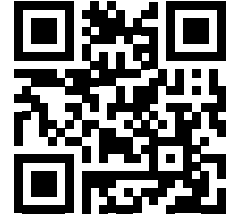


THE MANUAL IS AVAILABLE AT:
<https://qr.xylemsales.com/hijesr>



Series e-80X Smart Pumps



For safety and correct product usage, read the manual before this product is used.

1 Introduction

NOTICE:



Read the installation, operation and maintenance instructions located on the Xylem website before use. Improper use of the product can cause personal injury and damage to property and may void the warranty. See e-80, hydrovar X Smart Pump, and hydrovar X Instruction Manuals for complete product warranty and installation instructions.



WARNING:

Always lock out power to the driver before you perform any installation of maintenance tasks. Failure to disconnect and lock out driver power will result in serious injury.



WARNING:

Personal protective equipment should be worn when handling this equipment. Only use properly sized certified lifting equipment & lifting devices, including slings, suitably rated for the weights to be lifted. Slings, when used, must be of identical materials to avoid differences in stretch rates. Do not use lifting devices that are frayed, kinked, unmarked, or worn.



WARNING:

This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to: www.P65Warnings.ca.gov.

2 Lifting and handling requirements

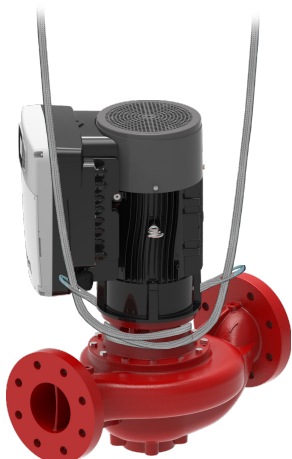


WARNING:

- Assembled units and their components are heavy. Failure to properly lift and support this equipment can result in serious physical injury and/or equipment damage. Lift equipment only at the specifically identified lifting points. Lifting devices such as eyebolts, slings, and spreaders must be rated, selected, and used for the entire load being lifted.
- Crush hazard. The unit and the components can be heavy. Use proper lifting methods and wear steel-toed shoes at all times.



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Lifting option 1: Sling around the motor bracket.



Lifting option 2: Sling around pump flanges and use motor eyelets as guides to maintain balance while lifting.

3 Unit installation



WARNING:

- The heating of water and other fluids causes volumetric expansion. The associated forces can cause the failure of system components and the release of high temperature fluids. In order to prevent this, install properly sized and located compression tanks and pressure-relief valves. Failure to follow these instructions can result in serious personal injury or death, or property damage.
- To avoid serious personal injury and property damage. Make sure that the flange bolts are adequately torqued.

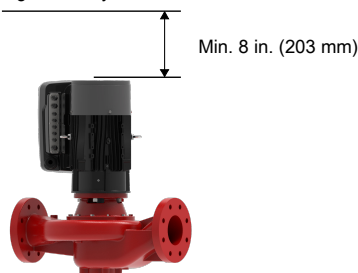
NOTICE:

Never force piping to make a connection with a pump.

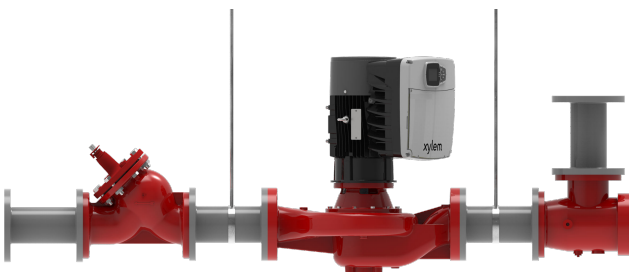
Check:

- Check that the pump is not supported by placing hangers or floor supports on the motor.
- Check that a section of straight pipe, with a length that is five times its diameter, is installed between the suction side of the pump and the first elbow, or that a B&G Suction Diffuser is installed.
- Check that the suction and discharge pipes are supported independently by use of pipe hangers near the pump.
- Check that there is a strong, rigid support for the suction and discharge lines.
- For pumps with flanges, check that the bolt holes in the pump flanges match the bolt holes in the pipe flanges.
- Check that the suction or discharge lines are not forced into position.
- Check that fittings for absorbing expansion are installed in the system when considerable temperature changes are expected.
- Check that you have a foot valve of equal or greater area than the pump suction piping when you use in an open system with a suction lift.
- Check that a B&G Triple Duty® valve is installed in the discharge line.
- Check that the pipeline has isolation valves around the pump and has a drain valve in the suction pipe.
- Use PTFE tape sealer or a high-quality thread sealant when you install the suction and discharge connections to a threaded pump housing.
- On an open system, check that the end of the suction pipe is at least 3 ft. below the surface of the water in the suction well.
- Check that new flange gaskets are installed between the flanges of the pump body end suction and discharge pipes. Make sure that these gaskets are clean and grease-free.

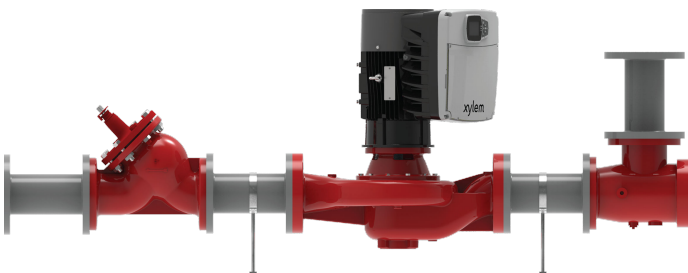
Ensure at least 8 inches (203 mm) of space is available above the motor, excluding any other space required for lifting equipment, to permit removal of the pump rotating assembly and sufficient airflow for motor cooling.



Minimum recommended clearance above motor.



Recommended e-80X unit installation using pipe hangers.



Recommended e-80X unit installation using pipe stands.

The e-80X is compatible with all standard e-80 installation arrangements up to 256 frame. Two common installations are shown to the left. e-80X pumps may be installed directly in-line with the piping using adequately sized piping hangers or floor mounted saddles to carry the loads from the pump and piping.

Consult the standard e-80 IOM for a full list of installation arrangements.

4 Preparation for startup

You must follow these precautions before you start the pump:

- Flush and clear the system thoroughly to remove dirt or debris in the pipe system in order to prevent premature failure at initial startup.
- Run a new or rebuilt pump at a speed that provides enough flow to flush and cool the close-running surfaces of the stuffing box bushing.
- If temperature of the pumped fluid will exceed 200°F (93°C), then warm up the pump prior to operation. Circulate a small amount of fluid through the pump until the casing temperature is within 100°F (38°C) of the fluid temperature.



WARNING:

- Operating the pump in reverse rotation can result in the contact of metal parts, heat generation, and breach of containment.
- Always disconnect and lock out power to the driver before you perform any installation or maintenance tasks. Failure to disconnect and lock out driver power will result in serious physical injury.

Check Drive Rotation:

1. Unlock power to the driver.
2. Make sure that everyone is clear, and then jog the driver long enough to determine that the direction of rotation corresponds to the arrow on the pump.
3. Lock out power to the driver.

5 Electrical installation

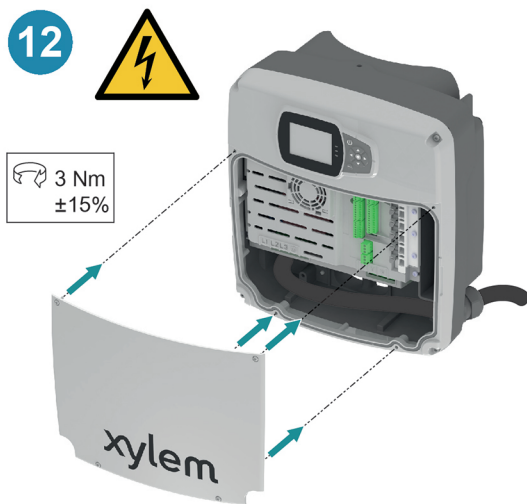
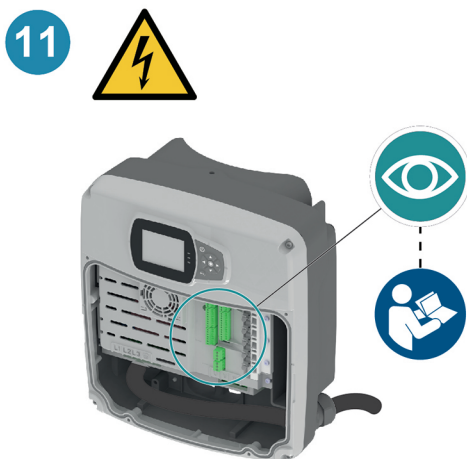
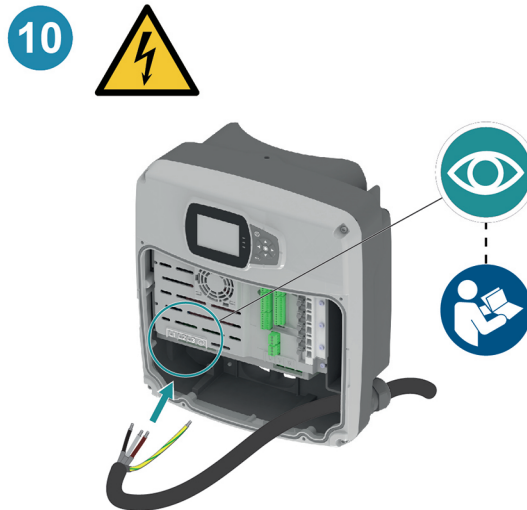
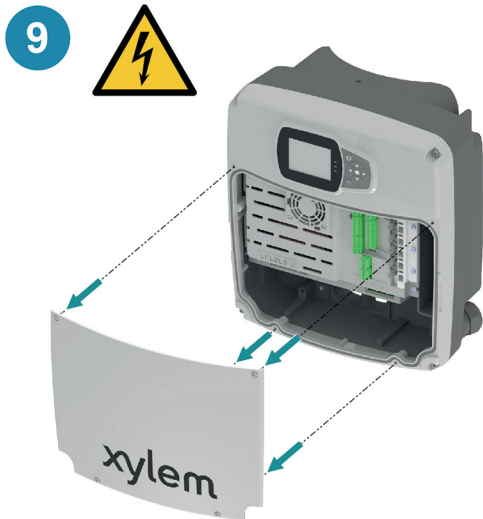


Figure 1



For safety and correct product usage, read the manual before this product is used.

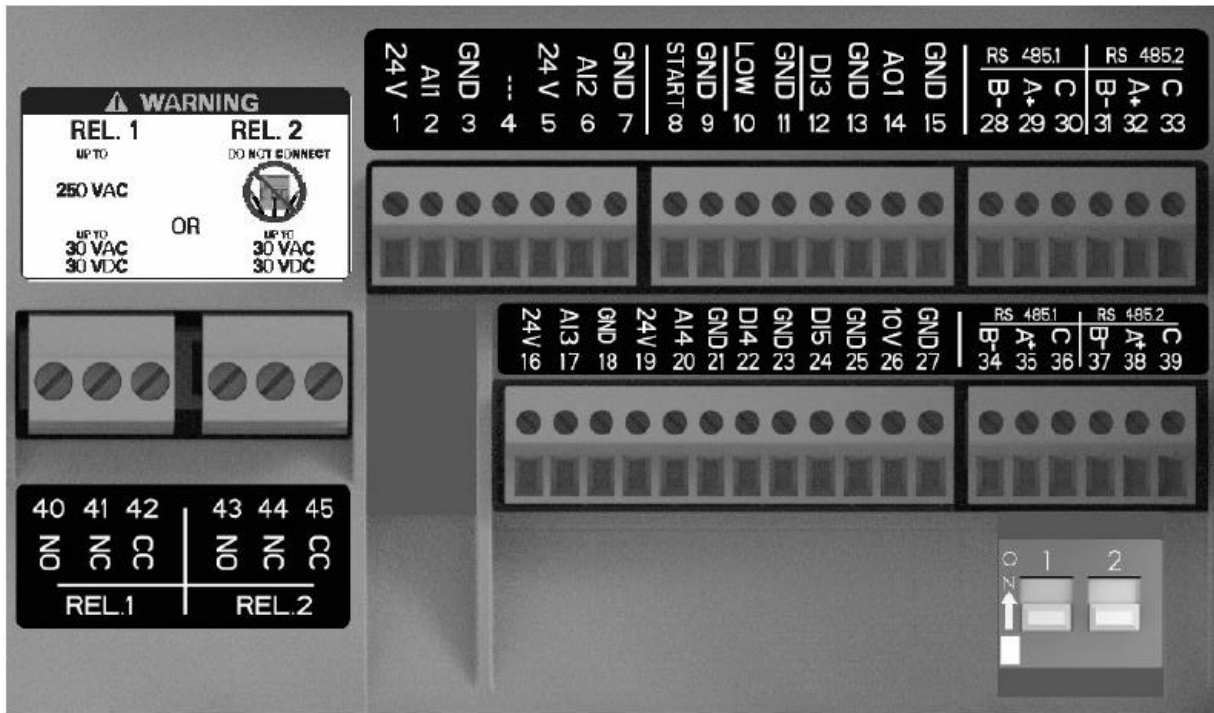


Figure 2: Auxiliary connections

Table 1:

Position number	Name	Description	Default setting
1	Analog input 1	Power supply +24 VDC, max. 60 mA (total, terminals 1 + 5)	Pressure sensor 1
2		Configurable analog input 1	
3		Electronic GND	
4	Reserved	For internal use, do not connect	-
5	Analog input 2	Power supply +24 VDC, max. 60 mA (total, terminals 1 + 5)	Not selected
6		Configurable analog input 2	
7		Electronic GND	
8	External Start/Stop	Digital start/stop input, internal pull-up +24 VDC, contact current 6 mA	-
9		Electronic GND	
10	External lack of water	Low water level digital input, internal pull-up +24 VDC, contact current 6 mA	-
11		Electronic GND	
12	Digital input 3	Configurable digital input 3, internal pull-up + 24 VDC, contact current 6 mA	Emergency start at maximum speed
13		Electronic GND	
14	Analog output	Configurable output	Motor Speed
15		Electronic GND	-
16	Analog input 3	Power supply +24 VDC, max. 60 mA (total, terminals 16 and 19)	Not selected
17		Configurable analog input 3	
18		Electronic GND	
19	Analog input 4	Power supply +24 VDC, max. 60 mA (total, terminals 16 and 19)	Not selected
20		Configurable analog input 4	
21		Electronic GND	

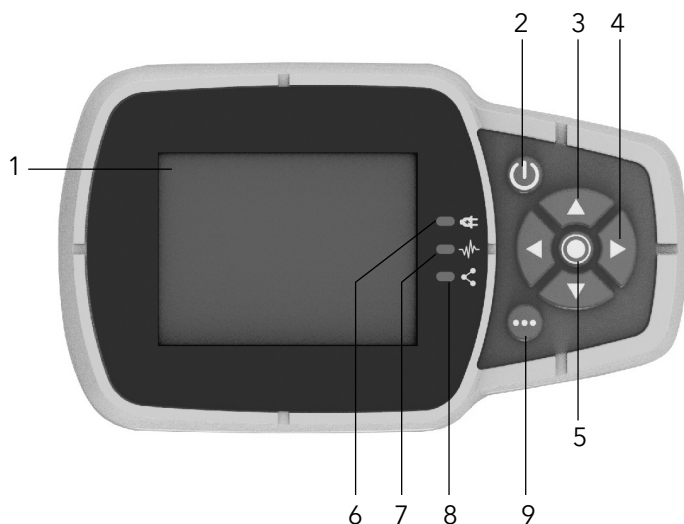


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Position number	Name	Description	Default setting
22	Digital Input 4	Configurable digital input 4, internal pull-up +24 VDC, contact current 6 mA	Not selected
23		Electronic GND	
24	Digital Input 5	Configurable digital input 4, internal pull-up +24 VDC, contact current 6 mA	Not selected
25		Electronic GND	
26	10 VDC power supply	Power supply +10 VDC, max. 3 mA	-
27		Electronic GND	
28	Communication Bus 1	RS485 port 1: RS485-1B N(-)	Multipump
29		RS485 port 1: RS485-1A P(+)	
30		RS485 port 1: RS485-COM	
31	Communication Bus 2	RS485 port 2: RS485-2B N(-)	Modbus
32		RS485 port 2: RS485-2A P(+)	
33		RS485 port 2: RS485-COM	
34	Communication Bus 1	RS485 port 1: RS485-1B N(-)	Multipump
35		RS485 port 1: RS485-1A P(+)	
36		RS485 port 1: RS485-COM	
37	Communication Bus 2	RS485 port 2: RS485-2B N(-)	Modbus
38		RS485 port 2: RS485-2A P(+)	
39		RS485 port 2: RS485-COM	
40	Relay 1	Configurable relay 1: normally open	Error reporting
41		Configurable relay 1: normally closed	
42		Configurable relay 1: common contact	
43	Relay 2	Configurable relay 2: normally open	Motor start
44		Configurable relay 2: normally closed	
45		Configurable relay 2: common contact	

6 Drive operation

Table 2:



NOTICE:

For first-time start-up and programming, the unit is equipped with a start-up genie to select the appropriate operating mode and other parameters for the intended application.

Figure 3: Interface screen

Table 3:

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.



For safety and correct product usage, read the manual before this product is used.

Position number	Name	Function
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 UP 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).
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 no 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 the unit to a mobile device (extended pressure)

7 Xylem App setup

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:



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 steady blue. It is now possible to control the unit using the mobile device.

¹ Compatible with iOS® operating systems with version 15.0 and above.

² Compatible with Android operating system with version 10.0 and above.

 For safety and correct product usage, read the manual before this product is used.

Xylem product cybersecurity

Xylem values system security and resilience. Defending against cybersecurity threats is a shared responsibility. Xylem builds products that are secure by de-

sign. Our customers have a responsibility to understand the risks inherent in their processes and take steps to operate and maintain their solutions securely. For details and updates on Xylem product cybersecurity visit xylem.com/security





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