



## Wilo Z 15+ Timed and Constant Speed Circulating Pump

### Installation and Operating Instructions

WILO\_IOM\_Z15+\_1221



### Warning

- Please read over the operating manual prior to installation and keep it for reference.
- The main electrical connection to the pump must be grounded before use.
- It is strictly prohibited to touch the electrical connections of the pump while the pump is in operation.
- It is strictly prohibited to run the Z 15+ pump without water.

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## Z 15+ - Timer Type Circulation Pump

Version 21.09

Thank you for choosing the WILO® Z 15+ domestic hot water recirculator pump. Please read over the operating manual prior to installation and keep it for reference.

### **Warning**

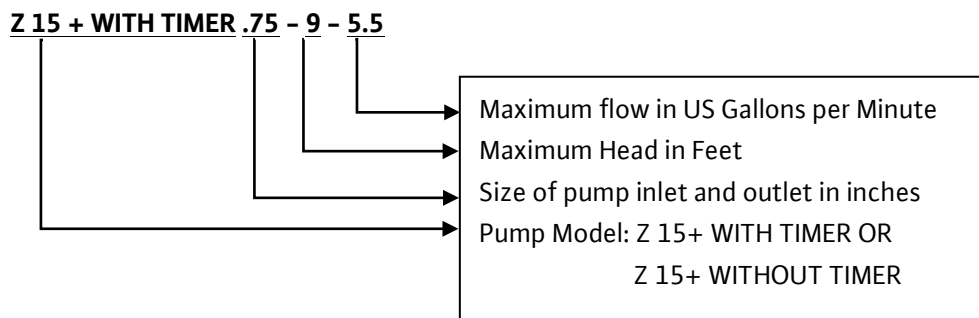
- It is strictly prohibited to touch the electric components of the pump while powered and in operation.
- It is strictly prohibited to run the pump without water.

### **Warning about children**

### **Warning about pressure**

### **Warning about modifying the pump without manufacturer's knowledge**

## I. MODEL DESCRIPTION



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### II. TECHNICAL PARAMETERS

Product model: Z 15+

Rated voltage: 115V

Rated frequency: 60Hz

Max. input power: 30W

Max. input current: 0.26A

Max. Head: 9 Ft.

Low Lead Standard: NSF-61 Listed

Maximum flow: 5.5 US Gallons per Minute

Protection class: NEMA 12

Maximum operating pressure: 145 PSI<sup>2</sup>

Maximum water temperature: 160°F<sup>1</sup>

Inlet thread: ¾" Female NPT

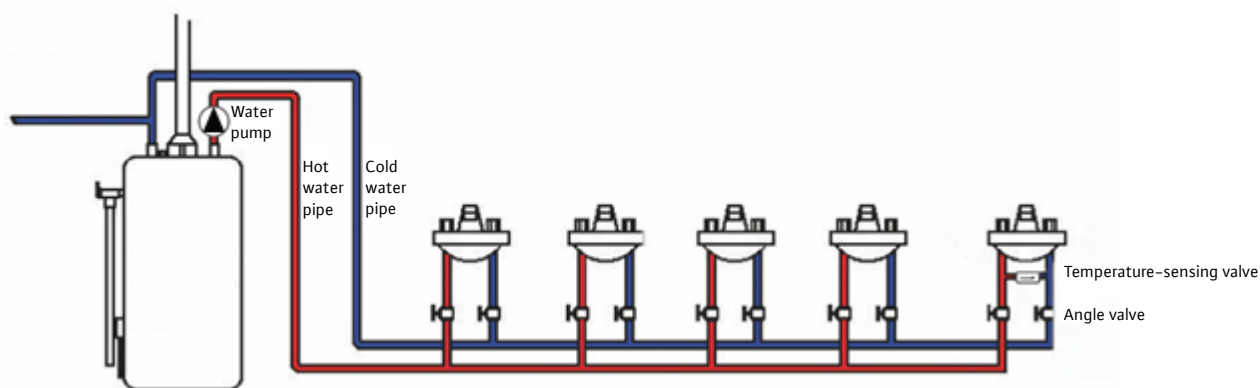
Outlet thread: ¾" Male NPT

Pump Weight: 5.5 lbs

- Notes:
1. The minimum temperature of the water must be greater than 32°F, and the maximum temperature is 160°F.
  2. The inlet (supply) pressure must be higher than .75 PSI to work properly.

### III. INSTALLATION PRECAUTIONS

For best performance and reliability, please follow the instructions in this manual.



Schematic diagram of a domestic hot water system

Step 1: Carefully check system components to ensure that the components are not missing or damaged.

The circulating system should include:

- One circulating pump with, or without, timing function (provided by WILO)
- One NSF-61 gasket to be placed into the union end of the pump (provided by WILO)
- Installation and operation instructions (provided by WILO)
- Jet valve (provided by WILO as an optional accessory)
- Four 3/8" braided hoses (provided by others)

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Step 2: Turn off the power to the water heater and isolate the cold-water supply to water heater; open the hot water tap in the house and wait until the residual water is drained out.

Step 3: Install the provided gasket into the union end of the valve. Install the water pump at the hot water outlet of water heater; connect the outlet of water pump to the hot water pipeline. Confirm the pumping direction through the arrow on the side of pump case, and the installed water pump shall be kept away from exhaust/gas lines. Make sure to insert the supplied gasket into the union end connection of the pump to ensure a leakproof seal.

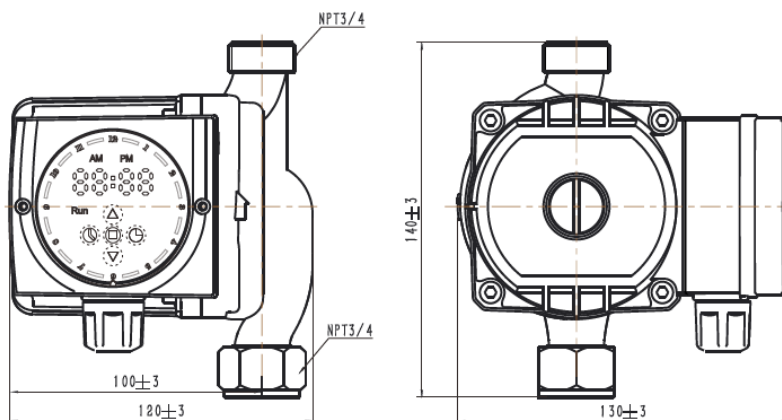
Step 4: Reopen the cold-water supply to the water heater and close the furthest faucet when the pipeline is filled with water to exhaust the air completely; power on the water heater and the water pump.

Step 5 (applies to models with timer only): Set the timing function of water pump to make it operate in the peak period of hot water use. (e.g., 15–30min before taking a shower)

Step 6: Close the cold and hot water angle valves below the tap, and observe the signs of cold water inlet/outlet and hot water inlet/outlet of the temperature-sensing bypass valve; use braided hoses to connect the cold water angle valve and the “COLD IN” of valve, connect the hot water angle valve and the “HOT IN” of the valve, connect the “COLD OUT” of the valve and the cold water end of the tap, and connect the “HOT OUT” of the valve and the hot water end of the tap; open the hot water angle valve and the cold water tap to check whether the valve operates normally (if the water runs out from the cold water tap normally and becomes warm, and the water flow becomes small slowly until it stops, it indicates that the valve operates normally); close the tap and open the cold water angle valve.

Note: 1. To obtain the best circulating results, the valve shall be installed below the tap the farthest away from the water heater; if there are branch hot water pipes in your house, more than one valve may be needed. 2. There may be some warm water in the cold-water pipeline connected with the valve, and warm water will dissipate soon when the cold water tap is opened.

### Outline dimensions of the product\*

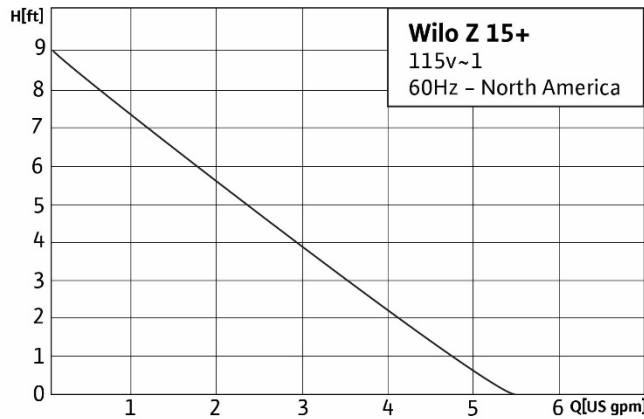


\*Pump pictured with timer

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**Performance parameters of the product**



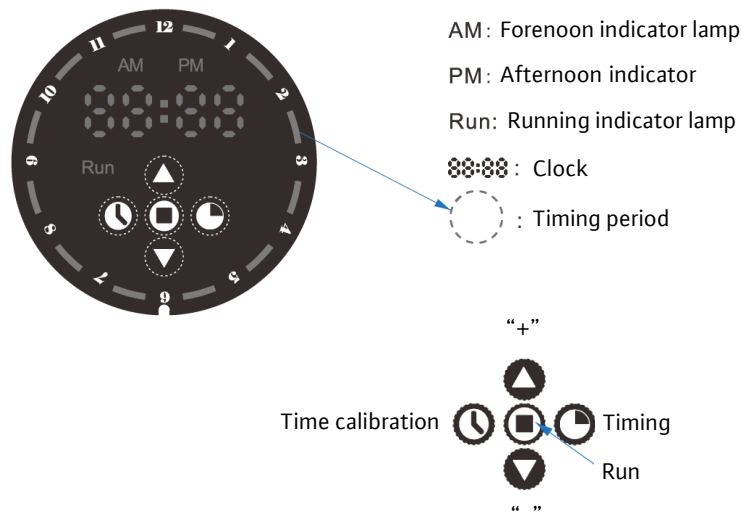
**Function overview**

Function name	Function description
Forced operation	The water pump runs continuously.
Timed operation (applies to models with timer only)	The water pump automatically runs in the set period of time. (The minimum setting period of time is 1 hour in the timing function)
Screen function (applies to models with timer only)	From 9:00 p.m. to 7:00 a.m., the display interface of water pump will enter the screen rest mode if not operated within 20s (except the running indicator lamp), and can be lit by pressing any button.

**Note:** The factory default mode is that the pump is started at fixed time in 24h.

**IV. HOW TO USE (applies to models with timer only; models without timer, skip to SECTION V. FAULT ANALYSIS AND ELIMINATION)**

1. Panel description



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### 2. Debugging and menu setting:

① Time calibration: Adjust the time of water pump to the current time; press the “Time calibration” key, the hour area starts flashing, press the “+/-” key to adjust the hours; press the “Run” key to enter, the minute area will then flash, press the “+/-” key to adjust the minutes; exit the time calibration function by pressing the “Run” key or not operating for 20s.



② Timing function: Set the running period of water pump; press the “Timing” key, the dial indicator lamp becomes flashing, and press the “+/-” key to adjust the cursor to the target time period; (the timer is based on the 12-hour system, and it automatically switches between AM/PM when the cursor passes through the 12 o'clock) Press the “Run” key to turn on or off the current time period; exit the timing function by pressing the “Timing” key or not operating for 20s.



③ Forced operation: Press the “Run” key, the set time goes off, and the water pump runs automatically and continuously.



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### V. FAULT ANALYSIS AND ELIMINATION

Fault	Main causes	Elimination methods
The cold-water pipe is filled with hot water	The temperature sensing function of the jet valve has failed	Replace the jet valve
The water from the hot water side of the faucet is not hot	There are branch pipes	Add the number of jet valves needed
	Forgot to open the cold/hot water angle valve at the connection of the jet valve	Open the angle valve
	The non-return function of the jet valve has failed	Replace the jet valve
The pump does not run	The current set time is not turned on	Turn on the current set time
The time returns to zero when the pump is powered on after it is powered off	The built-in button battery of pump is exhausted	Calibrate the time manually

**Note: All the figures given in this manual are schematic diagrams; as the performance of the product is improving continuously, the purchased products (including appearance and color, etc.) are subject to physical goods.**

END OF SECTION

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