



# The e-Range

PREMIUM EFFICIENCY PUMPS, MOTORS AND DRIVES COMPLIANT  
WITH THE ERP DIRECTIVE

# One Xylem

We are united in our focus to be the leading global technologies and applications.

Xylem is a global leader in water technology across both clean and waste water applications, and operates in over 150+ countries.

Xylem is a single company with multiple brands, all focussed on solving the most challenging water issues in multiple industries. Our aim is approach the market as one entity, focused on the best products, application expertise and aftersales support for customers, across all of our core markets within Europe, the Middle East, India, Russia and Africa.

Xylem manufactures a range of products which touch on numerous parts of the building and manufacturing processes. We felt the time was right to bring all of the brands into one single organisation offering customers one contact for all applications. For example, it is entirely possible that a Lowara pump is pumping clean water into the manufacturing process and a Flygt pump is being used to pump wastewater at the other end.

What's more, if the plant is producing a large amount of wastewater it is highly likely that a Wedeco ultraviolet or ozone treatment solution is being used before discharge into the water course. Now that customer can deal with one organisation for all their needs.

The brands and their heritage will remain, but we will go to market as one company, Xylem.

## Our customers.

For our customers, our unified approach under the Xylem brands means that they will have one single point of contact. Whereas before they may have had to liaise with a brand representative for each Xylem product used on a project, from now on, all contact will be centralised to make communication much easier. There will be one person with one voice, but with the full support of an array of technical experts behind them.

This new approach allows us to offer customers comprehensive technical advice which draws on the experience and expertise of our technical specialists. The in-depth knowledge we now collectively possess stretches far across the building and manufacturing processes, which means we can consult on an installation within the wider project team and highlight issues which may not have occurred to our customers.

## Our services.

Xylem has always prided itself on offering exceptional levels of service and support to customers across all of our brands.

## Our staff.

The knowledge and expertise of our staff is one of our most important assets and we are constantly continuing our investment in training and development. For instance, all of our customer-facing people are being required to go through a comprehensive training programme covering everything from pump and pumping system basics, through to the technology behind variable speed drives.

# provider of efficient and sustainable water

The importance of training can be demonstrated by the dynamics of our markets. The transportation, treatment and use of water, be it in the municipal or building services sector is now highly regulated. Environmental efficiency standards, such as the ErP Directive, have placed strict control on the types of pumps that can be manufactured and marketed to end-users, regardless of whether those end-users are operating a sewage pumping station or a modern office block.

## Our biggest opportunities.

One of our big focuses is our ecocirc XL circulator pump. It builds on the technological advancements we made with our original domestic ecocirc, but is designed to be used within the industrial and commercial marketplace. It is a symbol of various parts of Xylem EMEA combining to create a product that can be used by a variety of end-users across several of the company's key markets.

## The complete Xylem brand offering.

Xylem is now offering a single network of sales and service to provide you the best customer experience.

Our mission is to be the best provider of complete fluid handling solutions.

**AANDERAA**

**AC FIRE PUMP**

**Bell & Gossett**

**BS Bellingham + Stanley**

**-ebro-**

**FLOJET**

**FLOWTRONEX**

**FLYGT**

**Global Water**

**godwin**

**GOULDS WATER TECHNOLOGY**

**JABSCO**

**LEOPOLD**

**LOWARA**

**McDonnell & Miller**

**mjk**

**O-I Analytical**

**PCI MEMBRANES**

**RED JACKET Water Products**

**ROYCE TECHNOLOGIES**

**rule**

**SANITAIRE**

**SI Analytics**

**SonTek**

**Standard Xchange**

**Water Equipment Technologies**

**WATER LOG**

**WEDECO**

**WTW**

**YSI**

# We span the entire water cycle

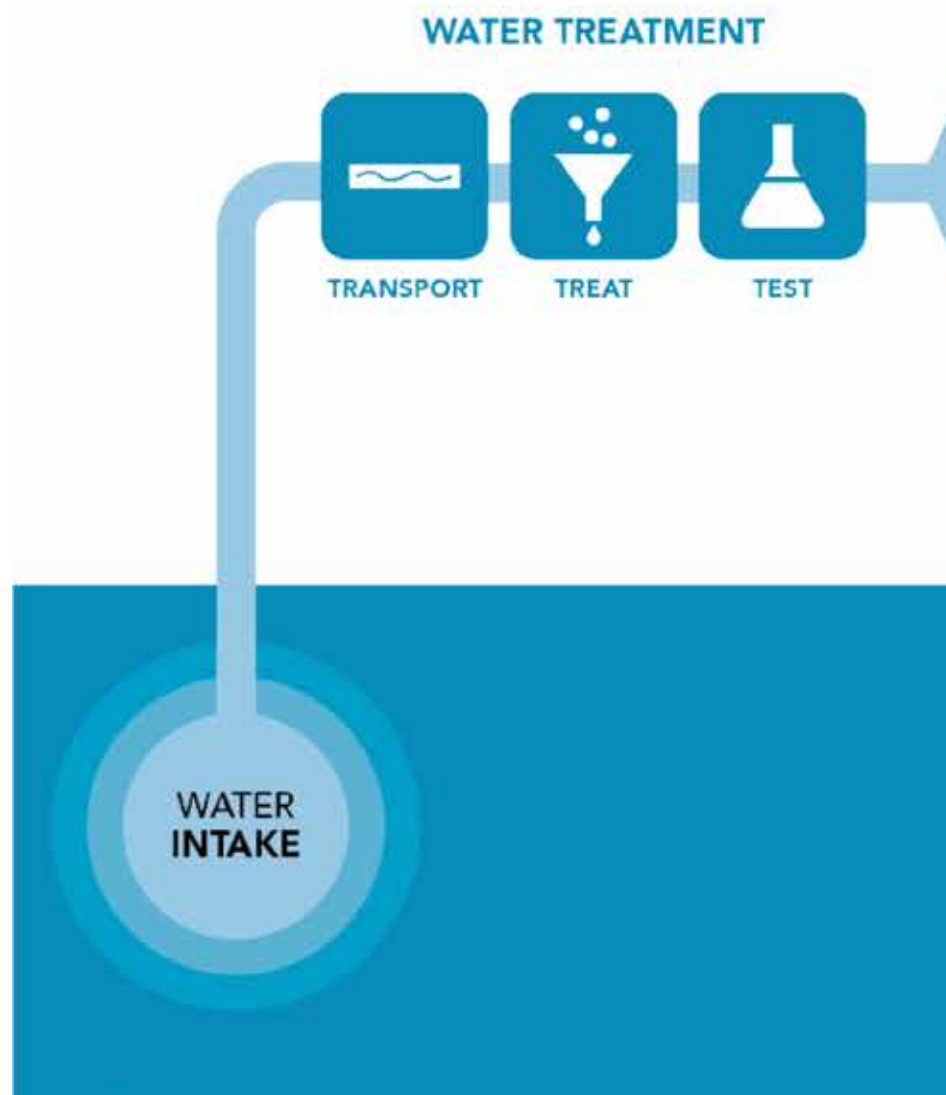
Our industry includes thousands of small companies, none of which have the breadth, scale or experience to address challenges across the complete water cycle. From water treatment – to end-use consumers – to wastewater treatment – the singular pure-play exception is Xylem.

Our involvement in the water cycle can be broken down into two parts – Water Infrastructure and Applied Water.

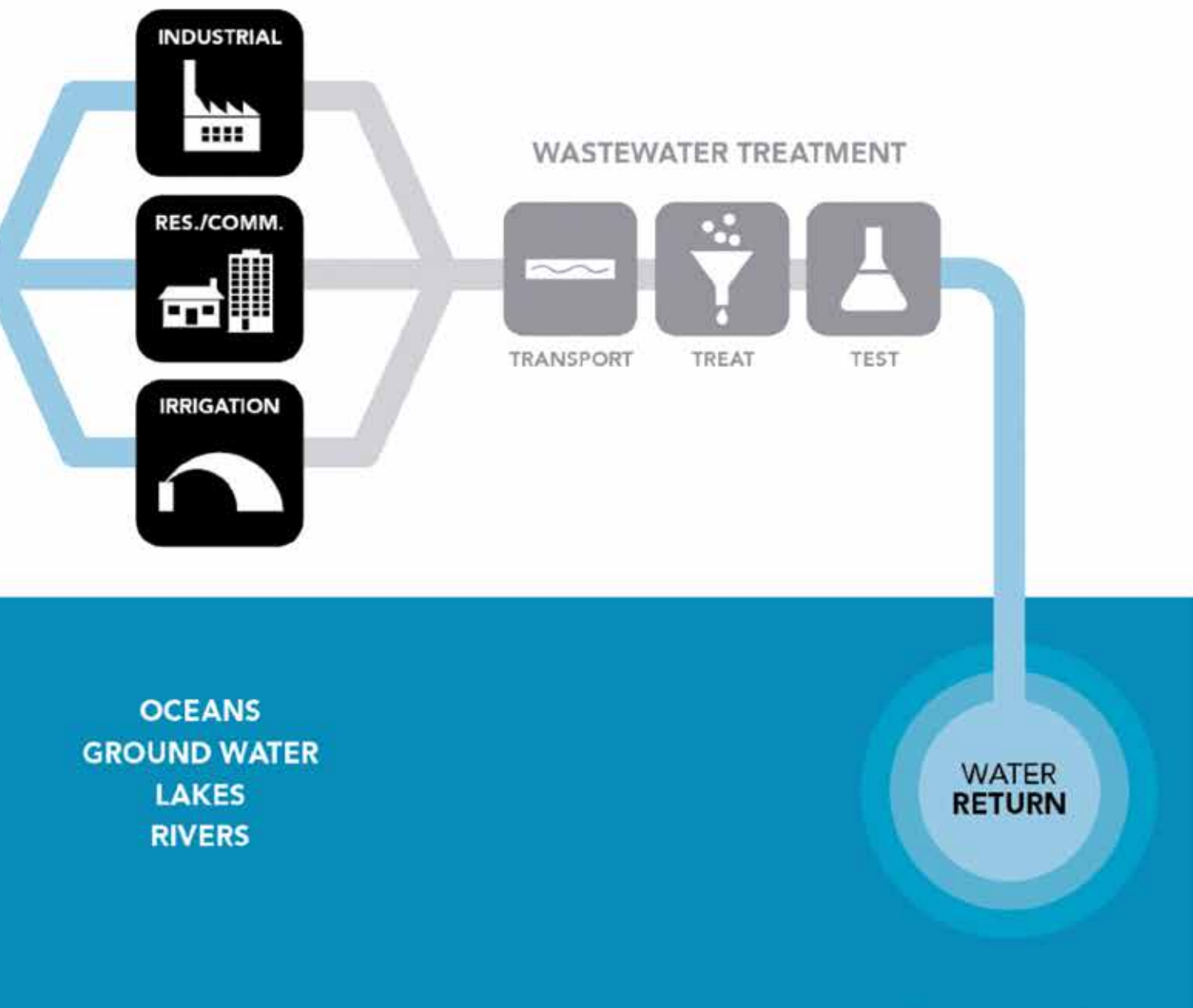
When we talk about Water Infrastructure – which encompasses 60 percent of our business – we are talking about helping customers collect water from a source and distribute it to users, and then helping them clean wastewater and return it back to the environment. This involves three closely linked applications – transport, treatment and testing – for two types of customers: public utilities and industrial facilities.

When we refer to Applied Water – which accounts for the other 40 percent of our business – we are focused on all the applications – or uses – of water in our daily lives. The customers here come to us for solutions in three major categories: residential and commercial building service applications, industrial applications, and irrigation and agriculture applications.

Having a huge footprint throughout the water cycle gives us a balanced portfolio and presents opportunities for us to create solutions for customers no matter where they are in this loop.



## END-USE CONSUMERS



# EU efficiency morse code

## De-mystifying EU pump legislation for the pump industry.

One of the EU's biggest legislative focuses is improving energy efficiency within building services and achieving a significant overall reduction in carbon emissions.

Heating systems, particularly pumps, are covered by a number of different pieces of legislation aimed at tackling CO<sub>2</sub> with many set to incrementally update minimum targets over the coming years. Despite European legislation significantly impacting on everyone within the HVAC industry – from an independent installer to global manufacturers – many of the specific metrics which the industry is required to meet can be lost in translation.

Below is a brief overview of some of the most relevant pieces of EU legislation and what they mean for both installers and end-users.

## European Union legislation.

### 1) Eco Design Directive/Energy-using Products Directive (EuP) (EC 641-2009)

In 2005 the European Commission launched a framework directive intended to half EU member states' CO<sub>2</sub> emissions by 2020.

In 2009 it became known as the Energy-using Products Directive (EuP)

### 2) Energy-related Products Directive (ErP)

The EuP Directive expanded in 2009 to include energy-related products and renamed the ErP Directive  
Energy-related products are defined

as products which use energy, or those that have an indirect impact on energy consumption

It covers any product within a heating system which consumes energy (e.g. not just boilers)

Approximately 14 million domestic circulators are placed into the global community annually

Due to regular operation over extended timeframes circulators were identified as a key product which needed drastic efficiency improvements

The energy labelling aspect of ErP is due to be relaunched from September 2015 for the total installed system

## Efficiency metrics under the ErP Directive.

### 3) Energy Efficiency Index (EEI)

A new ratings system under the ErP Directive for energy-related products, including circulator pumps, that replaces the previously used A-G rating system

As of 1st January 2013 all new and replacement circulator pumps are required to have a maximum EEI value of 0.27 from 0.4

As of 1st August 2015 all circulator pumps must have a minimum EEI value of 0.23 to comply with the ErP Directive.

This means that from 1st August 2015 only variable speed circulator pumps with a



permanent-magnet motor are allowed on the market

---

Drinking Water Circulators will not apply under the directive. Drinking water circulators are specifically designed to be used in the re-circulation of drinking water as defined in Council Directive 98/83/EC

---

#### **4) Premium efficiency motors - IE2 and IE3**

IEC standard for Rotating Electrical Machines - Part 30: defines three classes of motor efficiency for single-speed, three-speed and cage-induction motors

---

IE 1 - standard efficiency; IE 2 - high efficiency; IE 3 - premium efficiency

---

Under the EU Meps Directive, from 16th June 2011 all new motors must meet the IE2 efficiency legislation

---

From 1st January 2015, motors with a rated output of 7.5 - 375kW must meet IE3 legislation, or IE2 level if fitted with a variable speed drive

---

From 1st January 2017, smaller motors with a rated output of 0.75 - 375kW must meet IE3 legislation, or IE2 level if fitted with a variable speed drive

---

IE3 Motors are fitted as standard and the energy saving can be improved fitting Hydrovar variable speed drives, IE4 motors are available as an option

---

#### **5) Mean Efficiency Index (MEI) - clean water pumps**

Under the ErP Directive (formerly the Eco Design Directive), the Minimum Efficiency Index (MEI) identifies the minimum hydraulic efficiency levels manufacturers must meet

---

An MEI rating is determined by a pump's head, flow, speed it's unclear what you mean by constant depending on the design of the pump being measured

---

An MEI must be calculated at three different levels:

First at the Best Efficiency Point (BEP) - the operating point at which the pump runs at maximum hydraulic efficiency

---

Secondly at the Part Load (PL) - the operating point at which the pump is operating at 75% of the flow is at the BEP

---

Finally at the Over Load (OL) - the operating point at which the pump runs at 110% of the BEP

---

From 1st January 2013, all water pumps were required to be operating with an MEI rating of less than or equal to 0.1

---

From 1st January 2015, all water pumps are required to be operating with an MEI rating of less than or equal to 0.4

---

The directive effects affects: end-suction own bearing pumps; end-suction closed coupled pumps; close coupled in-line pumps; vertical multi-stage pumps; submersible multi-stage pumps



The revolutionary highly efficient circulators for domestic heating with simple and shaftless spherical motor design and patented anti-block technology.

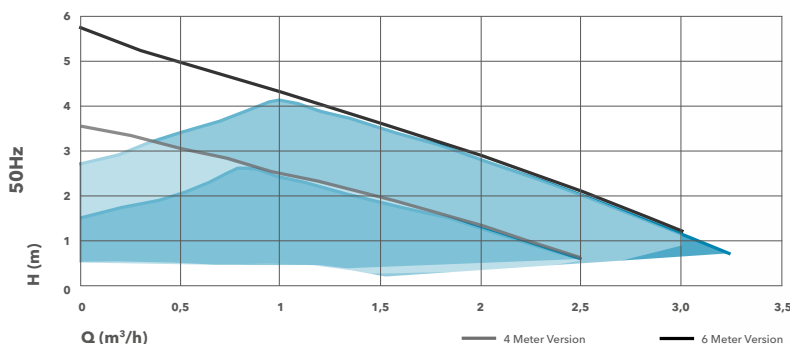
Magnetite and sludge, which are both found in pumped liquids are both magnetic, this can accumulate at the permanent magnetic parts of a high efficiency pump, and therefore block and damage it or decrease the pump's efficiency. Our new Anti-Block-Technology separates the main flow of the pumped media completely from the permanent magnetic parts, making it impossible to block up, even in very old open systems.

# ecocirc BASIC

The Lowara ecocirc BASIC focuses on energy saving and short payback times. No compromise in reliability and high efficiency, all with a clear focus on the essentials in mind

## Two stepless control options:

- stepless fixed speed
- automatic proportional pressure control  $\Delta p-v$



## Range Overview

Sizes: Pump body in 130mm or 180mm, 1" 1¼" 1½" or 2"  
Power consumption: 4m model, 4 to 23 Watts or 6m model, 4 to 42 Watts  
Heads up to: 6 m  
Flows up to: 3.2 m³/h  
Pressure class: 10 bar  
Temperature of pumped liquid: -10°C to +110°C



# ecocirc PREMIUM



All Lowara ecocirc PREMIUM products come as standard with three control options, a plug that does not require a tool for assembly, and even a multi-display mounted on the end cap

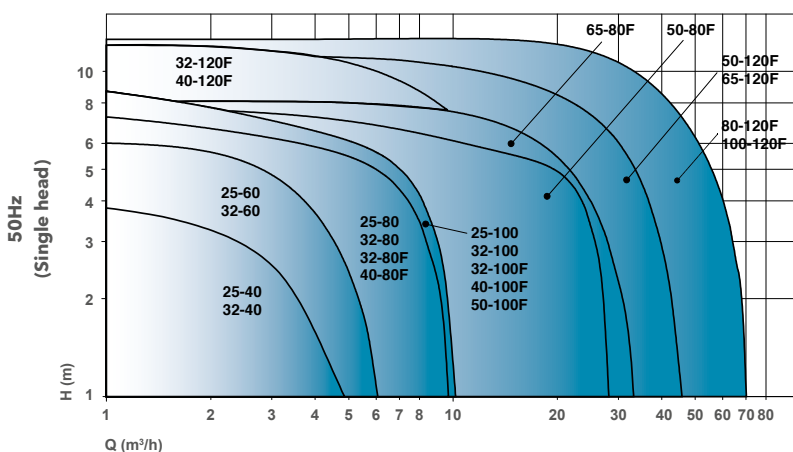
**Three stepless control options:**

- stepless fixed speed
- automatic proportional pressure control  $\Delta p-v$
- automatic constant pressure control  $\Delta p-c$

Multi-display: The automatically alternating display shows either the currently consumed power, the pump head or the flow rate. No tools are required for assembly, and there is a quick and easy electrical connection. An easy and quick electrical connection. The female plug is compatible with male plugs from previously installed third-party circulators. By turning the stator via the screw ring, the plug can be fixed in any position, making an installation even in the hardest and tightest environment environments, easy

# ecocirc XL & ecocirc XLplus

The new Lowara ecocirc XL and XLplus are wet rotor circulators that provide state-of-the-art technology in hydraulics, motor and intelligent controls.



## Range Overview

Sizes: Pump body in 180mm, 1½" or 2", DN32, DN40, DN50, DN65, DN80 and DN100 Single or twin head  
Maximum power consumption: 17 watts to 935 watts  
Heads up to: 12 m  
Flows up to: 62 m³/h

Pressure class: 10 bar  
Temperature of pumped liquid: -10°C to +110°C

The ecocirc XL and XLplus are everything you need in a large wet rotor circulator. The purposefully engineered, easy-to-install ecocirc XL and XLplus are designed with simplicity and efficiency in mind.

### High efficiency

Different operation modes adopted to all real life situations

- Automatic proportional pressure control ( $\Delta p_v$ )
- Constant pressure control ( $\Delta p_c$ )
- Differential temperature control ( $\Delta T$ )
- Manual set constant speed
- Night mode

Easy to install and start up, no advanced programming necessary

Clear display and easy setting with touch buttons

For hot and cold media including secondary hot water

Communicate with Modbus RTU and BACnet systems (XL plus)

Can be controlled from a laptop, tablet or smartphone via built in WiFi (XL plus)

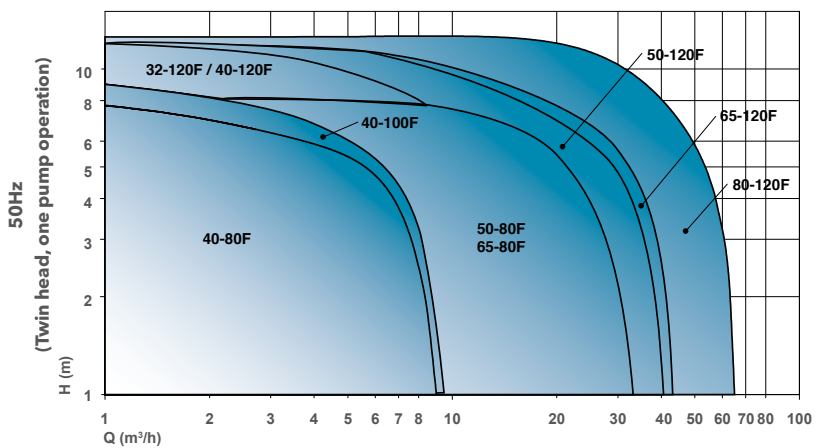
### Specification.

Single and twin head models in cast iron or bronze

Head up to 12 m

Flow up to 62 m<sup>3</sup>/h

Temperature range - 10°C to +110°C



Specifier's tools [xylect.com](http://xylect.com)  
after specifiers tools  
or visit [www.buildings.xylem.com](http://www.buildings.xylem.com)

# e-HM

The e-HM series is a modern highly efficient horizontal multistage pump.



## Range Overview

Sizes: 1" 1/4", 1 1/2" or 2"

Power: 0.3 kW up to 5.5 kW

Head up to: 159 m

Flows up to: 29 m<sup>3</sup>/h

Pressure class: PN10 or PN16

Temperature of pumped liquid: from -10 °C or -30°C  
options to +60°C, +90°C or 120 °C options

Variable speed option: Teknospeed or Hydrovar



State-of-the-art hydraulics with best-in class efficiency combined with IE3 motors mean the lowest possible operating costs

Thick sheet metal casing, high-quality bearings and stainless steel guarantees a long service life

High-efficiency hydraulics, motor and thick metal pump body keep the noise level to a minimum

Pumps are certified for drinking water use (WRAS and ACS)

e-HM residential: reliable water supply for most buildings; from family houses up to 10 floor apartment buildings. The e-HM is available in different versions

Bare pump

On/ off system with pressure switch and pressure tank

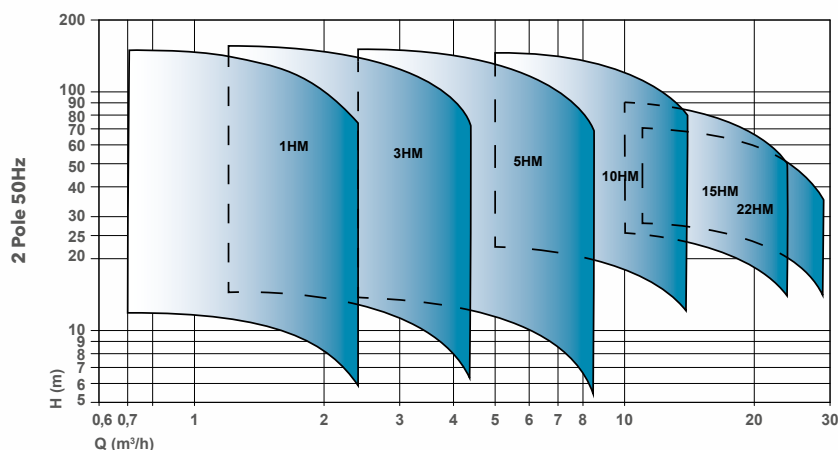
Semi constant pressure system with Genyo electronical pump controller

Constant pressure system with Teknospeed/ Hydrovar variable speed controller

e-HM industrial: full offering for numerous applications including washing & cleaning, water treatment and food & beverage industries

#### Options available on request:

- AISI 304 or 316
- Electropolished
- Mechanical seal and o-ring options



## Material options

Pump housing: AISI 304 or 316 stainless steel

Impeller: Noryl, AISI 304 or 316 stainless steel

Elastomers: EPDM (other materials available on request)

Mechanical seal: Ceramic, Carbon, EPDM (other options available on request)

50 or 60 Hz motors

# e-SV

Highly reliable and technologically advanced multipurpose pumps capable of satisfying the needs of a wide variety of users.



Many different construction designs are available, with models featuring 1-3-5-10-15-22-33-46-66-92-125 m<sup>3</sup>/h nominal capacities.

All pumps  $\geq 1.5$  kW are equipped with IE3 standard motors.

## New design features.

Balanced mechanical seal replaceable without the need for pump disassembling (for 10-15-22SV  $\geq 5.5$  kW, 33-46-66-92-125SV)

"O" Ring seat design allows for simple outer sleeve disassembly

Replaceable diffuser wear ring (PPS Glass filled tecnopolymer to withstand chemically corrosive, mechanically aggressive and high temperature liquids). The wear ring is designed to adjust the position and maintain a constant clearance between the impeller and diffuser

Reduced impeller axial thrust for longer standard motor bearing life (17,500h)

Hard Material Intermediate bush bearing (Tungsten Carbide/Silicon Carbide) to improve life and ability to withstand heavy duty applications, like boiler feed

## Options available on request:

- High temperature seal option (180°C max)
- Low NPSH design
- High pressure design (up to 40 Bar)
- Passivated & electro-polished version are available upon request



## Range Overview

Sizes: 1", 1¼, 1½, 2" threaded, Victaulic, Clamp, Oval or Round Flanges

Power: 0.37 Kw TO 55 Kw (2 OR 4 pole) Single or three phase 50 or 60 Hz

Head up to: 330 m

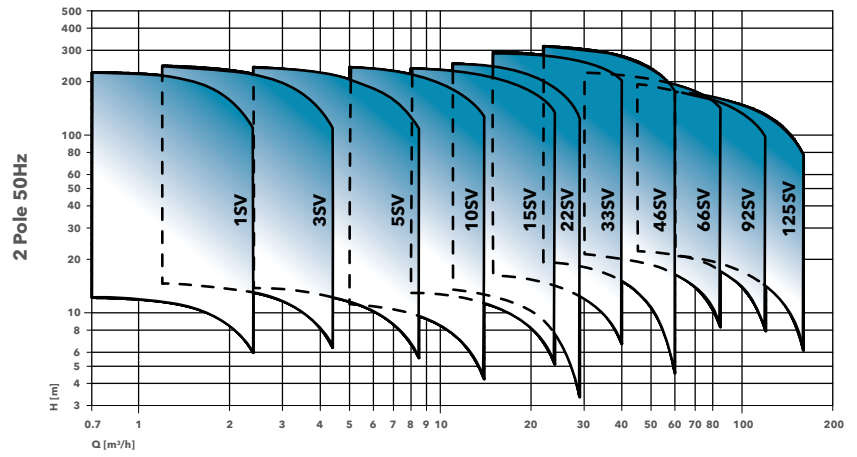
Flows up to: 160 m<sup>3</sup>/h

Pressure Class: PN16, PN25 or PN40

Temperature of pumped liquid: from -30 °C to +120 °C, extended temperature version +180 °C

Variable speed option: Teknospeed or Hydrovar





## Material options

**Pump housing:** AISI 304/316 or cast iron certified for drinking water use (WRAS and ACS certified)

**Impellers:** AISI 304 or 316 options

**Elastomers:** EPDM (other materials available on request)

**Mechanical Seal:** Silicon carbide / Carbon / EPDM (other materials available on request)

### Special Versions:

- High pressure
- Low NPSR
- High temperature, 4 pole versions
- Horizontal installation
- 50 or 60 Hz motors

- Dry sensor protection
- Declarations
- Passivated or electro-polished versions
- Stainless steel bases
- Pump body in stainless steel.

# e-LNE & e-LNT

Taking hydraulic and motor efficiency to a new level.



The new Lowara e-LNE and e-LNT series are single impeller centrifugal pumps with in-line suction and discharge delivery flanges. This series has a pullback design which allows the impeller, adapter and motor to be extracted without disconnecting the pump body from the piping system.

Hydraulic efficiency has been improved which exceeds the ErP compliance of MEI

0.4, IE3 motors are fitted as standard and the energy saving can be improved fitting Hydrovar variable speed drives, IE4 motors are available as an option. Starting in 2015 we will also enlarge the coverage with over 22 additional models across the range.



## Range Overview

Sizes: DN 40, DN 50, DN 65, DN80, DN 100, DN125 & DN150

Power: 1.1 kW – 37 kW (2-pole) 0.25 kW – 37 kW (4-pole)

Head up to: 100 m

Flows up to: 800 m<sup>3</sup>/h

Pressure class: PN16

Temperature of pumped liquid: -25°C to +120°C, extended temperature, version up to +140°C

Variable speed option: Hydrovar

## High efficiency.

New high efficiency designed hydraulics, with MEI values well above the ErP2015 level and IE3 motors that set the basis for very low operation costs.

## Long service life & easy maintenance.

Robust design, different bearing frame sizes and stainless steel replaceable wear rings ensure a long service life. The e-LNE & e-LNT series are also designed for easy maintenance and all service points are easy reachable to reduce downtime.

## Adapt to needs.

In many applications the need for water is varying. By equipping these In-line pumps

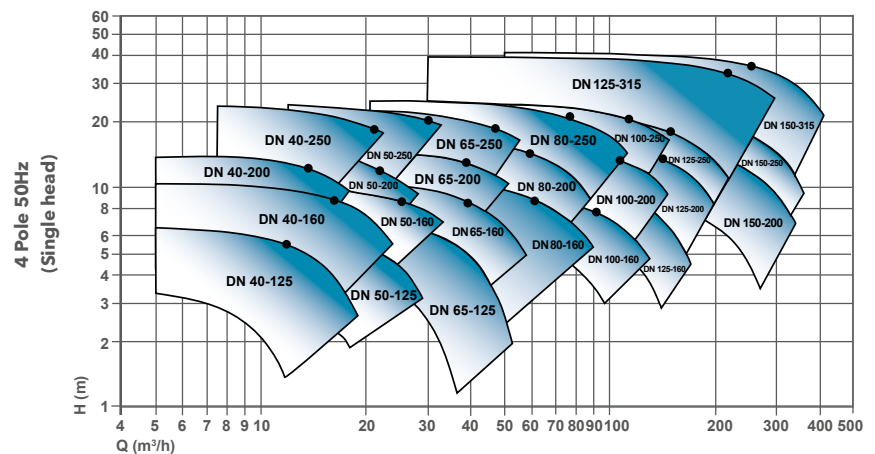
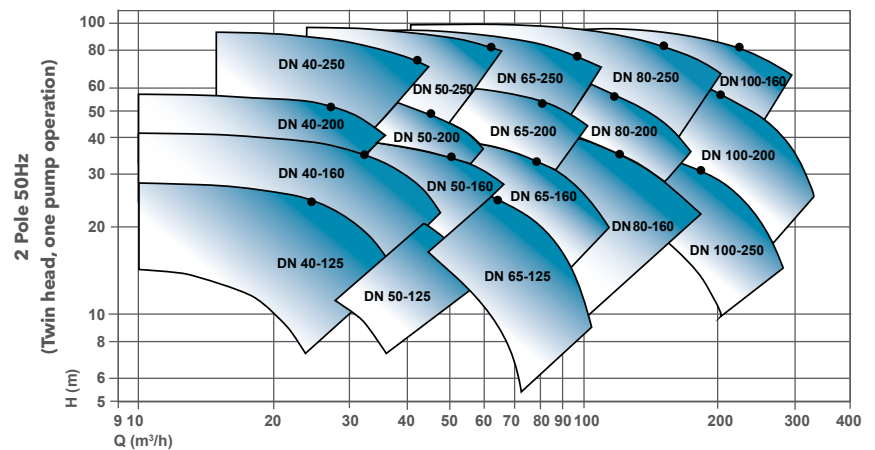
with a Hydrovar pump controller, the duty is always exactly where it should be. And it pays off: reducing the speed by 50% and reducing the power consumption by 85%.

## Exactly the right configuration.

With material options spanning from cast iron body in GG25, stainless steel or Bronze impellers with choice of mechanical seal options the e-LNE / e-LNT is the right solution for 1000's of liquids.

## Hot or cold.

The standard e-LNE / e-LNT can handle liquid temperatures from -25°C up to +120°C and the extended temperature version can handle up to +140°C.



## Material Options

**Pump housing:** Cast Iron (GG25)  
**Impeller:** Cast Iron, Fabricated Stainless Steel, Bronze, or Cast Stainless Steel  
**Elastomers:** EPDM, (other materials available on request)  
**Mechanical Seal:** Carbon, Silicon Carbide/EPDM (other options available on request)  
50 or 60 Hz motors

## Configuration Options

Extended Shaft or Stub Shaft



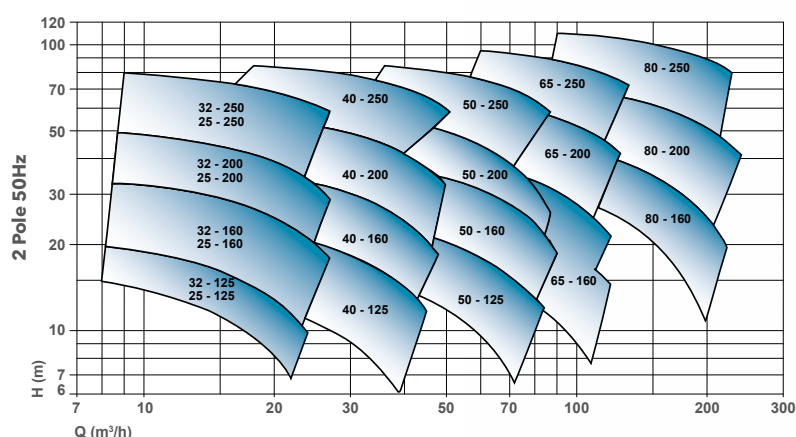
# e-SH

## Higher hydraulic efficiencies with IE3 motors fitted as standard.



The Lowara e-SH series is a single impeller centrifugal pump made in AISI 316 stainless steel. This series has a pullback design which allows the impeller, adapter and motor be extracted without disconnecting the pump body from the piping system.

Hydraulic efficiency has been improved and exceeds the ErP compliance of MEI 0.4, IE3 motors are fitted as standard and the energy saving can be improved fitting Hydrovar variable speed drives, IE4 motors are available as an option.



## Range Overview

Sizes: DN 25, DN 32, DN40, DN 50, DN 65 & DN80  
Power: 0.75 kW - 75 kW (2-pole) 0.25 kW - 11 kW (4-pole)  
Head up to: 110 m  
Flows up to: 240 m³/h  
Pressure class: PN12

Temperature of pumped liquid: -10°C to +120°C,  
extended temperature,  
version -30°C up to +120°C  
Variable speed option: Hydrovar

## High efficiency.

Newly designed high efficiency hydraulics, with MEI values well above the ErP2015 level and IE3 motors set the basis for very low operation costs.

## Long service life & easy maintenance.

Robust design, available in three motor pump coupling designs.

1: Close coupled extended shaft.

2: Close coupled stub shaft to any standardized motor.

3: Frame mounted with baseplate and coupling, stainless steel replaceable wear rings ensure a long service life.

The e-SH series is also designed for easy maintenance and all service points are easy reached to reduce downtime.

## Adapt to needs.

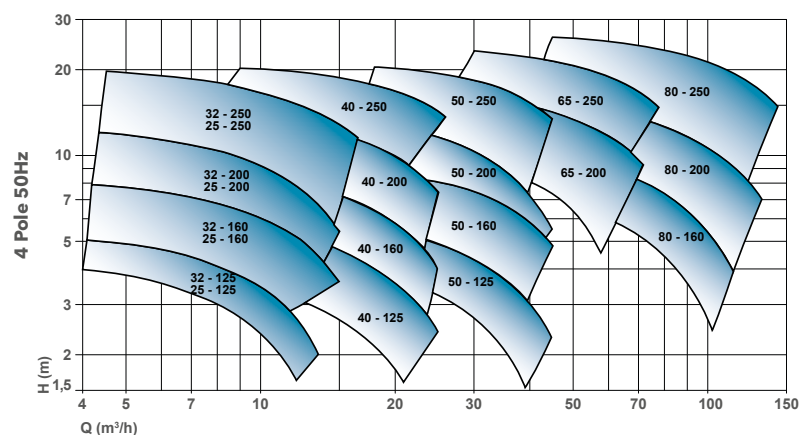
In many applications the need for water is varying. By equipping the e-SH with a Hydrovar pump controller, the duty is always exactly where it should be. And it pays off: reducing the speed by 50% and reducing the power consumption by 85%.

## Exactly the right configuration.

Pump and impellers are made in AISI 316 stainless steel with choice of mechanical seals / motor options, the e-SH is the right solution for 1000's of liquids. Suitable applications include such as handling clean water, chemically non-aggressive or moderately aggressive fluids, water supply, pressure boosting, water circulation, washing systems or industry.

## Hot or cold.

The standard e-SH can handle liquid temperatures from -10°C up to +120°C and the extended temperature version from -30°C up to +120°C.



## Material Options

**Pump housing:** Pump Body AISI 316 stainless steel  
**Impeller:** Fabricated AISI 316 laser welded stainless Steel or AISI 316 cast stainless Steel  
**Elastomers:** FKM (other materials available on request)  
**Mechanical Seal:** Ceramic, Carbon, FKM (other options available on request)  
50 or 60 Hz motors

## Configuration Options

Extended Shaft, Stub Shaft, Bare Shaft or Frame mount

# e-NSC

## Taking end suction pumps to a new level.



By combining high efficiency with high flexibility regarding installation, material options and temperature, the new Lowara e-NSC series is the natural choice for water transport, hydronic heating, chiller or fire protection systems and a vast number of industrial applications.

With efficiency levels well exceeding ErP 2015, the e-NSC series offer long term economical pumping solutions.



## Range Overview

Sizes: DN32 to DN300  
Power: 1,1 kW - 75 kW (2-pole) 0,25 kW - 315 kW (4-pole)  
Head up to: 160 m  
Flows up to: 1800 m<sup>3</sup>/h

Pressure class: PN16  
Temperature of pumped liquid: -25°C to +120°C,  
extended temperature version to +140°C  
Variable speed option: Hydrovar



## High efficiency.

Newly designed high efficiency hydraulics with MEI values well above the ErP2015 level and IE3 motors set the basis for very low operation costs.

## Long service life & easy maintenance.

Robust design, different bearing frame sizes and stainless steel replaceable wear rings ensure a long service life. The e-NSC is also designed for easy maintenance and all service points are in each reach to reduce downtime.

## Adapt to needs.

In many applications, the need for water varies. By equipping the e-NSC with a Hydrovar pump controller, the duty is

always exactly where it should be. And it pays off: reducing the speed by 50% reduces the power consumption by 85%.

## Exactly the right configuration.

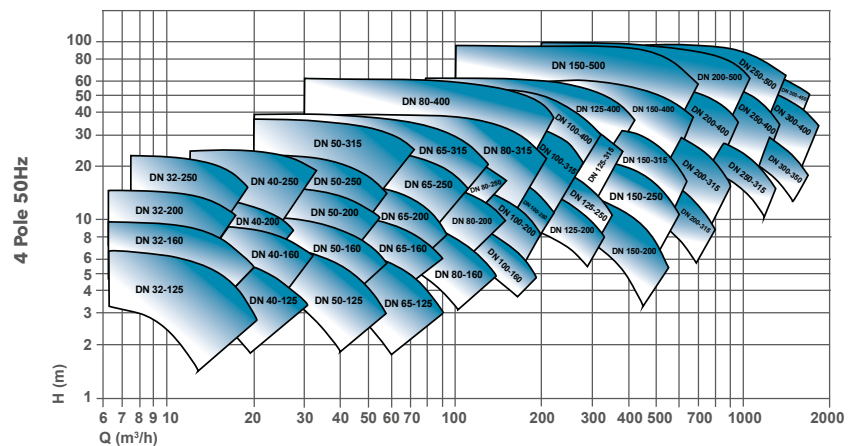
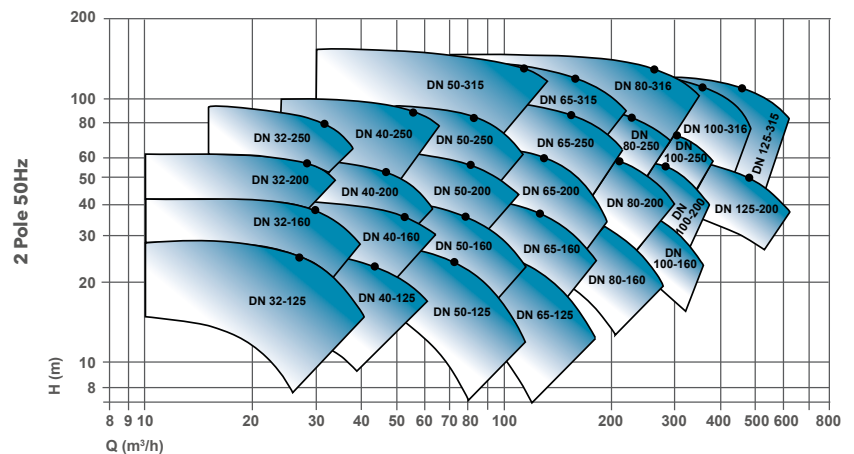
With materials options spanning from cast iron to duplex stainless steel, the e-NSC is the ideal solution for 1000's of liquids.

## Hot or cold.

The standard e-NSC can handle liquid temperatures from -25°C up to +120°C and the extended temperature version to +140°C.

## No leakage.

The e-NSC offers a wide range of mechanical face seal options regarding types and materials.



## Material Options

Pumphousing: cast iron, ductile iron, stainless steel 1.4401/1.4408, duplex stainless steel 1.4517

Impeller: cast iron, bronze, stainless steel 1.4401/1.4408, duplex stainless steel 1.4517

Elastomers: EPDM (other materials on demand).

Mechanical face seal: Carbon, Silicon carbide and EPDM  
50 or 60 Hz motors

## Configuration Options

Extended Shaft, Stub Shaft, Bare Shaft or Frame mount

# Hydrovar

The modern variable speed pump drive is taking pumping to a new level of flexibility and efficiency.



## Specifications

Mounting: Pump or wall mount  
Power supply: Both single and three-phase 50 and 60 Hz  
Power: from 1.50 kW up to 22 kW  
Configuration: up to 8 master drives or a mix of master and slave drives.

Enclosure class: IP 55  
Certifications: CE, UL, C-Tick, cUL

Motor or wall mountable

---

More flexibility

---

Cost savings

---

High level hardware design

---

Easy to commission

---

Fifteen different language options

---

Simple mounting "clip & work"

---

Multipump capability up to 8 pumps

---

Enclosure IP 55

---

HYDROVAR is not only a simple to use speed control system for direct motor mounting.

It represents an intelligent control system which accurately adapts the demand and offers plenty of advantages for both the operator and the system.

Unique modular design needs no additional master control and enables virtually any configuration of pumps: up to 8 master drives or a mix of master and slave drives. This is the long-awaited solution for high-level installations requiring failsafe systems with a superior range of features, while its modularity also provides a cost-effective solution for low-level, reduced feature demands.

## Retrofitting.

Possible on all existing standard asynchronous motors, which are suitable for VFD operation

---

Automatic adjustment of the pump performance to varying demands

---

Constant system pressure in water supply and booster stations

---

Possibility of control along the system curve for circulation pumps for the HVAC market

---

No external panels, contactors and motor protection devices are required

---

All hydraulic control functions are included in the HYDROVAR. Therefore no additional external controllers are required

---

Energy savings up to 70%

---

Soft start

---

Error log with time and date stamp

---

2 sensor inputs

---

Built in protection

---

Easy to integrate into BMS systems

# GHV Booster sets

The GHV, series booster sets use our Hydrovar® frequency converter-an automatic device that adjusts the speed of the electric pump in order to maintain constant pressure in the system.



HYDROVAR® is a pump or wall-mounted variable speed microprocessor based system controller, and was the world's first of its type to manage motor speed and match pump performance to a range of hot and cold water applications. Due to the unique modular design the HYDROVAR® unit can be mounted or retrofitted to any existing centrifugal pump which has a standard IEC motor.

GHV series booster sets are pumping stations that are assembled with two and up to a maximum, of four vertical multistage pumps from the e-SV series. The pumps are connected to one another by suction and delivery pipes, and fixed onto a single base. The pumps are connected to the manifolds by means of stop valves and check valves. An electric protection and control panel is installed using a bracket on the base of the set.

All pumps, to a maximum of four, engage by means of their own frequency converter. The pumps start automatically depending on the system requirements and are fitted with a pressure transmitter that is required to detect the pressure variation. The recorded figure is transmitted to the frequency converter and the pump is driven by the inverter which modulates its speed according to the system demand. The alternating pump start takes place automatically whenever the system is started and at pre-set timings. Starting and stopping of the pumps is determined according to the set value of pressure in the frequency converter menu.

## Energy saving.

All this results in less stress on all the components in the distribution network, and therefore results in less maintenance, greater reliability of supply and lower running costs. In short, using a pumping system with one or more variable-speed pumps means:

Saving energy

Optimising resources and processes

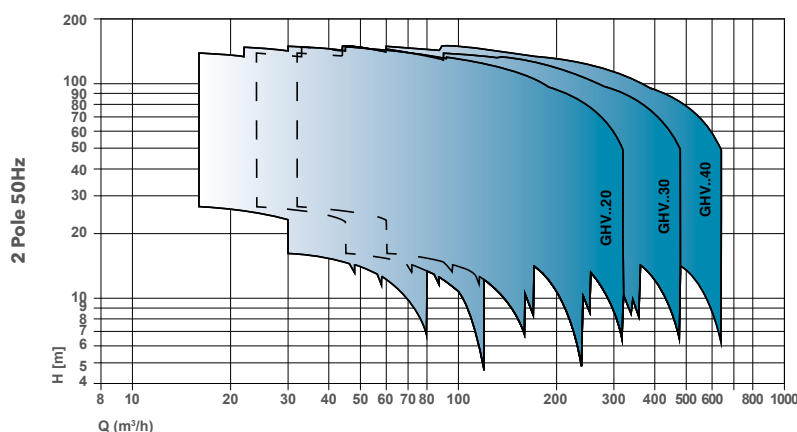
The possibility of complete integration of the management, control and supervision systems

Prolonging the life of the installations

Reducing maintenance costs

Increasing the productivity and efficiency of an installation

Power savings up to 70%



## Range Overview

Power: up to 22kW  
 Heads up to: 160m  
 Flows up to: 640 m³/h  
 Pressure Class: PN16  
 Manifolds: AISI 304 Stainless steel  
 WRAS approved materials

### Options:

- Set in AISI 316 Stainless steel
- Dry Run Protection
- PN25
- Flexible Couplings
- Up to 6 pump sets
- Jockey pump options
- End suction booster sets available on request
- 50 or 60 Hz motors



# Xylect

xylem  
Let's Solve Water

Xylect  
PROFESSIONAL

Selection tool for Xylem products



Xylect™ is pump solution selection software with an extensive online database of product information across the entire Xylem range of pumps and related products, with multiple search options and helpful project management facilities. The system holds up-to-date product information on thousands of products and accessories.

The possibility to search by applications and the detailed information output given, makes it easy to make the optimal selection without having detailed knowledge about products.

The search can be made by:

Application

Product type

Duty point

Xylect™ gives a detailed output:  
List with search results

Performance curves (flow, head, power, efficiency, NPSH)

Motor data

Dimensional drawings

Options

Data sheet printouts

Document downloads incl dxf files



*The search by application guides users not familiar with the product range to the right choice.*



The best way to work with Xylect™ is to create a personal account. This makes it possible to:

Set own standard units

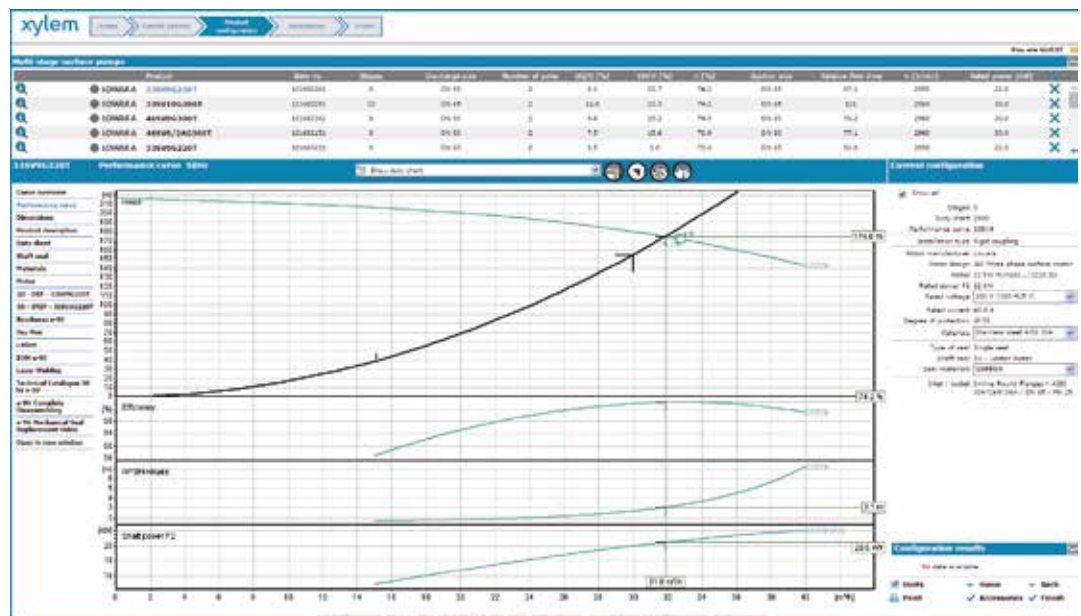
Create and save projects

Share projects with other Xylect™ users

Every user has a My Xylect space, where all projects are saved.

For more information about Xylect™ please contact our sales network or visit **[www.xylect.com](http://www.xylect.com)**.

The detailed output makes it easy to select the optimal pump from the given alternatives.



Dimensional drawings appear on the screen and can be downloaded in dxf format.

**For more information on how Xylem can help you, please visit: [www.buildings.xylem.com](http://www.buildings.xylem.com)**

# Xylem |'zīləm|

- 1) The tissue in plants that brings water upward from the roots;
- 2) a leading global water technology company.

We're approximately 12,500 people unified in a common purpose: creating innovative solutions to meet our world's water needs. Developing new technologies that will improve the way water is used, conserved, and reused in the future is central to our work. We move, treat, analyze, and return water to the environment, and we help people use water efficiently, in their homes, buildings, factories and farms. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise, backed by a legacy of innovation.

**For more information on how Xylem can help you, go to [xyleminc.com](http://xyleminc.com)**



Legal head office  
Xylem Water Solutions Italia Srl

Via Gioacchino Rossini 1/A  
20020 - Lainate (MI) - Italy  
Tel. (+39) 02 90358.1  
Fax (+39) 02 9019990  
[www.xylemwatersolutions.com](http://www.xylemwatersolutions.com)

For information and technical support  
Xylem Service Italia Srl

Via Dottor Vittorio Lombardi 14  
36075 - Montecchio Maggiore (VI) - Italy  
Tel. (+39) 0444 707111  
Fax (+39) 0444 491043  
[www.lowara.com](http://www.lowara.com)

Lowara, HYDROVAR, Xylect are trademarks or registered trademarks of Xylem Inc. or one of its subsidiaries.  
All other trademarks or registered trademarks are property of their respective owners.

Xylem Water Solutions Italia Srl reserves the right to make modification without prior notice.  
Lowara, Xylem are trademarks of Xylem Inc. or one of its subsidiaries. © 2015 Xylem, Inc.

cod. 191020251 - P02/15