



# The e-Range Borehole Series

e-RANGE BOREHOLE PUMPS, MOTORS, DRIVES AND ACCESSORIES COMPLIANT WITH THE ERP DIRECTIVE.

CAPACITIES UP TO 3,500 m<sup>3</sup>/h  
 HEAD UP TO 700 m  
 POWER UP TO 400 kW

# e-Range overview

Within our borehole pump range from 4" to 12" together with turbine pumps we now offer flows up to 3,500 m<sup>3</sup>/h and head up to 700m.

4" e-GS  
5" Scuba  
6" Z6" - ZN6"  
8" Z8" - ZR8"  
10" Z10" - ZR10"  
12" Z12" - ZR12"

Within the Xylem group we can also supply lineshaft and submersible turbine pumps, offering the latest in pump design and technology from Goulds Water Technology. With more than 100 years of pump manufacturing know how, they feature most of the major innovations in pump engineering and materials.

Lowara range overview  
Head up to: 500 m  
Flow at top: 520 m<sup>3</sup>/h

*Please contact your local sales office for further details.*

## Motors.

We offer both canned and rewindable versions from 4" to 12", power from 0.37kW to 300kW with different voltages and/or frequencies both in single or three phase.

High performance innovative motors are fitted as standard and the energy saving can be improved by fitting Hydrovar variable speed drives.

## Accessories.

Cable  
Cable Jointing Kits  
Cooling Shrouds  
Filters  
Hydrovar (Variable Speed Drive)  
Monitoring & Controls  
UV  
Expansion Vessels



Typical applications.

**All of the Xylem Borehole pump series now comply with the new EU requirements.**



# Introduction to the EU efficiency MEI regulations

## All of the Xylem Borehole pump series now comply with the new EU requirements:

**COMMISSION REGULATION (EU) No 547/2012** of 25 June 2012 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for water pumps.

## Definitions.

In addition to the definitions set out in Directive 2009/125/EC, the following definitions apply: (1) 'water pump' is the hydraulic part of a device that moves clean water by physical or mechanical action and is of one of the following designs: – Submersible multistage (MSS).

(9) 'Submersible multistage water pump' (MSS) means a multi stage rotodynamic water pump with a nominal outer diameter of 4" or 6" designed to be operated in a borehole at nominal speed of 2900 rpm, at operating temperatures within a range of 0 °C and 90 °C.

## Mean Efficiency Index (MEI) -

Clean water pumps

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

## Non-compliant Products:

Please be vigilant and ensure that the products you purchase fully comply with these regulations and inform your local country National Measurements Office.



# GS 4" Borehole pump

Higher hydraulic efficiency Borehole pumps for 4" wells that set the basis for lower operational costs.

Premium efficiency pumps compliant with the ErP directive. Abrasion resistant construction combined with floating impellers ensure optimum resistance to wear (maximum permissible quantity of sand 150 g/m<sup>3</sup>) making this one of the best pumps on the market for sand handling capabilities.

The stainless steel structure of the pump ensures high resistance to corrosion with a built in non-return valve and cable guard attachment.

The upper and lower supports are made of precision-cast stainless steel. The hexagonal pump shaft guarantees an effective impeller drive.

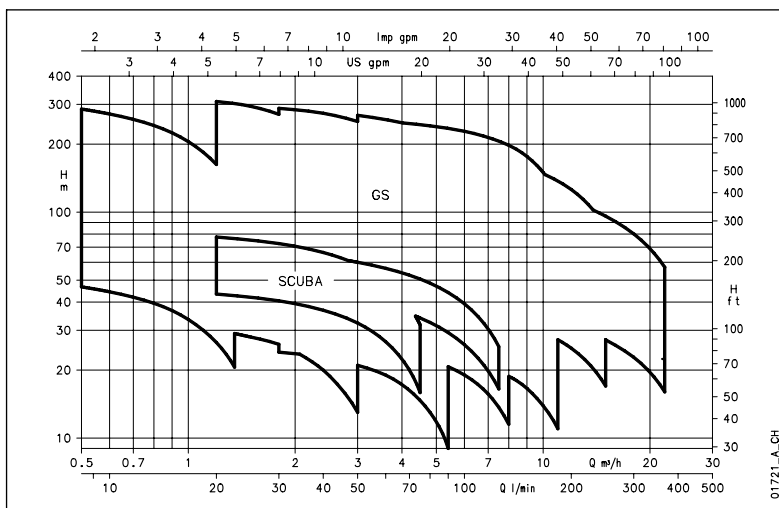
## Material options.

Pump housing: AISI 304

Impeller: PC / PPO + PS floating

Elastomers: NBR

Motors: Different voltages and frequencies and high temperature versions as options



## Range Overview

Sizes: 4"

Power: 0.25kW up to 7.5kW

Head up to: 340 m

Flows up to: 21 m<sup>3</sup>/h

Maximum immersion depth: 150m (4OS motor)

300m (L4C motor)

Temperature of pumped liquid: 0 °C to 35 °C

Maximum permissible quantity of sand: 150 g/m<sup>3</sup>

Variable speed option: ResiBoost/Hydrovar

# Scuba 5"

## Borehole pump

Multi-impeller submersible pump with the liquid end located underneath the motor which is cooled by the pumped liquid. The motor is protected by a double seal system with an oil chamber providing long lasting reliability. The techno polymer impellers and AISI 304 stainless steel body ensure superior performance and maximum operational efficiency. The Scuba 5" is available with or without level float.

### Material options.

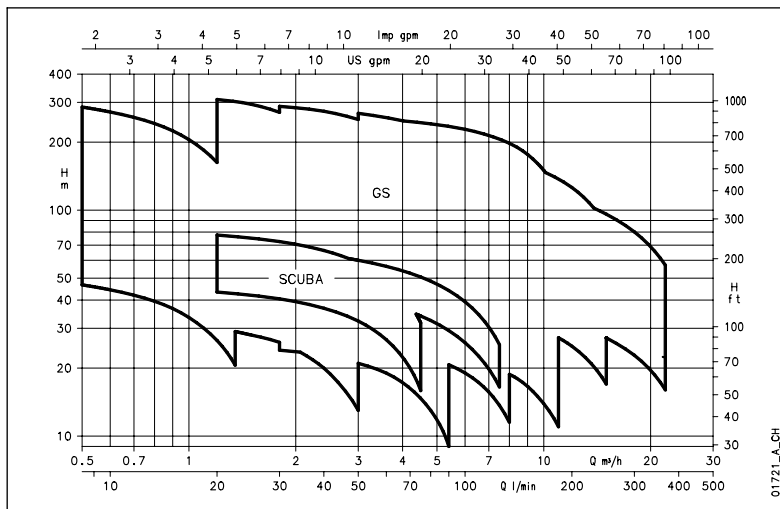
Pump housing: AISI 304

Impeller: Techno polymer (AISI 304 stainless steel available on request)

Elastomers: NBR

Motors: Different voltages and frequencies

It can also be operated in a horizontal position. The unit comes with 20 metres of cable and has a maximum permissible quantity of suspended sand 25 g/m<sup>3</sup>.



## Range Overview

Sizes: 5"  
 Power: 0.55kW up to 1.1kW  
 Head up to: 80 m  
 Flows up to: 7.5 m<sup>3</sup>/h

Maximum immersion depth: 20m  
 Temperature of pumped liquid: 0 °C to 40 °C  
 Maximum permissible quantity of sand: 25 g/m<sup>3</sup>  
 Variable speed option: ResiBoost/Hydrovar

# Z6 (AISI 304) ZN6 (AISI 316)

## 6" Borehole pumps

Guaranteed maximum resistance to wear with stable, long-lasting hydraulic performance. Sturdy and lightweight with easy maintenance and resistant to corrosion. The Z6 and ZN6 6" range has a maximum permissible quantity of suspended sand 100 g/m<sup>3</sup>. Head and motor support are manufactured in precision cast stainless steel, and impellers and diffusers are also available in either AISI 304 or AISI 316. Units have tungsten carbide shaft bearings and shaft sleeves made from stainless steel to ensure enduring reliability and efficiency.

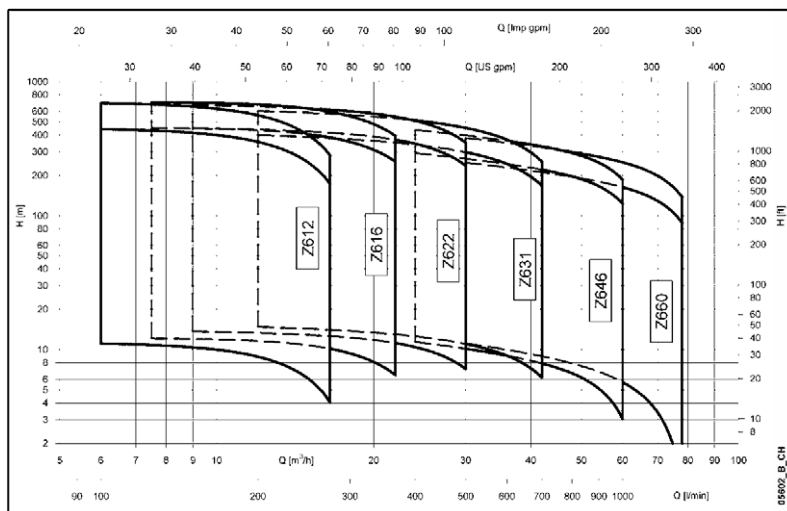
### Material options.

Pump housing: Z (AISI 304), ZN (AISI 316)

Impeller: Z (AISI 304), ZN (AISI 316)

Elastomers: NBR

Motors: Different voltages and frequencies and high temperature version as options



## Range Overview

Sizes: 6"

Power: 0.55kW up to 55kW

Head up to: 700m

Flows up to: 78 m<sup>3</sup>/h

Maximum immersion depth: 300m (L4C motor)

350m (L6W and L8W motor)

Temperature of pumped liquid: 0 °C to 60 °C

Maximum permissible quantity of sand: 100 g/m<sup>3</sup>

Variable speed option: Hydrovar

# Z8 (AISI 304) ZR8 (Duplex)

## 8" Borehole pumps

Our design ensures high efficiency with low power consumption.

Manufactured in investment casting stainless steel or duplex to ensure long lasting hydraulic performance even in very aggressive environments, the unique guide bearings on each stage guarantees correct shaft alignment avoids vibration issues. The recirculation losses are also kept to a minimum to ensure high levels of efficiency. Almost every duty point between 120 m<sup>3</sup>/h and 300 m<sup>3</sup>/h has an efficiency higher than 80%.

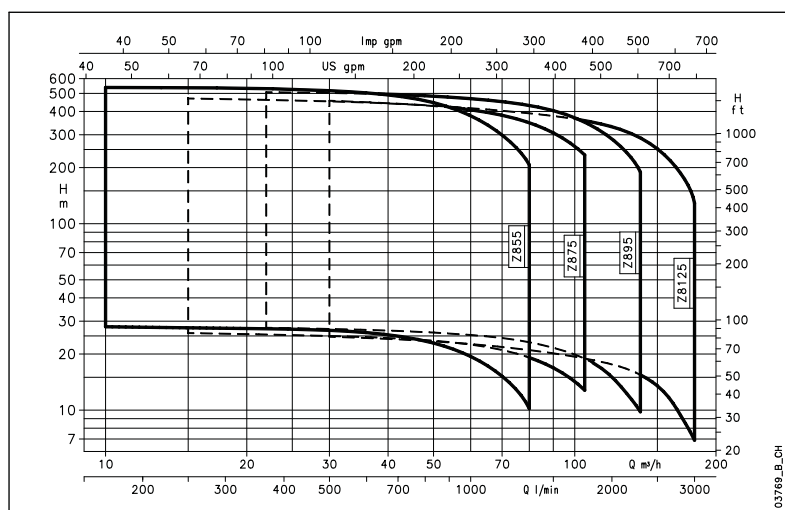
### Material options.

Pump housing: Z (AISI 304) ZR (Duplex)

Impeller: Z (AISI 304) ZR (Duplex)

Elastomers: EPDM

Motors: Different voltages and frequencies and high temperature version as options



## Range Overview

Sizes: 8"  
 Power: 5.5kW up to 150kW  
 Head up to: 550m  
 Flows up to: 180 m<sup>3</sup>/h

Maximum immersion depth: 350m (L6W, L8W, L10W motor)  
 Temperature of pumped liquid: 0 °C to 30 °C (up to 60°C as option)  
 Maximum permissible quantity of sand: 100 g/m<sup>3</sup>  
 Variable speed option: Hydrovar



# Z10 (AISI 304) ZR10 (Duplex) 10" Borehole pumps

Our design ensures high efficiency with low power consumption.

Manufactured in investment casting stainless steel or duplex to ensure long lasting hydraulic performance even in very aggressive environments, the unique guide bearings on each stage guarantees correct shaft alignment avoids vibration issues. The recirculation losses are also kept to a minimum to ensure high levels of efficiency. Almost every duty point between 120 m<sup>3</sup>/h and 300 m<sup>3</sup>/h has an efficiency higher than 80%.

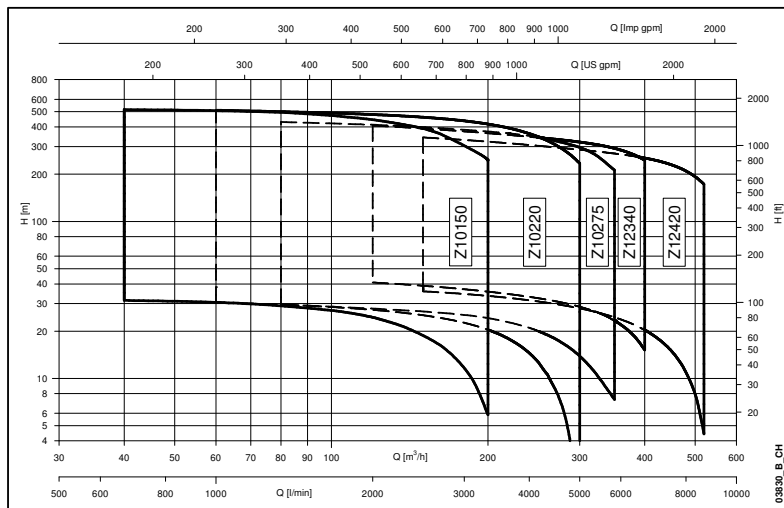
## Material options.

Pump housing: Z (AISI 304) ZR (Duplex)

Impeller: Z (AISI 304) ZR (Duplex)

Elastomers: EPDM

Motors: Different voltages and frequencies and high temperature version as options



## Range Overview

Sizes: 10"

Power: 11kW up to 300kW

Head up to: 545m

Flows up to: 350 m<sup>3</sup>/h

Maximum immersion depth: 350m

(L6W, L8W, L10W and L12W motor)

Temperature of pumped liquid: 0 °C to 30 °C

Maximum permissible quantity of sand: 100 g/m<sup>3</sup>

Variable speed option: Hydrovar

# Z 12 (AISI 304) ZR12 (Duplex) 12" Borehole pumps

Our new design ensures high efficiency with low power consumption.

Manufactured in investment casting stainless steel or duplex to ensure long lasting hydraulic performance even in very aggressive environments, the unique guide bearings on each stage guarantees correct shaft alignment avoids vibration issues. The recirculation losses are also kept to a minimum to ensure high levels of efficiency. Almost every duty point between 120 m<sup>3</sup>/h and 300 m<sup>3</sup>/h has an efficiency higher than 80%.

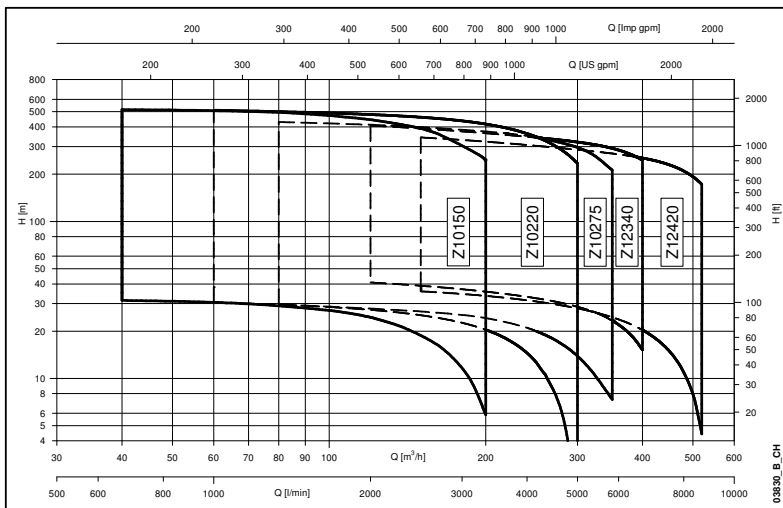
## Material options.

Pump housing: Z (AISI 304) ZR (Duplex)

Impeller: Z (AISI 304) ZR (Duplex)

Elastomers: EPDM

Motors: Different voltages and frequencies and high temperature version as options



## Range Overview

Sizes: 12"

Power: 30kW up to 350kW

Head up to: 450 m

Flows up to: 520 m<sup>3</sup>/h

Maximum immersion depth: 350m

(L6W, L8W and L10W motor)

Temperature of pumped liquid: 0 °C to 30 °C

Maximum permissible quantity of sand: 100 g/m<sup>3</sup>

Variable speed option: Hydrovar

# Goulds Water Technology

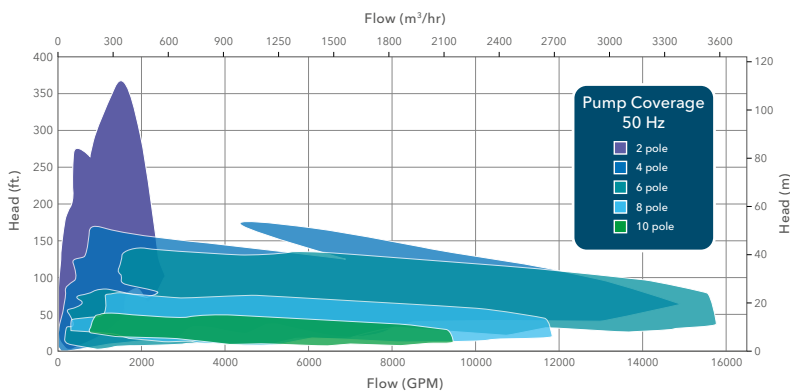
# Vertical Turbine Pumps

You not only get the latest in pump design and technology from Xylem's Goulds Water Technology, you get more than 100 years of pump manufacturing know-how that includes most of the major innovations in pump engineering and materials. All our products reflect the engineering design advances for top efficiency and head generation.

The range includes vertical lineshaft pumps with a submerged pump bowl, and above ground lineshaft and drive unit, for installation in deep wells or tanks. These units feature an extremely solid and reliable construction design, and they ensure great application flexibility.

The technical characteristics and broad range of versions make this series ideal for pumping services in the sectors of private or municipal water supply, commercial/ industrial, snowmaking, flood control, mining, dewatering, cooling towers, water parks, irrigation and in fire-fighting systems.

These pumps can be controlled both by electric motors and by diesel engines to ensure unrivalled service efficiency.



## Range Overview

### Lineshaft Turbines

Sizes: 5" to 29"  
 Head up to: Greater than 305m  
 Max Flow: 3500 m<sup>3</sup>h  
 Variable Speed Option: Hydrovar

### Submersible Turbines

Sizes: 5" to 20"  
 Max Head: Greater than 305m  
 Max Flow: 2500 m<sup>3</sup>h  
 Variable Speed Option: Hydrovar

### Options:

Temperature of pumped liquid:  
 60°C for standard construction  
 Special Construction may allow up to 149°C  
 Maximum solids size:  
 Depending on pump size, can pass up to 40mm solid sphere size

### Material options:

Cast iron, Ductile iron, Carbon steel, Nickel Aluminum Bronze, 12% Chrome, 316 Stainless steel, Duplex, Super Duplex, Alloy 20, Silicon Bronze and Aluminum Bronze.

# Motors

Xylem Lowara offers a complete range of submersible motors suitable for any borehole pump range. For over 48 years the Lowara name has been synonymous with innovation, highly efficient design, quality and reliability.

We offers both canned and rewindable versions from 4" to 12", power from 0.37kW to 400kW with different voltages and/or frequencies both in single or three phase.

The choice of materials and the robust design ensures optimum operating performance and ease of installation.



**L4C 4" Submersible canned motor with removable watertight supply cable fitting.**

Stainless steel outer sleeve with high starting torque ensuring optimum operating performances, superior quality, reliability and easy installation.

Versions

Single phase: 0.37kW to 3.7kW

Single phase: with built in capacitor: 0.37kW to 1.1kW

Three phase: 0.37kW to 5.5kW

Three phase: 0.37kW to 7.5kW (380-415 V, 50Hz)

Max water temp: 35 °C

IP rating: IP68

Optional features: Special voltages, inverter applications

**40S 4" Submersible motor (rewindable) with removable watertight supply cable fitting.**

Submersible liquid cooled motor with rewindable stator, motor cooling fluid suitable for use with foodstuffs; complies with the FDA

Versions

Single phase: 0.37kW to 4kW

Three phase: 0.37kW to 5.5kW

Three phase: 0.37kW to 7.5kW (380-415 V, 50Hz)

Max water temp: 35 °C

IP rating: IP68

Optional features: Special voltages, inverter applications



**L6C 6" Submersible canned motor with removable watertight supply cable fitting.**

Versions

Three phase: 4kW to 22kW

Three phase: 4kW to 37kW (380-415 V, 50Hz)

Max water temp: 35 °C

IP rating: IP68

Optional features: Special voltages, inverter applications, silicon carbide mechanical seal, temperature sensor (PT 100 / PTC)

## L6W 6" Submersible motor (rewindable) with removable watertight supply cable fitting.

Versions

Three phase: 4kW to 37kW (380-415 V, 50Hz)

Max water temp: 30 °C

IP rating: IP68

Special versions: L6WN all 316 stainless steel, L6WR all duplex, HT series for applications up to 60 °C

Optional features: Special voltages, inverter applications, silicon carbide mechanical seal, temperature sensor (PT 100 / PTC)



## L8W 8" Submersible motor (rewindable) with removable watertight supply cable fitting.

Versions

Three phase: 30kW to 93kW (380-415 V, 50Hz)

Max water temp: 30 °C

IP rating: IP68

Special versions: L8WN all 316 stainless steel, L8WR all duplex, HT series for applications up to 60 °C

Optional features: Special voltages, inverter applications, silicon carbide mechanical seal, temperature sensor (PT 100 / PTC)



## L10W 10" Submersible motor (rewindable) with removable watertight supply cable fitting.

Versions

Three phase: 93kW to 150kW (380-415 V, 50Hz)

Max water temp: 30 °C

IP rating: IP68

Special versions: L10WN all 316 stainless steel, L10WR all duplex, HT series for applications up to 60 °C

Optional features: Special voltages, inverter applications, silicon carbide mechanical seal, temperature sensor (PT 100 / PTC)



## L12W 12" Submersible motor (rewindable) with removable watertight supply cable fitting.

Versions

Three phase: 185kW to 300kW (380-415 V, 50Hz)

Max water temp: 30 °C

IP rating: IP68

Special versions: L12WN all 316 stainless steel, L12WR all duplex, HT series for applications up to 60 °C

Optional features: Special voltages, inverter applications, silicon carbide mechanical seal, temperature sensor (PT 100 / PTC)

# Control panels.

## QSM series.

Specifications:  
Supply voltage: 1 x 220-240 V  
Frequency: 50 Hz  
Power: 0.25 to 1.1kW  
IP Class: IP54  
Enclosure material: Plastic  
Capacitor: incorporated



Optional features:  
QSM PF version with overvoltage protection

## QPC series.

Specifications:  
Supply voltage: 1 x 230 V  
Frequency: 50 Hz  
Power: 0.25 to 2.2kW  
IP Class: IP54  
Enclosure material: Plastic  
Capacitor: incorporated



Optional features:  
DPF single phase module for overvoltage protection

## QPCS series.

Specifications:  
Supply voltage: 1 x 230 V  
Frequency: 50 Hz  
Power: 0.25 to 2.2kW  
IP Class: IP54  
Enclosure material: Plastic with clear cover  
Capacitor: incorporated



Optional features:  
Set of three electrodes (probes) without cable  
Float  
Pressure switch

## QSC series.

Specifications:  
Supply voltage: 1 x 220-240 V  
Frequency: 50 Hz  
Power: 0.25 to 4kW  
IP Class: IP55  
Enclosure material: Plastic  
Capacitor: incorporated



Optional features:  
DPF single phase module for overvoltage protection

## QSCS series.

Specifications:  
Supply voltage: 1 x 220-240 V  
Frequency: 50 Hz  
Power: 0.25 to 2.2kW  
IP Class: IP55  
Enclosure material: Plastic  
Capacitor: incorporated



Optional features:  
Set of three electrodes (probes) without cable  
Float  
Pressure switch

### QTD series.

Specifications:  
Supply voltage: 3 x 400 V  
Frequency: 50/60 Hz  
Power: 0.25 to 9.2kW  
IP Class: IP54  
Enclosure material: Metal  
All direct motor start



Optional features:  
KSL series 24V level kit  
Probe module for protection against dry running (set of three electrodes supplied)

### Q3D series.

Specifications:  
Supply voltage: 3 x 400 V  
Frequency: 50/60 Hz  
Power: 0.25 to 37kW  
IP Class: IP54  
Enclosure material: Metal  
All direct motor start



Optional features:  
KSL series 24V level kit  
Probe module for protection against dry running (set of three electrodes supplied)  
Float  
Pressure switch

### Q3Y series.

Specifications:  
Supply voltage: 3 x 400 V  
Frequency: 50/60 Hz  
Power: 4 to 315kW  
IP Class: IP54  
Enclosure material: Metal  
Star delta starting



Optional features:  
KSL series 24V level kit  
Probe module for protection against dry running (set of three electrodes supplied)  
Float  
Pressure switch

### Q3I series.

Specifications:  
Supply voltage: 3 x 400 V  
Frequency: 50/60 Hz  
Power: 4 to 315kW  
IP Class: IP54  
Enclosure material: Metal  
Impedance start



Optional features:  
KSL series 24V level kit  
Probe module for protection against dry running (set of three electrodes supplied)  
Float  
Pressure switch

### Q3SF series.

Specifications:  
Supply voltage: 3 x 400 V  
Frequency: 50/60 Hz  
Power: 5.5 to 110kW  
IP Class: IP54  
Enclosure material: Metal  
Soft start with torque control



Optional features:  
KSL series 24V level kit  
Probe module for protection against dry running (set of three electrodes supplied)  
Float  
Pressure switch

### Q3A series.

Specifications:  
Supply voltage: 3 x 400 V  
Frequency: 50/60 Hz  
Power: 4 to 315kW  
IP Class: IP54  
Enclosure material: Metal  
Autotransformer



Optional features:  
KSL series 24V level kit  
Probe module for protection against dry running (set of three electrodes supplied)  
Float  
Pressure switch

# Control Panel Accessories.

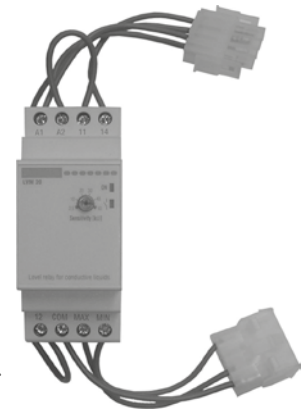
## QCL5

Level control panel, suitable for tank filling or borehole level protection; set of three electrodes included, to be used in conjunction with suitable control panel. Drop cables needed for electrodes, dependent on length of cable required.



## KSL series:

24V level probe kit.



Electronic module for use of probes as protection against dry running, designed for installation on Lowara electric control panels with a fitted DIN rail. Set of three electrodes included in the supply.

Panels which can be used are: QSCS, QM, QTD, Q3D, Q3Y, Q3A, Q3I and Q3SF

## DPF series.

Varistor for overvoltage protection of single phase supply.



# Optional equipment available within the Xylem portfolio.

## Flow meters:

MJK MagFlux® flow meters combine high accuracy, stability and low maintenance. Without moving parts, straight through flow sensor and self-cleaning electrodes there is virtually never any need for maintenance. Available in sizes from DN 3 to DN 1400 (1/8" to 56").



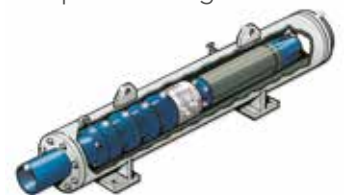
## Heat Exchangers:

Xylem Lowara technology offers a complete range of Brazed or Gasketed heat exchangers, maximum flowrates up to 1365 l/sec, BSP connections 1" or 2" and flanged from 65mm to 450mm. Choice of plate materials from stainless steel, titanium or hastelloy.



## Cooling Shrouds.

Cooling pump shrouds are installed over the body of the pump and motor so that the water flows past the motor and is sufficient to achieve adequate cooling.





# Accessories.

1. Pressure switches
2. Pressure gauges
3. 5 way connector
4. Flexible connector
5. Float switches
6. Non return valves
7. Filters
8. Expansion vessels
9. Cable



# ResiBoost / Hydrovar VSD options

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



## Specifications.

Mounting: Wall mount

Power supply: Both single and three-phase  
50 and 60 Hz

Power: from 0.75 kW up to 45 kW.

Hydrovar Smart - unlimited

Configuration: Up to 8 master drives or a  
mix of master and slave drives.

Enclosure class: ResiBoost IP54,

Hydrovar IP55

Certifications: ResiBoost: CE. Hydrovar: CE,  
UL, C-Tick, cUL

## How to use the Hydrovar variable speed drive unit with your borehole pump application.

Variable Speed Drives (VSD) together with submersible pumps are today often being used when water demand varies over time. The pump will run with the VSD at a speed optimal to the actual demand, leading to energy savings. Therefore it is important to choose a Variable Frequency Drive and other electric components that will work effectively together with the motor. The submersible motors can be used with VFD if the following guidelines are respected.

The acceleration (from 0 Hz to the recommended minimum frequency) and deceleration (from the recommended minimum frequency to 0 Hz) ramp time must be as quick as possible to ensure the correct lubrication of the thrust bearing of the motor.

Recommended minimum frequency is  $\geq 30\text{Hz}^*$

(\*) Always make sure that at the nominal frequency of the motor the minimum speed of the water around the motor is enough to cool the motor at all the duty points of operation. Values for the flow can be found in the submersible motor technical catalogue.

Acceleration & deceleration ramp times:

Maximum ramp times	Acceleration 0 Hz	Deceleration - 0 Hz
40S	$\leq 3\text{ s}$	$\leq 4\text{ s}$
L4C - L6C -LW	$\leq 1\text{ s}$	$\leq 1\text{ s}$

Lowara submersible motor voltage limitations on Hydrovar VSD applications:

Motor Version	Voltage spikes on motor terminals	dV / dt	Suitable for VSD	Max recommended switching frequency (**)
LW standard version	$\leq 690\text{ V}$	$\leq 500\text{ V} / \mu\text{s}$	Suitable (see filter diagram 3)	$\leq 5\text{ KHz}$
LW HT version	$\leq 1000\text{ V}$	$\leq 500\text{ V} / \mu\text{s}$		$\leq 5\text{ KHz}$
L4C	$\leq 800\text{ V}$	$\leq 2000\text{ V} / \mu\text{s}$		$\leq 5\text{ KHz}$
L6C	$\leq 800\text{ V}$	$\leq 2000\text{ V} / \mu\text{s}$		$\leq 5\text{ KHz}$
40S	$\leq 800\text{ V}$	$\leq 600\text{ V} / \mu\text{s}$		$\leq 5\text{ KHz}$

(\*\*) Switching frequency must be set on the inverter, if the sine wave filter is installed (see diagram 3) the switching frequency must be according to the file requirement.

## Motor filters on Hydrovar VSD applications.

Correct filters must be fitted in order to comply with the motor voltage limitations. The filters should be selected by Xylem sales according the motor requirements. The following indications are also recommended.

The sine wave filter should be positioned between the VSD and the motor, as these sine wave filters provide a sinusoidal phase-to-phase motor voltage. They reduce motor insulation stress and, by switching acoustic noise from the motor, the bearing currents are also reduced, especially across the larger motor range.

dV / dT filters: These provide a slower voltage rise rate on the motor terminal phase-to-phase voltage, important when using shorter motor cable lengths. The higher the level of impedance of the system (inductance and capacitance) the higher the voltage peaks, which can cause a flashover. This is a condition that results in the premature breakdown of the winding insulation of the connected motor.

## VSD selection.

For the correct selection of the VSD please refer to the **nominal current of the motor** rather than the power size. The nominal current of the VSD must be higher than the nominal current of the motor at full speed load conditions.

If the installation requires an operation other than stated in our guidelines please contact your local Xylem sales office.

Motor Version	Cable length ≤ 20 mtrs	20 m cable length ≤ 100 mtrs	Cable length ≥ 100 mtrs
LW standard version	Sine wave filter	Sine wave filter	Sine wave filter
LW HT version	Not required	dV / dt filter	Sine wave filter
L4C	Not required	dV / dt filter	Sine wave filter
L6C	Not required	dV / dt filter	Sine wave filter
40S	Not required	dV / dt filter	Sine wave filter

	Type	Nominal current	Coupling suitable?
Motor	L6W110T405 HT (11 kW)	In = 24,4 A	NO (In Motor > In VFD)
VFD	Hydrovar HV4.110 (11 kW)	In = 23 A	

In the above example the next size of inverter must be used, taking care to limit the output current of the inverter in order to match the motor current limits (In motor + tolerance):

	Type	Nominal current	Coupling suitable?
Motor	L6W110T405 HT (11 kW)	In = 24,4 A	YES (limiting the VFD output current according to motor data)
VFD	Hydrovar HV4.150 (11 kW)	In = 30 A	

In the above example, set Hydrovar parameter 0275 at 85% in order to have an output current of about 25 A.

# Where can the Wedeco Aquada UV systems be used?



The Aquada UV system is suitable everywhere that drinking water is taken from its own sources or the quality from public networks is no longer sufficient for your own needs. Moreover, it is used in residential treatment plants for disinfection of rainwater, process water circulations, aquariums, private swimming pools, ventilation, air-conditioning, fountains or water attractions. Aquada UV systems can be integrated into existing water pipeline systems without a great deal of effort.

---

Enhances overall water safety.

---

Effective inactivation of dangerous organisms that can pass through other treatment processes and reach your tap.

---

No harmful chemicals or by-products, and no residuals or harmful chemical by-products (such as Trihalomethanes) are introduced into the water.

No effect on taste and water quality. UV does not affect the taste, odour or clarity of the water.

---

Simple to install, low maintenance  
Aquada UV systems are easily installed in your household water line following any pretreatment that may be required. UV lamps are easy to replace and only require changing after one full year of use.

---

Economical Aquada UV systems require less energy than a typical household light bulb yet can disinfect the entire water flow to your home.

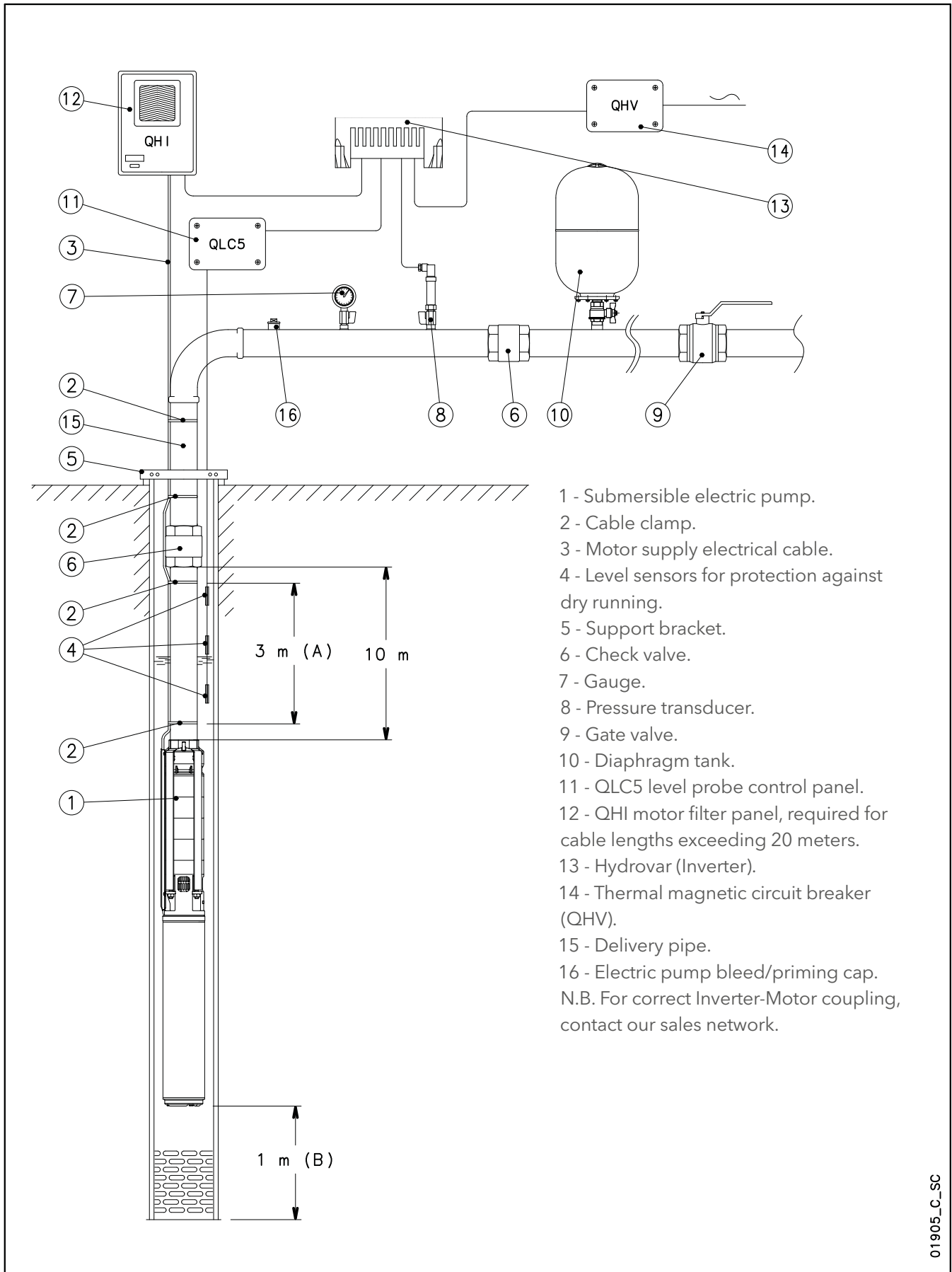
Unlike chemical disinfectants, which rely on chemical oxidation to disrupt the life functions of microorganisms, UV is simply light energy that cripples the DNA of harmful organisms. By disabling their DNA the life functions of these organisms are interrupted, rendering them harmless. As no chemicals are involved, you don't have to worry about drinking harmful chemicals or their by-products.

## Specifications

Type	Aquada1	Aquada2	Aquada4	Aquada7	Aquada10
Flow rates (m <sup>3</sup> /h)*					
250 Joule/m <sup>2</sup>	1.08	2.70	4.65	8.78	13.17
300 Joule/m <sup>2</sup>	0.92	2.25	3.87	7.33	10.97
400 Joule/m <sup>2</sup>	0.69	1.69	2.90	5.50	8.23
Pipe connection (inches)	1/2"	3/4"	3/4"	1" 1	1/2'
Power (W)	35	55	55	95	95
Dimensions (LxHxP, mm)	470 x90	670 x95	675 x129	1,035 x132	1,040 x180
Weight chamber (kg)	1.7	2.4	3.2	5.0	9.0

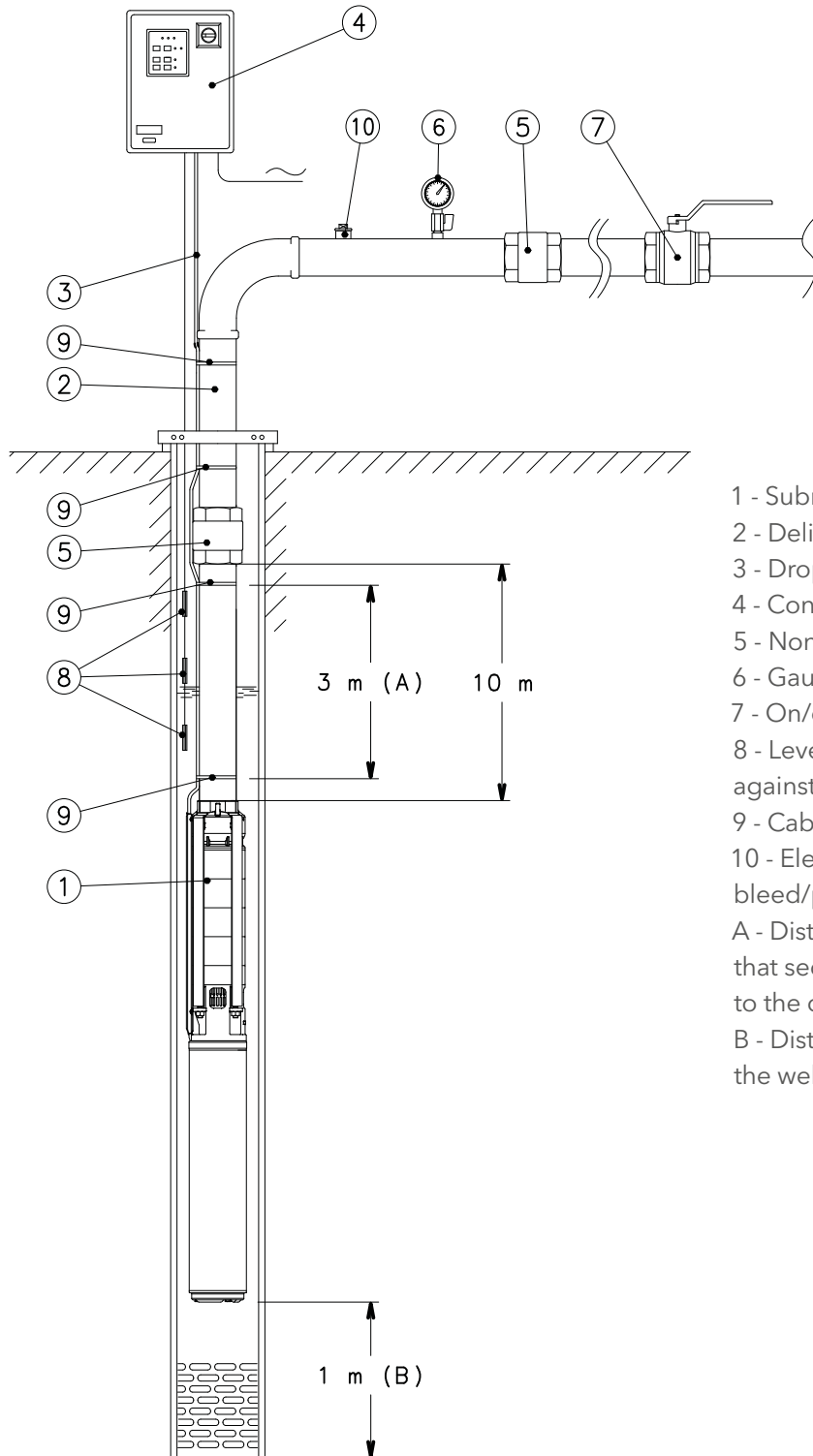
\* UV transmission = 98 % per 1 cm at end of lamp life

## Example of a Variable Speed Installation:



01905\_C\_SC

## Example of a Fixed Speed Installation:



- 1 - Submersible electric pump.
  - 2 - Delivery pipe.
  - 3 - Drop cable.
  - 4 - Control panel.
  - 5 - Non-return valve.
  - 6 - Gauge.
  - 7 - On/off valve.
  - 8 - Level sensors for protection against dry running.
  - 9 - Cable clamp.
  - 10 - Electric pump bleed/priming cap.
- A - Distance between the clamps that secure the drop cable to the delivery pipe.
- B - Distance from the bottom of the well to the electric pump.

# 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 re-used 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 [www.xylem.com](http://www.xylem.com)



#### Hauptsitz

Gloor Pumpenbau AG  
Thunstrasse 25  
CH-3113 Rubigen  
**Tel. +41 (0)58 255 43 34**  
**info@gloor-pumpen.ch**  
**www.gloor-pumpen.ch**

#### Filiale Mittelland

Gloor Pumpenbau AG  
Industriestrasse 25  
CH-5036 Oberentfelden



#### Filiale Suisse Romande

Gloor Pumpenbau SA  
Rue du Collège 3 | Case postale  
CH-1410 Thierrens  
**Tél. +41 (0)58 255 43 34**  
**info@gloor-pompes.ch**  
**www.gloor-pompes.ch**

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.