

Additional Installation, Operation and
Maintenance Instructions



e-SVI hydrovar X Series

Electric pump with integrated
variable speed drive
SVIK, SVIX

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1 Introduction and Safety

1.1 Introduction

Purpose of this manual

This manual provides information on how to do the following in the correct manner:

- Installation
- Operation
- Maintenance.

Supplementary instructions




The instructions and warnings of this manual apply to the standard unit as described in the sale documentation. Special version pumps may be supplied with supplementary instruction manuals. For situations not considered in the manual or in the commercial documentation, contact Xylem or the Authorised Distributor.

1.2 Hazard levels and safety symbols















Before using the unit, the user must read, understand and comply with the indications of the danger warnings in order to avoid the following risks:

- Injuries and health hazards
- Damage to the product
- Unit malfunction.

Hazard levels

Hazard level	Indication
 DANGER:	It identifies a dangerous situation which, if not avoided, causes serious injury, or even death.
 WARNING:	It identifies a dangerous situation which, if not avoided, may cause serious injury, or even death.
 ATTENTION:	It identifies a dangerous situation which, if not avoided, may cause small or medium level injuries.
NOTE:	It identifies a situation which, if not avoided, may cause damage to property but not to people.

Complementary symbols

Symbol	Description
	Electrical hazard
	Hot surface hazard
	Danger, pressurized system
	Explosive atmosphere hazard
	Ionizing radiation hazard
	Danger, suspended loads
	Magnetic hazard
	Do not use flammable liquids
	Do not use corrosive liquids
	Obligation to read the instruction manual
	Obligation to wear safety shoes
	Obligation to wear safety glasses
	Obligation to wear a safety helmet
	Obligation to wear safety gloves

1.3 User safety

Strictly comply with current health and safety regulations.

Qualified personnel

This unit must be used only by qualified users. Qualified users are people able to recognise the risks and avoid hazards during installation, use and maintenance of the unit.

1.4 Protection of the environment

Disposal of packaging and product

Comply with the current regulations on sorted waste disposal.

Leaking of fluid

If the unit contains lubricating fluid, take appropriate measures to prevent the dispersion of leaks into the environment.

Sites exposed to ionizing radiations



WARNING: Ionizing radiation hazard

If the unit has been exposed to ionizing radiations, implement the necessary safety measures for the protection of people. If the unit needs to be dispatched, inform the carrier and the recipient accordingly, so that appropriate safety measures can be put in place.

2 Handling and Storage

2.1 Unit inspection upon delivery

2.1.1 Package inspection

1. Check that quantity, descriptions and product codes match the order.
2. Check the packaging for any damage or missing components.
3. In case of immediately detectable damage or missing parts:
 - Accept the goods with reserve, indicating any findings on the transport document, or
 - Reject the goods, indicating the reason on the transport document.In both cases, promptly contact Xylem or the Authorised Distributor from whom the product was purchased.

2.1.2 Unpacking and inspection of the unit



ATTENTION: Cut and abrasion hazard
Always wear personal protective equipment.

1. Remove the packaging.
2. Ensure sorting of all packaging materials in accordance with the applicable regulations.
3. Release the unit by removing the screws and/or cutting the straps, if fitted.
4. Check the unit for integrity and to make sure that there are no missing components.
5. In case of damage or missing components, promptly contact Xylem or the Authorised Distributor.

2.2 Guidelines for transport

Precautions



WARNING: Crushing hazard
The unit and components are heavy: risk of crushing.



WARNING:
Always wear personal protective equipment.



WARNING:
Check the gross weight marked on the packaging.



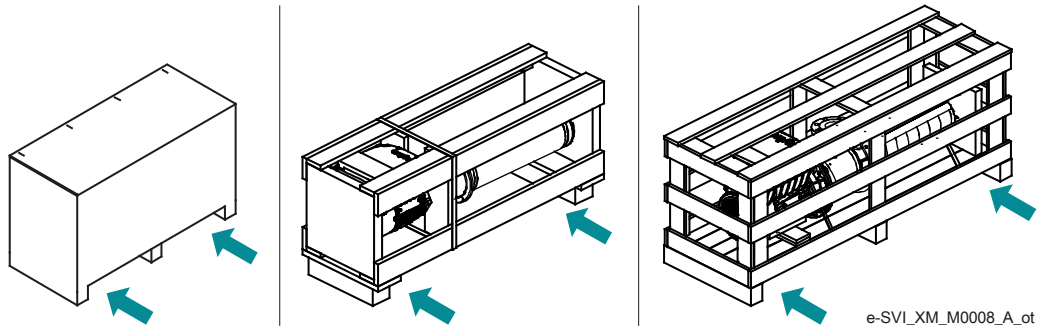
WARNING:
Handle the unit in compliance with the current regulations on "manual load handling", to avoid undesirable ergonomic conditions causing risks of back-spine injury.



WARNING:
Take appropriate measures during transport, installation and storage to prevent contamination from external substances.

2.2.1 Handling of the packed unit using a forklift truck

The Figure shows the types of packaging depending on the sizes of the unit and the lifting points.



2.2.2 Lifting with a crane



WARNING:

Use ropes, chains and/or slings (hereinafter referred to as "ropes"), hooks and/or clasps (hereinafter referred to as "hooks"), shackles or eyebolts that comply with the applicable directives and are suitable for use.

NOTE:

Make sure that the harnessing does not hit and/or damage the unit.



WARNING:

Lift and handle the unit slowly to avoid stability issues.



WARNING:

During handling, make sure to avoid injury to people and animals, and/or damage to property.

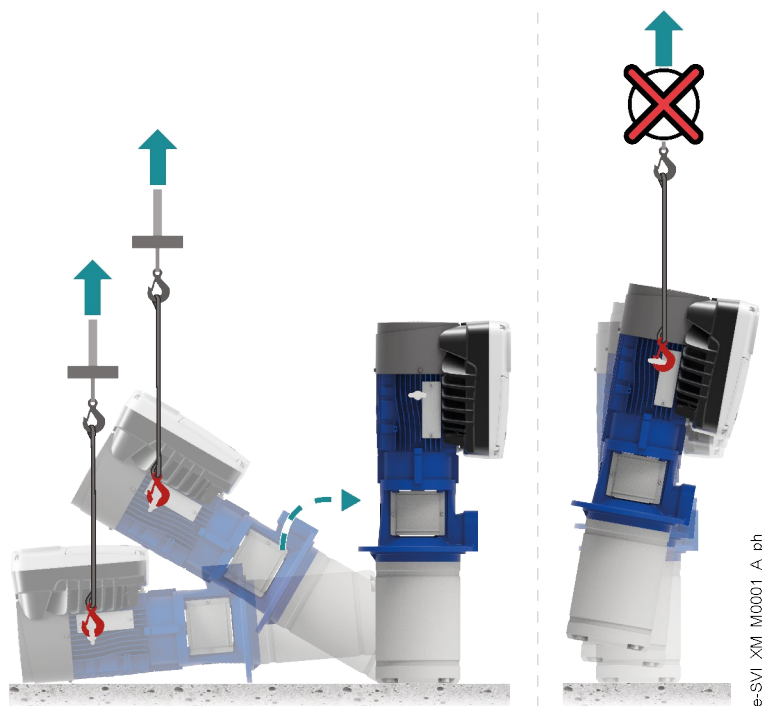


WARNING:

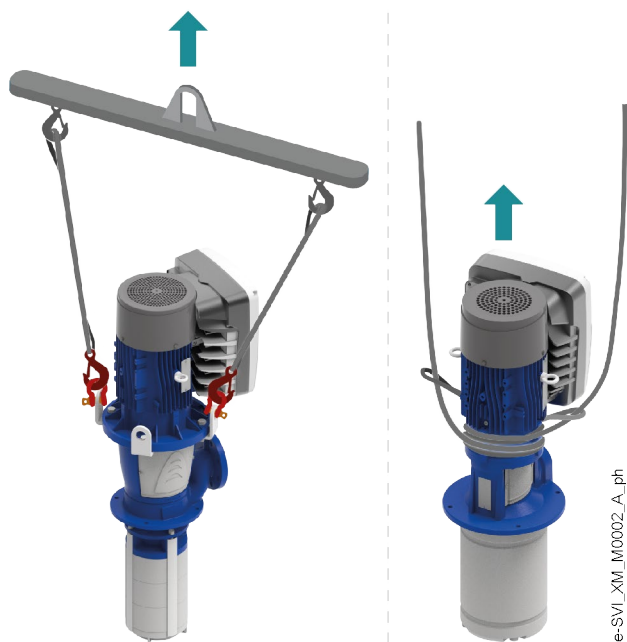
Do not use eyebolts screwed on the motor for lifting the unit.

Preparing the unit for lifting

1. Move the unit from the horizontal to the vertical position, using the motor eyebolts only if necessary, fixing the ropes to a sling bar.



2. Depending on the model:
 - Attach the shackles to all the eyelets, if any, and attach the ropes to the shackles, or
 - Use the ropes to make a tie harness.The figure shows how to harness and lift the different models.



3. Fix the sling bar to the crane.
4. Fix the ropes to the sling bar.
5. Lift the sling bar and tension the ropes without lifting the unit.

Lifting and positioning

1. Lift and move the unit slowly
2. Set the unit down slowly.
3. Depending on the model:
 - Release the ropes from the shackles, or
 - Release the harness.

2.3 Storage

Storage of the packed unit

The unit must be stored:

- In a covered and dry place
- Away from heat sources
- Protected from dirt
- Protected from vibrations
- At an ambient temperature between -5°C and +40°C (23°F and 140°F), and relative humidity between 5% and 95%.

NOTE:

Do not place heavy loads on top of the unit.

NOTE:

Protect the unit from collisions.

Long-term storage of the unit

1. Remove the unit from the tank.
2. Lift and empty the unit.
3. Follow the same instructions for the storage of the packed unit.

Alternatively:

1. Empty the tank.
2. Follow the same instructions for the storage of the packed unit.

Note

This operation is essential in environments with cold temperatures. Otherwise, any residual liquid in the unit could have an adverse effect on its condition and performance.

For more information on long-term storage contact the Xylem sales company or Authorised Distributor.

3 Product Description

3.1 Features

The product is multi-stage vertical submerged pump unit with integrated variable speed drive.

Intended use

- Pressure boosting systems
- Transfer and pressure boosting of liquids in machine tools
- Transfer of condensation
- Industrial washing systems
- Filtering systems
- Similar applications.

Observe the operating limits in **Specifications** on page 43.



DANGER: Potentially explosive atmosphere hazard

It is prohibited to start the unit in environments with potentially explosive atmospheres or with combustible dusts.

Pumped liquids

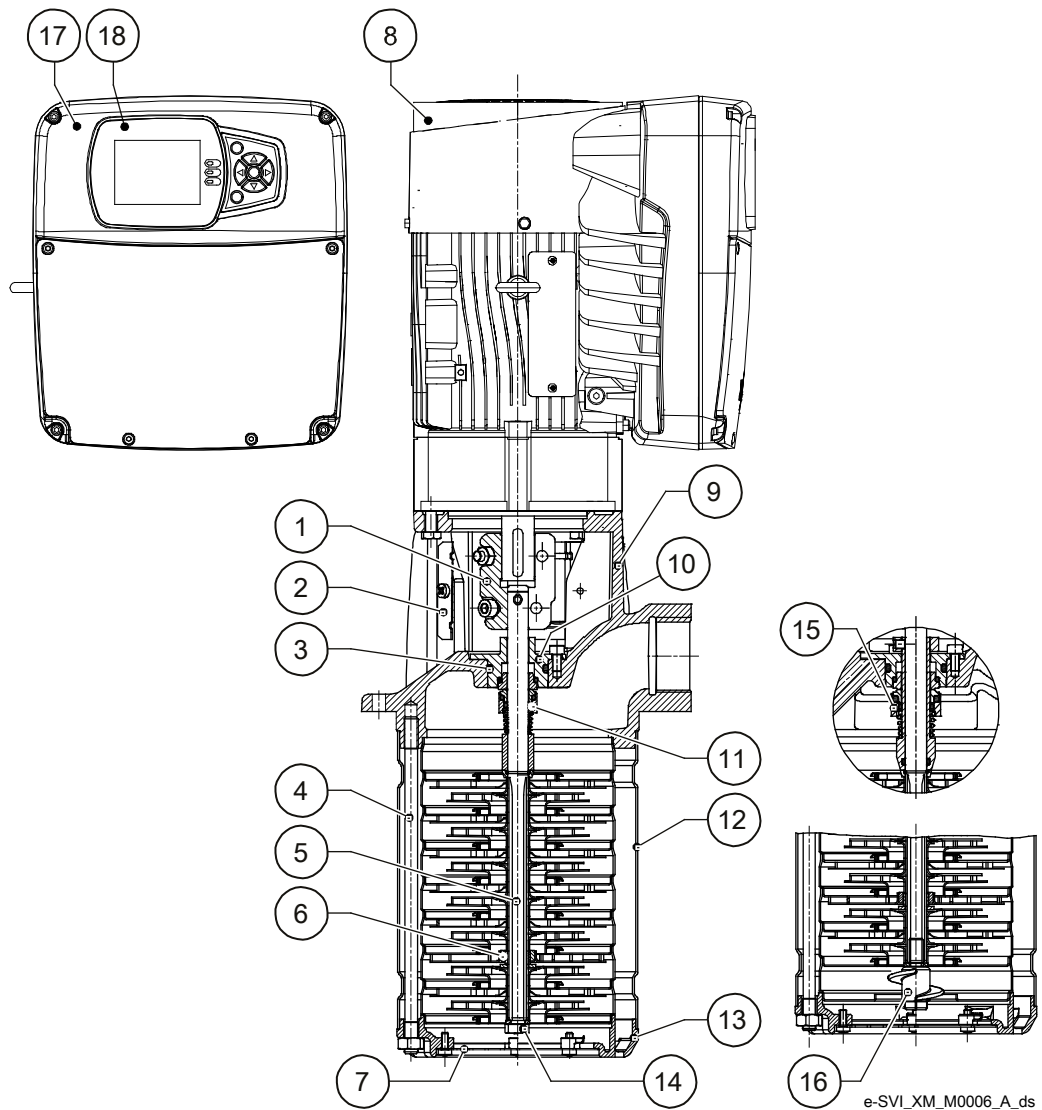
- Condensation
- Coolants
- Emulsions
- Liquids:
 - Clean
 - Cold or hot
 - Non-explosive
 - Free of solid particles or fibres
- Chemically and mechanically non aggressive.



DANGER:

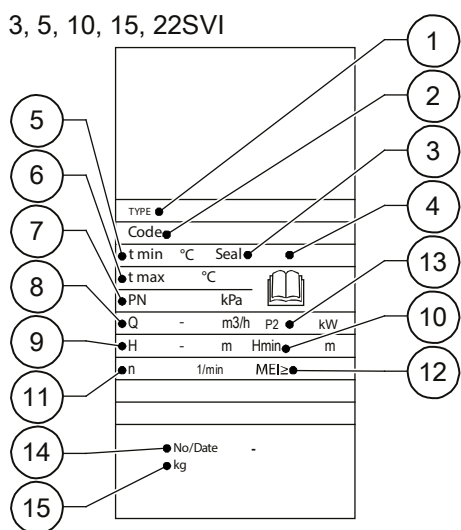
It is prohibited to use this unit to pump flammable and/or explosive liquids.

3.1.1 Part names

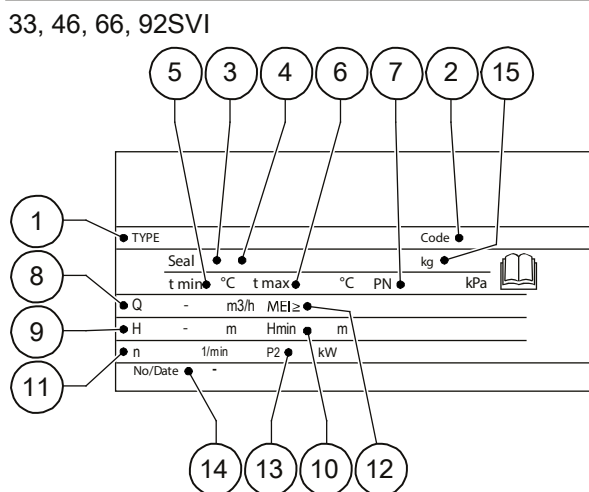


1. Coupling
2. Coupling protection
3. Elastomers
4. Tie rod
5. Shaft
6. Shaft sleeve and bush
7. Filter
8. Motor
9. Motor adapter
10. Seal housing
11. Mechanical seal
12. Outer sleeve
13. Suction bottom
14. Screw
15. Cartridge mechanical seal
16. Inducer
17. Drive
18. Drive display

3.2 Data plate



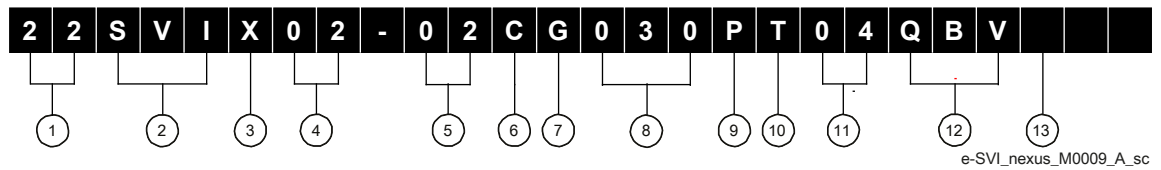
e-SVI_XM_M0018_A_ot



1. Pump unit type
2. Product code
3. Mechanical seal materials identification code
4. O-ring materials identification code
5. Minimum liquid operating temperature
6. Maximum liquid operating temperature
7. Maximum operating pressure
8. Flow rate range
9. Head range
10. Minimum head
11. Maximum rotation speed
12. Minimum efficiency index
13. Pump rated power
14. Serial number + manufacturing date
15. Weight

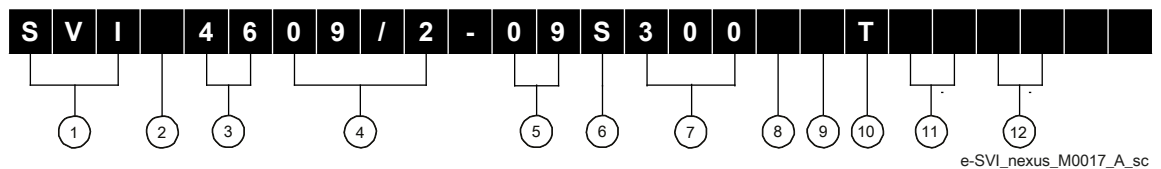
3.3 Identification code

Models 3, 5, 10, 15 and 22SVI



1. Flow rate in m³/h
2. Series name
3. Hydrovar X+ [X] or hydrovar X [K] drive
4. Number of impeller
5. Number of stages
6. Compact version (3 and 5SVI only) [E], with coupling and cartridge seal [C], with coupling and mechanical seal [M] or customised [X]
7. Hydraulic components in AISI 304 [G] or AISI 316 [N]
8. Rated power, kW x 10
9. Reluctance-assisted motor [P]
10. Three-phase motor [T]
11. Power supply voltage: 3x200-240 V [03] or 3x380-480 V [04]
12. Mechanical seal and elastomers (see the technical catalogue)
13. Other information: standard [], PTC [P], motor heater [S], UL approved (cURus) [U], other specifications [Z] or without inducer [Y]

Models 33, 46, 66 and 92SVI



1. Series name
2. Hydrovar X+ [X] or hydrovar X [K] drive
3. Flow rate in m³/h
4. Number of impeller
5. Number of stages
6. Version with coupling [S] or AISI 316 with coupling [N]
7. Rated power, kW x 10
8. Frequency with hydrovar X [] drive
9. Reluctance-assisted motor [P]
10. Three-phase motor [T]
11. Power supply voltage: 3x200-240 V [03] or 3x380-480 V [04]
12. Other information

3.4 Approval marks

Any electric safety approval marks found only apply to the pump unit.

4 Installation

4.1 Precautions

General precautions

Before starting, make sure that the safety instructions shown in **Introduction and Safety** on page 5 have been fully read and understood.



DANGER:

All the hydraulic and electrical connections must be completed by a technician possessing the technical-professional requirements outlined in the current regulations.



WARNING:

Always wear personal protective equipment.



WARNING:

Always use suitable working tools.



WARNING:

Piping must be sized to ensure safety at the maximum operating pressure.



WARNING:

Install appropriate gaskets between the unit and the piping system.

Electrical measures



DANGER: Electrical hazard

Before starting work, check that the electric power supply is disconnected and locked out, to avoid unintentional restart of the unit, the control panel and the auxiliary control circuit.

NOTE:

The mains voltage and frequency must match the values indicated on the motor data plate.

Ground

**DANGER: Electrical hazard**

Always connect the external protection conductor (ground) to the ground terminal before attempting to make any other electrical connections.

**DANGER: Electrical hazard**

Connect all the electrical accessories of the unit to the ground.

**DANGER: Electrical hazard**

Check that the external protection conductor (ground) is longer than the phase conductors. In case of accidental disconnection of the unit from the phase conductors, the protection conductor must be the last one to detach itself from the terminal.

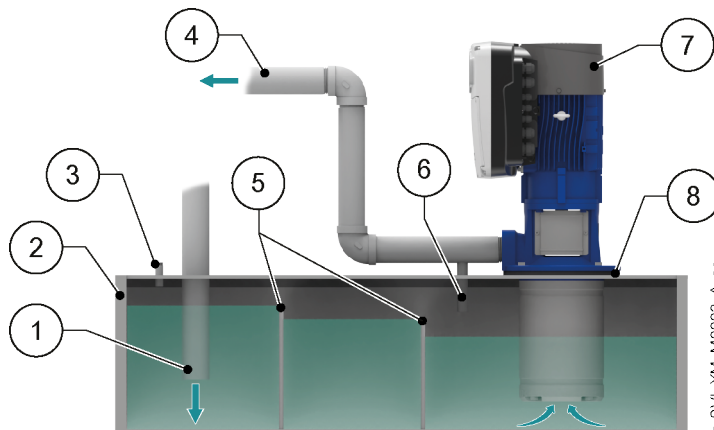
**DANGER: Electrical hazard**

Install suitable systems for protection against indirect contact, in order to prevent lethal electric shocks.

4.2 Mechanical installation

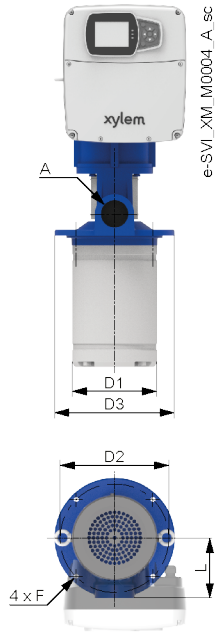
Tank or basin

The figure shows a typical installation.



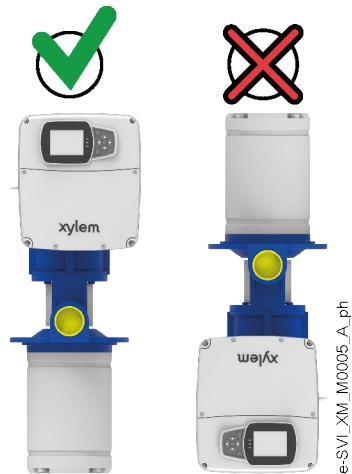
1. Return piping system
2. Tank
3. Air vent, to maintain the atmospheric pressure inside the tank
4. Discharge pipe
5. Bulkheads, to allow the unit to suck liquid in a quiet state
6. Bypass pipe, to reduce the risk of water hammer effects
7. Unit
8. Seal

Dimension of the mounting flanges



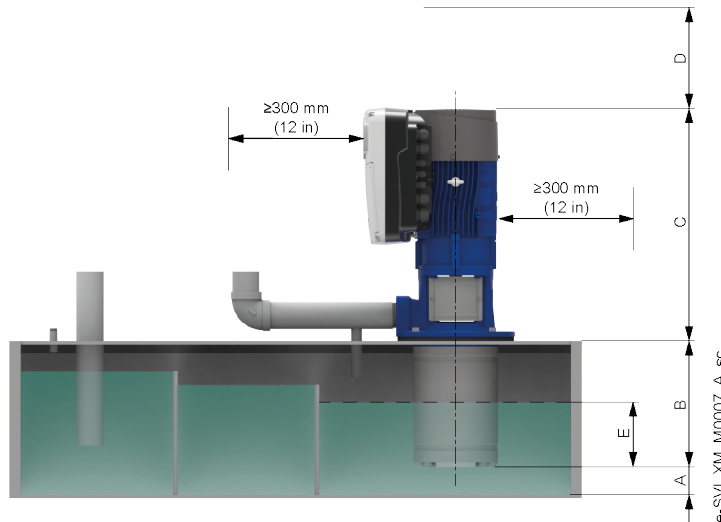
Models	D1, mm (in)	D2, mm (in)	D3, mm (in)	L, mm (in)	A	F, Ø mm (in)
3 and 5 SVI	140 (5.51)	160 (6.30)	180 (7.09)	100 (3.94)	Rp 1 1/4	7.5 (2.95)
10, 15 and 22 SVI	200 (7.87)	225 (8.86)	250 (9.84)	125 (4.92)	Rp 2	9.5 (3.74)
33, 46, 66 and 92 SVI	240 (9.44)	265 (10.43)	300 (11.81)	210 (8.27)	DN80	14 (0.55)

Permitted positions



Contact Xylem or the Authorised Distributor for other positions.

Positioning measurements



Models	A, mm (in)	B, mm (in)	C, mm (in)	D, mm (in)	E, mm (in)	
					With inducer	Without inducer
3 and 5	> 20 (0.8)	Depending on pump type, see the catalogue	Depending on motor type, see the catalogue	> 30 (1.2) + B	≥ 20 (0.8)	≥ 30 (1.2)
10, 15 and 22	> 25 (1.0)					
33, 46, 66 and 92					-	≥ 60 (2.4)

Unit assembly

1. Place the gasket at the bottom of the tank.
2. Remove the discharge port plug.
3. Remove all welding residues, deposits and impurities from the tank.
4. Insert the unit in the hole.
5. Check that the minimum distance from the bottom of the tank is maintained.
6. Secure the unit with bolts.

4.3 Hydraulic connection

1. Support the piping system independently to prevent them from weighing on the unit.
2. On the discharge pipes install:
 - An anti-vibration joint to reduce the transmission of vibrations from the unit to the system and vice versa
 - A check valve to prevent the liquid from flowing back into the unit when this is at a standstill
 - A pressure gauge with intercept valve for checking the actual operating pressure of the unit
 - An on-off valve, downstream the check valve and pressure gauge, to regulate the flow rate and disconnect the unit from the system during maintenance
 - An automatic relief valve at the highest point of the system to eliminate air bubbles
 - A minimum pressure device to prevent dry run, or a float or level probes inside the tank.
3. Remove any welding residues, deposits and impurities in the pipes that could damage the unit; install a filter if necessary.
4. Connect the piping system to the unit port.
5. Install the return piping system as far as possible from the suction, immersed in the liquid, to prevent turbulence and air bubbles.

4.4 Guidelines for electrical connection

1. Check that the electrical leads are protected against:
 - High temperature
 - Vibrations
 - Collisions
 - Liquids.
2. Check that the power supply line is provided with:
 - A short circuit protection device of appropriate size
 - A mains disconnection device with contact opening distance ensuring complete disconnection for overvoltage III category conditions.

4.5 Guidelines for the control panel

NOTE:

The control panel must match the ratings on the unit data plate. Improper combinations could damage the motor.

1. Fit a system for protection against dry running to which to connect a pressure switch, or a float, probes or other suitable devices.
2. On the suction side install:
 - A pressure switch, in the case of connection to the mains water supply
 - A float switch or probes, in the case of liquid drawn from a tank or basin.

4.5.1 Switch fuses

- An electronically activated function in the adjustable frequency unit provides overload protection in the motor. The overload protection function calculates the increment level in order to activate the timing of the trigger function (motor stop).
The higher the input current, the faster the response. The function offers a Class 20 motor protection.
- The unit must be equipped with overcurrent and short-circuit protection to prevent the overheating of cables during the installation. Line fuses or automatic switches must be provided to ensure this protection. Fuses and switches must be provided by the installer as part of the installation.
- Use the recommended fuses and/or switches on the power supply side as protection in the event of a component failure inside the unit (first failure). The use of recommended fuses and switches ensures that possible damage to the adjustable frequency unit is limited to the inside of the unit. For other types of protection, ensure that the passing energy is equal to or less than that of the recommended models.
- The fuses shown in the table are suitable for use on a circuit capable of releasing 5,000 Arms (symmetrical), maximum 480 V. With the correct fuses, the short-circuit current rating (SCCR) for the adjustable-frequency unit is 5,000 Arms.

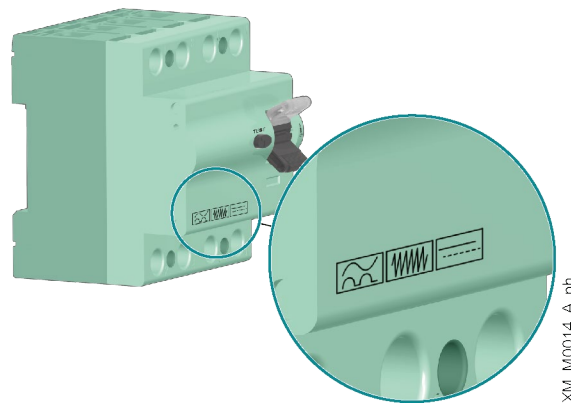
The figure shows the recommended fuses and switches.

Three-phase power supply voltage, Vac	Hydrovar X model	Non-UL fuses, type gG, A	UL fuses, type T, manufacturer and model				MCB S203 model ABB Switches
			Bussmann	Edison	Littelfuse	Ferraz-Shawmut	
200 - 240	EXM.../3...B..	16	JJN-15	TJN (15)	JLLN 15	A3T15	C16
	EXM.../3...C..	30	JJN-30	TJN (30)	JLLN 30	A3T30	C32
	EXM.../3...D..	63	JJN-60	TJN (60)	JLLN 60	A3T60	C63
380 - 480	EXM.../4...B..	16	JJS-15	TJS (15)	JLLS 15	A6T15	C16
	EXM.../4...C..	30	JJS-30	TJS (30)	JLLS 30	A6T30	C32
	EXM.../4...D..	63	JJS-60	TJS (60)	JLLS 60	A6T60	C63

4.5.2 Residual current devices, RCD (GFCI)

When using ground fault circuit breakers, GFCI, or residual current devices, RCD, also known as automatic earth leakage circuit breakers, ELCD, check that:

- They are suitable sized for the system configuration and environment of use
- They have a starting delay to prevent faults caused by transient ground currents
- They can detect alternate or direct current, they are marked with the symbols shown in the figure.



NOTE:

When using an automatic earth leakage switch or a ground fault switch, make sure to consider the total earth leakage current of all the electric devices of the system.

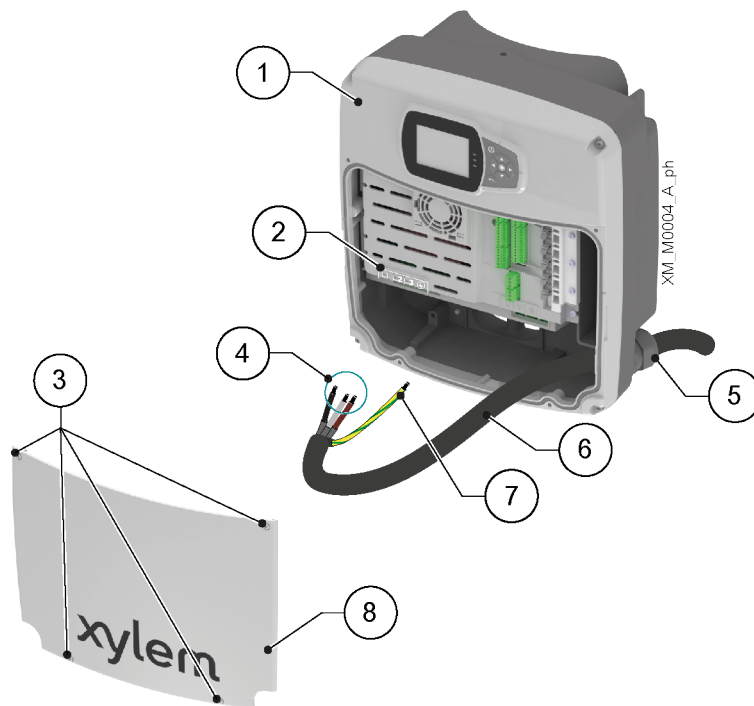
4.6 Guidelines for the motor

4.6.1 Drive positioning

1. Remove the bolts that secure the motor to the pump.
2. Rotate the motor in the desired position without removing the couplings.
3. Reposition and tighten the bolts at the torque indicated in the table.

Flange size, MEC	Bolt size	Torque, Nm (lbf-in)
71, 80	M6	6 (53)
90, 100, 112	M8	15 (133)
132	M12	50 (443)
160, 180, 200, 225, 250	M16	75 (664)

4.6.2 Connection



1. Drive
2. Terminals
3. Screws of the cover
4. Phase conductors
5. Cable Gland
6. Power supply cord
7. Protection conductor (ground)
8. Cover

1. Remove the cover and observe the wiring diagrams inside.
2. Insert the power cable in the cable gland.
3. Connect the conductors making sure that the protection one is longer than the phase ones.
For size D only, tighten the terminal screw with a Pozidriv screwdriver.
Tightening torque: 4 Nm (35 lbf-in).
4. Tighten the cable gland.
5. Fit the cover and tighten the screws.
Tightening torque: 3 Nm (27 lbf-in) \pm 15%.

5 Control

Introduction



DANGER: Electrical hazard

If the drive display is damaged, contact Xylem or the Authorised Distributor.



WARNING: Hot surface hazard

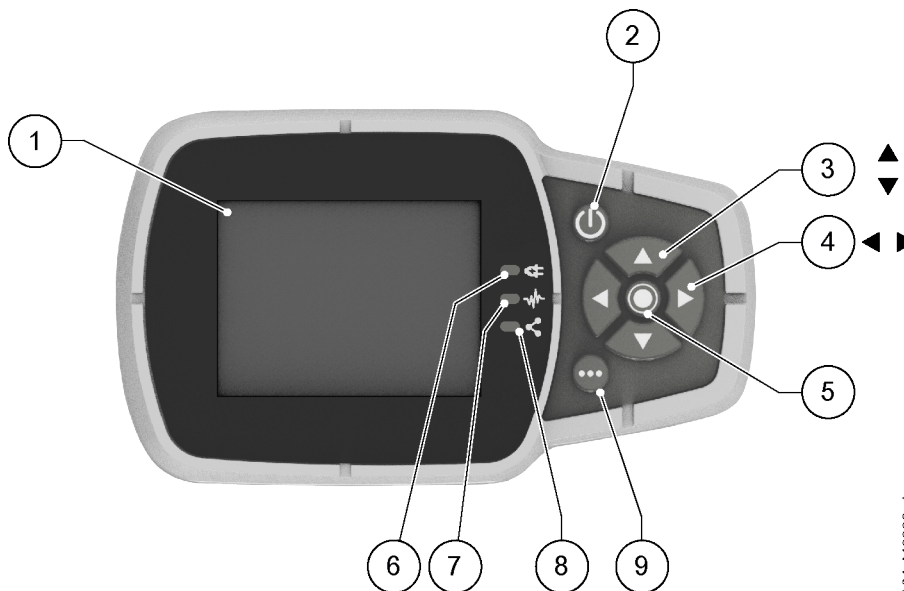
Only touch the drive display buttons. Pay attention to the high temperature released by the unit.

Depending on model, please observe the instructions in the following paragraphs:

- e-SVI hydrovar X+, **SVIX drive display** on page 23.
- e-SVI hydrovar X, **SVIK drive display** on page 26.

Programming instructions can be found in the Drive and Programming Manual.

5.1 SVIX drive display

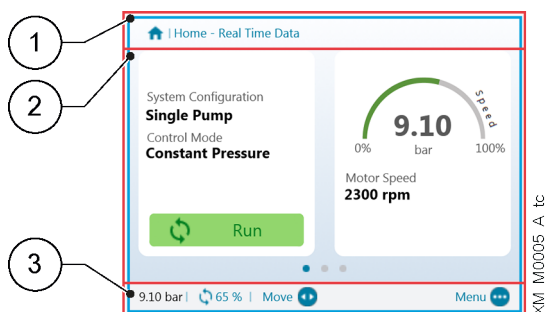



XIM_IM0002_A_sc

Position number	Name	Function
1	Display	
2	ON/OFF button	<ul style="list-style-type: none"> • Start and stop the unit • Reset the errors by pressing for 5 seconds.
3	UP and DOWN arrow keys	<ul style="list-style-type: none"> • Move vertically between menu options • Perform a manual switch-over on a multi-pump system by pressing the DOWN arrow (extended pressure) • Rotate the display 180° by simultaneously pressing ENTER and the DOWN arrow (extended pressure).
4	RIGHT and LEFT arrow keys	<ul style="list-style-type: none"> • Move horizontally to navigate home screens and menus • Lock and unlock the display by simultaneously pressing the RIGHT and LEFT arrows (extended pressure).

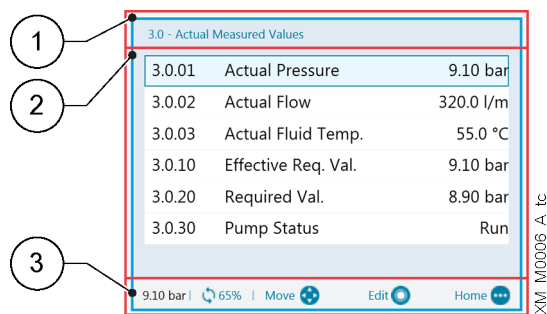
Position number	Name	Function
5	SEND button	<ul style="list-style-type: none"> Advancing through the menu levels Confirm the selection of a parameter Confirm the value of a parameter.
6	Unit LED on	Indicate that the unit is powered.
7	Unit status LED	Indicate: <ul style="list-style-type: none"> Motor not powered (off) Alarm active and motor stopped (yellow) Unit error and motor stopped (red) Motor started (green) Alarm active and motor started (yellow alternating green).
8	Connection status LED	Indicate: <ul style="list-style-type: none"> BMS communication disabled (off) BMS communication active (green) Wireless communication with mobile device established (fixed blue) Wireless communication with mobile device being established (flashing blue) Wireless communication and BMS communication active (blue alternating green).
9	Multifunction button	<ul style="list-style-type: none"> Access the parameter menu or additional functions according to the screen on the display. Enable wireless connection (extended pressure).

5.1.1 Graphic display



Position number	Name	Description
1	Header bar	It shows static information and messages relating to the operating conditions, such as: <ul style="list-style-type: none"> Alarms Errors Multi-pump operation.
2	Main screen	It shows the main information and allows the operating parameters to be changed. There are up to 5 screens, which can be navigated by pressing the RIGHT and LEFT arrow keys. The symbol  next to an entry indicates an editable parameter.
3	Lower bar	Show: <ul style="list-style-type: none"> On the left, the essential operating information, such as the actual adjustment value and the speed percentage at which the unit is operating On the right, the buttons available for interaction in the main screen.

5.1.2 Parameter menu, SVIX



Position number	Name	Description
1	Header bar	It shows the parameter path at menu and submenu level.
2	Parameter list	Show: <ul style="list-style-type: none"> The index, The name, The preview of the value of the parameters for the current menu level. To advance a level or change the value, press SEND or the RIGHT arrow key.
3	Lower bar	Show: <ul style="list-style-type: none"> On the left, the essential operating information, such as the actual adjustment value and the speed percentage at which the unit is operating On the right, the buttons available for interaction in the main screen.

The menu is split into 3 levels:

- Main
- Submenu
- Parameters.

To display or change a parameter:

1. Press the function button in the main screen.
2. Enter the password using the arrow keys.
3. Press SEND.

Note: after 10 minutes of inactivity, the password must be re-entered.

4. Press the RIGHT arrow key or SEND to advance between levels, or the LEFT arrow key to return.

5.1.3 Unit start using the SVIX drive display

1. Check the connection between the START/STOP and GND inputs on the terminal board.
2. Press ON/OFF to start the unit.
Note: If parameter 1.0.45 Autostart is configured to "Yes", it will not be necessary to press ON/OFF again at the next start.
3. With the unit in operation, the working setpoint can be changed by switching to the second screen.

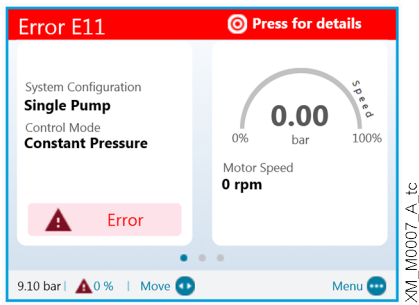
5.1.4 Operating mode change, SVIX

The unit parameters are set at the factory and the unit is ready for use.

To change parameters and advanced features, access the configuration menu.

1. Press the multi-function button.
2. Enter the password using the arrow keys.
3. Press SEND.
4. Navigate through the menus to locate the parameter or function to be changed: see the Drive and Programming Manual for the association between parameter codes and their functions.

5.1.5 Error reset, SVIX

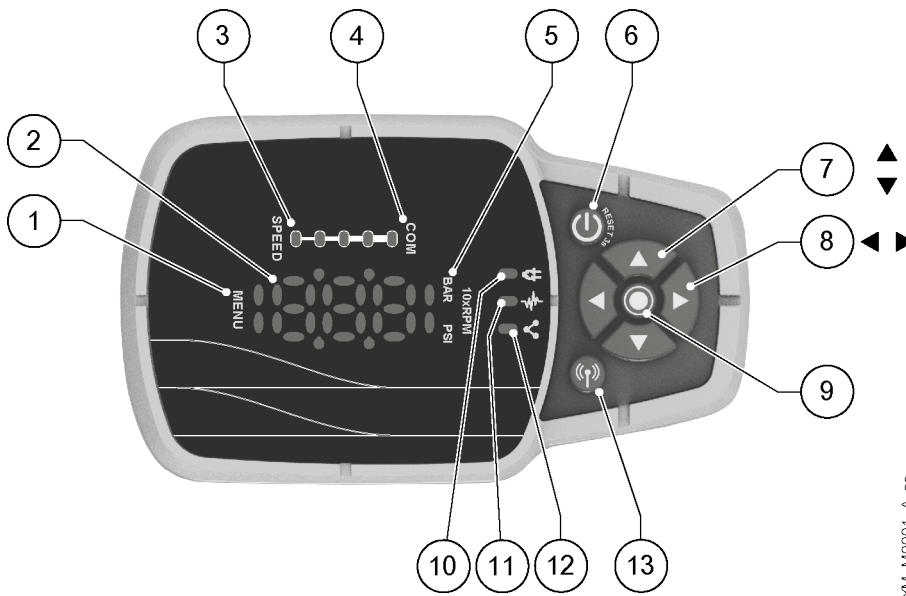


In the event of an error, the unit automatically makes several attempts to reset itself, where permitted: if the attempts are unsuccessful, the unit stops and the display shows the error code.

To eliminate the error:

1. Open the first main screen by pressing SEND.
2. Read the description of the error in the screen.
3. Identify the cause and follow the instructions **Troubleshooting** on page 40.
4. Reset the error by pressing and holding down ON/OFF for 3 seconds: the unit returns to the status before the error.








5.2 SVIX drive display



Position number	Name	Function
1	Menu indicator	Indicate: <ul style="list-style-type: none"> • Navigation through the menu items (steady light) • The display of a parameter value (flashing light).
2	Seven-segment display	
3	Speed bar	
4	Multi-pump communication indicator	

Position number	Name	Function
5	Unit of measure indicator	
6	ON/OFF button	<ul style="list-style-type: none"> Start and stop the unit Reset the errors by pressing for 5 seconds.
7	UP and DOWN arrow keys	<ul style="list-style-type: none"> Quickly change the setpoint in the main display Navigate through the submenus and change the parameter displayed in the parameter menu Perform a manual switch-over on a multi-pump system by pressing the DOWN arrow (extended pressure) Rotate the display 180° by simultaneously pressing ENTER and the DOWN arrow (extended pressure).
8	RIGHT and LEFT arrow keys	<ul style="list-style-type: none"> Show speed and pressure in alternation in the main display Navigate the parameter menu levels LEFT arrow only, confirm the changed value Lock and unlock the display by simultaneously pressing the RIGHT and LEFT arrows (extended pressure). RIGHT arrow only, navigate through the active error codes, if more than one are present
9	SEND button	<ul style="list-style-type: none"> Advancing through the menu levels Confirm the value of a parameter Enter the parameter configuration menu (extended pressure).
10	Unit LED on	Indicate that the unit is powered.
11	Unit status LED	Indicate: <ul style="list-style-type: none"> Motor not powered (off) Alarm active and motor stopped (yellow) Unit error and motor stopped (red) Motor started (green) Alarm active and motor started (yellow alternating green).
12	Connection status LED	Indicate: <ul style="list-style-type: none"> BMS communication disabled (off) BMS communication active (green) Wireless communication with mobile device established (fixed blue) Wireless communication with mobile device being established (flashing blue) Wireless communication and BMS communication active (blue alternating green).
13	Wireless technology communication button	Connect the unit to a mobile device.

5.2.1 Main visualization

Glyph	Name	Description
	OFF	Unit stopped with ON/OFF button or BMS. Note: lower priority in relation to STOP.
	STOP	START/STOP and GND digital inputs open.
	Start request	Request to start the unit with the ON/OFF button. It remains active for a few seconds, then the following appears: <ul style="list-style-type: none"> • Unit in operation, or • Alarm, or • Error.
	Alarm	Alarm code of the unit in alarm status, in alternation with the main display. The unit status LED can be: <ul style="list-style-type: none"> • Yellow= motor stopped • Yellow in alternation with green = motor started.
	Error	Error code of the unit in error status.
	Unit in operation	Unit in operation and selected unit of measure display: <ul style="list-style-type: none"> • Speed, 10xRPM • Pressure in bar or psi.
	Display blocked	Display locked by the operator and button operation inhibited.





5.2.2 Parameters menu, SVIK

The menu is split into 3 levels:

- Main
- Submenu
- Parameters.

To display or change a parameter:

1. Press the SEND button (extended pressure).
2. Enter the password using the arrow keys.
3. Press SEND.
Note: after 10 minutes of inactivity, the password must be re-entered.
4. Press the UP and DOWN arrow keys to navigate through the menus.
5. Press SEND or the RIGHT arrow to go to the menu sub-levels until the parameter value is found.
6. Press the UP and DOWN arrow keys to increase or decrease the parameter value.
7. Press SEND or the LEFT arrow key to confirm.
Note: After 5 seconds of inactivity, the parameter returns to the previously set value.

Glyph	Name	Notes
	Main menu	<ul style="list-style-type: none"> • Menus numbered from 1 to 9. • Menu indicator: fixed light.
	Submenu	<ul style="list-style-type: none"> • Submenus numbered from 1 to 9. • Menu indicator: fixed light.
	Parameter	Navigation in the parameter level. <ul style="list-style-type: none"> • Parameters numbered from 0 to 99. • Submenus numbered from 1 to 9. • Menu indicator: fixed light.
	Parameter value	Parameter value modification. <ul style="list-style-type: none"> • Menu indicator: light flashing. • Parameter value while editing: flashing.

5.2.3 Unit start using the SVIK drive display

1. Check the connection between the START/STOP and GND inputs on the terminal board.
2. Press ON/OFF to start the unit.
Note: If parameter 1.0.45 Autostart is configured to "Yes", it will not be necessary to press ON/OFF again at the next start.
3. With the unit in operation, the control setpoint can be changed with immediate effect using the UP and DOWN arrow keys.

5.2.4 Operating mode change, SVIK

The unit parameters are set at the factory and the unit is ready for use.

To change parameters and advanced features, access the configuration parameters.

1. Press the SEND button (extended pressure).
2. Enter the password using the arrow keys.
3. Press SEND.
4. Select the parameter to be changed in the M01 menu: see the Drive and Programming Manual for the association between parameter codes and their function.

5.2.5 Error reset, SVIK

In the event of an error, the unit automatically makes several attempts to reset itself, where permitted: if the attempts are unsuccessful, the unit stops and the display shows the error code. To eliminate the error:

1. Identify the cause and follow the instructions **Troubleshooting** on page 40.
2. Reset the error by pressing and holding down ON/OFF for 3 seconds: the unit returns to the status before the error.

5.3 Xylem X App

Introduction

Available for mobile devices with wireless technology operating system.

Use the App to:

- Check the status of the unit
- Configure parameters
- Interact with the unit and obtain data during installation and maintenance
- Generate a work report
- Contact the assistance service.

Download the App and connect the mobile device with the unit

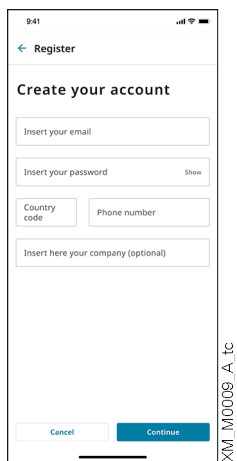
1. Download the Xylem X App to the mobile device from App Store¹ or Google Play² by scanning the QR code:



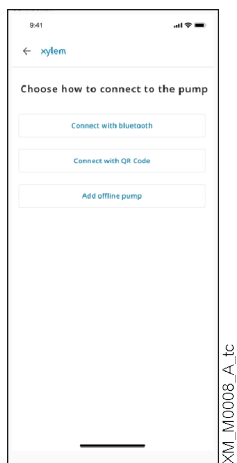
¹ Compatible with iOS operating systems with version 11.0 and above

² Compatible with Android operating systems with version 8.0 and above

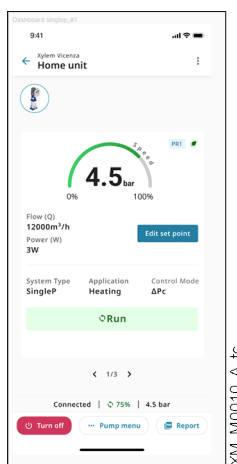
2. Complete the registration.



- 3. On the drive display, press the wireless communication button.
- 4. Add the unit to the user profile.



5. When the connection has been established, the connection light turns blue steady: it is now possible to control the unit using the mobile device.



6 Use and Operation

6.1 Precautions



WARNING: Injuries hazard

Check that the protection devices of the coupling are installed, when applicable: risk of physical injury.



WARNING: Electrical hazard

Check that the unit is properly connected to the mains power supply.



WARNING: Hot surface hazard

Be aware of the extreme heat generated by the unit.



WARNING:

It is prohibited to place flammable materials near the unit.

NOTE:

Check that the shaft can turn smoothly.

NOTE:

It is prohibited to operate the unit when dry, not primed and below the rated flow rate.

NOTE:

It is prohibited to operate the unit with the on-off valves closed.

NOTE:

It is prohibited to use the unit in the case of cavitation.

NOTE:

Bleed the unit properly before starting it.

NOTE:

Always ensure the minimum liquid level required for proper operation of the unit.

6.2 Startup

NOTE:

If there is a risk of the unit running at a flow rate below the minimum expected, install a bypass circuit.

1. Check that the level of the liquid inside the tank is above the minimum level.
2. Open the on-off valve on the discharge line.
3. If present, open the air relief valve on the unit flange.
4. Check that the shaft can turn smoothly by rotating it with the cooling fan.
5. Pre-charge the expansion vessel.
6. Start the unit:
 - By pressing ON/OFF on the drive display, or
 - Closing the intended enabling contact, if used.
7. If installed, close the relief valve.

After the start-up procedure, with the pump unit in operation, check that:

- No liquid is leaking from the unit or pipes
- There is no unwanted noise or vibrations
- At zero flow, the pressure delivered by the unit matches the pressure set and that the unit stops.
- The current absorbed is within the rated limits on the nameplate
- The devices to prevent the absence of liquid (float or probes), or the minimum pressure devices work correctly
- The liquid is free of:
 - Vortexes through which air could enter the unit
 - Foam that could cause unit fault
 - Turbulence caused by the return piping system or the bypass.

Settling of the mechanical seal

The pumped liquid lubricates the seal faces of the mechanical seal; under normal conditions, a small amount of liquid may leak out. When the unit is run for the first time, or immediately after the seal is replaced, more liquid may temporarily leak out. To help the seal settle and to reduce leaking:

1. Close and open the on-off valve on the discharge side two or three times with the unit running.
2. Stop and start the unit two or three times.

6.3 Manual stop

Stop the unit:

- By pressing ON/OFF on the drive display, or
- Opening the intended enabling contact, if used.

7 Maintenance

7.1 Precautions

Before starting, make sure that the safety instructions shown in **Introduction and Safety** on page 5 have been fully read and understood.



DANGER: Electrical hazard

Before starting work, check that the electric power supply is disconnected and locked out, to avoid unintentional restart of the unit, the control panel and the auxiliary control circuit.



DANGER: Electrical hazard

After disconnecting the system from the power supply, wait 2 min for the discharge of the residual current.



WARNING:

Maintenance must be done by a technician possessing the technical-professional requirements outlined in the current regulations.



WARNING:

Always wear personal protective equipment.



WARNING:

Always use suitable working tools.



WARNING:

In the case of liquids that are excessively hot or cold, pay attention to the risk of injury.

The disassembly or installation of the rotor in the motor casing generates a strong magnetic field:



DANGER: Magnetic hazard

The magnetic field may be dangerous for anyone wearing pacemakers, or any other medical devices sensitive to magnetic fields.

NOTE:

The magnetic field may attract metal debris on the rotor surface, causing damage to the same.

7.2 Maintenance every 4000 hours of operation, or every year

Perform maintenance when one of the two limits is reached.

Maintenance with unit started

Check:

1. That the unit does not produce abnormal noises or vibrations.
2. That no liquid is leaking from the unit and the piping system.
3. The tightening of all bolts and screws.

Maintenance with unit stopped

1. Check:
 - The integrity of the power cable
 - The tightening of the terminals with a torque of 4 Nm (35 lbf-in)
 - That there are no signs of overheating and electric arcs on the terminal boxes and traces of humidity in the drive.
 - That the expansion vessel is pre-charged correctly.
2. Clean:
 - The pressure sensor
 - The fan cover
 - The drive dissipator
 - The stator casingand check the status of the cooling fan.

7.3 Maintenance every 10000 hours of operation or every 2 years

When the first of the two limits is reached, replace the mechanical seal.

7.4 Maintenance every 17500 hours of operation or every 5 years

When the first of the two limits has been reached, replace the permanently lubricated bearings of the motor, if present.

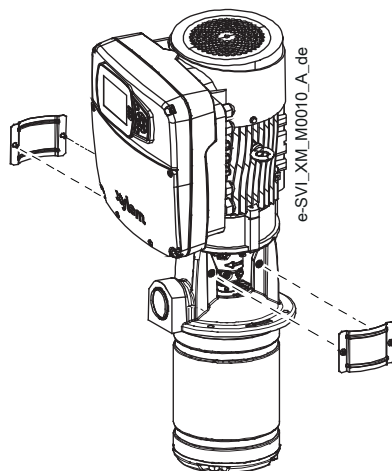
7.5 Long periods of inactivity

1. Shut the on-off valve located on the discharge line.
2. Comply with the instructions on **Storage** page 11.
3. Before starting the unit:
 - Clean the filter
 - Check the status of the connections of the electric conductors on the unit and the control panel.
4. Start the unit complying with the instructions on **Startup** page 31.

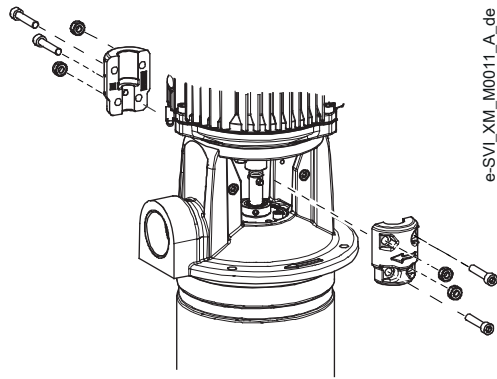
7.6 Motor replacement for models 3, 5, 10, 15 and 22SVI

Disassembly

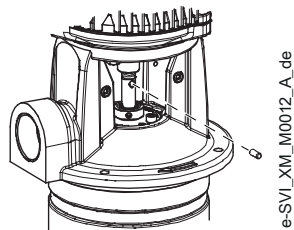
1. Remove the coupling guard.



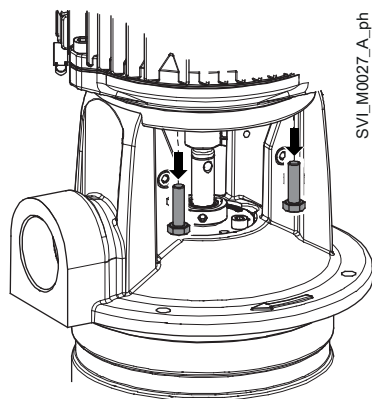
2. Remove the coupling



3. Remove the pump shaft shim.

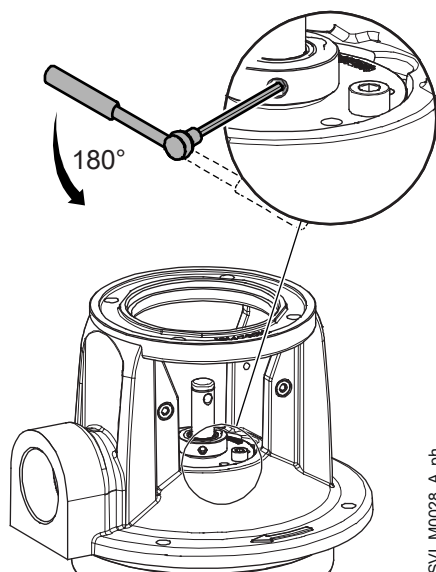


4. Unscrew the 4 motor screws and remove the motor.



Assembly

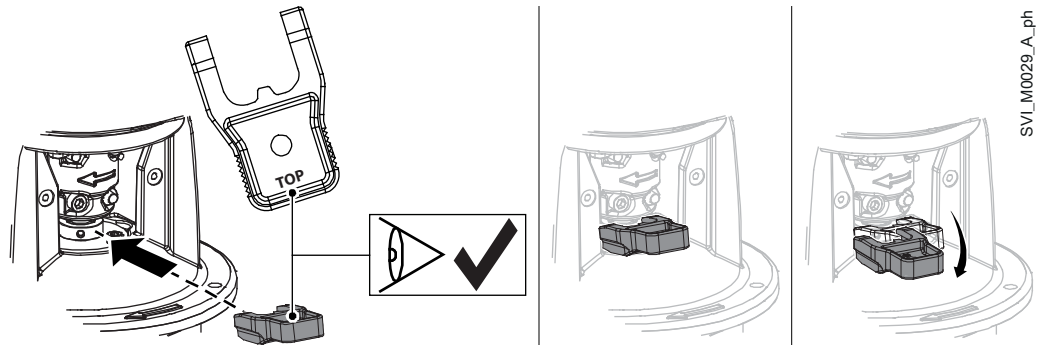
1. Loosen the 3 screws of the cartridge seal.



2. Install the new motor using the 4 screws.

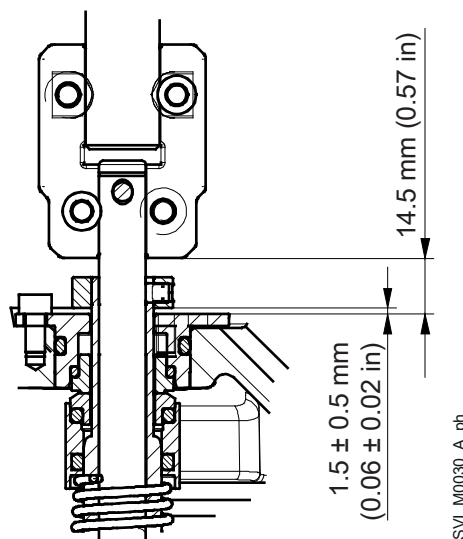
Screw	Torque, Nm (lbf-in)
M6	6 (53)
M8	15 (130)
M12	50 (440)
M16	80 (710)

3. Insert the plug.
4. Install the coupling, tightening the bolts by hand.
5. Insert the spacer between the coupling and the seal, holding it slightly at an angle, and then moving it down, applying pressure on the coupling.



Final checks and operations

1. Check the distance between the flange and the seal ring nut, and between the flange and the coupling.



2. Tighten the bolts of the coupling.

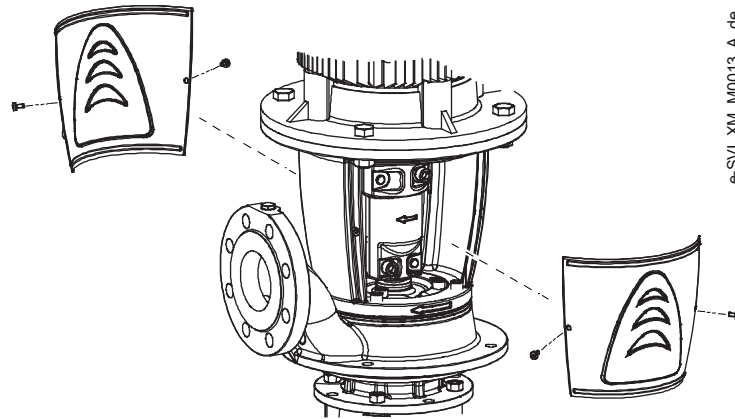
Screw	Torque, Nm (lbf-in)
M6	15 (130)
M8	25 (220)
M10	50 (440)

3. Remove the spacer.
4. Tighten the seal screws.
Tightening torque: 1.5 Nm (13 lbf-in).
5. Check that the shaft rotates freely and without friction by turning the coupling by hand.
6. Reinstall the guards.

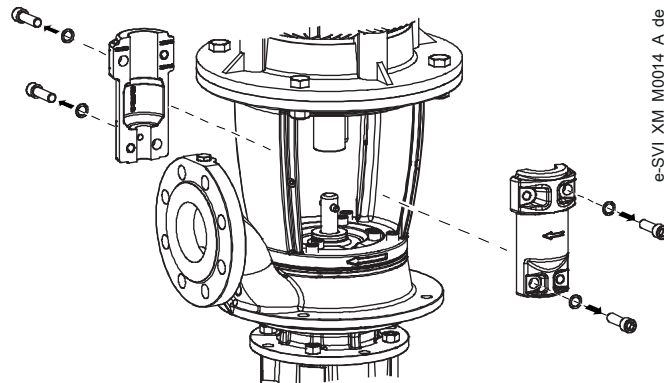
7.7 Motor replacement for models 33, 46, 66 and 92SVI

Disassembly

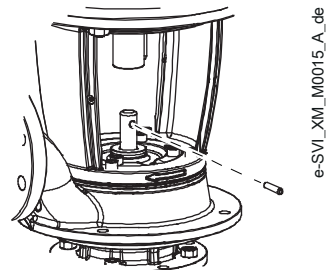
1. Remove the coupling guard.



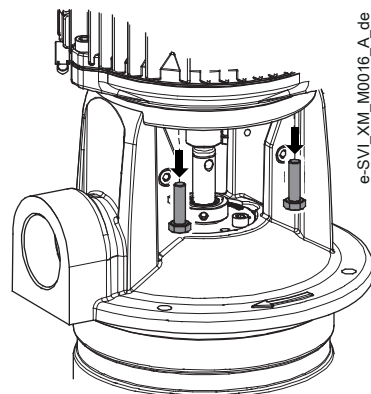
2. Remove the coupling



3. Remove the pump shaft shim.



4. Unscrew the 4 motor screws and remove the motor.

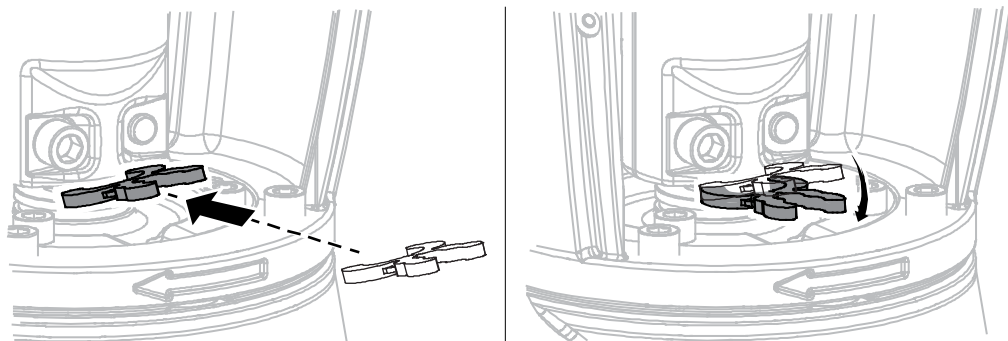


Assembly

1. Install the new motor using the 4 screws.

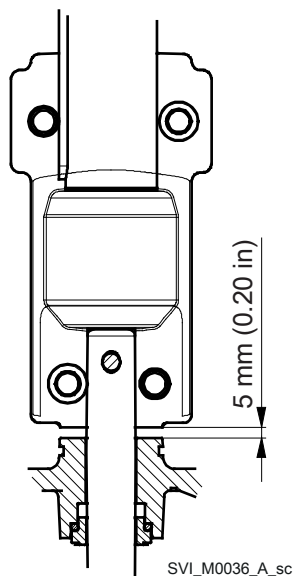
Screw	Torque, Nm (lbf-in)
M8	20 (180)
M12	50 (440)
M16	80 (710)

2. Insert the plug.
3. Install the coupling, tightening the bolts by hand.
4. Insert the spacer between the coupling and the seal, holding it slightly at an angle, and then moving it down, applying pressure on the coupling.



Final checks and operations

1. Check the distance between the flange and the coupling.



2. Tighten the bolts of the coupling.

Screw	Torque, Nm (lbf-in)
M10	50 (440)
M12	75 (660)

3. Remove the spacer.
4. Check that the shaft rotates freely and without friction by turning the coupling by hand.
5. Reinstall the guards.

7.8 Identification of spare parts

Identify the spare parts with the product codes directly on the site spark.xylem.com.
Contact Xylem or the Authorised Distributor for further technical information.

8 Troubleshooting



WARNING:

Maintenance must be done by a technician possessing the technical-professional requirements outlined in the current regulations.



WARNING:

If a fault cannot be corrected or is not mentioned, contact Xylem or the Authorised Distributor.

8.1 The unit does not switch on

The unit does not switch on even when correctly powered.

Cause	Solution
Electric power supply cut off	Restore the electric power supply
Power supply cord is damaged	Replace the cable
Unit faulty	Contact Xylem or the Authorised Distributor, or send the unit to an authorised workshop

8.2 Little or no hydraulic performance

Cause	Solution
Air inside the unit	<ul style="list-style-type: none"> • Bleed the unit • Increase the liquid level inside the tank • Remove any turbulences of the liquid in the suction area • Check the suction conditions
Check valve at the discharge blocked or partially blocked	Replace the check and/or foot valve
Discharge piping system choked or obstructed	Remove all chocking or obstructions
Suction filter clogged	Clean the filter
Foreign bodies in the unit	Remove the foreign bodies
Unit incorrectly set	Check the settings
Undersized unit	Contact Xylem or the Authorised Distributor, or send the unit to an authorised workshop
Worn internal unit components	Contact Xylem or the Authorised Distributor, or send the unit to an authorised workshop
Unit faulty	Contact Xylem or the Authorised Distributor, or send the unit to an authorised workshop

8.3 The differential protection device (RCD) has tripped

Cause	Solution
Differential unsuitable or faulty	Check the type of differential and/or replace it
Unit faulty	Contact Xylem or the Authorised Distributor, or send the unit to an authorised workshop

8.4 The unit runs in reverse

The unit runs in reverse even if not powered.

Cause	Solution
Check valve faulty	Replace the check valve
Foot check valve faulty	Replace the foot valve

8.5 The unit starts and stops too frequently

Cause	Solution
Check valve at the discharge blocked or clogged	Replace the check valve
Discharge piping system choked or obstructed	Remove all choking or obstructions
Expansion vessel damaged, not installed, undersized or incorrectly pre-charged	Install, replace or pre-charge the expansion vessels
Unit incorrectly set	Check the settings

8.6 The unit does not stop when the setpoint is reached

Cause	Solution
Check valve at the discharge blocked or clogged	Replace the check valve
Expansion vessel damaged, not installed, undersized or incorrectly pre-charged	Install, replace or pre-charge the expansion vessels.
Unit incorrectly set	Check the settings
The pressure shown on the display does not correspond to the set pressure	<ul style="list-style-type: none"> • Check the set sensor range • Clean the pressure sensor • Replace the sensor

8.7 The unit produces excessive noise and/or vibrations

Cause	Solution
Plant resonance	Check the installation
Foreign bodies in the unit	Contact Xylem or the Authorised Distributor, or send the unit to an authorised workshop
Pump cavitation	Check the suction conditions
Air inside the unit	<ul style="list-style-type: none"> • Bleed the unit • Increase the liquid level inside the tank • Remove any turbulences of the liquid in the suction area • Check the suction conditions
Unit wrongly secured to the tank or basin	Check the unit anchoring
Wrongly adjusted motor-pump coupling	Adjust the coupling
Anti-vibration joint on the piping system not suitable or absent	Install or check the anti-vibration
Unit faulty	Contact Xylem or the Authorised Distributor, or send the unit to an authorised workshop

8.8 The unit is leaking at the mechanical seal

Cause	Solution
Seal damaged or worn	Replace the seal or contact Xylem or the Authorised Distributor, or send the unit to an authorised workshop

8.9 Unit error or alarm

Cause	Solution
Miscellaneous	See the Drive and Programming Manual

9 Specifications

9.1 Operating environment

Non-aggressive and non-explosive atmosphere.

Temperature

From 0 to 40°C (32÷104°F), unless otherwise indicated on the data plate of the electric motor.

Relative air humidity

< 50% at 40°C (104°F).

NOTE:

If the humidity exceeds the stated limits, contact Xylem or the Authorised Distributor.

Elevation

< 1000 m (3280 ft) above sea level.

NOTE: Danger of motor overheating

If the unit is exposed to temperatures or installed at an altitude greater than those stated, reduce the power output of the motor according to the coefficients reported in the table. Otherwise, replace the motor with a more powerful one.

If the unit is installed at an altitude exceeding 2000 m (6600 ft), contact Xylem or the Authorised Distributor.

Altitude m (ft)	Power reduction coefficient
1000÷1500 (3300÷4900)	0.97
1500÷2000 (4900÷6600)	0.95

9.2 Liquid temperature

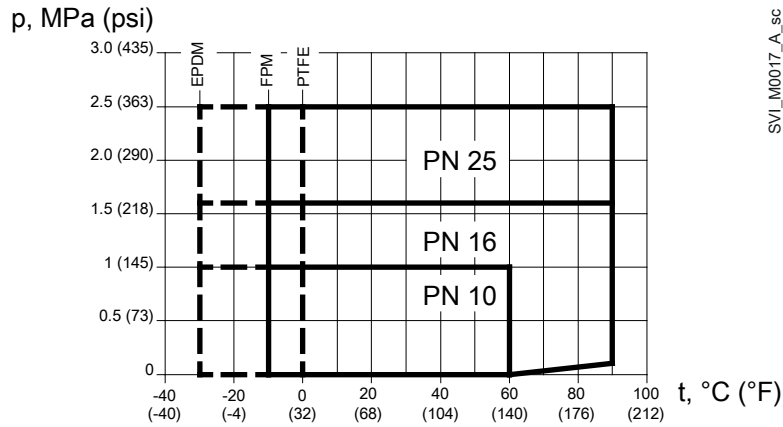
The table shows the permitted liquid temperatures according to the seal material.

Seal material	Minimum and maximum temperature, °C (°F)	
	SVI	SVIE
FPM	-10÷90 (14÷194)	-10÷60 (14÷140)
EPDM	-30÷90 (-22÷194)	-30÷60 (-22÷140)
PTFE	0÷90 (32÷194)	0÷60 (32÷140)

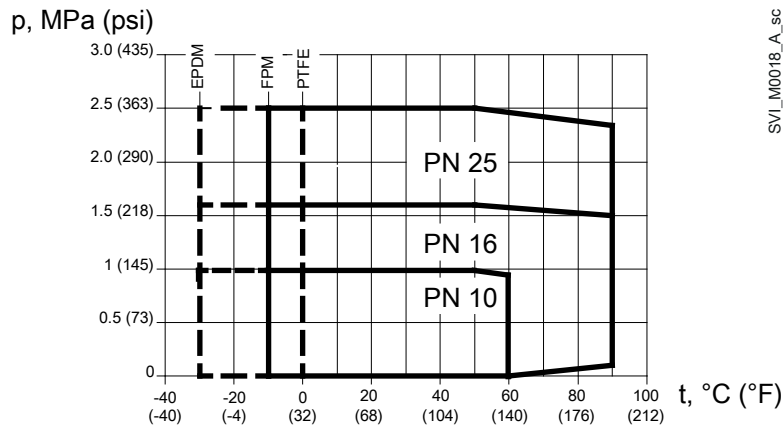
9.3 Maximum operating pressure

The chart shows the pumped liquid pressure and temperature limits permitted for the mechanical seal, based on the material of the hydraulic components.

AISI 304



AISI 316



9.4 Maximum number of starts and stops

≤ 4/h.

NOTE:

If more starts and stops are required, use the dedicated external input.

9.5 Electrical specifications

See the motor data plate.

Permitted tolerances for the supply voltage

- 200 - 240 V ±10% 50/60 Hz
- 380 - 480 V ±10% 50/60 Hz.

Leakage Current

≤ 3.5 mA (AC).

Protection class

IP 55.

9.6 Radio frequency characteristics

Features	Description
Technology	Wireless Low Energy 5.2
Band	2.4 GHz ISM
RF	≤ 4.5 mW (6.5 dBm)

9.7 Characteristics of inputs and outputs

Features	Description
Communication ports	2, RS-485
Digital inputs	3 for SVIK, 5 for SVIX: <ul style="list-style-type: none"> Floating/NPN contact, open manifold/drain open, to GND Internal polarisation +24 VDC, current limited to 6 mA max. Protection from -0.5 VDC to +30 VDC, ±15 mA max.
Analog inputs	2 for SVIK, 4 for SVIX: <ul style="list-style-type: none"> Configurable or 0-20 mA current, or 0-10 V voltage 24V signal for sensor power supply with current limitation 60 mA
Analogue output	Configurable as either 0-20 mA current signal or 0-10 V voltage signal
Relay	2, with NC and NO changeover contact: <ul style="list-style-type: none"> Relay 1 up to 240 VAC 0.25 A or 30 VDC 2 A Relay 2 up to 30 VAC 0.25 A or 30 VDC 2 A



WARNING:

If relay 1 is connected to a voltage higher than 30 VAC, disconnect and do not use the terminals of relay 2.

9.8 Sound pressure

Measured in free field at a distance of one metre from the unit, operating without load at 3600 min⁻¹.

Size	Powers, kW	LpA, dB ± 2
B	3, 4, 5.5	< 75
C	5.5, 7.5, 11	< 82
D	11, 15, 18.5	< 82

9.9 Materials in contact with the liquid

- Stainless steel
- Cast iron.

9.10 Seals

Mechanical

Model	Motor power, kW (hp)	Rated diameter, mm (in)	Balanced	Rotation	Version according to EN 12756
3, 5	All	12 (0.47)	No	Right	K
10, 15, 22	< 5.5 (7.4)	16 (0.62)	No	Right	K
10, 15, 22	≥ 5.5 (7.4)	16 (0.62)	No with 50 Hz motors, Yes with 60 Hz motors	Right	K
33, 46, 66, 92	All	22 (0.86)	Yes	Right	K

Cartridge

Model	Motor power, kW (hp)	Shaft diameter, mm (in)	Balanced	Rotation	Version according to EN 12756
3, 5	All	12 (0.47)	No	Right	K
10, 15, 22	< 5.5 (7.4)	16 (0.62)	No	Right	K
10, 15, 22	≥ 5.5 (7.4)	16 (0.62)	Yes	Right	K

10 Disposal

10.1 Precautions



WARNING:

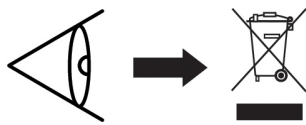
The unit must be disposed of through approved companies specialised in the identification of different types of materials: steel, copper, plastic, lithium, ferrite etc...



WARNING:

It is prohibited to dispose of lubricating fluids and other hazardous substances in the environment.

10.2 WEEE (EU/EEA)

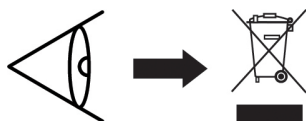


INFORMATION TO USERS pursuant to art. 14 of the Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE). The crossed bin symbol on the appliance or on its packaging indicates that the product at the end of its useful life must be collected separately and not disposed of together with other mixed urban waste. Appropriate separate collection for the subsequent start-up of the disused equipment for recycling, treatment and environmentally compatible disposal helps to avoid possible negative effects on the environment and on health and favours the re-use and / or recycling of the materials of which the equipment is composed.

WEEE from users other than private households (classification according to product type, use and current local laws): the separate collection of this equipment at the end of its life is organized and managed by the producer of EEE as per Directive 2012/19/EU.

The user who wants to get rid of this equipment can then contact the producer and follow the system that it has adopted to allow the separate collection of equipment at the end of life or select an organization independently authorized to manage waste.

10.3 WEEE (UK)



INFORMATION TO USERS pursuant to art. 44 of the The Waste Electrical and Electronic Equipment Regulations 2013 (S. I. 2013 No. 3113). The crossed bin symbol on the appliance or on its packaging indicates that the product at the end of its useful life must be collected separately and not disposed of together with other mixed urban waste. Appropriate separate collection for the subsequent start-up of the disused equipment for recycling, treatment and environmentally compatible disposal helps to avoid possible negative effects on the environment and on health and favours the re-use and / or recycling of the materials of which the equipment is composed.

WEEE from users other than private households (classification according to product type, use and current local laws): the separate collection of this equipment at the end of its life is organized and managed by the producer of EEE as per WEEE Regulations 2013.

The user who wants to get rid of this equipment can then contact the producer and follow the system that it has adopted to allow the separate collection of equipment at the end of life or select an organization independently authorized to manage waste.

11 Declarations

Refer to the specific declaration relating to the marking on the product.

11.1 Pump unit (electric pump) (CE)



EC Declaration of Conformity (Original)

Xylem Service Italia S.r.l., with headquarters in Via Vittorio Lombardi 14 - 36075 Montecchio Maggiore VI - Italy, hereby declares that the product:

SVIK...or SVIX...electric pump with integrated variable speed drive (EXM-type electric motor), with or without pressure transmitter and relative cable (see label on the last page of 'Safety and Other Information' manual)

fulfils the relevant provisions of the following European Directives

- Machinery 2006/42/EC and subsequent amendments (ANNEX II - natural or legal person authorised to compile the technical file: Xylem Service Italia S.r.l.)
- Eco-design 2009/125/EC and subsequent amendments, Regulation (EU) no. 547/2012 and subsequent amendments (water pump) if MEI marked,

and technical standards

- EN 809:1998+A1:2009, EN 60204-1:2018, EN 61800-5-1:2007+ A1:2017+A11:2021
- EN 16480:2021.

Additional information: the EXM series motor includes an integrated variable speed drive, and the energy performances of the two cannot be tested independently of each other (Regulation (EU) 2019/1781, Article 2(2)(b), (3)(a)). The marking shown (IE...-IES...) is that required by the technical standard IEC 61800-9-2.

Montecchio Maggiore, 23.03.2023

Peter Björnsson
Managing Director

rev.00

EU Declaration of Conformity (No 68)

1. RE-D - Radio equipment: SVIK, SVIX (see product data plate)
RoHS - Unique identification of the EEE: SVIK, SVIX
2. Name and address of the manufacturer:
Xylem Service Italia S.r.l.
Via Vittorio Lombardi 14
36075 Montecchio Maggiore VI
Italy
3. This declaration of conformity is issued under the sole responsibility of the manufacturer.
4. Object of the declaration:
SVIK...or SVIX...electric pump with integrated variable speed drive (EXM-type electric motor), with or without pressure transmitter and relative cable.
5. The object of the declaration described above is in conformity with the relevant Union harmonization legislation:
 - Directive 2014/53/EU of 16 April 2014 and subsequent amendments (radio equipment).
 - Directive 2011/65/EU of 8 June 2011 and subsequent amendments including directive (EU) 2015/863 (restriction of the use of certain hazardous substances in electrical and electronic equipment).
6. References to the relevant harmonised standards used or references to the other technical specifications, in relation to which conformity is declared:

- EN 61800-3:2004+A1:2012 (Category C2), EN IEC 61800-3:2018 (Category C2), EN 61000-6-2:2005, EN IEC 61000-6-2:2019, EN 61000-6-4:2007+A1:2011, EN IEC 61000-6-4:2019, EN 61000-3-2:2014, EN IEC 61000-3-2:2019+ A1:2021, EN 61000-3-3:2013+A1:2019+A2:2021, ETSI EN 300 328 V2.2.2 (2019-07), EN 62311:2008, EN IEC 62311:2020.
 - EN IEC 63000:2018.
7. Notified body: - - -
8. RE-D - Any accessories/components/software: - - -
9. Additional information:
RoHS - Annex III - Applications exempted from the restrictions: lead as a binding element in steel, aluminium and copper alloys [6(a), 6(b), 6(c)], in solders and in electrical/ electronic components [7(a), 7(c)-I].

Signed for and on behalf of: Xylem Service Italia S.r.l.

Montecchio Maggiore, 23.03.2023

Peter Björnsson
Managing Director

rev.00



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11.2 Pump unit (electric pump) (UKCA)



UK Declaration of Conformity (Original)

Xylem Service Italia S.r.l., with headquarters in Via Vittorio Lombardi 14 - 36075 Montecchio Maggiore VI - Italy, hereby declares that the product:

SVIK...or SVIX...electric pump with integrated variable speed drive (EXM-type electric motor), with or without pressure transmitter and relative cable (see label on the last page of the 'Safety and Other Information' manual)

fulfils the relevant provisions of the following UK legal acts

- S.I. 2008/1597 - Supply of Machinery (Safety) Regulations 2008 and subsequent amendments (Schedule 2 - Part 2 - Annex II - natural or legal person authorised to compile the technical file: Xylem Service Italia S.r.l.)
- S.I. 2019/539 - The Ecodesign for Energy-Related Products and Energy Information (Amendment) (EU Exit) Regulations 2019 (water pump) if MEI marked,

and technical standards

- EN 809:1998+A1:2009, EN 60204-1:2018, EN 61800-5-1:2007+ A1:2017+A11:2021
- EN 16480:2021.

Additional information: the EXM series motor includes an integrated variable speed drive, and the energy performances of the two cannot be tested independently of each other (S.I. 2021/745, Regulation 34, Schedule 16, paragraphs 10(1)(b), 10(2)(a)). The marking shown (IE...-IES...) is that required by the technical standard IEC 61800-9-2.

Montecchio Maggiore, 23.03.2023

Peter Björnsson
Managing Director

rev.00



UK Declaration of Conformity (No 68)

1. RE-D - Radio equipment: SVIK, SVIX (see product data plate)
RoHS - Unique identification of the EEE: SVIK, SVIX
2. Name and address of the manufacturer:
Xylem Service Italia S.r.l.
Via Vittorio Lombardi 14
36075 Montecchio Maggiore VI
Italy
3. This declaration of conformity is issued under the sole responsibility of the manufacturer.
4. Object of the declaration:
SVIK...or SVIX...electric pump with integrated variable speed drive (EXM-type electric motor), with or without pressure transmitter and relative cable.
5. The object of the declaration described above is in conformity with the relevant UK legislative acts:
 - S.I. 2017/1206 - The Radio Equipment Regulations 2017 and subsequent amendments.
 - S.I. 2012/3032 - The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 and subsequent amendments.
6. References to the relevant designated standards used or references to the other technical specifications, in relation to which conformity is declared:
 - EN 61800-3:2004+A1:2012 (Category C2), EN IEC 61800-3:2018 (Category C2), EN 61000-6-2:2005, EN IEC 61000-6-2:2019, EN 61000-6-4:2007+A1:2011, EN IEC 61000-6-4:2019, EN 61000-3-2:2014, EN IEC 61000-3-2:2019+ A1:2021, EN 61000-3-3:2013+A1:2019+A2:2021, ETSI EN 300 328 V2.2.2 (2019-07), EN 62311:2008, EN IEC 62311:2020.
 - EN IEC 63000:2018.
7. Approved body: - - -
8. RE-D - Any accessories/components/software: - - -
9. Additional information:
RoHS - Annex III of Directive 2011/65/EU - Applications exempted from the restrictions: lead as a binding element in steel, aluminium and copper alloys [6(a), 6(b), 6(c)], in solders and in electrical/ electronic components [7(a), 7(c)-I].

Signed for and on behalf of: Xylem Service Italia S.r.l.

Montecchio Maggiore, 23.03.2023

Peter Björnsson
Managing Director

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12 Warranty

For information on the warranty refer to the commercial documentation.

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.

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