Amazing Water

Purifying
Moving
Designing
Vitalising
Lighting
Installation

Pumps and accessories

Programme and technical specifications 2023

35 Amazing Water
1988 / 2023

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MOVING WATER

Fountains

Filter systems

Waterfalls

Watercourses

Every water project will depend on the circulation pump; everything will be stationary when there is no pump. Regardless of whether it's a water feature in a garden, an impressive fountain in a public lake or a large waterfall, water circulation always requires a pump.

AUGA designs and constructs pumps and pump systems for a wide range of applications. The specific construction properties make our pumps genuinely multifunctional, even in changing conditions.

Benefiting from guarantee periods of up to three years and an excellent after-sales service, our pumps are truly the silent force behind any water project.

Water art

Water elements

Water features

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WATERFALL OR WATERCOURSE PUMPS

There are a number of crucial criteria to be considered when choosing the right pump for these applications: the pumps must be suitable for pumping pond water with no risk of blockage, accurate flow calculation is imperative for the end result, and energy consumption must be as efficient as possible since the pumps have to run for many hours.

FOUNTAIN PUMPS

Moving water is fascinating! Fountains mainly fulfil an aesthetic role in private ponds, city parks, recreational lakes and in front of company buildings. In addition, circulation aerates the water, which benefits the water quality. To create fountains, you need pumps which produce the desired fountain appearance.

FILTER PUMPS

There are many different filter systems for ponds and water projects. The similarity among all systems lies in the fact that they are all powered by a pump which must operate continuously, day and night, while using as little energy as possible. Due to the variety in filter systems, there are many different pumps available: volume pumps, high-pressure pumps, clean or waste-water pumps, and electronically regulated pumps with energy management for precise flow configuration.

PUMPS FOR WATER ART

Water art: defining the views in cities, parks, squares and garden ponds. Accurate calculation of the required pump capacity is extremely important for each project in order to determine the resistance of pipes, valves and water ornaments. The pumps are often located in humid technical pits, which pumps must be able to cope with.

PUMPS FOR WATER ELEMENTS

To achieve a beautiful water film along the entire length of the waterfall, it is important to get the flow right: the flow must neither be too high nor too low. The overall construction of the watercourse and the water inlet is an important consideration to prevent turbulence in the water flow. Using adjustable pond pumps, the flow can be precisely adjusted to the desired amount.

WATER FEATURES

Water features come in many shapes and sizes. They also have to be able to run in a huge variety of conditions. Whether they are large or small, all pumps should be able to handle this. And because the pumps work for many hours a day, another important aspect is how much electricity they consume.

AUGA pond pumps with Permanent Magnet Motor (PM).

AUGA pumps have undergone a technical revolution. This is because the use of efficient motor and pump technology for industry has become mandatory in the EU as imposed by the authorities. The introduction of PM motors saw the light of day with the aim of reducing energy consumption and C02 emissions.

AUGA quickly saw the great advantages of this technology, and has now been using it for its own pond pump line for seven years. The E series is our latest development; better performance with lower power consumption. For pond pumps that operate for long periods, this results in huge savings in energy costs.

PM motors on average 25% more efficient

What are PM motors?

Six strong magnets convert electrical energy into mechanical energy, which drives the pump. This motor technology is on average 25% more efficient compared to conventional motor technology, thus making it the first gain.

Efficient PM motor

VarioFlow® E pumps are electronically adjustable and save up to 60% on power costs

PM motors are technical gems: Alternating current (AC) from the wall socket is converted to direct current (DC) with the VarioControl control unit. It allows the speed of the motor to be easily changed in steps of 1 to 100. As speed decreases, flow as well as power consumption decrease proportionally.

A pump does not need to operate at full capacity during the colder seasons. With the downward regulation of a VarioFlow E pump, up to 60% of the power costs can be saved.

VarioControl unit

The supplied VarioControl unit is used to set the desired position. The Controller features an LED display showing the set position and power consumption.

The pump graphs give an insight into flow and power consumption in different positions.

AquaFlow® E pumps also feature energy-efficient PM motors, but are not electronically adjustable in capacity and power consumption.

Open impeller

Open impeller with 3 blades prevents blockage of the pump

AUGA pumps can transport large solids, which is due to the large free space between the impellers which allows solids to pass through.

The pump strainer supplied serves exclusively as protection against even larger dirt particles and animal life in ponds when the pump is operating in de pond.

AquaFlow® E and VarioFlow® pond pumps

Dry set-up outside the pond and fully rotatable motor for optimum ease of installation

All AquaFlow® E and VarioFlow® E pumps are suitable for use both underwater and above the water as long as the pump receives a supply of water. The pump is also rotatable in all positions, allowing the discharge connection to be positioned as required.

Technical specifications AUGA pumps with energy-efficient PM motor

Series	PM motor	4-pole	6-pole	Electronic adjustable
AquaFlow® E	✓	–	✓	–
VarioFlow® E	✓	–	✓	✓
Compact® E	✓	✓	–	–

Continuous monitoring

Capacity, delivery pressure and power consumption are tested every year on a calibrated test bench.

Our pumps do what we promise, which is why pumps from production are fully tested on a calibrated test bench.

AquaFlow® E pond pumps with PM motor without frequency converter

AquaFlow® E pumps are truly multifunctional. They can be installed both wet (underwater) and dry (out of water) for circulation, waterfalls, filter systems and all other conceivable situations that require water to be transported. All pumps are fitted with the latest generation PM motors, which are more energy-efficient and make less noise.

Type	Motor W	Flow max. l/h	Head max. m	Connection suction/ pressure	L x W x H mm	Solid handling mm	Cable m	Art. no.
AquaFlow® E-5000	25	5000	2.5	1.5"	290 x 130 x 175	8	10	102034
AquaFlow® E-10000	80	9800	4.8	1.5"	290 x 130 x 175	8	10	102035
AquaFlow® E-15000	115	14900	4.9	2"	360 x 160 x 225	8	10	102036
AquaFlow® E-20000	175	21000	5.3	2"	360 x 160 x 225	8	10	102037

Product description

Under water, out of the water — it makes no difference: all models are multifunctional, as long as there is a sufficient water supply to the pump. The motors are encased in synthetic resin and are watertight, safe and also ultra-quiet.

- High-efficiency PM motor.
- 6-pole, high-torque motor.
- Suitable for dry and wet use.
- Continuously rotatable motor/outlet connection.
- Solid handling of pump strainer Ø 8 mm.
- Solid handling of open impeller in AquaFlow® E-5000 and E-10000: Ø 12 mm.
- Solid handling of open impeller in AquaFlow® E-15000 and E-20000: Ø 16 mm.
- Built-in microprocessor monitors motor management.
- 230 V, 50 Hz voltage.

AquaFlow® E pomp with pump cage for wet use

AquaFlow E® without pump cage for dry use

AquaFlow® E pond pumps

Besides the flow (l/h), and head (m) a pump can supply is a very important aspect, as the lift largely determines a pump's energy consumption. Therefore, it is important to select the right pump and a comparison with other pumps based solely on the capacity in litres is not objective.

Scope of delivery

- AquaFlow® E pump with a 10-metre power cable.
- AquaFlow® E 5000 / 10000: Hose tails 25/32/40 mm and 40 mm glued tails.
- AquaFlow® E-15000/20000: Hose tails 32/40/50 mm and glued tails 50 mm.

Materials

- Motor/pump housing and pump strainer: plastic.
- Pump shaft and slide bearings: ceramic.

Construction and safety

- The pumps fully conform with the European CE guidelines.
- CE relates to the construction and safety of equipment.

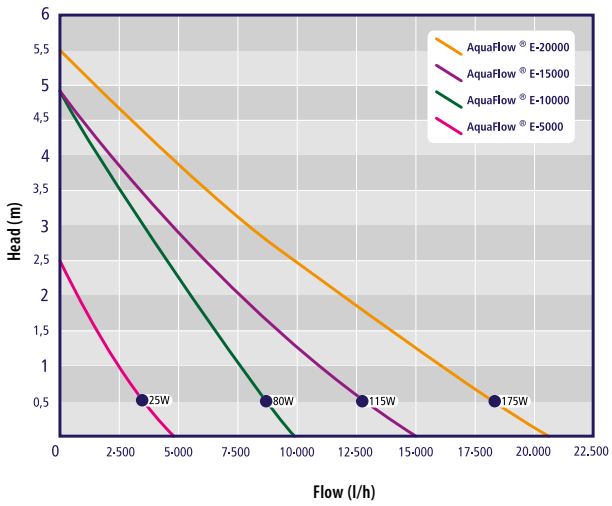
Warranty

- 3-year warranty in subject to the General Warranty Terms and Conditions

AquaFlow® E pomp with continuous rotatable motor

Suitable for a dry use with continuously rotatable motor for exact positioning of the outlet.

AquaFlow® E pump curve



VarioFlow® pond pumps with PM motor and frequency converter

VarioFlow® pond pumps with PM motor and frequency converter for continuous RPM adjustment.

Type	Motor W	Flow max. l/h	Head max. m	Connection suction/ pressure	L x W x H mm	Solid handling mm	Cable m	Art. no.
VarioFlow® E-10	max. 80	9800	5	1.5"	290 x 130 x 175	8	10 + 1.5	102115
VarioFlow® E-20	max. 175	22000	6.5	2"	360 x 160 x 225	8	10 + 1.5	102125
VarioFlow® E-30	max. 285	29500	8	2"	360 x 160 x 225	8	10 + 1.5	102135

Product description

Under water, out of the water - it makes no difference: all models are multifunctional, as long as there is a sufficient water supply to the pump. The motors are encased in synthetic resin and are watertight, safe and also ultra-quiet.

- High-efficiency PM motor.
- 6-pole, high-torque motor.
- Control panel for continuous capacity configuration.
- Connection plug between the pump and control panel.
- Power consumption and configured percentage are displayed digitally.
- Suitable for dry and wet use.
- Continuously rotatable motor/outlet connection.
- Solid handling of pump strainer Ø 8 mm.
- Solid handling of open impeller in VarioFlow® E-10: Ø 12 mm.
- Solid handling of open impeller in VarioFlow® E-20 and E-30: Ø 16 mm.
- Built-in microprocessor monitors motor management.
- Display of error codes for: overvoltage, undervoltage, low water/running dry, phase fault, pump blockage, overload.
- 230 V, 50 Hz voltage.

Connection plug

VarioFlow® E pomp with pump cage for wet use

VarioFlow® E pump without cage for dry use

VarioFlow® E pond pumps

The VarioFlow® E pumps are fully adjustable electronically in terms of capacity in steps of 1 to 100% using the supplied control panel. Power consumption decreases when the capacity is lowered, once the speed of the motor is reduced.

Position 1 is a protected lower limit against motor overheating and is at about 30% of maximum power.

The digital display shows power consumption and the configured percentage. After a power cut the pump restarts at the configured position, due to the built-in memory.

Scope of delivery

- VarioFlow® E pump with a 10-metre power cable.
- VarioFlow® E control panel with a 1.5 metre power cable and connection plug.
- VarioFlow® E-10: 25/32/40 mm hose tails and 40 mm glued couplings.
- VarioFlow® E 20/30: 32/40/50 mm hose tails and 50 mm glued couplings.

Materials

- Motor and pump housing: plastic.
- Pump strainer: plastic.
- Pump shaft and slide bearings: ceramic.

Construction and safety

- The pumps fully conform with the European CE and EMC guidelines.
- All electronics are TüV certified.
- CE relates to the construction and safety of equipment.
- EMC relates to the uninterrupted operation of electronic components.

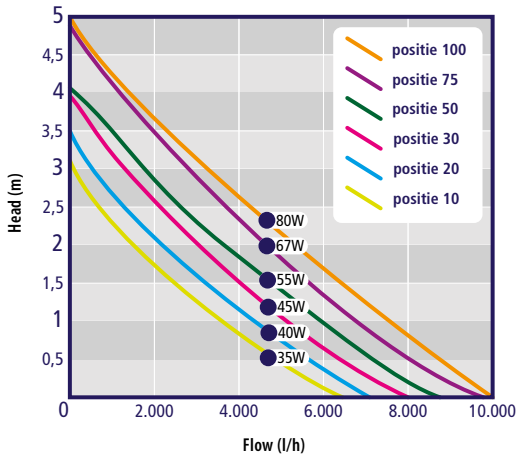
Warranty

- 3-year warranty subject to the General Warranty Terms and Conditions

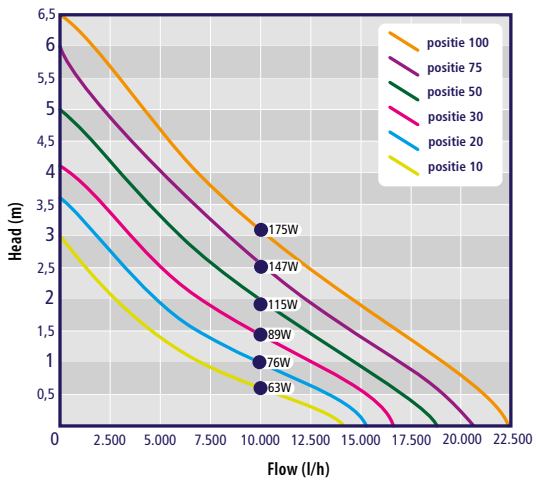
VarioFlow® E pomp with continuously rotatable motor

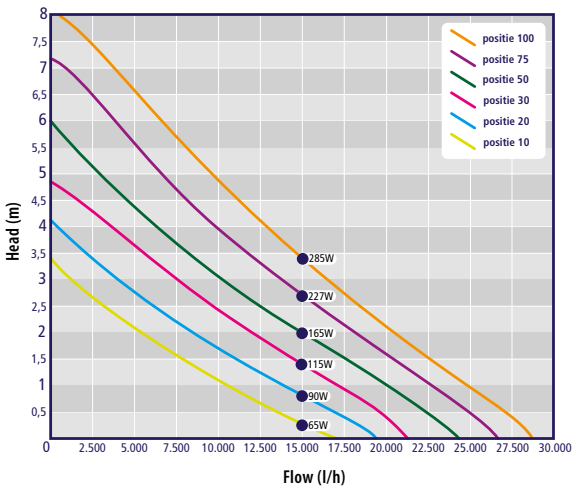
Suitable for a dry use with continuously rotatable motor for exact positioning of the outlet connection.

VarioFlow® E-10 pump curve



VarioFlow® E-20 pump curve





Capacity, conveying height and power consumption fall when the number of RPMs decreases. The graphs show the different models with examples of six set positions and the corresponding power consumption.

VarioFlow® LV 20 pond pump with 12 V PM motor and frequency converter

Energy-efficient pond pump with 12 V low-voltage motor.

Type	Motor W	Transformer W	Flow max. l/h	Head max. m	Connection suction/ pressure	L x W x H * mm	Solid handling mm	Cable m	Art. no.
VarioFlow® LV 20	max. 160	40	19000	5	2"	375 x 150 x 175	8	10 + 1.5	102121

** Including pump strainer*

Product description

VarioFlow® LV 20 pumps are ideal for installation in swimming pond filter zones, where 230 V pumps are prohibited by law. Much less equipment is required for the installation of these pumps, which also greatly reduces the costs.

- 6-pole, high-torque motor.
- Control panel for capacity setting, detachable from the pump.
- Includes 230 /12 V transformer, suitable for outdoor use.
- Suitable for dry and wet use.
- Free-passage impeller for solid particles of a maximum of Ø 8 mm.
- Power consumption and configured percentage are displayed digitally.
- Built-in microprocessor monitors motor management.
- 230/12 V, 50 Hz voltage.

Scope of delivery

- VarioFlow® LV 20 pump with a 10-metre power cable.
- 50/40/32/25 mm hose tails.
- VarioControl control panel with a 1.5-metre power cable.
- 230/12 V safety transformer with a 1.5-metre cable and plug.

Materials

- Motor, pump strainer and pump housing: plastic
- Pump shaft and slide bearings: ceramic

Construction and safety

- The pumps fully conform with the European CE and EMC guidelines.
- CE relates to the construction and safety of equipment.
- EMC relates to the uninterrupted operation of electronic components.

Warranty

- 3-year warranty subject to the General Warranty Terms and Conditions.

Advantage of using 12 V low-voltage pumps

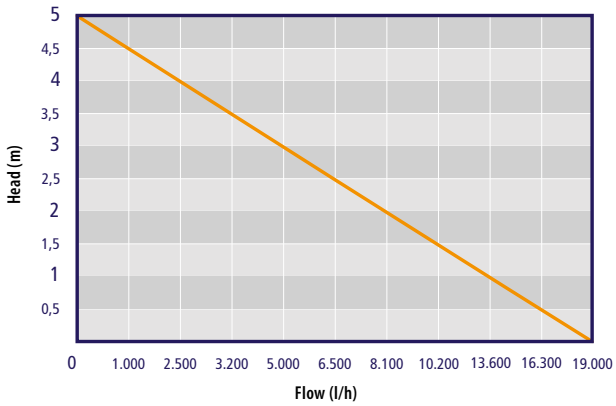
Low-voltage pumps are always used for safety reasons. Legal requirements prohibit the installation of 230 V pumps in water when persons can into contact with the same water.

This usually relates to swimming ponds, where 230 V pumps must be installed in an equipment pit outside the pond. Extra precautions must also be taken to protect the safety of users.

This is much easier when low-voltage pumps are used, which may be installed in water as they provide maximum safety for humans and animals in the same water.

The pump can be set up in the aqua plant filter. AUGA supplies a drain collector for this purpose, into which the pump fits exactly. Drainage hoses connected to the filter extract the purified water from the plant filter and the pump provides circulation. This is a safe and simple solution that also offers the lowest installation costs.

VarioFlow® LV 20 with pump strainer



Compact E pond and ornamental pumps with PM motor

Type	Motor W	Flow max. l/h	Head max. m	Connection		L x W x H mm	Solid handling mm	Cable m	Art. no.
				suction/pressure	hose mm				
Compact E-1800	11	1800	2.2	5/4"	20/25/32	182 x 115 x 110	4	10	102050
Compact E-2800	18	2800	3.0	5/4"	20/25/32	182 x 115 x 110	4	10	102051
Compact E-4200	32	4200	4.5	5/4"	20/25/32	182 x 115 x 110	4	10	102052

Product description

The Compact E series consists of a highly efficient and low noise submersible pump for smaller filter systems, ornaments and water sprayers. A fountain connector set is optionally available (see page 15). Durable motor design with low power consumption and long service life.

- Manually adjustable capacity control.
- Very low operating noise level.
- Built-in motor/dry-run protection.
- 230 V, 50 Hz voltage.
- High-efficiency motor.

Scope of delivery

- Compact E pump with 2 hose tails.

Materials

- Motor/pump housing and pump strainer: plastic.
- Pump shaft and slide bearings: ceramic.

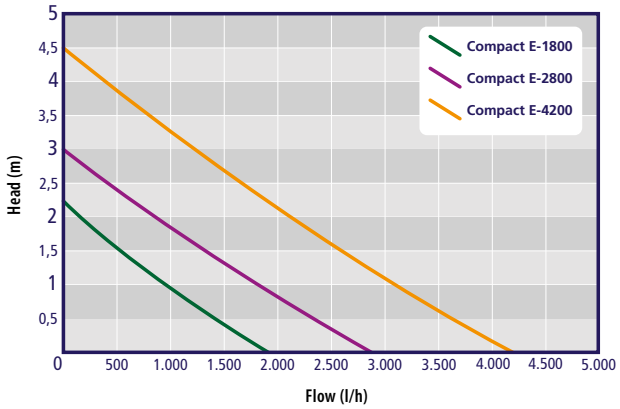
Construction and safety

- The pumps fully conform with the European CE guidelines. CE

Warranty

- 3-year warranty subject to the General Warranty Terms and Conditions

Compact-E pump



AquaFlow® pond pumps with high conveying height

Powerful pond pumps with high pressure, suitable for waterfalls, fountains and watercourses.

Type	Motor W	Flow max. l/h	Head max. m	Connection suction/pressure	L x W x H mm	Pollutant filter mm	Cable m	Art. no.
AquaFlow® 15	230	16000	6.2	1.5"	315 x 128 x 136	6	20	102022
AquaFlow® 20	400	20000	9	1.5"	385 x 175 x 205	8	20	102021
AquaFlow® 30	500	30000	9	2"	392 x 175 x 205	8	20	102019
AquaFlow® 36	700	36000	11	2"	392 x 175 x 205	8	20	102020

Product description

The pumps are fitted with powerful asynchronous motors, the capacity can be altered using a VarioTronic speed regulator.

- Suitable for dry and wet configurations
- Semi-open impeller for transportation of waste particles up to 8 mm.
- Supplied with a 20-metre power cable.
- 230 V, 50 Hz voltage.

AquaFlow® pump

The pumps are fitted with powerful asynchronous motors; capacity and power consumption can be adjusted to a limited degree electronically using a VarioTronic speed controller (see page 29).

Scope of delivery

- AquaFlow® pump with a 20-metre power cable.
- Hose tails.

Materials

- Motor/pump housing and pump strainer: plastic.
- Pump shaft and slide bearings: ceramic.

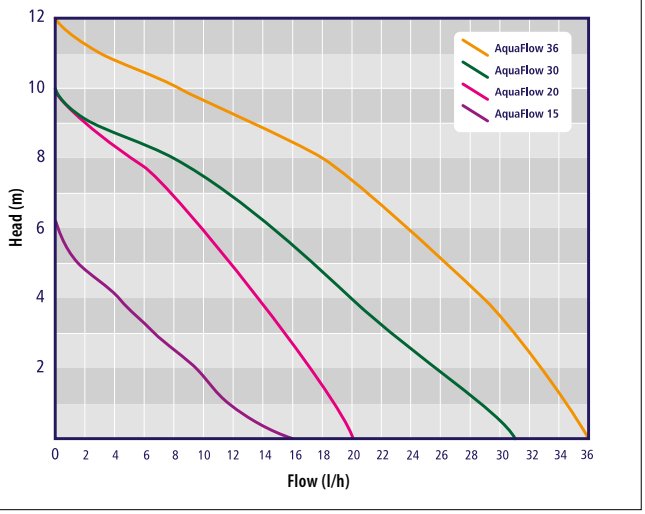
Construction and safety

- The pumps fully comply with European CE guidelines.
- CE relates to the construction and safety of equipment.

Warranty

- 3-year warranty subject to the General Warranty Terms and Conditions.

AquaFlow® pump curve



Fountain coupling set for Compact-E pumps

Fountain connector set suitable for all Compact-E models. The divider has an extra connection for a spray figure for example.

Type	Suitable for	Art. no.
Compact Kit	E-1800, E-2800, E-4200	991094

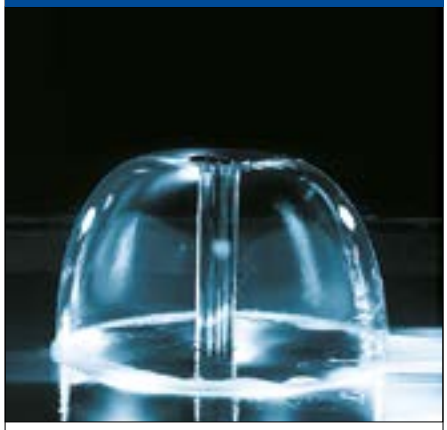
Scope of delivery

- Fountain head set.
- Divider.
- Telescopic standpipe.

Pump with riser pipe and valve

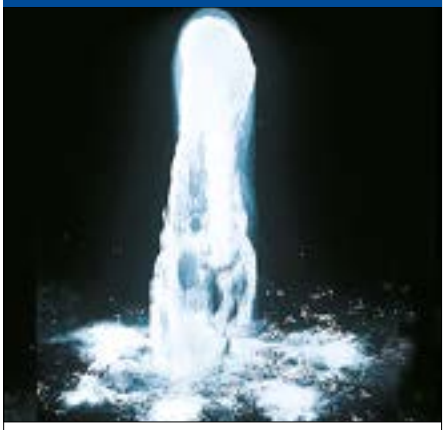
Type	Fountain diameter and height in cm		
	Water bell	Volcano nozzle	Foam nozzle
Compact C 1800	Ø 40 ↑ 20	Ø 60 ↑ 60	↑ 8
Compact C 2800	Ø 50 ↑ 30	Ø 90 ↑ 95	↑ 20
Compact C 4200	Ø 70 ↑ 40	Ø 120 ↑ 130	↑ 35

Water bell



Volcano nozzle

Foam nozzle



HI-Flow underwater pumps, WB series

Underwater pumps with a large capacity, suitable for large fountains, waterfalls, watercourses and water projects.

Type	Motor kW (P2)	Flow max* m³/h	Head max m	Connection outlet	Cable m	Art. nr. 230 V /1Ph	Art. nr. 400 V / 3Ph
WB 16 / 1	0,55	16	11	2½"	20	105140	–
WB 16 / 2	1,10	16	22	2½"	20	105141	–
WB 16 / 3	2,20	16	34	2½"	20	105142	–
WB 30 / 1	1,10	30	11	3"	20	105143	105144
WB 30 / 2	2,20	30	24	3"	20	105145	105146
WB 45 / 1B	1,10	45	10	3"	20	105147	105148
WB 45 / 1	2,20	45	14	3"	20	105149	105150
WB 45 / 2BB	2,20	45	19	3"	20	105151	105152
WB 45 / 2	3,0	45	27	3"	20	–	105153
WB 60 / 1	2,20	60	14	4"	20	–	105155
WB 60 / 2B	3,0	60	22	4"	20	–	105156

*) Optimal operating point.

Product description

WB underwater pumps are suitable for larger water projects: fountains, watercourses, waterfalls and water screens, etc.
The installation can be stationary, as well as mounted under a float for use as a fountain pump.

- High-efficiency underwater pumps.
- Made entirely out of stainless steel 304 (stainless steel 316 on request).
- Stationary or floating use.
- Horizontal and vertical installation possible.
- Large fine mesh pump cage suitable for use as a fountain pump.

WB pump stationary use

Complete fountain set with WB pump

HI-Flow underwater pumps, WB series

HI-Flow pumps are premium, industrial quality, with extremely efficient pump technology.

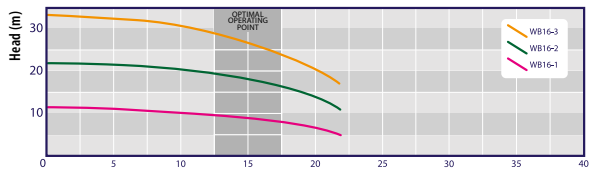
Scope of delivery
- Underwater pump with large stainless steel pump strainer.
- Supplied as standard with a 20-metre power cable, extension possible.
- 230 V incl. starter control box with an on/off switch and thermal protection.
- 400 V 3 Ph, must be connected by a qualified fitter.

Materials
- Pump and pump cage in stainless steel 304 (stainless steel 316 also available).
- Motor shaft seal: Silicon Carbide.
- Motor filled with mineral oil, fully biological.

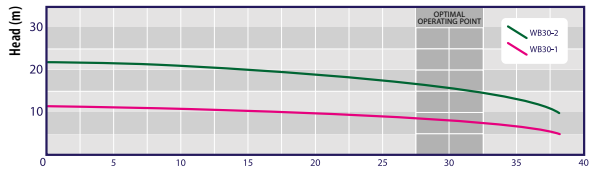
Construction and safety
- The pumps fully conform with the European CE guidelines.
- CE relates to the construction and safety of equipment.

Garantie
- 2-year warranty subject to the General Warranty Terms and Conditions.

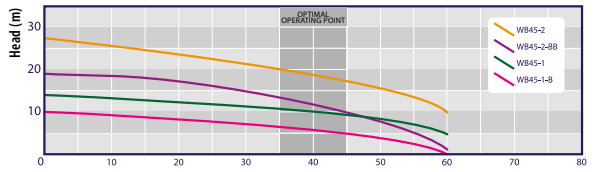
WB16 pump curve



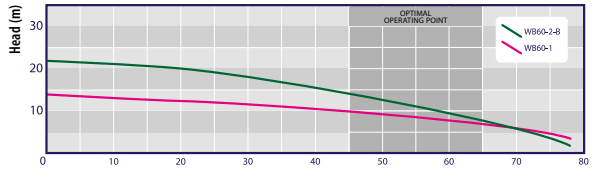
WB30 pump curve



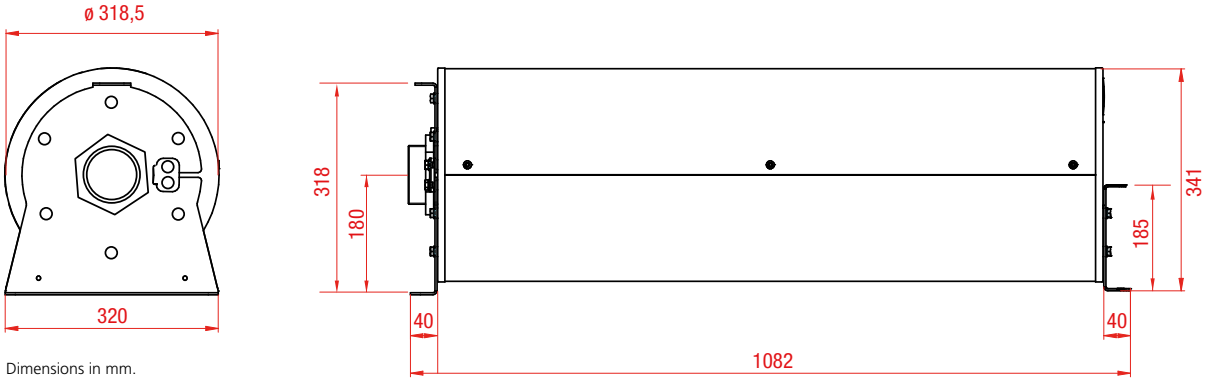
WB45 pump curve



WB60 pump curve



The graphs demonstrate the optimal operating point per series. For the pump to work properly and achieve its life expectancy it is important to select the right pump for the water project concerned.



Dimensions in mm.

Precise electronic configuration of the pump flow, or water flow distribution to a filter and a waterfall.

This can be easily achieved using the handy accessories on the following pages.

Accessories

AUGA
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Pump strainers

Pump strainers are needed to keep large dirt particles and live animals out of pumps and filter systems. In most cases, these strainers are mounted on a wall duct in the pond; pump strainers can also be mounted directly on pumps.

Type	Material	Connection	Dimensions	Filter	Art. no.
Pump strainer set T	Plastic	ø 63 mm PVC	B = 520 mm L = 270 mm	<–> slots 6 mm	901070
Pump strainer.	Plastic	2" female thread	ø = 115 mm L = 130 mm	☐ 10 x 3 mm	991068
Pump strainer.	Stainless steel 304	2" female thread	ø 220 mm L = 160 mm	○ 5 mm	FT 51150
Pump strainer fine	Plastic	2" female thread	B = 130 mm L = 230 mm	○ 3 mm	ME 6181
Pump strainer coarse	Plastic	2" female thread	B = 130 mm L = 230 mm	☐ 8 mm	ME 6180

Pump strainer set T

Mounting on wall duct.
PVC coupling for disconnection strainer set. Strainer fitted with thread for easy removal.
Strainer size 2 x Ø 9 cm. L = 13 cm

Plastic pump strainer

Mounting on pump, pipe, hose or wall duct.

Stainless steel pump strainer

Mounting on pump, pipe, hose or wall duct.

Fine- and coarse-mesh pump strainer

The fine-mesh strainer is suitable as a pre-filter on pumps for fountains. The coarse-mesh strainer (not shown) is suitable as a pre-filter for dirty water pumps.

Pump strainers modular system

Type	Material	Connection	Dimensions	Filter	Art. no.
Pre-filter	Plastic	11/4"	ø 120 mm L = 50 mm	<–> slots 3 mm	ME9137
Pre-filter	Plastic	11/2"	ø 120 mm L = 50 mm	<–> slots 3 mm	ME9138
Pre-filter	Plastic	2"	ø 120 mm L = 50 mm	<–> slots 3 mm	ME9139
Pre-filter extension	Plastic	–	ø 120 mm L = 50 mm	<–> slots 3 mm	ME9140

Pre-filters

Module system for connecting to pumps or to a wall duct in a pond as a pump strainer.

Applications

- Pump strainer for pond pumps.
- Protective strainer for suction pipe.
- The extension module can be coupled multiple times to the basic module.

Pre-filters

3-way distributor MD-3

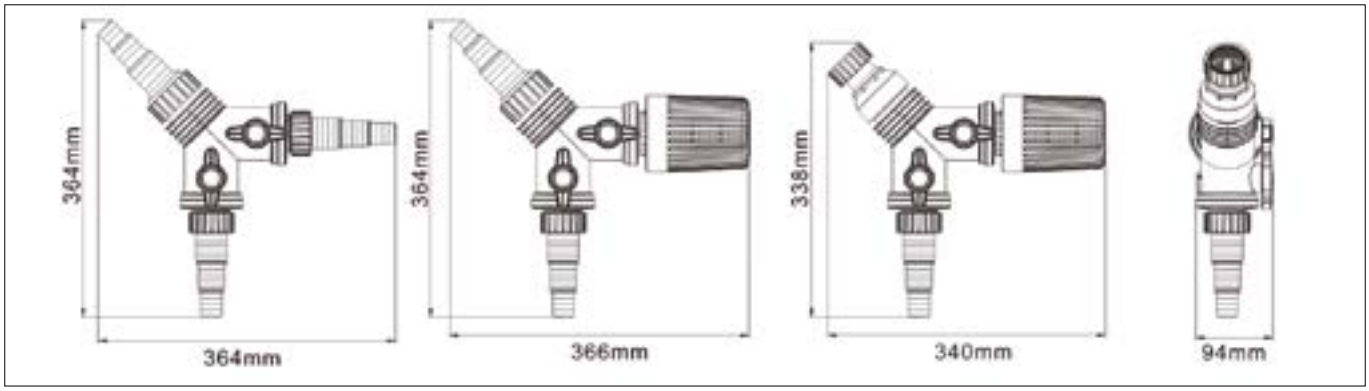
Multi-tool for pond pumps, distributes the water flow in two directions, for the suction side as well as the pressure side of the pump.

Type	Hose connections ø mm	Threaded connections male thread inch	Art. no.
MD-3	3 x 25/32/40	2 x 1½" - 1 x 2"	901067

Applications

- Suctioning water from two places, such as via the strainer and skimmer.
- Pumping water to two places, such as a waterfall and filter.
- Fitted with two control valves.
- Supplied with 3 hose connectors, One pump strainer and one flow nipple 2 x 1½".
- Only suitable for underwater installation.
- Clearance of pump strainer <–> slots 6 mm.

MD-3 distributor



Pump accessories

VarioTronic speed controllers, suitable for pond pumps with asynchronous motors, change the speed of the motor, allowing the capacity to be configured as required.

Type	Max. capacity	Voltage	Art. no.
VarioTronic 800	800 W	230 V	01B902

VarioTronic 800

Applications

- Precise calibration of fountains, filters, waterfalls.
- Suitable for pond pumps with asynchronous motors:
  Messner: MPF, Eco-X, Eco-Tec, Multi System series.
  AUGA: AquaTec 15, 20, 30 and 36.
- Flow can be adjusted by approx. 50%.
- Decrease in power consumption up to approx. 50%, depending on model.

AUGA July/2023/EXP

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