



HERBORNER
PUMPENTECHNIK

WATERblue-B η eo

The Pump Generation of the future

BEST EFFICIENCY





LIMITLESS

WATERblue-B η eo

The pump generation of the future
is redefining pump applications.

Maximum efficiency

And therefore maximum energy savings

The requirements profile of today's pure water pumps is always unique for each system. In addition, it requires flexibility when it comes to controlling the pumps. For exactly this reason it is important to be able to use the right pump with the suitable drive for every project application. Until now, this was only possible for certain operating points along the pump's characteristic curve. This is changed fundamentally with the new **WATERblue-B η eo** pump generation.

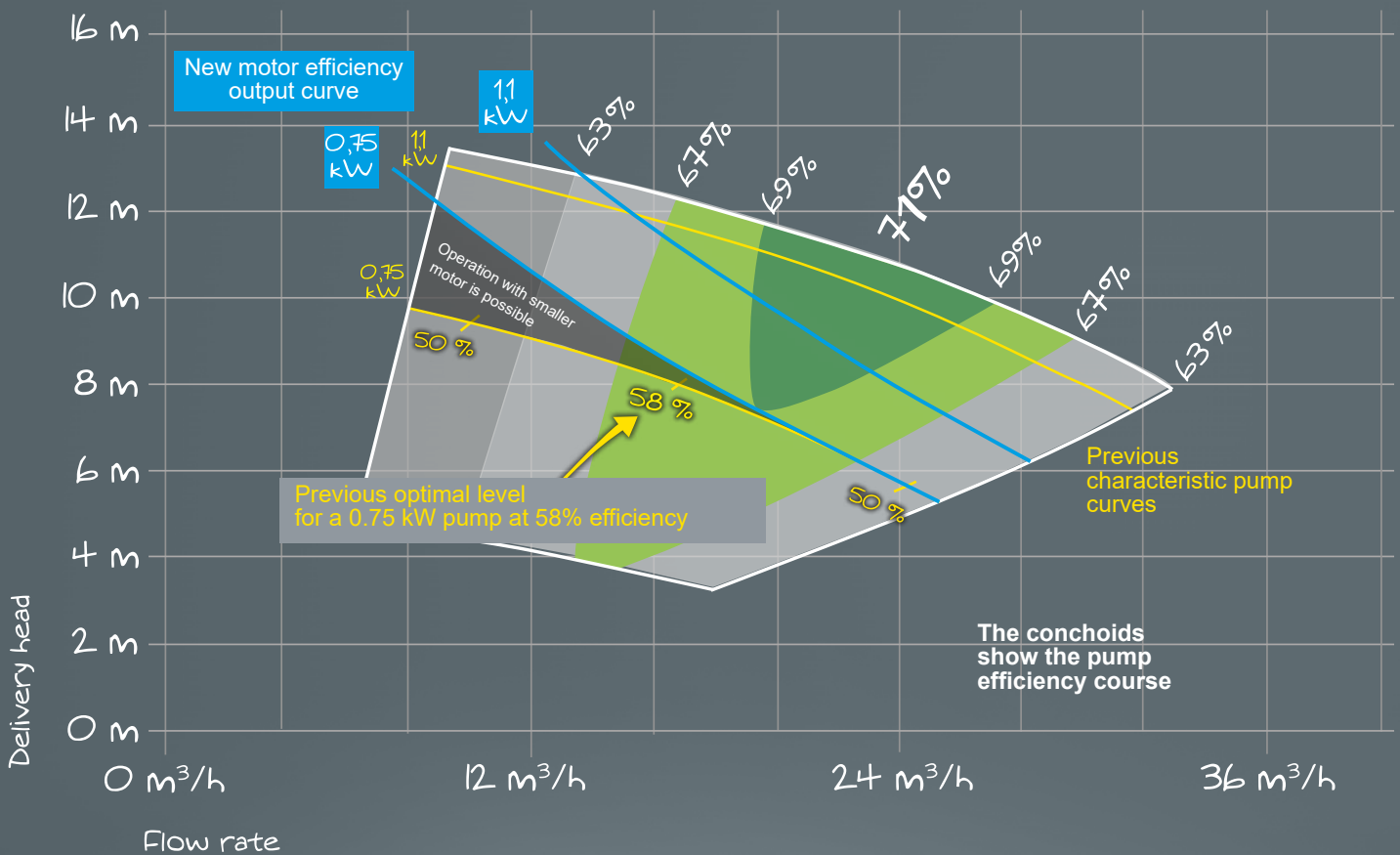
Most important arguments for using **WATERblue-B η eo** pumps are the **guaranteed maximum efficiency and the maximum energy and cost savings which are reached for every operating point for which the pumps can be used.**

The pumps were tested
in endurance tests
and under extreme
conditions.



Set of performance curves

Example **WATERblue-B_{neo}**

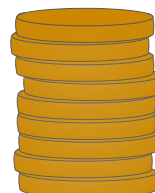


Example for 0.75 kW pump:
 Previous optimal efficiency level: 58 %
 New efficiency with full impeller diameter according to shell curve: 68 %
 => Hydraulic optimisation of the efficiency by 10 % !

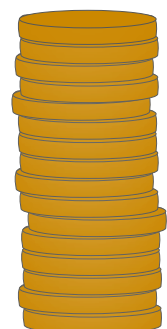
INNOVATION

Life cycle costs

Cost savings as a result of lower investment and energy costs.



WATERblue-B_{neo}



classic pumps

WATER*blue*-B η eo

Thinking beyond for nature and humankind

Impressive pump efficiency

Eco-friendly products

Thanks to our experience in pump technology, our further developments are innovative and define the market. Saving on stainless metals by substituting materials using our own coating technology developed in-house is particularly eco-friendly. We want to stay the forerunner when it comes to sustainability and think about the future when we develop our products, much like with the **WATERblue-B η eo**.

Maximum efficiency increase

Using the efficiency increase in the pump hydraulics with the development of the **WATERblue-B η eo** series, new sets of performance curves have come about. Derived from this is the use of smaller motors with the same pump power output compared to previously used pump types with the accompanying reduction in investment costs. The result of this is considerably reduced life-cycle costs for the operator.

Highest quality features

All parts inside the pump which touch the medium are 100% corrosion-protected. The high-quality finishing process of the HPC coating serves to provide the greatest possible protection against wear, corrosion and other adhesions. The smooth surfaces of the **WATERblue-B η eo** guarantee constant and efficient operating conditions. Simple assembly and safe start-up after longer idle periods are possible with our pumps.

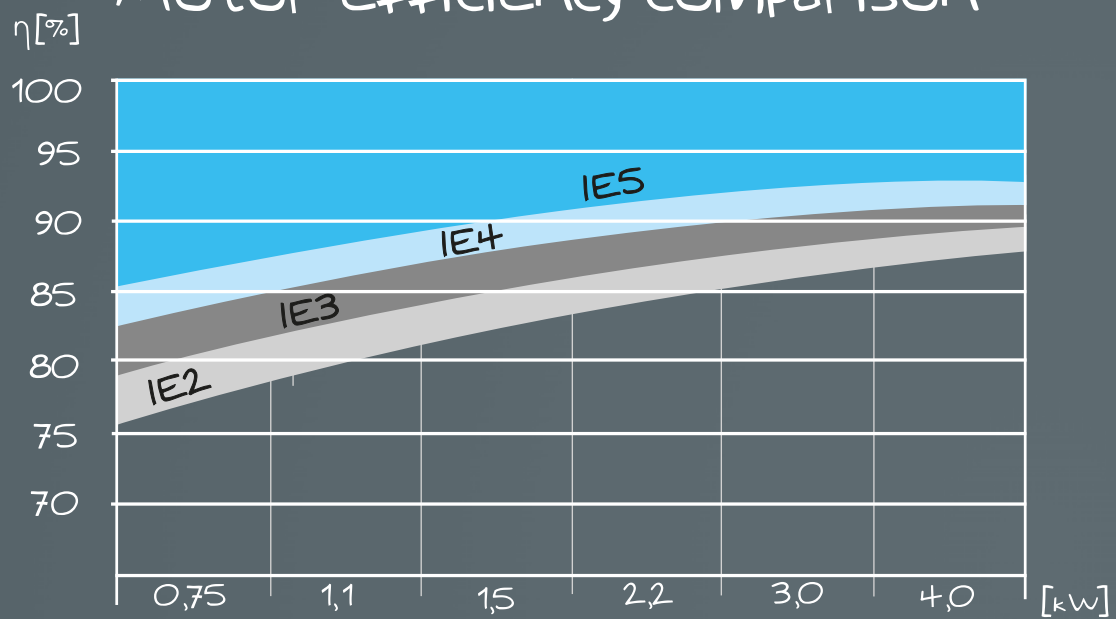
Reduction in motor size

WATERblue-B η eo pumps can be operated using a considerably broader range of performance curve sets. The limits of this area will not be determined here by the impeller diameter, but by the maximum motor power. Resulting from this, among other things, is the increased delivery head.

Efficiency maximization

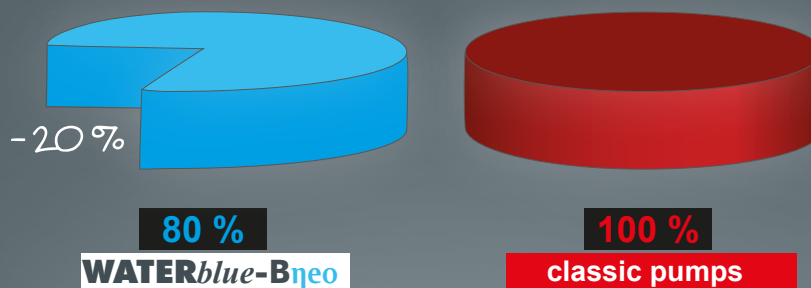
By using coated hydraulics in combination with the largest and thus best impeller diameter for pump efficiency, very high energy savings potential can be realized and life cycle costs thus reduced.

Motor efficiency comparison



IE2 to IE5 correspond to standardized energy efficiency classes

Energy needs
 ∅ Annual consumption



ECONOMICAL

WATERblue-B η eo

First-class setup

Intelligent motor efficiency

The latest motor technology with frequency converter

With regard to the European directives on eco-friendly energy use, we are combining our **WATERblue-B η eo** pumps with permanent magnetic motors IE5 and specially customized frequency converters. IE5 currently corresponds to the highest energy efficiency class for motors, while the converter permits the optimum control of the system's requirements. It is not possible to make pumps any more energy-optimised than these.

Of course, the motors of the **WATERblue-B η eo** pumps also have the established quality features of reinforced supports and shafts which have considerable advantages compared to standard motors and allow the costs associated with the life cycle of the pump to be minimized.

With the help of the set of performance curves recorded at the test bench, the **WATERblue-B η eo** in the plant is pre-configured to match the operating point desired by the customer. Subsequent adjustment of individual operating points can be done easily on site using the frequency converter.





INTERIOR

WATERblue-Bηeo

Developed for the best flow

Most efficient water transport

Flow-optimised surfaces are perfectly smooth

Completely smooth-coated from the inside, the **WATERblue-B**ηeo series conveys the medium with the greatest energy efficiency. This efficiency reduces energy costs by up to 15-20% compared to conventional pumps.

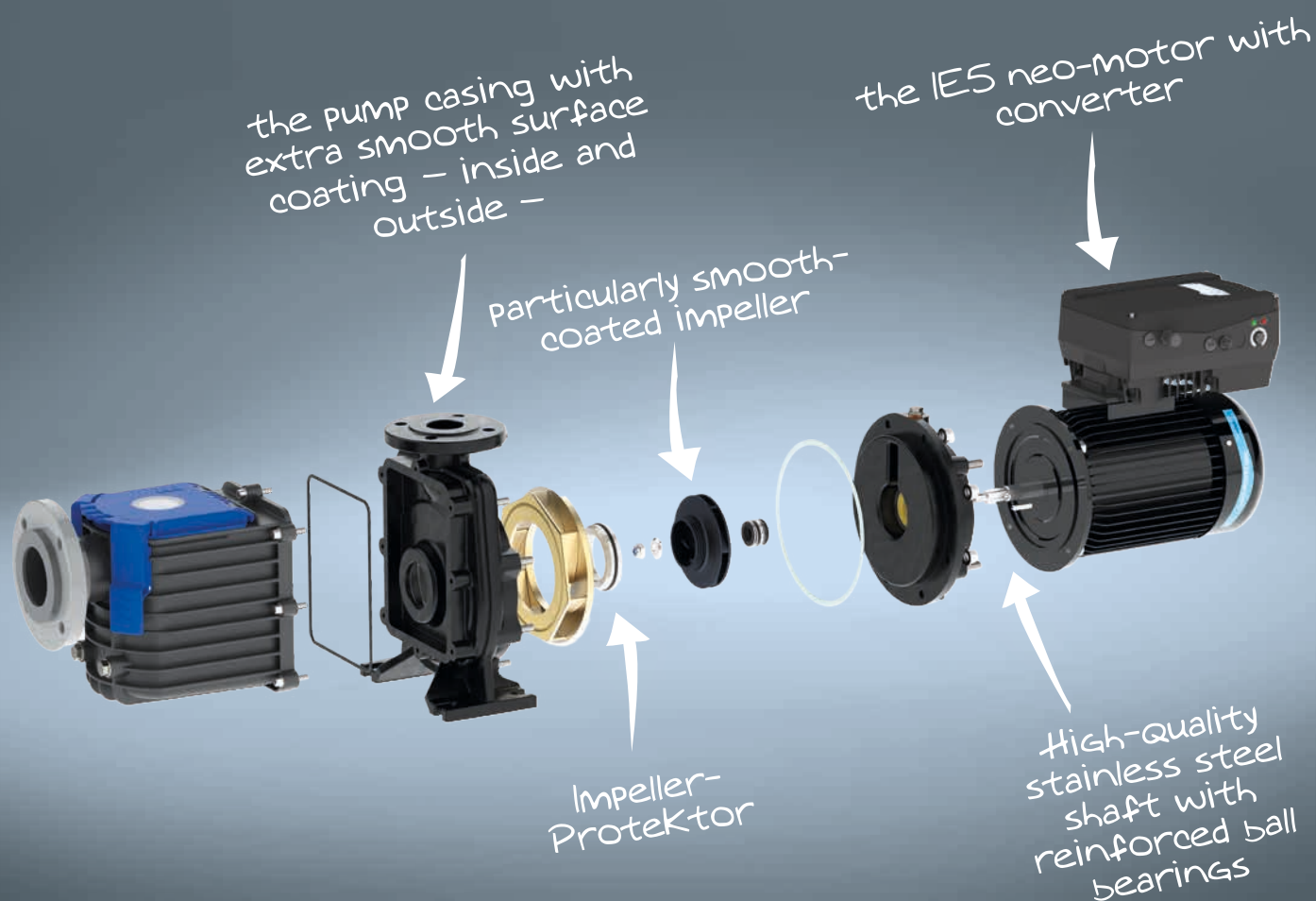
Equipped with 100% corrosion protection, our pumps also offer the best hygiene protection. The possibility of any adhesions is as good as eliminated.

Maximum impeller diameter puts the pressure on

In the pumps of the **WATERblue-B**ηeo series, the impeller diameter in the pump housing is designed with the maximum diameter. Here, the pump is adjusted to the system requirements using the speed control. The combination of the largest impeller diameter in connection with the speed adjustment ensures optimum flow behaviour. This simple measure exhibits efficiency benefits of up to 15% compared to twisted impellers.

The smooth-coated impeller, unique to the market, helps further maximize efficiency. This reduces energy costs by a further 3%. The specially developed, wear-proof impeller protector makes sure that operation runs smoothly and that gap losses on the suction side are kept extremely low. This, in turn, ensures that the efficiency of the pump remains constant.





COMPONENTS

WATER*blue*-**B***η*eo

Practical applications, done logically

Brilliant operation

Easy commissioning

Die vorkonfigurierten **WATERblue-B η eo**-Pumpen sind optimal für die Inbetriebnahme vorbereitet.

Fast adjustment to operating point

In conjunction with the required pump power output, the frequency converter can easily regulate the motor speed. This is done with just a few hand motions. In general, pre-parameterisation is done before delivery.

Time-saving service

The combination of pump, motor and frequency, each of which are attuned to one another, allows for generous service time intervals.

Minimum maintenance works

Easily accessible points on the pump simplify the few maintenance tasks required. Even after years of operation, components and functional elements can be conveniently removed and reinserted.



APPLICATION

WATERblue-B_{neo}

The Pump generation of the future

Your Team for Success

The self-priming swimming pool pump **WATERblue-B_{max}** with integrated hair and fibre filter is particularly suited to the pumping and filtering of pool water, fresh water, sea water, industrial water and other liquids contaminated by coarse materials.



Ideal material combination thanks to hybrid type of construction. Easy-to-install and readily serviceable compact design.

High circulation rates are achieved thanks to minimum space requirements and an easy-to-install compact design.

The material combination of modern plastics ensures a high level of pressure resistance as well as providing weight optimisation.





SMOOTH

WATER*blue*-**B**ηeo

See what sets us apart from the rest

Checklist for maximum efficiency

Smooth coating – High efficiency

Thanks to the 100% smooth coating of the entire pump hydraulics system, optimum flow conditions are given. The flow of the medium through this is practically flawless. In addition, the "HPC" coating guarantees continuous corrosion protection.

Life cycle optimised

- Longterm use thanks to high product quality
- Best operating adjustment with maximum efficiency
- Outstanding value of life cycle costs and thus low overall costs for the operator

Maximum impeller diameter

The smooth-coated and thereby enhanced impeller achieves the maximum efficiency attainable thanks to its maximum diameter.

PM Motor IE5

- PM synchronous motor with IE5 (Ultra Premium Efficiency) and thus the highest energy efficiency class
- Outstanding part load behaviour compared to asynchronous motors
- Equipped with frequency converter and thus individually adjustable

Sustainability through resource efficiency

- Eco-friendly manufacture
- Minimum wear
- Best energy use
- Maximum efficiency

For new constructions or integrations

- Easy commissioning and quick adjustment to existing system conditions •
Special solutions possible and thus flexible when it comes to installation options •
Optimum operating point adjustment

Optimised service and maintenance

- Time-saving servicing thanks to coated surfaces and thus easy maintenance and unproblematic component replacement
- Fast replacement parts delivery thanks to fewer versions of the impeller diameters
- Fast filter cleaning



Special solutions

The customisation of special pumps is one of our performance features.

Our decades of experience in development and our on-site foundry form the basis of our ability to adapt to the requirements of individual projects. The technology needed for perpetual innovation provides our customers with the clear advantage of optimised solutions especially tailored to each unique project.

Special configurations

Different voltage

- Different insulation class
- Elevated ambient temperature
- Higher protection type
- Enhanced tropical and moisture protection
- Special materials
- Customer-specific solutions

After successful quality testing, each pump of the **WATERblue-B η eo** series receives the following label. The back can be used by the customer as a maintenance overview.



Consultation and service

We are here for you - competent and personal.

The last decades have seen our company establish itself worldwide. The client base stretches across the entire globe. Your contact persons in our company are highly qualified employees who use their professional knowledge and technical skills to find tailor-made solutions for your requirements. We also have globally active sales and service teams.

WANT TO LEARN MORE?

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WATERblue-B η eo