# Технические характеристики



### По вопросам продаж и поддержки обращайтесь:

Алматы (7273)495-231 Архангельск (8182)63-90-72 Астрахань (8512)99-46-04 Барнаул (3852)73-04-60 Белгород (4722)40-23-64 Брянск (4832)59-03-52 Владивосток (423)249-28-31 Волгоград (844)278-03-48 Вологда (8172)26-41-59 Воронеж (473)204-51-73 Екатеринбург (343)384-55-89 Иваново (4932)77-34-06 Ижевск (3412)26-03-58 Иркутск (395)279-98-46

Россия (495)268-04-70

Казань (843)206-01-48 Калининград (4012)72-03-81 Калуга (4842)92-23-67 Кемерово (3842)65-04-62 Киров (8332)68-02-04 Краснодар (861)203-40-90 Красноярск (391)204-63-61 Курск (4712)77-13-04 Липецк (4742)52-20-81 Магнитогорск (3519)55-03-13 Москва (495)268-04-70 Мурманск (8152)59-64-93 Набережные Челны (8552)20-53-41 Нижний Новгород (831)429-08-12

Киргизия (996)312-96-26-47

Новокузнецк (3843)20-46-81 Новосибирск (383)227-86-73 Омск (3812)21-46-40 Орел (4862)44-53-42 Оренбург (3532)37-68-04 Пенза (8412)22-31-16 Пермь (342)205-81-47 Ростов-на-Дону (863)308-18-15 Рязань (4912)46-61-64 Самара (846)206-03-16 Санкт-Петербург (812)309-46-40 Саратов (845)249-38-78 Севастополь (8692)22-31-93 Симферополь (3652)67-13-56

Казахстан (7172)727-132

Смоленск (4812)29-41-54 Сочи (862)225-72-31 Ставрополь (8652)20-65-13 Сургут (3462)77-98-35 Тверь (4822)63-31-35 Томск (3822)98-41-53 Тула (4872)74-02-29 Тюмень (3452)66-21-18 Ульяновск (8422)24-23-59 Уфа (347)229-48-12 Хабаровск (4212)92-98-04 Челябинск (351)202-03-61 Череповец (8202)49-02-64 Ярославль (4852)69-52-93

hrb@nt-rt.ru || https://herborner.nt-rt.ru/



The new generation of pool water circulation pumps

The **WATER***blue***-HN** achieves high circulation rates in small spaces. The unique compact design is conceived specifically for ease of maintenance.

As a self-priming swimming pool pump with an integrated hair and fiber catcher, the **WATER***blue***-HN** is particularly suited for pumping and filtering pool water, fresh water, seawater, industrial water and any other liquids contaminated by coarse matter. The pump is used in private, indoor, outdoor and adventure swimming pools, water parks, ice rinks, leisure and hotel facilities for water slides, attractions, systems for water treatment, fountains, heat recovery systems and industrial plants.



2



#### EASY-clean<sup>©</sup>

The filter strainer with its special perforation designed to tackle hair and fibers ensures a high degree of separation. The filter cover is opened and closed by means of two toggle lever fasteners. Additional tools are not required. Lifting the integrated filter cover raises the filter strainer a few inches from the pre-filter casing. Besides simplifying the removal of the filter strainer, this also prevents any contact between the user and the collected contaminants. In addition, the generously dimensioned filter strainer volume (146.5 cubic inches) guarantees minimum maintenance.

Once the pump casing and suction pipeline have been filled, the self-priming function of the pump is guaranteed (please follow the instructions in the operating manual).



### Noise

The generation of noise depends on complex factors such as size, materials, operating and installation conditions. Hydraulic methods and a solid design were used to influence the noise characteristics of the pump right from development. The maximum sound pressure level is generally determined by the drive motors due to air, magnet and bearing noise. Noise development is at its lowest when operating at close to  $Q_{\text{optimal}}$  (best degree of efficiency).

### **General data**

- Media temperature range from 32 to 100 °F
- Ambient temperature range from 32 to 104 °F
- Density of the pumped medium up to max 65.5 lb/ft<sup>3</sup>
- · Viscosity of the pumped medium up to max. 1cSt

A performance correction is made for different operating conditions according to customer specifications.



Many innovative features:



# Motor

The motor concept ensures overload-proof and efficient operation. A frequency converter can be mounted directly (only 3-phase motors) or on the wall.

## Motor shaft

A motor shaft made of high-alloy stainless steel with high bending stiffness for minimum deflection.

# Storage

The pump and motor have a common shaft mounted in a reinforced bearing. Unlike standard motors, the fixed bearing on the pump side is a reinforced bearing that achieves a long service life under extreme operating conditions. High bending stiffness and short shaft spacing ensure that the motor shaft achieves a high degree of concentricity, which guarantees the vibration-free operation of the mechanical shaft seal.

## Shaft seal

The pump-side shaft seal for all types is a maintenancefree mechanical seal that is made of wear-resistant high-performance materials and is independent of the direction of rotation. All motors are fitted with a special seal on the pump side to protect them against spraying water.

## By-pass channel

To ensure that the mechanical seal is rinsed optimally by the pumped medium.

# 6 Impellers

Dynamically balanced impellers ensure vibration-free running and contribute significantly to the long service life of the pump.

Closed multi-vane impellers made of high-alloy aluminum bronze (CuAl10Fe5Ni5) are used for pure to slightly contaminated pumped medium.



# Filter strainer

The generously dimensioned filter strainer with its special perforation designed to tackle hair and fibers ensures a high degree of separation.

The degree of contamination of the filter strainer can be checked at any time via the viewing window.



4



# 8 Filter cover

Filter cover with the patented "EASY-clean®" mechanism for lifting the filter strainer. The cover can be opened and closed easily using the toggle lever fasteners.

# Pump casing

Standard pump casing made of bronze.

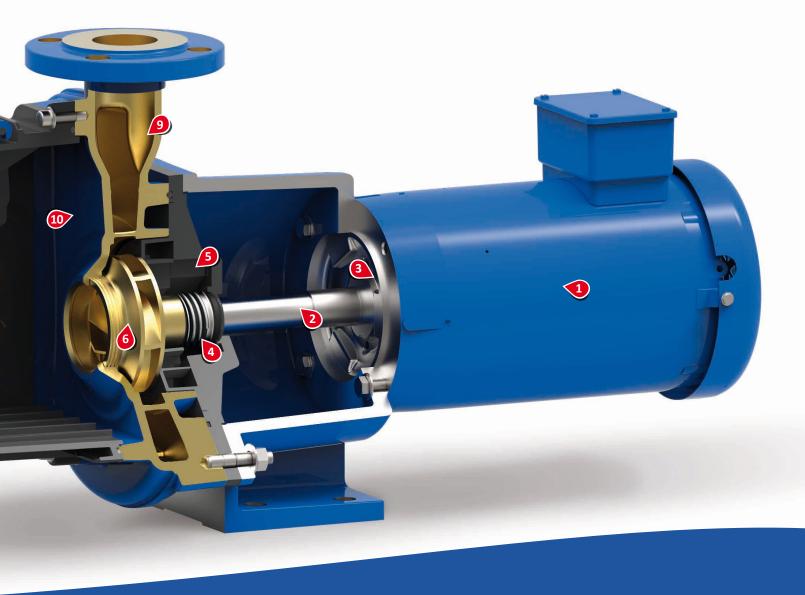


# Construction

Ideal combination of materials through the use of hybrid construction. Easy-to-install and maintenance-friendly compact design.

The easy-to-install and maintenance-friendly compact pump delivers high circulation rates even in small spaces.

The combination of bronze (C90700) and high-strength, glass fiber reinforced polypropylene (PP GF) and polyamide (PA 6 GF 30) provides ample strength for working pressures of up to 43.5 psi whilst optimizing weight at the same time.



The self-priming pool water circulation pump **WATER***blue***-HN** comes with a 3-phase motor as standard. A 1-phase motor is available as an option.



### Motor

A surface-cooled three-phase motor with squirrel-cage rotor is used as standard. It meets CC010A (as per EISA 2007). The motor can either be fitted with an integrated or external frequency converter. The use of a frequency converter is recommended but not obligatory.

### Performance range

Spo	eed [rpm]	Flow volume Q <sub>max</sub> [gpm]	Delivery head H <sub>max</sub> [ft]
	3600	225	85

Design	C-Face, footless
Motor connection	Standard
Enclosure	TEFC
Speed	3600 rpm
Frequency	60 Hz
Voltage	115/230 V
	208-230/460 V
Service factor	1.15
Number of phases	1/3
Insulation class	F

The frequency regulation of the pump can be performed as a response to the operating conditions.



6



#### **Frequency converter**

Frequency converters are used to electronically control the speed of motors and can bring significant energy savings. They also extend the system service life and reduce repair and maintenance costs.

The advantage of a frequency converter is primarily that pump speed control enables the operating point to be adjusted to best suit the system requirements (for example, reduced night-time operation in swimming pools), which brings significant energy improvements over earlier technical solutions and possibilities.

Frequency converters are either mounted directly (only 3-phase motors) or on the wall.

The frequency regulation of the pump can be performed as a response to the operating conditions: from 30 to 60 Hz.

### Type PED

This powerful and robust frequency converter for direct mounting features optimal EMC characteristics with low leakage currents. It can be mounted directly (only 3-phase motors) or on the

wall. System-specific parameter settings are performed using a handheld device (MMI) or PC software.



#### Type PEDC to 3HP

This frequency converter has been specially developed to control motors in the lower output range. The

integrated membrane keypad ensures supreme user-friendly operation directly at the pump.



#### Accessories

Security Device (for the filter cover) This is used to prevent the unauthorized opening of the filter cover.





#### Wall mounting

The frequency converter can be installed in a control cabinet or mounted on the wall.

## По вопросам продаж и поддержки обращайтесь:

Алматы (7273)495-231 Архангельск (8182)63-90-72 Астрахань (8512)99-46-04 Барнаул (3852)73-04-60 Белгород (4722)40-23-64 Брянск (4832)59-03-52 Владивосток (423)249-28-31 Волгоград (844)278-03-48 Вологда (8172)26-41-59 Воронеж (473)204-51-73 Екатеринбург (343)384-55-89 Иваново (4932)77-34-06 Ижевск (3412)26-03-58 Иркутск (395)279-98-46

Россия (495)268-04-70

Казань (843)206-01-48 Калининград (4012)72-03-81 Калуга (4842)92-23-67 Кемерово (3842)65-04-62 Киров (8332)68-02-04 Краснодар (861)203-40-90 Красноярск (391)204-63-61 Курск (4712)77-13-04 Липецк (4742)52-20-81 Магнитогорск (3519)55-03-13 Москва (495)268-04-70 Мурманск (8152)59-64-93 Набережные Челны (8552)20-53-41 Нижний Новгород (831)429-08-12

Киргизия (996)312-96-26-47

Новокузнецк (3843)20-46-81 Новосибирск (383)227-86-73 Омск (3812)21-46-40 Орел (4862)44-53-42 Оренбург (3532)37-68-04 Пенза (8412)22-31-16 Пермь (342)205-81-47 Ростов-на-Дону (863)308-18-15 Рязань (4912)46-61-64 Самара (846)206-03-16 Санкт-Петербург (812)309-46-40 Саратов (845)249-38-78 Севастополь (8692)22-31-93 Симферополь (3652)67-13-56

Казахстан (7172)727-132

Смоленск (4812)29-41-54 Сочи (862)225-72-31 Ставрополь (8652)20-65-13 Сургут (3462)77-98-35 Тверь (4822)63-31-35 Томск (3822)98-41-53 Тула (4872)74-02-29 Тюмень (3452)66-21-18 Ульяновск (8422)24-23-59 Уфа (347)229-48-12 Хабаровск (4212)92-98-04 Челябинск (351)202-03-61 Череповец (8202)49-02-64 Ярославль (4852)69-52-93

hrb@nt-rt.ru || https://herborner.nt-rt.ru/