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Surface electric pumps

Product Catalogue



Solutions for every eventuality

The supply of drinking water, industrial systems for purposes such as washing or air treatment, building services with heating and cooling or pressurisation, are uses that require specific solutions.

Surface electric pumps represent an **extended range** with **all the requirements** to meet the demands of increasingly complex and demanding applications. EBARA and its range of surface pumps, thanks to their **reliability, flexibility, performance** and **high efficiency** cover a vast area of applications and can be adapted for a range of uses in an increasingly demanding market, thanks to **cutting-edge technical solutions**.

The efficiency and reliability of the pumps is enhanced by the ability to use inverter technology systems, including *E-drive* and *E-SPD*, for **energy** and **cost savings** of the entire system and an **improvement of environmental sustainability**.



Sectors and Areas of Application



Water supply

For water supply in civil, agricultural and industrial plants



Pressurisation

For the pressurisation of water in residential, commercial, industrial and agricultural areas ensuring an efficient water supply



Fire-fighting

For the creation of fire-fighting sets compliant with the European standard UNI EN 12845



Irrigation

For the circulation of water required in refrigeration towers



Washing

For the creation of washing systems used in industry (car washing machines, dishwashers, cleaning in place, sterilizing in place)



Air-conditioning

For the circulation of water in air conditioning systems



Heating

For the circulation of water in air conditioning systems



Handling

Industrial liquid handling in process applications



Swimming pools

For water recirculation of swimming pools or sports facilities



Refrigeration towers

For the circulation of water required in refrigeration towers



Emptying

For the emptying of tanks







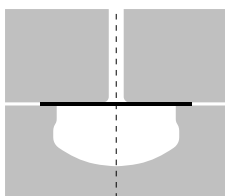
Hydroforming molding core

High efficiency is one of the main features of surface pumps. In addition to this the quality of the materials, the high performance and corrosion resistance are among the strong points. To do all this, we focused on the particular production process of the pump body: **hydroforming**.

This process uses a high pressure fluid (up to 1200 bar) for metal forming. The hydraulic fluid, in our case water, with increasing pressure pushes the stainless steel to copy the shapes of the template until it comes into contact with the internal walls of the matrix that constitutes the mold. Hydroforming, which combines the power of a press with the power of water, has significant advantages over traditional processes: **perfectly smoothed**, highly **flowing** and **without welding points**.

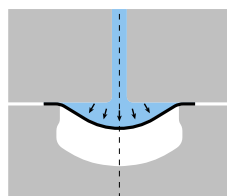
These features thus ensure high corrosion resistance, high efficiency with **efficiency of over 80%** and reduced losses.

For high efficiency and **high level performance**.



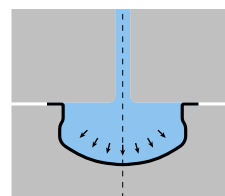
CLOSURE

The steel disc is positioned in the press



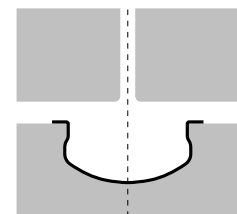
FOUNDRY

The water is injected into the mold at a pressure of 1200 bar



COMPLETION

The water fills the whole mold, thus deforming the steel disc



EXTRACTION

The press is raised and the pump body is formed without welding points.



DWO

Open impeller centrifugal electric pumps in stainless steel AISI 304

Centrifugal surface electric pumps with molded AISI 304 body, obtained through the hydroforming process: this process exploits the water pressure to deform the material. This guarantees the highest quality standards, the drastic reduction of welding points, the ability to shape the pump body ensuring the most efficient form absolutely and the ability to work steel with high thickness ensuring maximum construction strength.

It mounts the open radial flow impeller, which makes it suitable for pumping liquids that are not completely clean, but with solid parts up to 19 mm in diameter: this is the case of machinery such as washers, car washes, industrial dishwashers to name but a few.

The standard mechanical seal is in Ceramic/Carbon/NBR, and are then available in the versions with special seals.



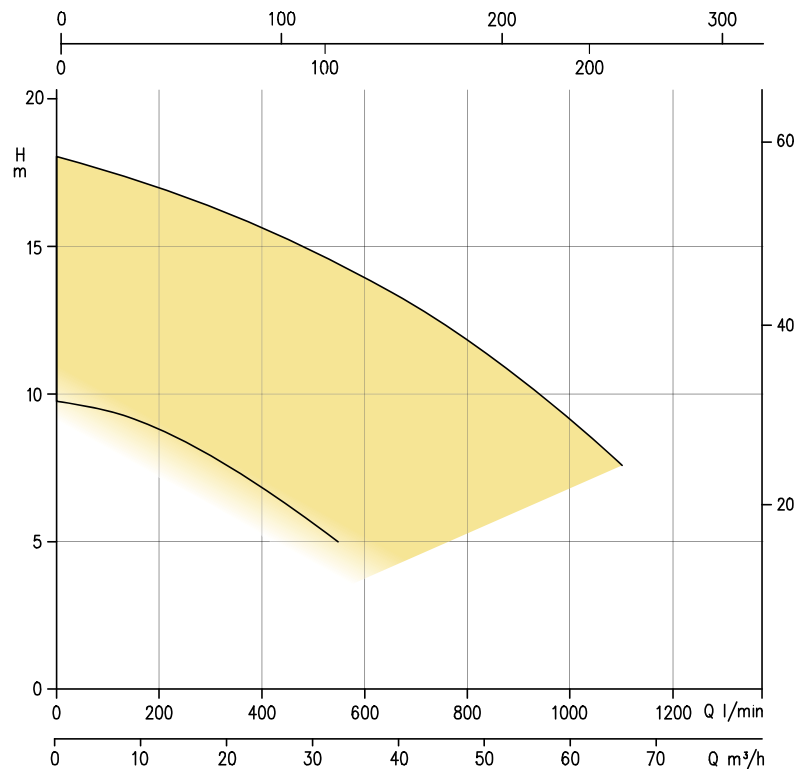
Silent



Sturdy structure



Compact dimensions



- Total head from 17.5 to 5.1 m
- Capacity from 6 to 66 m³/h
- IE3 high efficiency motors starting from 0.75 kW
- Liquid temperature: from -5°C to +90°C (from -15°C to +110°C for H, HS, HW and HSW versions)
- Liquid with solids up to 19 mm in diameter

DWC

Closed impeller centrifugal electric pumps in stainless steel AISI 304

Centrifugal surface electric pumps with molded AISI 304 body, obtained through the hydroforming process: this process exploits the water pressure to deform the material. This guarantees the highest quality standards, the drastic reduction of welding points, the ability to shape the pump body ensuring the most efficient form absolutely and the ability to work steel with high thickness ensuring maximum construction strength. It mounts the closed radial flow impeller and is available both with threaded connections (DWC-N), and with victaulic connections (DWC-V) that make it suitable for installations in chillers or in hydronic groups.

The standard mechanical seal is made of Ceramic/Carbon/EPDM, but the product is available with special seals for harder applications and higher liquid temperature limits.



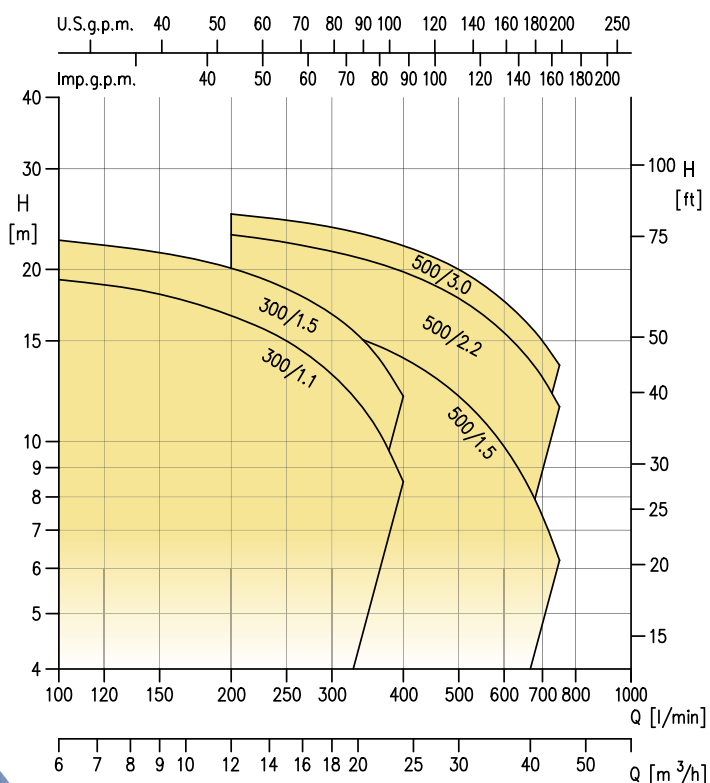
Silent



Sturdy structure



Dimensions dimensions



- Total head from 25 to 6.2 m
- Capacity from 6 to 45 m³/h
- IE3 high efficiency motors starting from 0.75 kW
- Liquid temperature:
 - from -15°C to +90°C (from -15°C to +110°C for H, HS, HW and HSW versions)
- Threaded or Victaulic connections

CD - CDX(L)



Single impeller centrifugal electric pumps with hydraulics in AISI 304 and AISI 316

CD are surface centrifugal electric pumps entirely made of AISI 304 stainless steel. CDX(L) are surface centrifugal electric pumps with radial impeller, with hydraulics completely in molded AISI 304 or AISI 316 (version L), whose components are obtained through the hydroforming process, which guarantees strength, hydraulic efficiency and reliability.

CDX(L) model is suitable for different uses ranging from domestic pressurisation to small irrigation, from water treatment plants to evaporative towers; therefore for handling clean water in general.

The standard mechanical seal is made of Ceramic/Carbon/NBR, but several special seals are available.



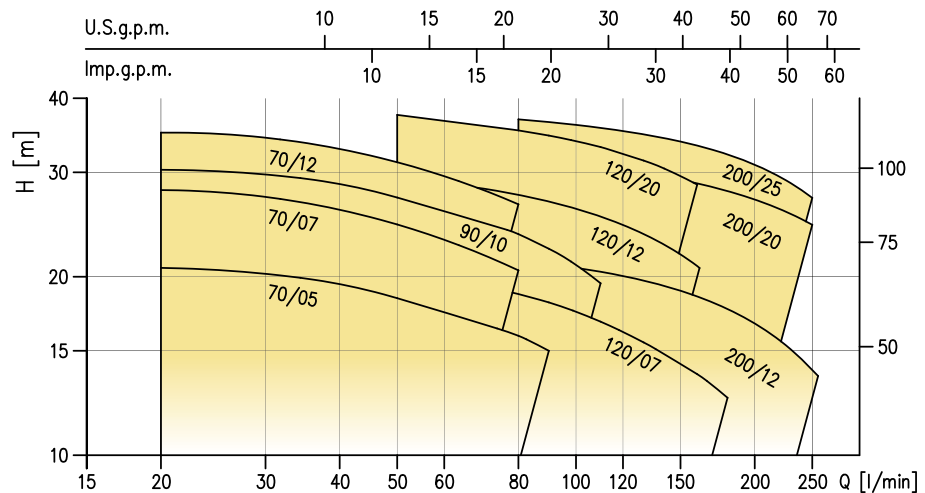
Compact dimensions



Robust structure



Available in AISI 316



- Liquid temperature:
 - 5°C ÷ +60°C for 70/05-70/07-90/10 standard and E version models
 - 5°C ÷ +90°C for the rest of standard version
 - 5°C ÷ +110°C for H, HS, HW e HSW versions
 - 5°C ÷ +120°C for the rest of E version
- Total head from 37.5 to 12.5 m
- Flow rate 1.2 to 15 m³/h
- Hydraulic efficiency index MEI > 0.4
- IE3 high efficiency motors starting from 0.75kW

2CDX(L)



Twin impeller centrifugal electric pumps with hydraulic in AISI 304 and AISI 316

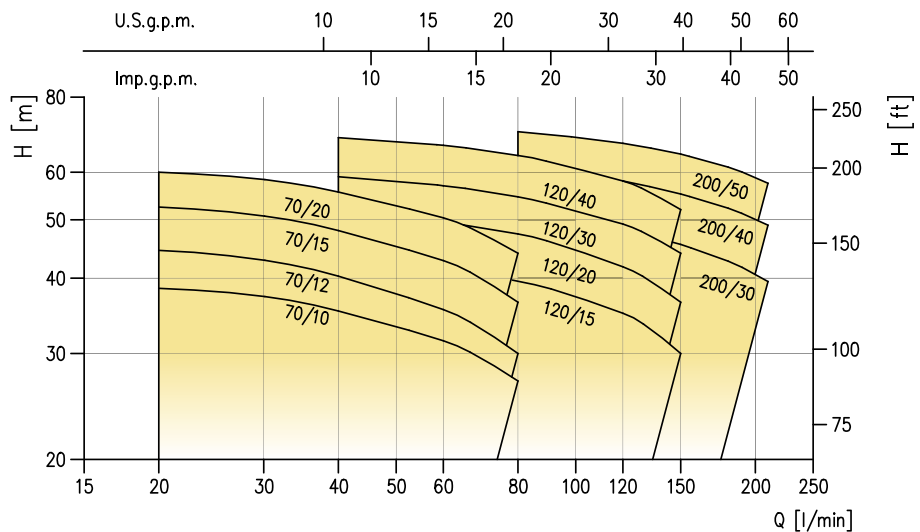
2CDX(L) are surface centrifugal electric pumps with double radial impeller, with the hydraulics completely in molded AISI 304 or AISI 316 (version L), whose components are obtained through the hydroforming process, which guarantees strength, hydraulic efficiency and reliability.

2CDX(L) model is suitable for different uses ranging from domestic pressurisation to small irrigation, from water treatment plants to evaporative towers; therefore for handling clean water in general. The double impeller makes it possible to expand the performance range with respect to the single impeller version. The standard mechanical seal is made of Ceramic/Carbon/NBR, but several special seals are available.

Compact dimensions

Robust structure

Available in AISI 316



- Total head from 71.5 to 27 m
- Flow rate 1.2 to 12.6 m³/h
- IE3 high efficiency motors starting from 0.75 kW
- Liquid temperature:
 - 5°C ÷ +60°C for standard and E versions
 - 5°C ÷ +110°C for H, HS, HW e HSW versions

AGA - AGC

Self-priming cast iron electric pumps

AGA - AGC electric pumps are self-priming cast iron electric pumps equipped with Venturi group (ejector and diffuser) in PPE + PS reinforced with glass fibres. Practical, easy to use and easily transportable thanks to their low weight. The pump body is made of cast iron for all models. Among their peculiarities is that of having a shaft in steel AISI 303 (for the part in contact with the liquid). The impellers are available in PPE + PS reinforced with glass fibres for AGA 0.60 - 0.75 - 1.00 and in brass for the rest of the range. The mechanical seal is in Ceramic/Carbon/NBR. The self-ventilated 2-pole asynchronous motors are IE3 high energy efficiency starting from 0.75 kW.



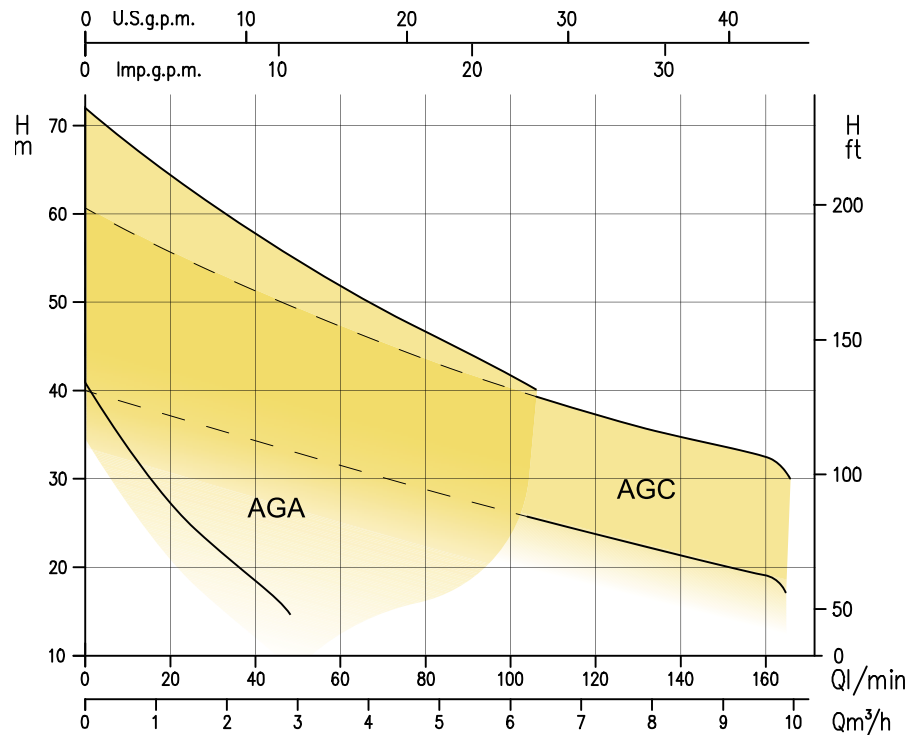
Available with
impeller
in brass



Practical and
easy to use



Light and easy
to transport



- Total head from 16.5 to 68 m
- Capacity from 0.3 to 9.6 m³/h
- Maximum operating pressure:
 - 6 bar for AGA 0.60 - 0.75 - 1.00
 - 10 bar for the rest of the range
- Maximum liquid temperature 45°C
- Maximum working width 8 m

JES - JE

Self-priming electric pumps in stainless steel AISI 304

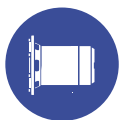
The electric pumps of the JES - JE series are electric pumps in AISI 304 stainless steel. These are self-priming pumps equipped with Venturi group (ejector and diffuser), which are easy to use and light thanks to their small size. Constructively they have the pump body, the support, the seal bearing disc in AISI 304 steel. They are equipped with an AISI 303 shaft (for the part in contact with the liquid). The impellers are different depending on the model: for the JES electric pumps the impeller is in PPO + PS reinforced with glass fibres, while for the JE the impeller is in AISI 304. For both versions the mechanical seal is in Ceramic/Carbon/NBR. The motors are 2-pole, closed, asynchronous, self ventilated with internal ventilation. High energy efficiency IE3 starting from 0.75 kW



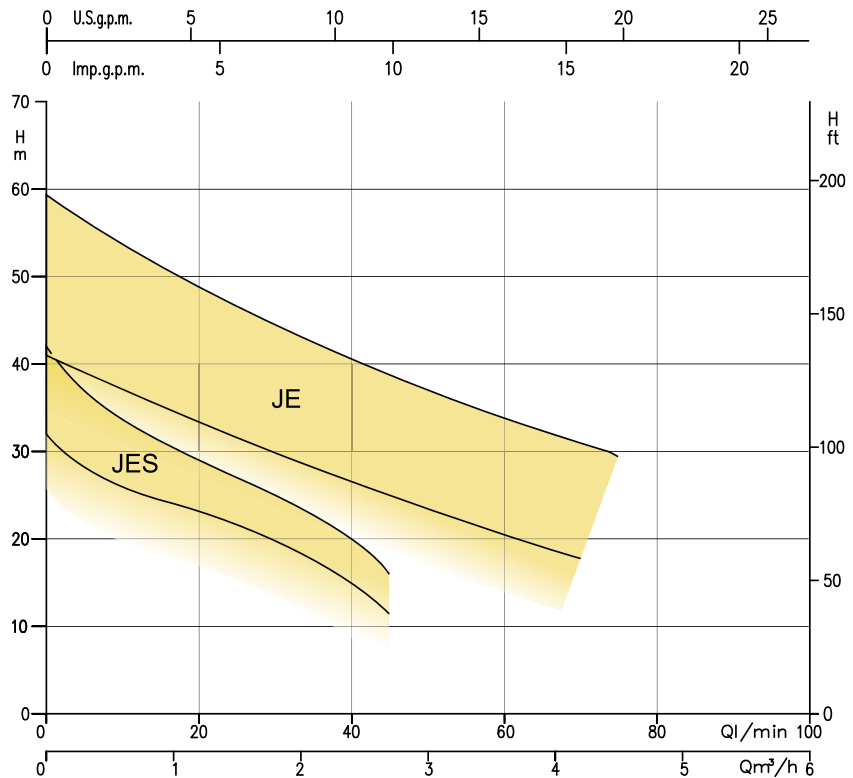
Practical and easy to use



Light and easy to transport



Internal ventilation motor



- Total head from 11.5 to 49 m
- Capacity from 0.3 to 4.5 m³/h
- Maximum operating pressure 6 bar
- Maximum liquid temperature 45°C
- Maximum working width 8 m

JESX - JEX

Self-priming electric pumps in stainless steel AISI 304

The electric pumps of the JESX – JEX series are electric pumps in AISI 304 stainless steel. These are self-priming pumps equipped with Venturi group (ejector and diffuser), which are easy to use and light thanks to their small size. Constructively they have the pump body, the support, the seal bearing disc in AISI 304 steel. They are equipped with an AISI 303 shaft (for the part in contact with the liquid). The impellers are different depending on the model: for the JESX electric pumps the impeller is in PPE + PS reinforced with glass fibres, while for the JEX the impeller is in AISI 304. For both versions the mechanical seal is in Ceramic/Carbon/NBR. The motors are 2-pole, asynchronous, self ventilated. High energy efficiency IE3 starting from 0.75 kW



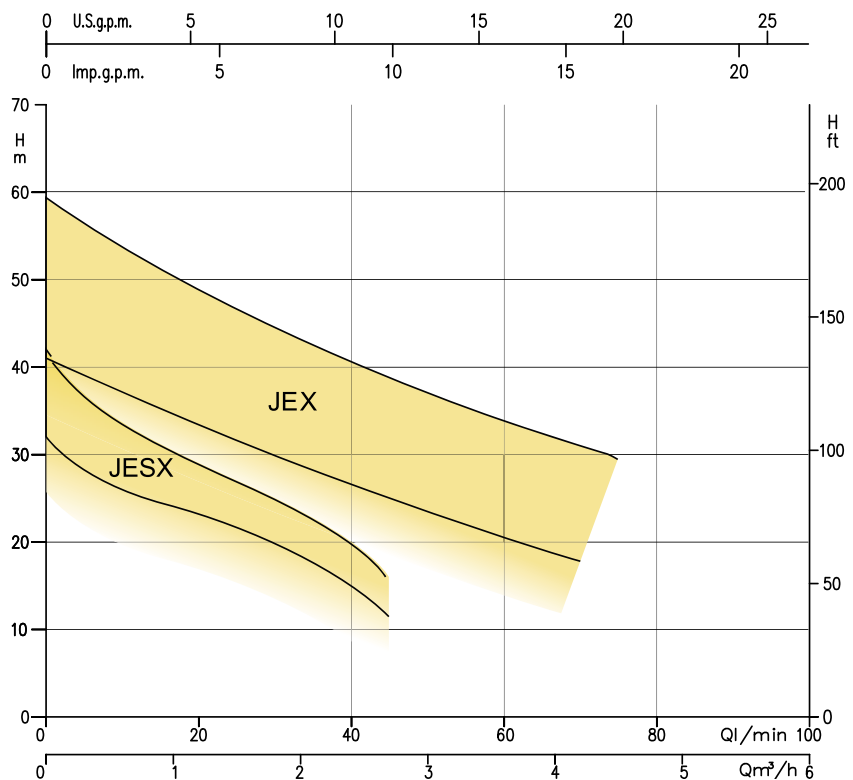
Practical and easy to use



Light and easy to transport



Self-ventilated motor



- Total head from 15 to 49 m
- Capacity from 0.3 to 4.5 m³/h
- Maximum operating pressure 6 bar
- Maximum liquid temperature 45°C
- Maximum working width 8 m

CDA

Cast iron twin impeller centrifugal electric pumps

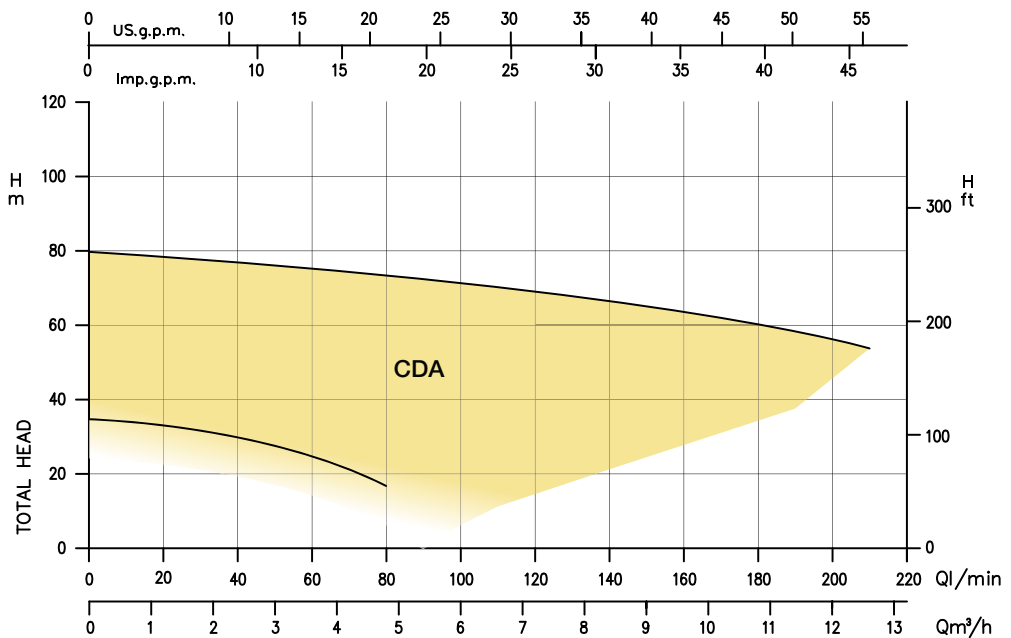
CDA centrifugal electric pumps are cast iron electric pumps fitted with a double impeller to allow them to expand their performance while maintaining compact dimensions. The pump body is in cast iron, they mount a mechanical seal in Ceramic/Carbon/NBR. The impeller is made of PPE + PS reinforced with glass fibres for CDA models 0.75 - 1.00, while the rest of the range is equipped with a brass impeller. Among the technical specifications are noted the AISI 303 steel shaft for CDA models 0.75 - 1.00 - 1.50 - 2.00 - 3.00, in AISI 304 steel for CDA models 4.00 - 5.50. CDA models 0.75 - 1.00 have an aluminium support, while the rest of the range is equipped with cast iron supports. The motors are asynchronous 2-pole self-ventilated, high energy efficiency IE3 starting from powers of 0.75 kW.



Available with impeller in brass



Compact dimensions



- Total head from 17 to 76.5 m
- Capacity from 1.2 to 12.6 m³/h
- Maximum operating pressure:
 - 6 bar for CDA 0.75 - 1.00
 - 10 bar for the rest of the range
- Maximum liquid temperature:
 - 40°C for CDA 0.75 - 1.00
 - 90°C for the rest of the range

CM(A-B-C-D) - CMR

Cast iron single impeller centrifugal electric pumps

CM series electric pumps are single impeller electric pumps with cast iron body. Within the series there are several models: CMA - CMB - CMC - CMD and the CMR model that has the peculiarity of being equipped with an open impeller. They are equipped with a mechanical seal in Ceramic/Carbon/NBR. Depending on the models, the impellers can be made of PPE + PS reinforced with fibre glass, brass or cast-iron. The shafts can be in AISI 416, AISI 303 steel or, alternatively, in AISI 304. The supports available are in aluminium or cast iron. The motors combined with these electric pumps are 2-pole self-ventilated asynchronous motors and IE3 high efficiency starting from 0.75 kW.



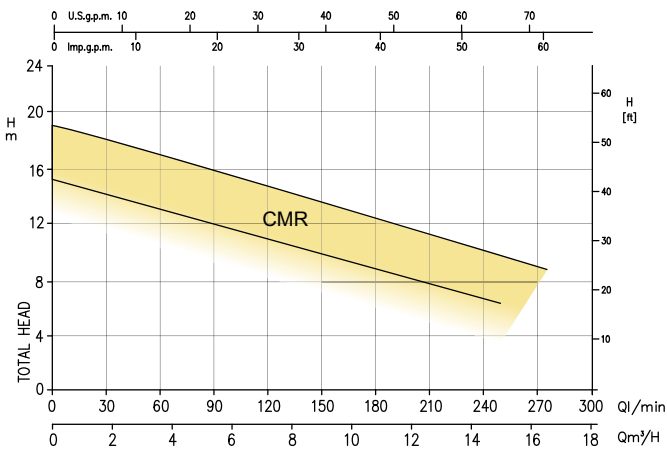
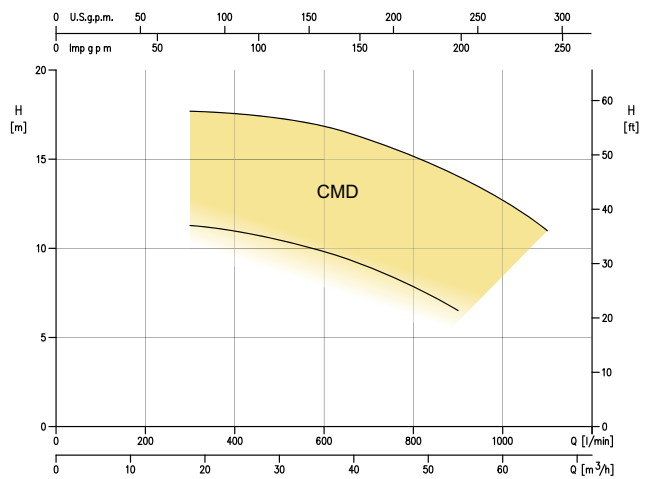
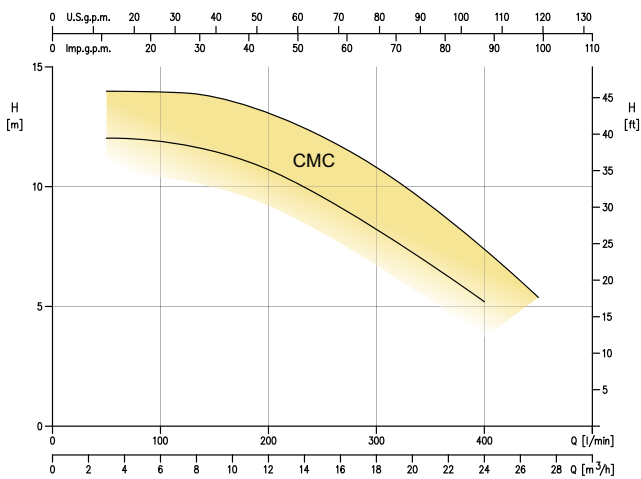
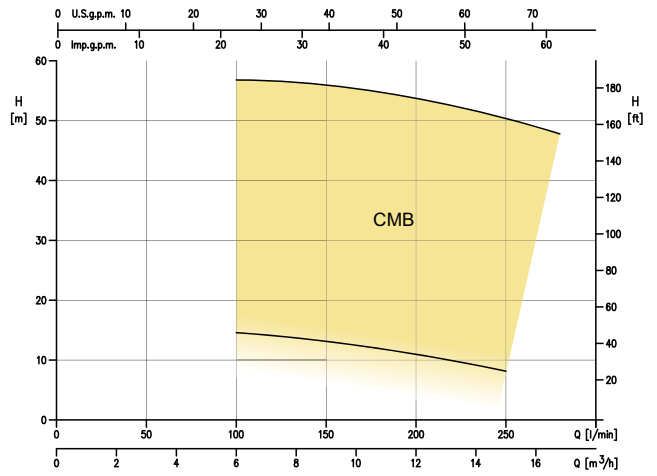
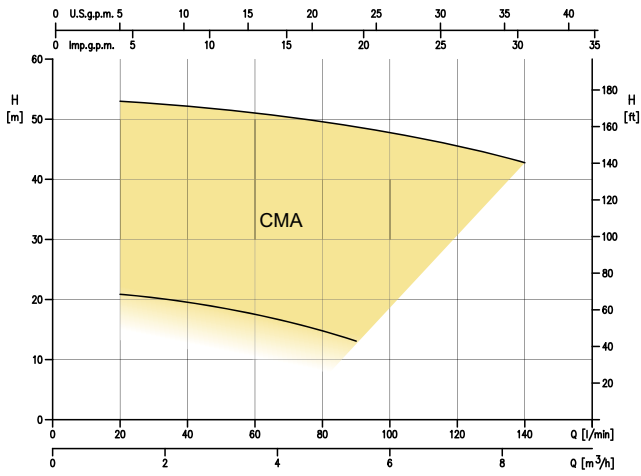
Available with
brass impeller



Possibility of
insertion in
machinery for
industrial use

- Prevalence:
 - for CMA from 13.1 to 53 m
 - for CMB from 8.1 to 57 m
 - for CMC from 5.2 to 14 m
 - for CMD from 6.5 to 16,1 m
 - for CMR from 6.3 to 17.3 m
- Flow rate:
 - for CMA from 1.2 to 8.4 m³/h
 - for CMB from 6 to 19.9 m³/h
 - for CMC from 3 to 27.1 m³/h
 - for CMD from 18.1 to 60.2 m³/h
 - for CMR from 3 to 16.5 m³/h
- Maximum operating pressure:
 - 6 bar for CMA 0.50 - 0.75 - 1.00, CMB 0.75 - 1.00 - 1.50 - 2.00 - 3.00, CMC, CMD, CMR
 - 8 bar for CMA 1.50 - 2.00 - 3.00, CMB 4.00 - 5.50
- Maximum liquid temperature:
 - 40°C for CMA 0.50 - 0.75 - 1.00
 - 90°C for the rest of the range





PRA

Peripheral electric pump in cast iron



- Total head from 5 to 88 m
- Capacity from 0.3 to 4.2 m³/h
- Maximum operating pressure:
 - 6 bar for PRA 0.50
 - 7.5 bar for PRA 0.80
 - 12 bar for the rest of the range
- Maximum liquid temperature 80°C



PRN 0.50



Silent



Light
and easy to transport

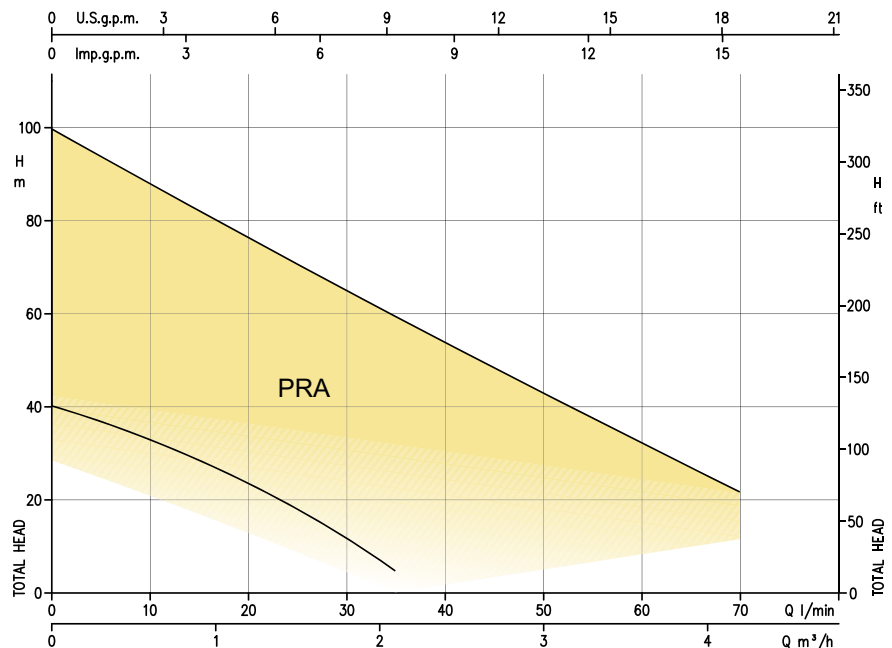


Practical
and easy to use



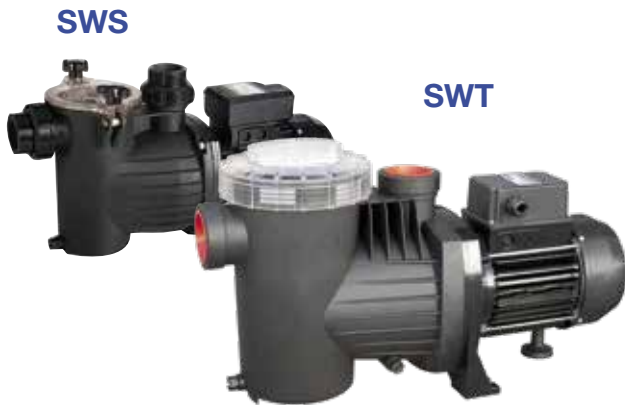
Available
in nickel plated version

Peripheral electric pumps with cast iron body and support particularly suitable for domestic use, boiler supply, autoclave units, etc. The shaft is in AVZ for the PRA 0.50 model, in AISI 303 for the rest of the range (part in contact with the liquid). Brass impeller and mechanical seal in Ceramic/Carbon/NBR. The motors combined with PRA pumps are IE3 2-pole high energy efficient asynchronous motors starting from 0.75 kW.



SWS-SWT

Self-priming centrifugal electric pumps for swimming pools



- Total head from 23.8 to 2.7 m
- Flow rate 4.8 to 31.2 m³/h
- Hydraulic efficiency index MEI > 0.4
- IE3 high efficiency motors starting from 0.75 kW
- Liquid temperature up to +40°C
- Connections for SWT: 2" female threading
- Connections for SWS: standard and possibility of connection via 1½" female threading, and through gluing with PVC pipe diameter 50 mm

Self-priming centrifugal electric pumps for swimming pools, with built-in prefilter. Body, seal holder disc and diffuser in polypropylene reinforced with glass fibres and Noryl impeller. Suitable for pumping and recirculating water, thanks to the steel seal and the shaft in AISI 316. Perfect to ensure the recirculation of clean or slightly dirty water, water containing chlorine or additives in filtration systems for small and medium-sized pools.



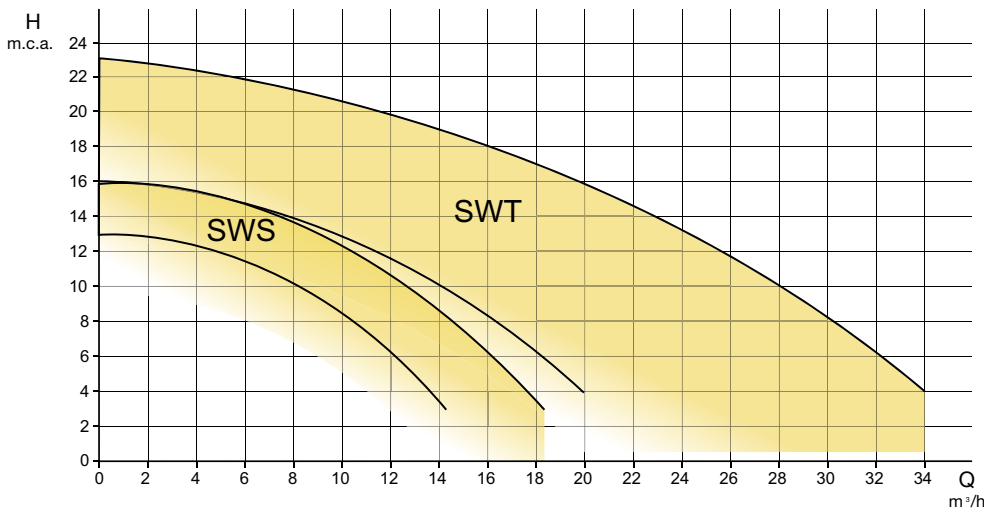
Easy maintenance



Practical and easy to use



Large built-in prefilter



Accessories

EBARA not only provides electric pumps, but aims to be a complete partner for the entire pumping systems. This is why it is important to provide complementary products and accessories for the system. For surface electric pumps the choice is wide ranging from special seals to insulation casings, from variable speed control systems to different types of electrical panels, vessels and floats.



Insulation casing

In some applications in which coolants or liquids are used at low temperatures, or if there are high temperature differences, condensation may occur which could damage the operation of the electric pump.

In order to prevent such phenomena and to preserve their functioning, EBARA provides as an accessory an insulating casing in cross-linked polyethylene foam that ensures its functioning even under severe conditions.



A driver for your system

Pressure or temperature variations, as well as the variation in the demand for water itself, are situations that commonly occur in water systems, whether they are civil pressurisation systems or related to irrigation or industrial uses.

Responding promptly to these variations by linking the operation of the pressurization group to these events means **improving the efficiency** and **reliability** of the entire system.

To do this, different types of inverters are available that offer different modes of operation of the group ensuring optimal operation.

The available options are: **E-SPD**, **E-drive**, **Servopress** and **Presscomfort**.

E-SPD

E-SPD is the new inverter introduced by EBARA, with air cooling, to be installed directly on terminal box of the EBARA motors, it has all the characteristics to satisfy all customer needs.



Easy: E-SPD is easy and intuitive, with terminal box mounting and easy connection, along with the easy to use start up wizard to save time.



Flexibility: E-SPD can be adapted to EBARA centrifugal pumps including both horizontal and vertical



Versatility: E-SPD can be either mounted directly on the terminal box of ETM or EBARA branded motors, or wall mounted with the optional wall bracket



Visibility: E-SPD has a large LCD display that can indicate important performance data, system parameters and alarm notifications.



Safety: E-SPD provides both protection for the motor and the pump preventing common problems like overcurrent, overheating, voltage protection, dry running and water leaks.



Connectivity: E-SPD can offer multiple connections with 2 digital inputs and outputs as standard, along with 1 analogue input and dedicated communication port for linking up to 8 inverters for multiple pump systems.

Presscomfort/Servopress

This is an automatic electronic device, whose purpose is to regulate the operation of the electric pump. Suitable for use with single-phase or three-phase electric pumps, it has the advantage of being able to operate both with drinking water and non-drinking water.



It controls the automatic start and stop of the electric pump



It is an adjustment device suitable for installation without the use of autoclave tanks



Its operation is regulated by the opening or closing of a tap or valve connected to the installation



It allows transmitting of the required flow to the network maintaining a constant pressure

Everything that you need just a click away

visit our website www.ebaraeurope.com



Data book

Complete technical documentation to be consulted to obtain all the data related to the pumps



Instruction manual

The manual with all the information needed for correct installation of our pumps



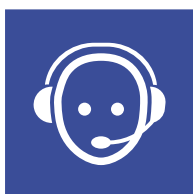
Kensaku

a system for the selection of spare parts



Ez-finder

The correct pump selection software for every need
<https://ezfinder.ebara.com>



Service

A team of professionals at your disposal to advise you in your choice of pump and to offer post sale assistance



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