

Figure 33: With cooling jacket

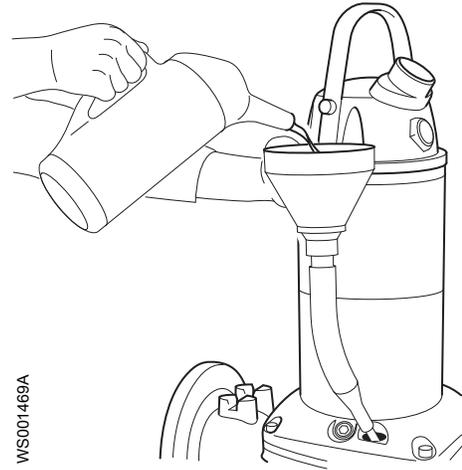


Figure 34: Without cooling jacket

2. Fit new O-rings and reinstall the coolant plugs. Tighten the plugs.
Tightening torque: 44 Nm (33 lbf-ft)

6.4 Service the pump

Type of maintenance	Purpose	Inspection interval
Initial inspection	A Xylem-authorized personnel checks the pump condition. From the results, the personnel recommends the intervals for the periodical inspection and overhaul for the installation.	Within the first year of operation.
Periodical inspection	The inspection prevents operational interruptions and machine breakdowns. The measures to increase performance and pump efficiency are decided for each application. They can include such things as impeller trimming, wear part control and replacement, control of zinc-anodes and control of the stator.	Up to 12,000 hours or three years, whichever comes first. Applies to normal applications and operating conditions at media (liquid) temperatures <40°C (104°F).
Overhaul	The overhaul lengthens the operating lifetime of the product. It includes the replacement of key components and the measures that are taken during an inspection.	Up to 24,000 hours or six years, whichever comes first. Applies to normal applications and operating conditions at media (liquid) temperatures <40°C (104°F).

NOTICE:

Shorter intervals may be required when the operating conditions are extreme, for example with very abrasive or corrosive applications or when the liquid temperatures exceed 40°C (104°F).

6.4.1 Inspection

Service item	Action
Cable	<ol style="list-style-type: none"> 1. If the outer jacket is damaged, then replace the cable. 2. Check that the cables do not have any sharp bends and are not pinched.
Connection to power	Check that the connections are properly secured.
Electrical cabinets	Check that they are clean and dry.

Service item	Action
Impeller	<ol style="list-style-type: none"> 1. Check the impeller clearance. 2. Adjust the impeller, if necessary.
Inspection chamber	<ol style="list-style-type: none"> 1. Drain all liquid, if any. 2. Check the resistance of the leakage sensor. Normal value approximately 1200 ohms, alarm approximately 430 ohms.
Insulation	<p>Use a megger maximum 1000 V.</p> <ol style="list-style-type: none"> 1. Check that the resistance between the ground (earth) and phase lead is more than 5 megohms. 2. Conduct a phase-to-phase resistance check.
Junction box	Check that it is clean and dry.
Level regulators	Check the condition and functionality.
Lifting device	Check that the local safety regulations are followed.
Lifting handle	<ol style="list-style-type: none"> 1. Check the screws. 2. Check the condition of the lifting handle and the chain. 3. If necessary, replace.
O-rings	<ol style="list-style-type: none"> 1. Replace the oil plug O-rings. 2. Replace the O-rings at the entrance or junction cover. 3. Grease the new O-rings.
Overload protection and other protections	Check the correct settings.
Personnel safety devices	Check the guard rails, covers, and other protections.
Rotation direction	Check the impeller rotation.
Seal housing	<ol style="list-style-type: none"> 1. Fill with new coolant, if necessary. 2. Check that the freezing point is lower than -13°C (9°F).
Terminal board	Check that the connections are properly secured.
Temperature sensors: – Thermal contact – Thermistor – Pt100	<p>If the pump is connected to the MAS 801 or MAS 711, then it is recommended that the sensors be checked in the MAS unit. Otherwise, use a multimeter.</p> <p>Do not use a device applying a higher voltage than 2.5 V.</p> <ol style="list-style-type: none"> 1. Disconnect the sensor leads. 2. Measure the resistance to check the status of the sensor and leads according to values in Connect the equipment on page 30. Make sure to select values for the appropriate sensor, monitoring equipment, and sensor combination. 3. Measure between each sensor lead to ground (earth) to establish that the resistance is infinite (or at least several Megaohm).
Voltage and amperage	Check the running values.

6.4.2 Overhaul

The basic repair kit includes O-rings, seals, and bearings.

For an overhaul, do the following in addition to the tasks listed under Inspection.

Service item	Action
Support and main bearing	Replace the bearings with new bearings.
Mechanical seal	Replace with new seal units.

6.4.3 Service in case of alarm

For information about indication values for sensors, see [Connect the equipment](#) on page 30.