flinging them up into the air. The droplets are then able to take up oxygen and discharge to the atmosphere polluting gases, such as carbon dioxide. An added benefit is the increased circulation of the water, which distributes the oxygen-enriched water.

Aqua-Wheel requires almost no maintenance. The paddle wheels turn slowly, and are only slightly submerged in the water, so in most cases a protective screen is not required. The **Aqua-Wheel** aerator is available in a variety of sizes to suit individual requirements. Common to all sizes is the exceptionally buoyant float. With Aqua-Wheel, we have made ease of use a priority.

Aqua-Wheel is relatively lightweight, so making it easy to install in the desired position. Practical carrying handles are moulded directly onto the sides of the float.

Fastening and anchoring could not be easier. This can be achieved either by means of a fastening rope in the form of a V, or by a single rope attachment, or even by a locking mechanism on rods. This allows for assembly and dismantling on your pond.

Materials

Aqua-Wheel is driven with a high quality, slow running electric motor (IP55). The motor is mounted above the water surface.



detail: motor with belt drive

Power from the motor is transmitted by a simple tooth belt drive (except the 0.25 kW, where a gear motor is used). This results in reliable operation, long life and minimal energy consumption.

The wheels are connected to a one-piece stainless steel shaft held by sealed ballbearings. For the mountings, shafts and screws, only stainless steel is used. The float and the motor cover are made of robust, UV-resistant polyethylene.



Aqua-Wheel 0.25 kW

The paddle wheel has been specially developed for aeration function, maximising both the transfer of oxygen, and the dispersal of waste gases. The shape of the wheel and the paddles guarantee optimum water circulation and distribution with minimum power requirements. Its design creates a powerful current, making this aerator especially valuable where flow is required.

The paddles are robust and durable, and can be replaced quickly and easily. **Aqua-Wheel** is supplied ready to use, complete with cable and motor-protection-device.





screen protection

Screen protection

Where fish are stocked very densely, in spawning ponds or ponds with young fish, the fish might sustain injuries from the paddle wheels.

A possibility in the case of dense stocks is to use stainless steel screen-baskets (mesh size 9.5 or 5.5 mm), available for the 0.25, 0.55 and 1.1 kW sizes. Due to the large water flow, these screen-baskets are self-cleaning and remain virtually free from clogging.

As an second alternative you can use **Aqua-Wheel** with brush wheels (see page 10).

ADVANTAGES:

- best possible oxygen-enrichment
- best possible water-circulation
- non-clogging
- convenience and low maintenance
- rating adjustable (size 0,55 kW)
- ready for use
- minimum energy-consumption





Technical

Motor rating	kW	0.25	0.37	0.55 (0.40)	1.1
Paddle Wheels		1	2	2	4
Float		U-Float	T-Float	U-Float	U-Float
Power take-up	W	360	580	840 (600)	1400
Voltage	۷	230/400	230/400	230/400	230/400
Motor	rpm	1400	920	920	920
Paddle wheel revolutions	rpm	138	150	190	190
Water ejection horizontal	m	1.5	1.6	1.8 (1,6)	2.0
Water ejection vertical	m	1.20	1.2	1.5 (1,4)	1.50
Water flow speed	m/sec*	0.4	0.6	0.6	0.8
Minimum water depth	m	0.25	0.25	0.30	0.50
Suction depth	m	0.90	1.0	1.5 (1,0)	1.8
Active zone	bis m	40	55	70 (50)	100
Dimensions	cm	100 x 76 x 50	110 x 75 x 46	100 x 110 x 50	100 x 135 x 50
Weight	kg	30	35	40	50



