



# Product Portfolio

LOWARA PROVIDING PUMPING PRODUCTS AND SYSTEMS

# 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 EMEIA 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.



# We span the entire water cycle

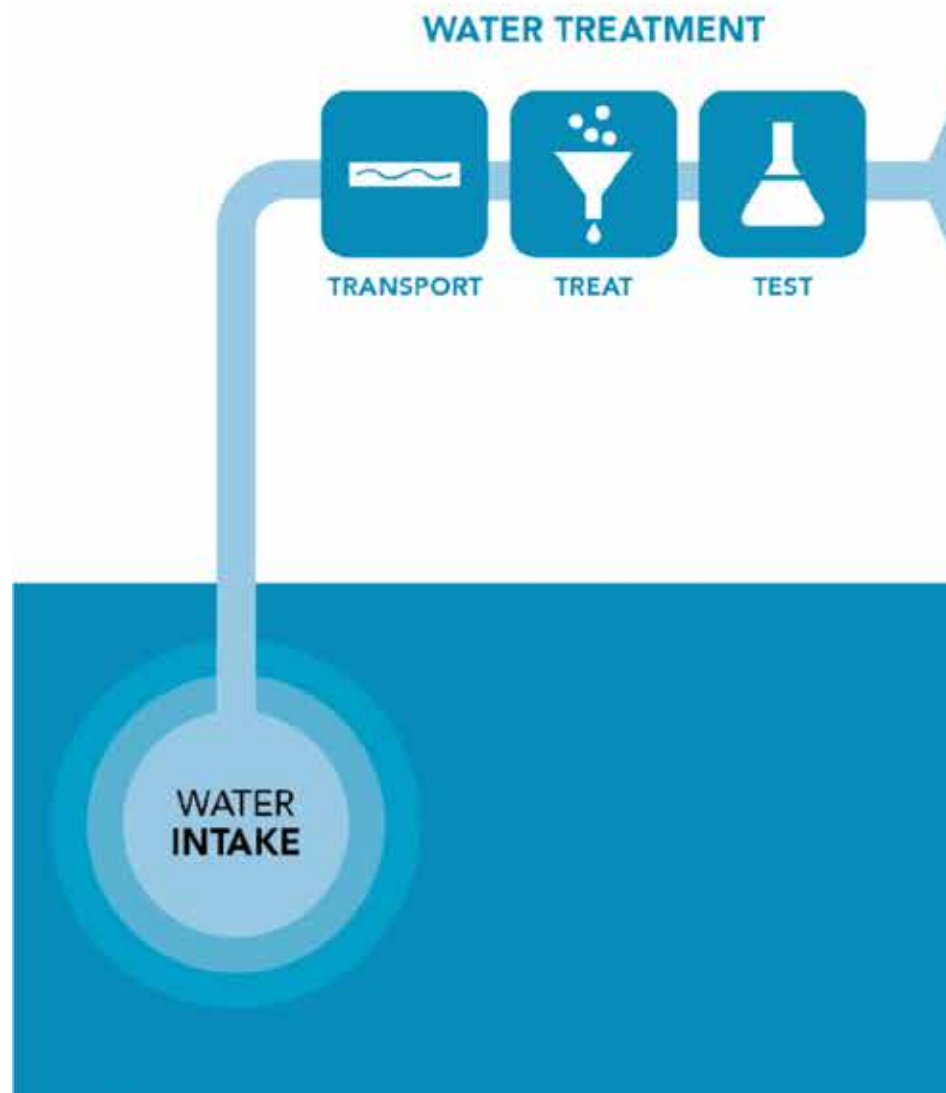
Our industry includes thousands of small companies, none of which have the breadth, scale or experience to address challenges across the complete water cycle. From water treatment – to end-use consumers – to wastewater treatment – the singular pure-play exception is Xylem.

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

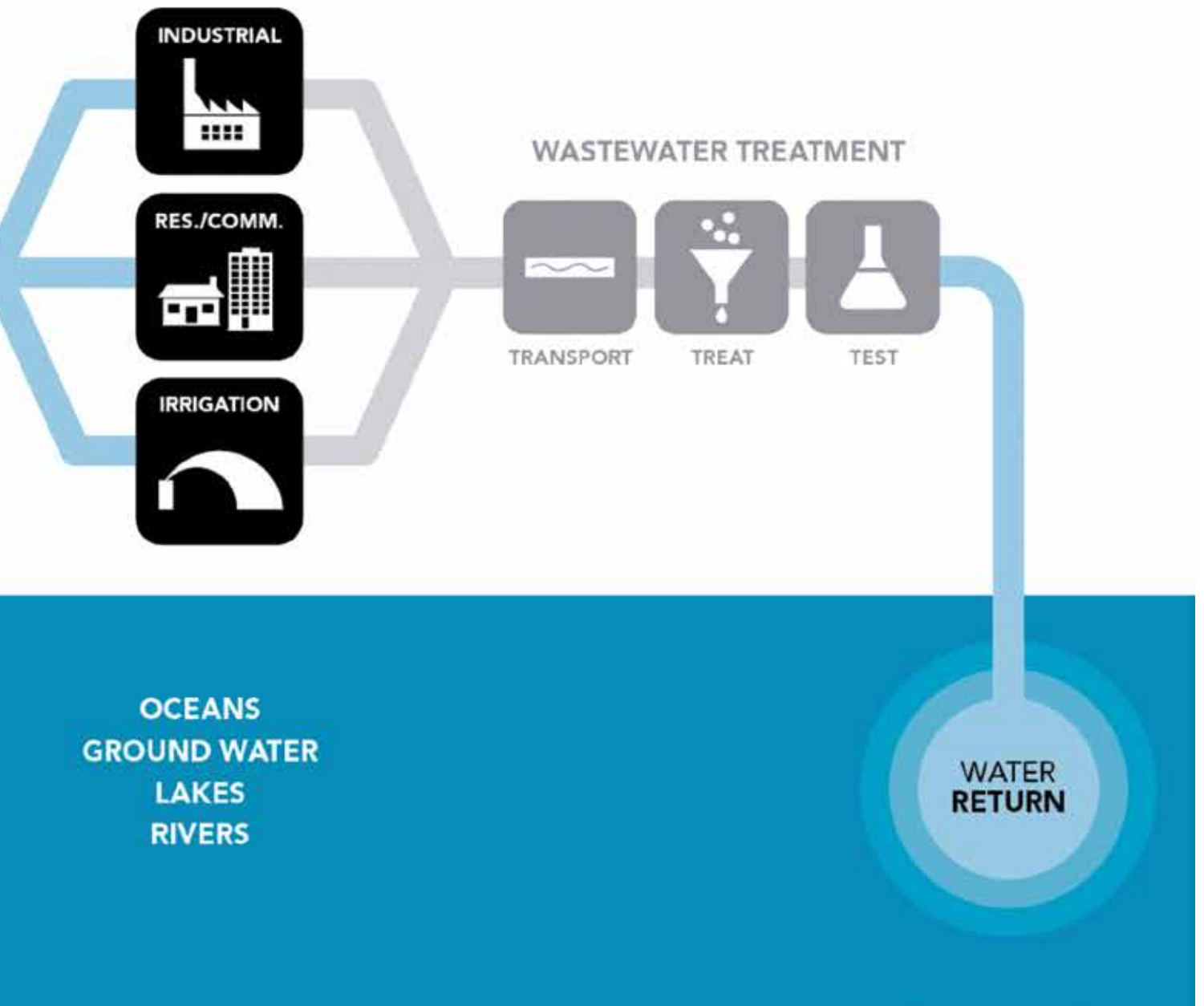
When we talk about Water Infrastructure – which encompasses 60 percent of our business – we are talking about helping customers collect water from a source and distribute it to users, and then helping them clean wastewater and return it back to the environment. This involves three closely linked applications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



# And here comes Lowara ....a xylem brand

Founded in 1968 and based in Montecchio Maggiore, near Vicenza in Italy, Lowara has been serving customers and users of hydraulic pumps in various sectors over 40 years. In 1986 Lowara was purchased by Goulds Pumps Inc. of Seneca Falls, USA.

The purchase in 1997 of Goulds Pumps Inc. by ITT Industries made Lowara of the world's largest pump manufacturing group. In 2011 Xylem completed its spinoff from ITT Corporation, and began a new chapter as a leading global water technology company.

Innovation has always been one of Lowara's distinctive characteristics, as the offer of quality needs to be maintained and developed over time. Lowara invests economic, human and technological resources in training and research in order to ensure continuous improvements of its products and processes.

Lowara uses the most advanced research, design and industrial engineering to enhance its global capabilities.

This provide efficient and reliable products, services and solutions for the water supply and water pumping needs in the residential, irrigation, building services and commercial markets worldwide.

Lowara holds a comprehensive stock and manufacturing facilities thus enabling a fast and efficient response to customer's needs.



## Applications.

The Lowara offer is a complete range of pumps for residential and commercial building services, agriculture, industrial and public utilities applications. In Building services, Lowara produces pumps for pressurization, conditioning, fire-fighting systems, wastewater lifting stations and dewatering.

In irrigation, Lowara produces pumps for agriculture applications, irrigation of gardens and parks. In public utilities, Lowara is committed on drinking water process, on water treatment, and district heating. In industry, Lowara products are used in a wide range of applications from washing equipment and chillers, to heavy industry such as oil & gas, mining, power generation and steel mills.



# You Can Trust Us.

Lowara pumps and solutions are installed all over the world and probably close to you. We've been chosen because we are able to understand and meet the demands from a modern society focusing on cost efficiency and reliability. Our products help creating comfort and safety in people's life whether they are at home, at work, watching a sports game or staying in 5 star hotels and spas.

## Burj Khalifa, Dubai, UAE.

Burj Khalifa opened in 2010. Xylem special designed variable speed booster sets distribute 1000 m<sup>3</sup> of water every day all the way up to the top floor of the 800 m building.

Water supply: 6 water transfer sets and 7 pressure booster sets.



## Palazzo della Regione Lombardia, Milan, Italy.

The 160 m high building trust Lowara pumps for fresh water and comfortable indoor climate.

Heating and cooling: FC pumps with Hydrovar. Water Supply: GHV booster sets and FH pumps.



## State university library, Moscow, Russia.

Since 2004 Lowara products serve the 55.000 m<sup>2</sup> building complex with indoor climate and fresh water.

Heating and cooling: FC pumps. Water supply: SV pumps.



## Hospital Beatriz Ângelo, Lisbon, Portugal.

Since 2012 this has been a fully Xylem equipped hospital.

Heating and cooling: 125 Lowara FC, e-SV and FH pumps, 92 of them with Hydrovar.

Water supply and irrigation: 3 GHV booster sets. Wastewater: 3 Flygt N3127. Firefighting: 1 Lowara booster set.



# End suction single stage centrifugal pumps.



**e-NSCE SERIES**  
Closed impeller pumps, extended shaft  
According to EN 733



**50 Hz**  
Capacities up to 130 m<sup>3</sup>/h  
Head up to 100 m  
Powers up to 22 kW  
Temp -25°C to +140°C

Various materials and seals options available

**e-NSCS SERIES**  
Closed impeller pumps, stub shaft  
According to EN 733



**50 Hz**  
Capacities up to 1300 m<sup>3</sup>/h  
Head up to 160 m  
Powers up to 90 kW  
Temp -25°C to +140°C

Various materials and seals options available

**e-NSCF/C SERIES**  
Closed impeller pumps, frame mounted (elastic or spacer coupling)  
According to EN 733



**50 Hz**  
Capacities up to 1800 m<sup>3</sup>/h  
Head up to 160 m  
Powers up to 315 kW  
Temp -25°C to +140°C

Various materials and seals options available

**e-SHE-SHS-SHF SERIES**  
Full stainless steel (AISI 316) pumps: extend shaft, stub shaft and frame mounted



**50 Hz**  
Capacity up to 240 m<sup>3</sup>/h  
Head up to 110 m  
Power up to 37 kW (extended shaft version up to 22 kW)  
Temp -30°C to +120°C

Various seals options available

The centrifugal range is the largest available within the Lowara portfolio and covers a multitude of applications. The Lowara single-stage end-suction products range has a large hydraulic coverage; supported by diverse seal arrangements and material options to satisfy pumping needs from potable water to water with aggressive chemicals. As mandated by the European Union, the applicable series are compliant with the ErP Eco-design directives. Variable speed pumping is available with the addition of the Hydrovar (see page 19).

**SHO SERIES**  
open impeller pumps (AISI 316)



**50 Hz**  
Capacity up to 53 m<sup>3</sup>/h  
Head up to 50 m  
Power up to 11 kW

**CO SERIES**  
open impeller stainless steel pumps (AISI 316)



<b>50 Hz</b>	Capacity up to 54 m <sup>3</sup> /h	<b>60 Hz</b>
	Head up to 24 m	54 m <sup>3</sup> /h
	Power up to 3 kW	24 m
		3 kW

**BG SERIES**  
self priming pumps



**50 Hz**  
Capacity up to 4.2 m<sup>3</sup>/h  
Head up to 53 m  
Suction head to 8 m  
Power up to 1,1 kW





**CEA-CEAN SERIES**  
closed impeller  
pumps (AISI 316)

	<b>50 Hz</b>	<b>60 Hz</b>
Capacity up to	31 m <sup>3</sup> /h	32 m <sup>3</sup> /h
Head up to	62 m	46 m
Power up to	3 kW	3 kW

Various seals options available



**P-PSA-PK SERIES**  
peripheral pumps

	<b>50 Hz</b>	<b>60 Hz</b>
Capacities up to	3.72 m <sup>3</sup> /h	3.9 m <sup>3</sup> /h
Head up to	82 m	83 m
Powers up to	1,1 kW	1,1 kW



**SP SERIES**  
self priming pumps

	<b>50 Hz</b>	<b>60 Hz</b>
Capacities up to	2.75 m <sup>3</sup> /h	2.7 m <sup>3</sup> /h
Head up to	49 m	46 m
Powers up to	0.75 kW	0.75 kW
Suction head to	7 m	7 m



**BLOCK  
PRESSURE  
SETS**

**50 Hz and 60 Hz**  
Pre-assembled sets  
for use with the  
Lowara range of  
end suction pumps



**LS SERIES**  
Closed impeller 16  
bar pumps frame  
mounted  
According to ISO 5199

	<b>50 Hz</b>
Capacity up to	4600 m <sup>3</sup> /h
Head up to	100 m
Temperature	180°C
Size	DN 150-600

Various materials and seals options available



**LSB SERIES**  
Single stage end  
suction pump in  
close coupled  
(block) design

	<b>50 Hz</b>
Capacity up to	450 m <sup>3</sup> /h
Head up to	150 m
Temperature	140°C
Size	DN 25-150

Various materials and seals options available



**LSN SERIES**  
Closed impeller  
pumps  
frame mounted (elastic  
or spacer coupling)  
According to ISO 5199

	<b>50 Hz</b>
Capacity up to	450 m <sup>3</sup> /h
Head up to	150 m
Temperature	140 °C standard (180°C extended temp available)
Size	DN 25-150

Various materials and seals options available



**LC/LCP SERIES**  
Closed impeller 25  
bar pumps frame  
mounted  
According to ISO 5199

	<b>50 Hz</b>
Capacity up to	4600 m <sup>3</sup> /h
Head up to	100 m
Temperature	180°C
Size	DN 150-600

Various materials and seals options available

# Circulators.



High efficiency circulators range for many applications including heating, air conditioning systems and hot water.

ecocirc SERIES XL and XLplus high efficiency wet rotor circulators

Capacities up to  
Head up to  
Maximum pressure  
Temp

**50 Hz**  
70 m<sup>3</sup>/h  
12 m  
10 bar  
-10°C to +110°C



ecocirc PREMIUM SERIES high efficiency wet rotor circulators

Capacities up to  
Head up to  
Maximum pressure  
Temp

**50 Hz**  
3,2 m<sup>3</sup>/h  
6 m  
10 bar  
-10°C to +110°C



ecocirc BASIC SERIES high efficiency wet rotor circulators

Capacities up to  
Head up to  
Maximum pressure  
Temp

**50 Hz**  
3,2 m<sup>3</sup>/h  
6 m  
10 bar  
-10°C to +110°C



ecocirc PRO SERIES wet rotor circulators for sanitary systems

Capacities up to  
Head up to  
Maximum pressure  
Temp

**50 Hz**  
1 m<sup>3</sup>/h  
3 m  
10 bar  
+2°C to +65°C



TLCN-TLCHN Wet rotor circulators for sanitary systems

Capacities up to  
Head up to  
Maximum pressure  
Temp

**50 Hz / 60 Hz**  
12 m<sup>3</sup>/h  
12 m  
10 bar  
+2°C to +110°C  
(recommended up to 65°C)



TLC-TLCH\* SERIES wet rotor circulators

Capacities up to  
Head up to  
Maximum pressure  
Temp

**50 Hz**  
12 m<sup>3</sup>/h  
12 m  
10 bar  
-10°C to +110°C



FLC-EFLC\* SERIES wet rotor circulators

Capacities up to  
Head up to  
Maximum pressure  
Temp

**50 Hz**  
80 m<sup>3</sup>/h  
20 m  
10 bar  
-15°C to +120°C



\* Only for Extra EEA Countries.  
EEA means: European Economic Area = European Union + 3 of 4 Member States of EFTA European Free Trade Association = EU 27 + Iceland + Liechtenstein + Norway. Swiss, Turkey and Croatia have to be added to EEA list of countries for the observance of the same regulations.

# In-line dry rotor centrifugal pumps.



In-line centrifugal pumps with cast iron pump available in the single and twin configurations. Suitable for handling hot or cold moderately aggressive liquids. With wide options both in terms of impeller material and mechanical seals, the e-LNE/LNT is the right solution for 1000's of liquids. Variable speed pumping is available with the addition of the Hydrovar (see page 19).



e-LNEE SERIES  
Extended shaft

Capacities up to  
Head up to  
Powers up to  
Temp

**50 Hz**  
300 m<sup>3</sup>/h  
100 m  
22 kW  
-25°C to +140°C



e- LNES SERIES  
Stub shaft in-line  
pumps

Capacity up to  
Head up to  
Power up to  
Temp

**50 Hz**  
400 m<sup>3</sup>/h  
100 m  
37 kW  
-25°C to +140°C



e-LNTE- LNTS  
SERIES  
Extended shaft and  
stub shaft in-line  
twin

Capacities up to  
Head up to  
Powers up to  
Temp

**50 Hz**  
800 m<sup>3</sup>/h  
100 m  
37 kW  
-25°C to +140°C

# Multi-stage pumps.



Lowara has an extensive range of multi-stage products that start with the Lowara SV standard product through to the TDB range which are available in various materials including stainless steel, bronze and various iron options. Unique products within this range include the High Pressure e-SV system and a multi-outlet pump used in fire set applications. Variable speed pumping is available with the addition of the Hydrovar (see page 19).



## e-SV™ SERIES vertical multistage pumps

The range of pumps features 11 models and can be specially configured for a wide range of applications.

Capacity up to	<b>50 Hz</b>	160 m <sup>3</sup> /h
Head up to		330 m
Power up to		55 kW
Temp		-30°C to +120°C (high temp versions up to 180°C)

Capacity up to	<b>60 Hz</b>	160 m <sup>3</sup> /h
Head up to		280 m
Power up to		55 kW
Temp		-30°C to +120°C (high temp versions up to 180°C)

## SVI SERIES immersible vertical multistage pumps



	<b>50 Hz</b>	<b>60 Hz</b>
Capacity up to	160 m <sup>3</sup> /h	160 m <sup>3</sup> /h
Head up to	330 m	280 m
Power up to	55 kW	55 kW
Temp	-10°C to +90°C	

## e-HM™ SERIES horizontal multistage pumps



	<b>50 Hz / 60 Hz</b>
Capacity up to	29 m <sup>3</sup> /h
Head up to	160 m
Power up to	5,5 kW

## TDB-TDV SERIES vertical multi-stage pumps

Capacity up to	<b>50 Hz</b>	360 m <sup>3</sup> /h
Head up to		500 m
Power up to		355 kW
Temp		up to +140°C



## VM SERIES High efficiency close-coupled vertical multistage pumps equipped with non-standard Lowara motors



	<b>50 Hz</b>	<b>60 Hz</b>
Capacity up to	14 m <sup>3</sup> /h	17 m <sup>3</sup> /h
Head up to	98 m	106 m
Power up to	3 kW	4 kW
Max temp to	up to +90°C	

**MP**  
Horizontal multistage pump with closed, radial type impellers and roller bearings on both ends



Capacity up to  
Head up to  
Temp  
Size

50 Hz	60 Hz
340 m <sup>3</sup> /h	360 m <sup>3</sup> /h
500 m	500 m
140°C	140°C
DN 40-125	

**MPE**  
Horizontal multistage pump with bearings on both ends. Thrust balancing and seal pressure reduction by balancing drum.



Capacity up to  
Head up to  
Temp  
Size

50 Hz	60 Hz
300 m <sup>3</sup> /h	320 m <sup>3</sup> /h
850 m	850 m
140°C (optional up to 180°C)	
DN 100-125	

**MPA**  
Thrust bearing at drive side and medium lubricated slide bearing on suction side



Inducer optional



Capacity up to  
Head up to  
Temp  
Size

50 Hz	60 Hz
340 m <sup>3</sup> /h	360 m <sup>3</sup> /h
500 m	500 m
140°C	140°C
DN 40-125	

**P / MP 300**  
Horizontal multistage pump with bearings on both ends



Capacity up to  
Head up to  
Temp  
Size

50 Hz	60 Hz
1800 m <sup>3</sup> /h	1200 m <sup>3</sup> /h
300 m	300 m
140°C	140°C
DN 80-300	DN 80-250

**MPB**  
Vertical multistage pump with closed, radial type impellers in close coupled (block) design



Capacity up to  
Head up to  
Temp  
Size

50 Hz	60 Hz
200 m <sup>3</sup> /h	240 m <sup>3</sup> /h
500 m	500 m
140°C	140°C
DN 40-125	

**PVa**  
Vertical multistage pump with closed, radial type impellers



Capacity up to  
Head up to  
Temp  
Size

50 Hz	60 Hz
850 m <sup>3</sup> /h	1000 m <sup>3</sup> /h
300 m	300 m
140°C	140°C
DN 80-200	

**MPV**  
Vertical multistage pumps



Capacity up to  
Head up to  
Temp  
Size

50 Hz	60 Hz
340 m <sup>3</sup> /h	360 m <sup>3</sup> /h
500 m	500 m
140°C	140°C
DN 100-125	DN 40-125

# Drainage and wastewater products.

The Lowara submersible pumps range is suited for a wide variety of applications such as, for example, drainage of residential sump pits, sewage pumping, emptying of sumps, septic tanks and wastewater discharge tanks.

## DOC SERIES cellar drainage pumps

Capacity up to  
Head up to  
Power up to  
Solids up to

50 Hz	60 Hz
14 m <sup>3</sup> /h	13,2 m <sup>3</sup> /h
11 m	11 m
0,55 kW	0,55 kW
20 mm	



## DOMO SERIES wastewater/ sewage pumps

Capacity up to  
Head up to  
Power up to  
Solids up to

50 Hz	60 Hz
40 m <sup>3</sup> /h	40 m <sup>3</sup> /h
14,5 m	14,5 m
1,5 kW	1,5 kW
50 mm	



## DOMO GRI SERIES sewage pumps with grinder device

Capacity up to  
Head up to  
Power up to

50 Hz	60 Hz
6,6 m <sup>3</sup> /h	6,6 m <sup>3</sup> /h
25 m	29 m
1,1 kW	1,1 kW



## DIWA SERIES drainage pumps

Capacity up to  
Head up to  
Power up to  
Solids up to

50 Hz	60 Hz
25 m <sup>3</sup> /h	25 m <sup>3</sup> /h
21 m	20 m
1,5 kW	1,5 kW
8 mm	



## DN SERIES drainage pumps

Capacity up to  
Head up to  
Power up to  
Solids up to

50 Hz	60 Hz
16,8 m <sup>3</sup> /h	18 m <sup>3</sup> /h
22 m	21 m
0,75 kW	0,8 kW
5 mm	



## DL SERIES wastewater/ sewage pumps

Capacity up to  
Head up to  
Power up to  
Solids up to

50 Hz	60 Hz
42 m <sup>3</sup> /h	42 m <sup>3</sup> /h
21,9 m	22 m
1,5 kW	1,5 kW
50 mm	



## GLS-GLV SERIES wastewater/sewage pumps in cast iron with self- cleaning channel or vortex impeller

Capacity up to  
Head up to  
Power up to  
Solids up to  
Motors  
Temp



50 Hz
244 m <sup>3</sup> /h
41 m
7,4 kW
100 mm
2-4 poles
up to +40°C

COMING  
SOON

1300 SERIES  
Wastewater /  
sewage pumps  
in cast iron with  
non-clog or vortex  
impeller



Capacity up to  
Head up to  
Power up to  
Temp

**50 Hz**  
414 m<sup>3</sup>/h  
63 m  
18 kW  
up to +40°C

BOX SERIES  
prefabricated  
lifting stations

Minibox  
Midibox  
Singlebox Plus  
Doublebox Plus  
Maxibox Plus



Volume  
Pumps

up to 1900 liters  
1 or 2



SOS FLOODKIT  
For flooded  
basements and  
garages

Pump type DOC 3 with  
10 metres cable

Can be used in or  
outside the box.

# Submersible borehole pumps.

## GS SERIES 4" borehole pumps



Capacity up to  
Head up to  
Power up to

50 Hz	60 Hz
21 m <sup>3</sup> /h	22 m <sup>3</sup> /h
340 m	300 m
7,5 kW	7,5 kW

The Lowara borehole range offers products ranging in pump diameters from 4" to 12". Various material options are available including cast iron and various grades of stainless steel. In addition to the products shown, Lowara can offer alternative mounting options of this range including cooling shrouds and pressure shrouds.



## SCUBA SERIES 5" submersible pumps

Capacity up to  
Head up to  
Power up to

50 Hz	60 Hz
7,5 m <sup>3</sup> /h	7,5 m <sup>3</sup> /h
80 m	75 m
1,1 kW	1,1 kW

## Z6 SERIES 6" borehole pumps



Capacity up to  
Head up to  
Power up to

50 Hz	60 Hz
78 m <sup>3</sup> /h	90 m <sup>3</sup> /h
700 m	700 m
55 kW	55 kW

## Z8-Z10-Z12 SERIES 8"-10"-12" borehole pumps



Capacity up to  
Head up to  
Power up to

50 Hz	60 Hz
520 m <sup>3</sup> /h	480 m <sup>3</sup> /h
500 m	500 m
350 kW	350 kW

## TVS Series 8" to 12" borehole pumps



Capacity up to  
Head up to  
Power up to

50 Hz	60 Hz
520 m <sup>3</sup> /h	480 m <sup>3</sup> /h
500 m	500 m
350 kW	350 kW

## Water and oil filled 4" submersible motors series



Powers up to

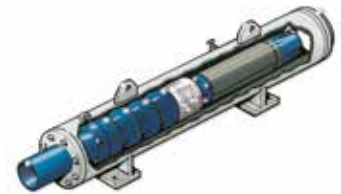
50 Hz	60 Hz
7,5 kW	7,5 kW

## L6W-L8WL10W- L12W SERIES Rewindable motors



Powers up to

50 Hz	60 Hz
300 kW	300 kW



Cooling shrouds  
and pressure  
shrouds



# Booster sets.



Wide range of 2, 3 or 4 pump units controlled by pressure switches or pressure transmitter, with constant or variable speed. The Lowara range of automatic booster units is designed to supply water to intermittent and variable demand users, employing centrifugal electric pumps controlled by an electric panel.

## GXS SERIES SETS

Single-phase power supply, fixed speed and pressure switch control. For BG, CA, CEA, HM and SV series electric pumps.



Flow rate up to  
Power up to

**50 Hz**  
58 m<sup>3</sup>/h  
2 x 1.5 kW

**Available at 60 Hz on request.**

## GTKS SERIES SETS

Single-phase power supply, variable speed and control by pressure transducers and Teknospeed electronic speed controllers integrated with the motor. For BG, CA, CEA, HM and SV series electric pumps.



Flow up to  
Power up to

**50 Hz**  
52 m<sup>3</sup>/h  
2 x 1.1 kW

## GMD SERIES SETS

Three-phase power supply, fixed speed and pressure switch control. For BG, CA, CEA, HM and SV series electric pumps.



Flow up to  
Power up to

**50 Hz**  
62 m<sup>3</sup>/h  
2 x 4 kW

## FIRE FIGHTING SYSTEMS EN 12845 GEM SERIES

Fire pump package manufactured in accordance to EN 12845. Max. power size for service pump 200 kW. Manifold in painted steel pipe with anchor bolts to fix to a wall or floor.



## GHV SERIES SETS

Single-phase or three-phase power supply, variable speed and control by pressure transducers and HYDROVAR™ electronic speed controllers mounted on the motor. For SV series electric pumps.



Flow up to  
Head up to  
Power up to

**50 Hz**  
640 m<sup>3</sup>/h  
160 m  
22 kW

## GV SERIES SETS

Variable speed booster sets up to four pumps eSV series.



Flow up to  
Head up to  
Power up to

**50 Hz**  
640 m<sup>3</sup>/h  
160 m  
37 kW

## GS SERIES SETS

Fixed speed booster sets, two and three pumps eSV and e-NSC series.



Flow up to  
Head up to  
Power up to

**50 Hz**  
480 m<sup>3</sup>/h  
160 m  
37 kW

# Variable speed drives... Teknospeed.

## Series of Variable Speed Electric Pumps and Pressure Booster Units.

The single-phase Teknospeed variable speed electric pumps and pressure booster units are designed for residential applications as they provide all the comfort and advantages of constant pressure in the home. The Teknospeed series comprises a frequency converter integrated into the pump which adjusts motor speed so as to constantly provide users with the same pressure, even when demand for water changes. The main applications for which the Teknospeed series offers elevated comfort and benefits are: home pressurisation, irrigation, greenhouses, light industry, fountains and creative water displays.



The range features a large number of models and pump types.

Horizontal and vertical pumps:  
TKS/HMZ, TKS/BG, TKS/CA-CEA, TK/SV.

Single pump or two-pump pressure booster units:

GTKS20/HMZ, GTKS20/CA, GTKS20/SV

## Specifications.

Delivery: up to 16m<sup>3</sup>/h

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Head: up to 75m

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Power supply: single-phase 50 and 60Hz

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Power: from 0.3kW up to 1.1kW

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Temperature of pumped liquid: to 80°C

## Applications.

Water distribution

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Industrial washing equipment

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Pressure boosting

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Irrigation

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Water treatment

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H.V.A.C.

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Cooling and chiller accessories



# Variable speed drives... HYDROVAR™.

## HYDROVAR™ - the intelligent and user friendly speed controller for pumps!

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.

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.

The HYDROVAR™ 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. The units are available in powers from 1,1 - 22 kW.

The HYDROVAR™ does much more than just change the motor speed. It truly manages your pump performance to match a wide range of system conditions, allowing energy savings up to 70% (approved by TUEV Austria)\*.

\* Tests carried out by TUEV Austria (Austrian testing authority) on 5 March 2005 based on comparative tables and data on intake performance at identical flow.



The HYDROVAR™ eliminates the need for.

Expensive additional master control panels and circuitry

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System control valves

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Large pressure vessels

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## Benefits.

Sizes available 1,1 - 22 kW

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Extension up to 315 kW by using the external Hydrovar Smart controller

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Shut down at zero demand

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Easy to integrate into BMS systems - ModBus communication included as standard

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Can be mounted directly on any standard IEC motors

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Included 2 line LCD display

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Enclosure IP 55 protection

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Up to 8 HYDROVAR™ pumps can be connected to one system

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Available in 3 different levels (Master/Single/Basic) to offer the right solution for system requirement

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2 sensor inputs for implementing of two actual value signals within one system (min/max, difference) or for a second sensor for safety reasons (Master Inverter)

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Different types of sensors supported (4-20mA, 0-20mA, 0-10Vdc, 2-10Vdc)

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Energy savings up to 70% achievable

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Error Log with Time and date stamp

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Extended manual control mode with different fixed speed valued selectable via external contact

## Typical examples of application.

Maintaining a constant pressure, as in water boosting or irrigation

Maintains a constant flow, as in filter and water supply applications

Compensating for losses in a system (following a system curve), as in heating systems

Control of pump performance by temperature sensors

Emptying or filling tanks by level probes

Control of boiler feed water

Cascade control capability by combining different executions (Master/Basics) of the modular HYDROVAR™ family

## Typical energy savings.

Pump Type: In-line FCE 80 - 200/110 at a head of 25 metres

CAPACITY m <sup>3</sup> /h	POWER USED		POWER SAVED kW	LENGTH OF TIME h	TOTAL kWh
	CONSTANT SPEED kW	VARIABLE SPEED kW			
40	7,13	4,95	2,18	2.190	4.774
60	8,17	6,29	1,88	4.380	8.234
90	9,81	9,43	0,38	2.190	832
<b>TOTAL ENERGY SAVINGS</b>					<b>13.840</b>

## Retro-fitting.

The HYDROVAR™ speed controller can be mounted or retro-fitted to any existing centrifugal pump manufacturer's unit, which has a standard IEC motor. The units are available in powers from 1.1-22 kW. The units can be mounted directly on to the pump motor (horizontal or vertical) or can be wall mounted. The

## Energy savings.

Energy saving is a large issue within the heating and ventilating market and within the Lowara product portfolio we can offer a variable speed drive, the HYDROVAR™. A unique parameter gives the HYDROVAR™ an added advantage. This parameter allows the pump to follow a system curve, the minimum system head is set together with the maximum and the pump will then operate between these two points.

This option has been specifically developed for use in the heating industry as it allows the user to save up to 70% energy costs over a fixed speed pump. Due to the energy saving capabilities of the HYDROVAR™ the unit has achieved the high requirements set by the Energy Saving Trust to allow Lowara to promote the HYDROVAR™ product.

## HYDROVAR™ booster sets.

The HYDROVAR™ allows up to 8 units to be interfaced together which offers the user ultimate flexibility. The pumps have an automatic cyclic changeover facility and in the case of failure the remaining pump/s take up the duty. The HYDROVAR™ utilises a 4 - 20A signal to regulate the motor speed in order to meet the system requirements. By controlling the pump in this way the user can make substantial savings in comparison to conventionally controlled systems.



HYDROVAR™ can also be connected by cable to another control system with microprocessor, using the RS-485 database located on the main terminal board under the cover. This enables the HYDROVAR™ system to send information about the system conditions to an external unit, and to be controlled from a distance.



## HYDROVAR™ Smart.

The HYDROVAR™ Smart device includes all control functions of a HYDROVAR™ and can be combined with all standard frequency converters, regardless of the power range and the available supply voltage range. The inbuilt microprocessor manages all pump specific control requirements including cascading of up to 4 drives in multipump systems. The patented HYDROVAR™ controller ensures an immediate stop of the pump at zero demand.

## Advantages.

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Patented HYDROVAR™ Control System.

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Integrated multi pump controller.

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No external power supply required  
(24V AC/DC output of the VFD can be used).

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Enclosure IP55 for panel or wall mounting.

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Suitable for combination with all standard frequency converters.

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No limitation of the power range.

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HYDROVAR™ controlled variable speed drive for any supply voltage range possible.

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RS485 interface input included as standard.

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## HYDROVAR™ Watercooled for low power boosting systems.

As the name implies the unit utilises the water pumped through it to cool the internal electronics and its unique design has been developed for use within residential applications. The HYDROVAR™ Watercooled variable speed drive will be supplied along with a pump and will protect the unit from dry running, overheating, short circuit and over-current and due to the soft start/stop operation protect the system from water hammer.

The HYDROVAR™ Watercooled is an important part of the HYDROVAR™ product family to complete the product portfolio on the low power end and continue to offer its users a reliable variable speed drive solution.



## Aquonroller 230 VAC drive for single phase motors.

The Aquonroller is specially designed for maintaining constant pressure independent of flow for maximum comfort. Energy savings are the result of the precise speed control. Top quality components guarantee high reliability and a trouble-free life. The inverter has inbuilt protection against various and electrical faults.

Smooth operation and soft starting ensure silent running and an extended pump life. With pipe or wall mounted versions, the quick set up means easy installation.



# Vessels and accessories.



## Pressure Vessels.

Sizes to 5000 litre

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Horizontal and vertical

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Pressure to 10bar

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Temperature to 99°C

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Products available with WRc approved materials



## Control Boxes.

A range of control boxes suitable for use with both submersible and surface pumps.

## Accessories.

An extensive range of accessories is available to complement the pump range illustrated in this brochure. This includes:

Pressure switches

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Pressure gauges

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5 way connector

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Flexible connector

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Genyo

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Float switches

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Flow switches

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Direct on line starter

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Non return valves, strainers and hosetails.

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Water softners

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Filters

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Dosing Pumps



## Genyo.

The Genyo is designed to replace traditional pressure boosting systems in domestic applications; it offers the advantages of smaller overall dimensions and no maintenance is required. Genyo provides the electric pump with adequate protection against dry running.

Two models: Genyo 8A and Genyo 16A

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Maximum current 16 A

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Maximum pressure 10 bar

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IP 65 protection

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Delivery up to 170 l/min (10 m<sup>3</sup>/h).

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Maximum liquid temperature 60°C

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Low friction loss



# Pump selection guide.

Xylem offer great online and off-line tools to make users and specifier's life easier and for better performance.

They are easy to use and minimize the risk of making mistakes in the selection process.

The selection software comes in stand-alone (Loop4U) or web based (xylect.com) versions and allows you to find the best solutions for your pumping problems even without knowing the Xylem product portfolio.

The software let's you search on duty point, application or browse by product.

Detailed output from our tools includes downloadable documents such as data sheets and dimensional drawings in dxf, stp or revit formats.

Besides a comprehensive range of software, Xylem offers a whole range of systems engineering tools for sizing a pump system as well as training in pump sizing and pump systems optimization. And if you need further help, Xylem also has skilled application engineers ready to assist you in designing optimal pumping systems.



# Applications.

	PUBLIC UTILITIES (MUNI)	RESIDENTIAL BUILDING SERVICES	COMMERCIAL BUILDING SERVICES	INDUSTRY	AGRICULTURE
<b>END SUCTION CENTRIFUGAL PUMPS</b>					
CEA-CEAN Series					
SP Series					
BG Series					
JEC-AG Series					
P-PB-PK Series					
e-NSCE, e-NSCS Series					
e-NSCF Series					
CO -CO F-SHO Series					
e-SHE, e- SHS, e,SHF Series					
LS-LC-LCP-LSN-LSB Series					
<b>CLOSE COUPLED IN-LINE PUMPS</b>					
ecocirc XL e XLplus Series					
ecocirc PREMIUM Series					
ecocirc Series					
ecocirc PRO Series					
TLCN-TLCHN Series					
TLC-TLCH Series *					
FLC-EFLC Series *					
e-LNEE, e-LNES, e-LNTE, e-LNTS Series					
<b>MULTISTAGE</b>					
e-HM™ Series					
VM Series					
e-SV™ 1-125 Series					
TDB-TDV Series					
SVI Series					
MP Series					
P-MP Series					
PVa Series					
<b>SUBMERSIBLE, DRAINAGE &amp; SEWAGE PUMPS</b>					
DOC Series					
DOMO Series					
DOMO GRI Series					
DIWA Series					
DN Series					
DL Series					
1300 Series					
GLS-GLV Series					
Minibox, Midibox, Singlebox Plus, Doublebox Plus Series					
Maxibox Plus					



	PUBLIC UTILITIES (MUNI)	RESIDENTIAL BUILDING SERVICES	COMMERCIAL BUILDING SERVICES	INDUSTRY	AGRICULTURE
<b>BOREHOLE</b>					
GS Series					
SCUBA Series					
Z6 Series					
Z8-Z10-Z12 Series					
40S-L4C Motors					
L6C-L6W Motors					
L8W-L10W-L12W Motors					
TVS Series					
<b>BOOSTER SETS</b>					
Block Pressure Set					
GXS Series					
GMD Series					
GTKS Series					
GHV Series					
GEM Fire Fighting Systems EN 12845					
GS Series					
GV Series					
<b>VARIABLE SPEED CONTROLS</b>					
Teknospeed					
HYDROVAR™					
HYDROVAR™ Retro-Fitting					
HYDROVAR™ Smart					
HYDROVAR™ Watercooled					
Aquonroller					
<b>ACCESSORIES</b>					
Genyo, Vessels, Motors, Float switches					
Filters					
Control Boxes					

\* Only for Extra EEA Countries.

EEA means: European Economic Area = European Union + 3 of 4 Member States of EFTA European Free Trade Association = EU 27 + Iceland + Liechtenstein + Norway. Swiss, Turkey and Croatia have to be added to EEA list of countries for the observance of the same regulations.

# Xylect



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

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Product type

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Duty point

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Xylect™ gives a detailed output:

List with search results

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

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Motor data

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Dimensional drawings

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Options

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Data sheet printouts

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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:

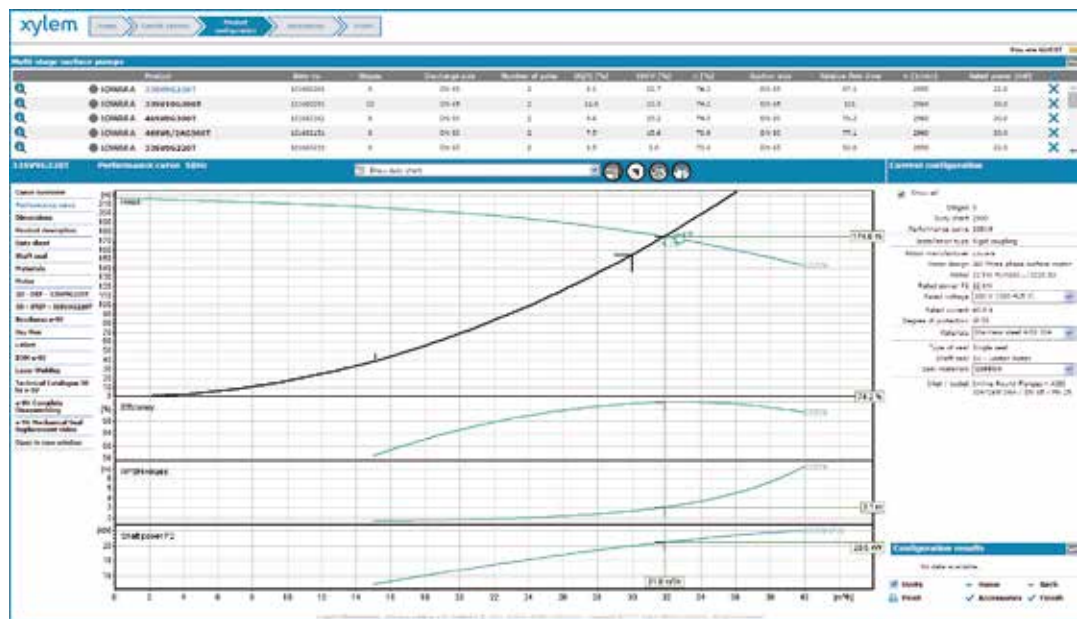
Set own standard units

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 a global team 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).**



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