

MANUAL

SILENT CIRCULATION PUMP WITH SHIELDED ROTOR

Thank you for choosing our product.

Read the instruction manual carefully before using the pump.

Retain this manual for future reference.



MODELS:

UPS25/4-130(180), UPS32/4-130(180), UPS25/6-130(180), UPS32/6-130(180), UPS25/8-180, UPS32/8-180, UP50/12F-280 ect.

ATTENTION!

Make sure the pump is properly grounded before starting operation. Do not touch a running pump. Do not run the pump without water.







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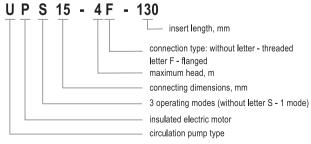


1. Description.

Circulation pumps of the UPS series are quiet electric canned rotor pumps. The stator of the electric motor is completely shielded, and the rotating parts are placed in clean water, which has a positive effect on cooling and lubrication during the operation of the device. The slim pump casing acts as a shielding shell that completely separates the interior from the water. Such a device provides traditional mechanical seals and successfully solves the problem of leaks. The rotating components are mounted on a ceramic bearing for a long service life. The ceramic bearing not only contributes to more efficient cooling of the electric motor, but also reduces the overall pump noise, ensuring that there is no overload during the entire life of the pump. When using the circulation pump in accordance with this manual, no special maintenance is required.

The pump has 3 power levels, adjustable by a switch located on the terminal box, Mode I - minimum head and flow, mode II - average values of head and flow, mode III - maximum values of head and flow.

2. Explanation of the model name.





3. Specifications.

Model	UPS25/32- 4-180	UPS25- 6-130	UPS25/32- 6-180	UPS25/32- 8-180	UP50- 12F-280	
Connecting dimensions, inch	G1" / 1¼"	G1"	G1" / 1¼"		G2"	
Power, W	60 / 60	90	90 / 90	200 / 245	1000	
Head, m	4	6	6	8	12	
Working pressure, bar	0,4	0,6	0,6	0,8	1,2	
Net weight, kg	2,7	2,5	2,7 / 2,9	4,3 / 4,5	18	
Gross weight, kg	3,2	3,0	3,4	4,8 / 5,0	21	
Maximum working pressure, bar	10					
Maximum temperature pumped liquid, °C	110					

4. Installation and safety rules.

Before installing the pump, make sure that all pipeline connections are securely tightened, the pipes themselves must be cleaned from the inside of dirt, impurities, solder residues, etc.

Make sure that the circulation pump will be installed in an easily accessible, dry, well-ventilated area. This will help avoid short circuits caused by high humidity and will make servicing the pump easier.

When installing the pump outdoors, a protective cover must be used to protect the pump from moisture ingress. To ensure protection against electric shock, never install a circulation pump in a bathroom.

Before installing the circulation pump on the pipeline,



connect the pump to the power supply and carry out a test run of the device. A test run is carried out by short-term (no more than 5-8 seconds) turning on the pump; with longer operation, the bearing may be destroyed and the pump may fail.

It is highly recommended to install shut-off valves upstream and downstream of the pump. Installing taps in these locations will ensure that the pump can be easily dismantled if necessary.

Never touch the pump (and / or its parts) operating in heating systems to avoid getting burned.

The pump supply cable must be grounded. This is one of the conditions for the safe operation of the pump. The use of line pipes and pump casing as grounding is prohibited.

At the place of installation of the circulation pump, it is recommended to place information stickers or memos with a list of safety rules to avoid the possibility of an accident.

De-energize the pump before installing it in the pipeline. Complete disconnection of the power supply (including disconnecting the power supply plug from the outlet) is mandatory when carrying out any work on the circulation pump. Failure to do so may result in electric shock.

Check the circulation pump and its components regularly. This will help in time to diagnose and eliminate problems that may arise during the operation of the pump.

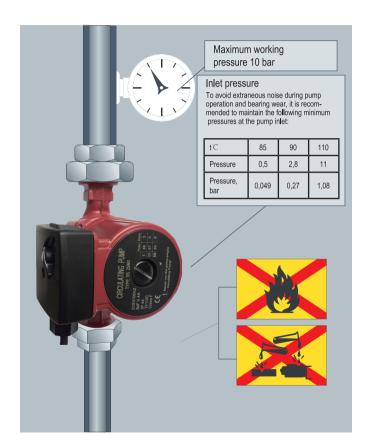
Regularly check the condition of the pump isolation resistor; when cold, it should not be lower than $50M\Omega.$ When the circulation pump reaches operating temperature, the value of the insulating resistor must be at least $2M\Omega.$ The supply cable can only be replaced with a cable with parameters not lower than that of a standard cable.

If, in winter, the temperature at the places where the pipeline is laid and the pump is installed is below 0 $^{\circ}$ C, it is recommended to drain the water in order to avoid damage to the pump due to its freezing.

It is not recommended to fill the heating system with "hard" water in order to avoid the formation of lime deposits on the inner rotating parts of the pump (for example, the impeller).



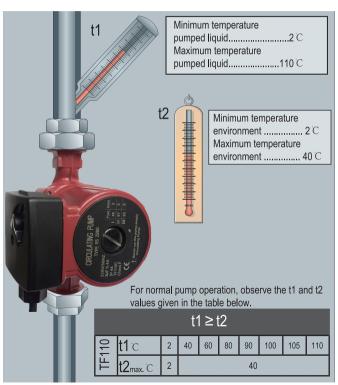
Only "soft" water (PH 6.5 - 8.5) is allowed to be pumped





free of abrasive impurities and fibrous inclusions. The pumping of aggressive and explosive liquids is strictly prohibited.

The system temperature (i1) must be higher than the ambient temperature (t2). This helps to avoid the formation of condensation on the pump housing. Different pumps have a different temperature range of the pumped liquid. Consider this when using pumps.





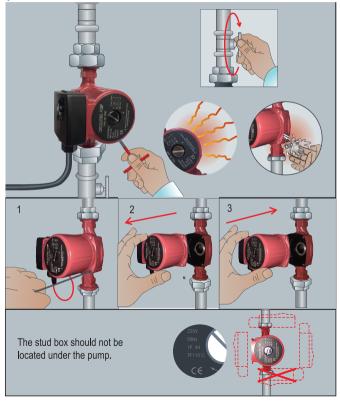
The water flow must pass through the pump in the direction indicated by the arrow located on the body of the device. Never install the pump against the flow of water as this could damage the pump.





Before starting any service to the pump, make sure that the supply line is closed and the pump is de-energized.

Allow the pump to cool down, otherwise a thermal burn may result from the ejection of hot steam.





- 1. The position of the terminal box can be adjusted depending on the installation of the pump. Before adjusting the position of the terminal box, make sure that the pump is completely de-energized and that the valve in front of the pump is closed.
 - 2. Disconnect the motor section from the pump section.
- 3. Rotate the motor section to the desired position and install it on the pump section, tightening the screw connections securely.

Installation of the power supply network should be carried out only by qualified specialists in accordance with the rules and regulations for the installation of the power supply network.

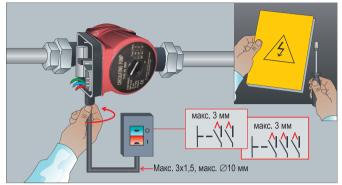
The supply cable must not come into contact with the pipe and / or the pump motor compartment. Make sure that the mains supply meets the requirements indicated on the pump nameplate.

If the temperature of the pumped liquid is more than 90 $\,^\circ$ C, then it is necessary to install a heat-resistant power cable.

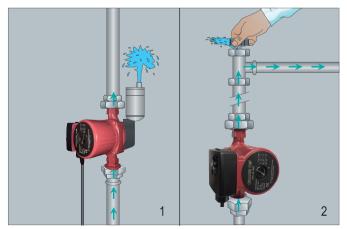
If the pump is marked "MOTOR PROTECTION NEEDED", then a circuit breaker with overload and short-circuit protection is required.





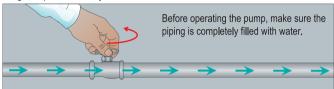


Do not allow water splashes or drops to enter the terminal box. This could cause a short circuit, electric shock and damage to the pump.

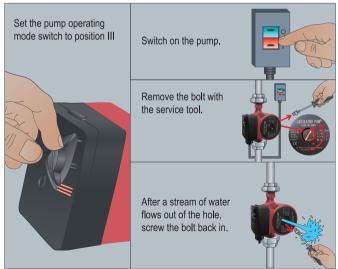




- 1. When an automatic air valve is installed, air and excess water will be discharged through it.
- 2. If no automatic air valve is available, install the air valve at the highest point in the system.



When filling the heating system with water, it is advisable to open the top plug on the automatic air valve.





5. Possible malfunctions.

Malfunction	Cause	Elimination	
	inlet valve closed	turn on the tap	
The pump runs, but does not build up pressure	airlock in the system	bleed the air from the system according to the manual.	
	the power cable is not connected to the mains	make sure the power cable is connected to the mains	
	blown fuse	replace fuse	
The pump is not working	the capacitor is out of order	replace capacitor	
	the pump impeller is blocked by fibrous inclusions or other materials	remove impurities that interfere with normal pump operation	
	the inside of the pump is clogged	clean the pump	
Extraneous noise in the system	delivery power set too high	reduce the pump power	
	air locks in the system	bleed the air from the system according to t he manual	

6. Equipment.

Name	Quantity, pcs.
Pump assembly	1
Connecting nuts	2
Manual	1
Packaging	1



WARRANTY OBLIGATIONS.

- The pump has a warranty period of 12 months from the date of sale. The service life of the pump is up to 10 years, subject to strict adherence to all the requirements set forth in this operating manual.
- 2. In the event of a pump failure during the warranty period due to the manufacturer's fault, the owner has the right to free warranty repairs upon presentation of a correctly completed warranty card, factory-complete pump and packaging in the warranty workshop or in the place where it was purchased. In case of warranty repair, the warranty period is extended for the period of repair and shipment.
- 3. The warranty period is 12 months from the date of sale. In the absence of a stamp indicating the date of sale in the manual, the warranty period is calculated from the date of issue (the final warranty period is determined by the seller, but cannot exceed 24 months).
- 4. The guaranteed shelf life is 12 months.
- Claims are not accepted in all cases specified in the warranty card, in the absence of the date of sale and the stamp of the store (the seller's signature) in this operating manual, the absence of the warranty card.
- 6. The warranty does not cover pumps with defects resulting from operation in violation of the requirements of the operating manual, including:
 - · work with overload of the electric motor;
 - mechanical damage as a result of impact, falling, etc .;
 - damage as a result of exposure to fire, aggressive substances, etc.;
 - ingress of liquids and foreign objects into the product;
 - for mechanical damage (cracks, chips, etc.), damage caused by exposure to aggressive agents and high temperatures, the ingress of foreign objects into the ventilation grilles of the pump, damage resulting from improper storage (corrosion of metal parts, etc.);
 - on wearing parts (carbon brushes, toothed belts, rubber seals, oil seals, protective casings, grease, etc.), replaceable and wearing accessories and devices, except for cases of damage to the above parts that occurred as a result of pump breakdown due to manufacturing defects
 - natural wear and tear of pump parts (full depletion of the resource, strong internal or external pollution);
 - on a pump that has traces of opening or repair outside the warranty workshop, with removed, erased or altered serial numbers (if any), in the event of faults caused by force majeure (fire, flood, lightning strike, etc.);



PW

MODEL	PW125	PW250	PW370	PW550	PW750
FLOW max., I / min	33	37	40	50	60
Head max., m	24	30	36	42	50
Suction depth, m	8				
Power, W	125	250	370	550	750
Connecting dimensions, inch	3/4"	1"			
Engine rotation speed, rpm.	2850				
Voltage / Frequency	220 В , 50 Гц				
Pressure, bar	2,4	3,0	3,6	4,2	5,0
Accumulator valuma 2 l					

Accumulator volume - 2 L Maximum temperature of the pumped-over liquid + 90 °C Maximum ambient temperature + 40 °C

