

# Have a nice shower

The NEW CIRCULATION

## Patented solution for immediately hot water at the last tap

**50 % saved energy**  
in relation to classical circulation

**Simply retrofit**  
Only one valve at the last tap of every line

**Problem solver in old facilities**  
No third circulation line, defective heating band






Energy saving system resounding successful:

1. Place Stuttgart environmental prize
1. Place ZDF television program „WISO“
2. Place MDR television program „Simply ingeniously“

Your advantage:

- Time and cost saving assembly
- Content customers
- Financial advantages

### The products on a view

Article	Name	Description
ZR-S RD or ZR-P RD	 Circulation valve	Circulation valve for gravity or pump actuation inclusive universal installation accessories (2 T-fittings with union nut, flexible hose)
ZR-ZPE ECO or ZR-ZPE ECO3	 Central pump unit	Energy-saving pump only 3 watts (3-9 W adjustable) ideal for power-saving operation by timer. Universal usable pump with 300 mbar static final pressure (4-27 W adjustable). This is ideal for quick filling of the WW-line operation by using radio buttons
FS20 S4A + FS20 ST more FS20 S4A	 Radio switch-transmitter and receiver	Battery-powered wall switch (2 channels) for manual turning the circulation pump As many as desired further transmitters possible Receiver for switching the circulation pump through all FS20 transmitters (Falling delay is programmable)

### Further characteristics

- No needed circulation line
- Problem solver in many existing buildings
- Simple and fast assembly
- Low-priced solution
- Circulation through water meter  
Problem solver in multi-family houses by subsequent extension of the existing circulation
- Optimum protection against legionella bacteria  
by constant water exchange  
- for the first time also in cold water lines

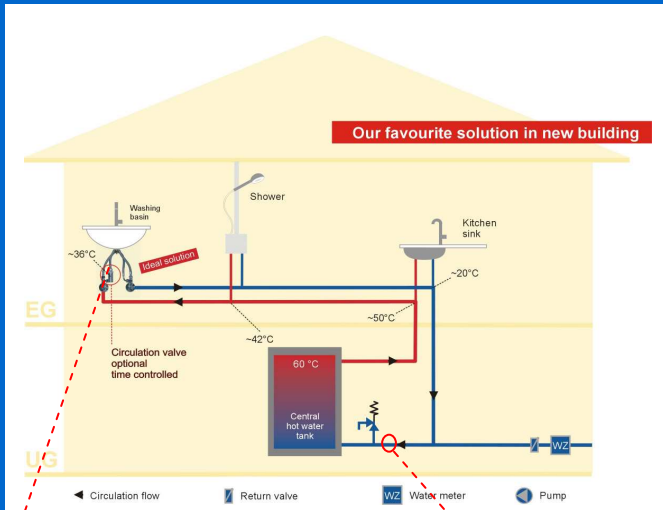


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ENERGIESPARSYSTEME

Closer information you will find under:  
[www.miller-energiesparsysteme.de](http://www.miller-energiesparsysteme.de)

# The NEW CIRCULATION in overview



## Function of the NEW CIRCULATION

The circulation regulator is installed at the end of the warm water pipe under the last tap. The cooling down water is sent back to the hot water tank by using the cold water line and there it gets warmed up again.

This constant, extremely slow circulation (typically 4 litres per hr.) is the guarantor for immediately warm water.

Shortly after opening the hot water tap a lukewarm temperature is available at the last tap. From the warm water line more warmer water flows. While from the cold water line more colder water flows. So the lukewarm temperature is constant available (on middle position of the tap).

At the branching to the shower warm water more than 40°C can be received immediately and in the middle of line section (oftentimes kitchen) almost immediately hot or cold water is available. In this kind all water taps immediately can receive the typically desired water temperature.



Energy-efficiently  
only 3 Watt  
3-9 W adjustable

or

4-27 W adjustable  
up to 300 mbar  
for radio buttons

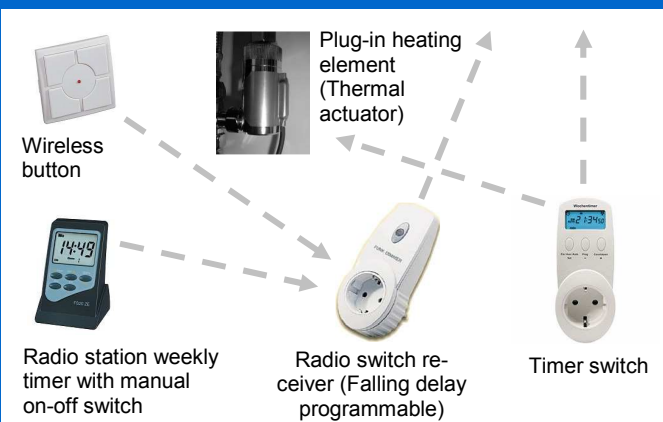


## Circulation driven by pump or gravity

The circulation is powered by gravity or a circulating pump. This pump is placed in the cold water line which leads to the hot water tank.

By using a high-efficient pump with 3 Watts of power consumption, up to 90% energy can be saved.

A pump with higher performance (ECO3) achieves a static pressure of 300 mbar with 27 W and allows a fast filling of the WW-lines by using a radio transmitter.



## Circulation steering with timer or radio transmitter

The time-steered activating of the circulation with gravity is done via the circulation valve himself (principle of the thermal actuator). Thereby the restarting duration amounts to approx. 20 minutes. A condition for the restarting of the gravity circulation is a standing hot water tank with inlet pipe on the bottom and exit above.

By using circulation with pump, the circulation can be activated by a classic timer. For this it needs only 3 Watt of electric consumption.

By using a radio transmitter button, the WW-line can be filled with hot water in the respective case of need. A falling delay which is integrated in the radio switch stops the pump automatically e.g. after 3 minutes.

Built on a strong co-operation  
with high success ratios

Your partner



Closer information to various solutions in single and multi-family houses you will find under [www.miller-energiesparsysteme.de](http://www.miller-energiesparsysteme.de)

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