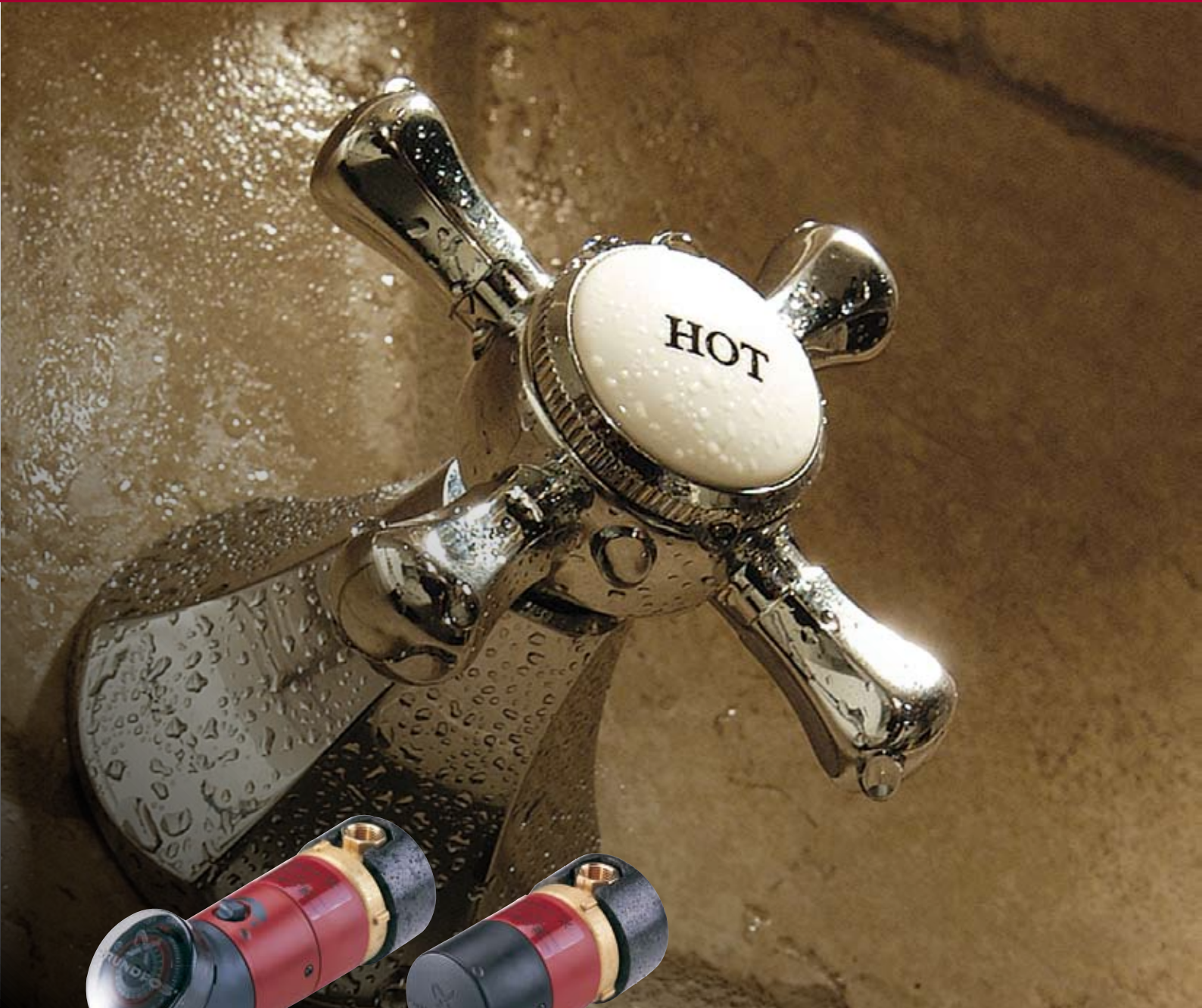


GRUNDFOS HOT WATER RECIRCULATION SOLUTIONS



Hot Water in an Instant

BE > THINK > INNOVATE >

GRUNDFOS 

> Hot Water Recirculation

What are you waiting for?

Many Home Owners wait up to 60-seconds or more for hot water to run from their tap or shower... with Grundfos the wait is over!

Convenience and water conservation is here now. With a Hot Water Recirculation System, the comfort of hot water in an instant and the elimination of water waste is a phone call away.

What is Hot Water Recirculation?

Hot water recirculation provides a continuous flow of hot water in the hot water supply line of your home – when you need it. Without a Hot Water Recirculation System, unused hot water in the line cools and must be evacuated before hot water from your hot water heater can reach the desired tap. As a result, litres of water are wasted.

How Hot Water Recirculation works

There are two types of HWR systems suitable for applications in new and established homes.

New construction – Return Line

When constructing a new home, a dedicated return line is installed between the end of the hot water supply line and the water heater. A circulator pump is installed at the point where the return line connects to the hot water tank. The circulator then pushes heated water from the tank through the supply line and back through the return line.

Retrofit for existing homes – Comfort System

This system uses the cold water supply line as the “return-line” to the water heater. A circulator pump is used to create a pressure differential that allows the cold and cool water in the hot water supply line to by-pass (at low volume) into the cold supply line through a patented thermostatically controlled valve that is mounted under the sink furthest from the water heater.



Grundfos brings
you hot water on
tap, instantly!

➤ Solutions for new homes

Hot Water Recirculation Solutions

Hot Water Recirculation systems are becoming more popular due to the population's increasing interest in saving water and adding convenience to their lives. In many countries around the world a hot water return line is mandatory when building a new home.

Reliable solutions for new home construction

An up-to-date and water saving tap-water supply installation consists of not only a cold water pipe (green) and a hot water pipe (red), but also a circulation pipe (violet). *see figure below*

The Grundfos Comfort pump offers the only traditional recirculation solution that provides a simple and reliable installation. The Plumber needs to install the dedicated return line and the circulator will do the rest.

Features and benefits

- Quick and easy installation
- Built in timer & thermostat on the BUT model ensures optimum operation
- Brass pump housing with integrated valve
- Uses less than a 25 watt light bulb
- Can save thousands of litres of water per year, per household

Grundfos Comfort UP 15-14

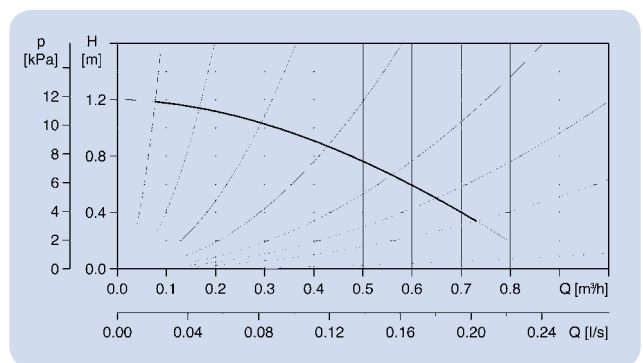


UP 15-14 B
Standard



UP 15-14 BUT
Includes timer and thermostat

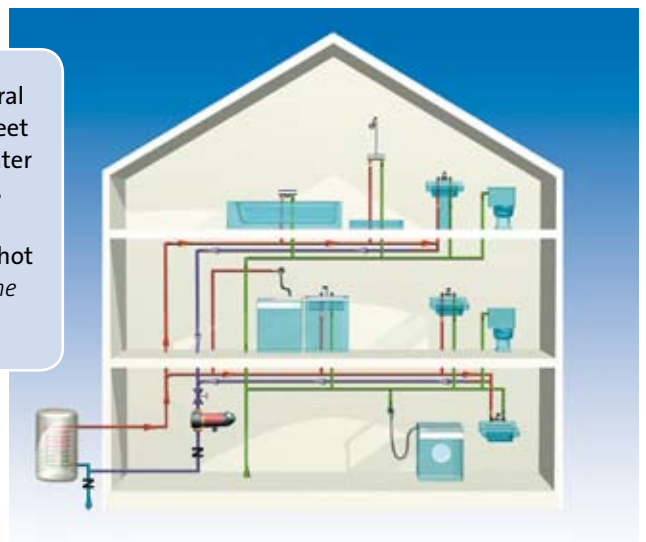
Characteristics UP 15-14



Installation diagram

New home

Grundfos has developed several circulator pump models to meet the needs of domestic hot water systems. Bronze and stainless steel models are available to resist the corrosive effects of hot water. Refer to *Pumps for Home and Garden* brochure.



> Solutions for existing homes

The right solution for existing homes

Traditional hot water recirculation is difficult, and impractical to install in an existing home. Companies have responded with large under sink units which are cumbersome to install and often require a power source, which is hard to find under the bathroom sink.

The innovative Grundfos Comfort System now gives you the opportunity to provide Home Owners the convenience and comfort of hot water in an instant – even in an existing home.

How does the Grundfos Comfort System work?

- When your tap is off, hot water cools in your water pipes.
- Water that cools overnight becomes a cold shower the next morning because your tap or shower has to “run off” all the water between your hot water system and the shower head.
- With the Grundfos Comfort System water circulates back to the hot water storage so it’s hot and comfortable, from the moment you turn the tap.
- The Grundfos Comfort System utilises the main supply line which eliminates the need for installation of a return line. A small circulator pump is installed on the outlet pipe of the hot water storage tank, to keep the water in your line hot.
- The valve at your tap provides the by-pass which allows the water to recirculate using the already installed cold water pipe line as a return line to the hot water service.
- When the water temperature reaches 38°C at the valve it will close and stop the circulation.
- The valve works without the need of electricity and can therefore be easily installed without you having to look for a power outlet.
- Together the pump and the valve provide instant hot water from every tap and shower in the home.
- There is even a timer on the pump to make the system more efficient during down time, like nights and midday, that will help to save you money.

Note: A small amount of tepid water will be in the cold water line.

Features and benefits

- No return line is required
- No electricity needed under the sink
- Built-in timer & line cord
- Uses less than a 25 watt light bulb
- Installs in less than an hour
- Can save thousands of litres of water per year, per household.

Grundfos Comfort System



PN 91332440

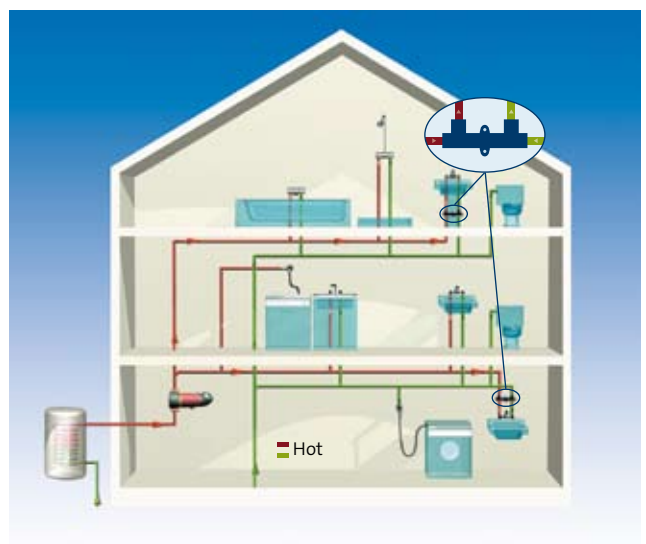
Includes one pump and valve

PN 9133237

Includes one pump and two valves

Installation diagram

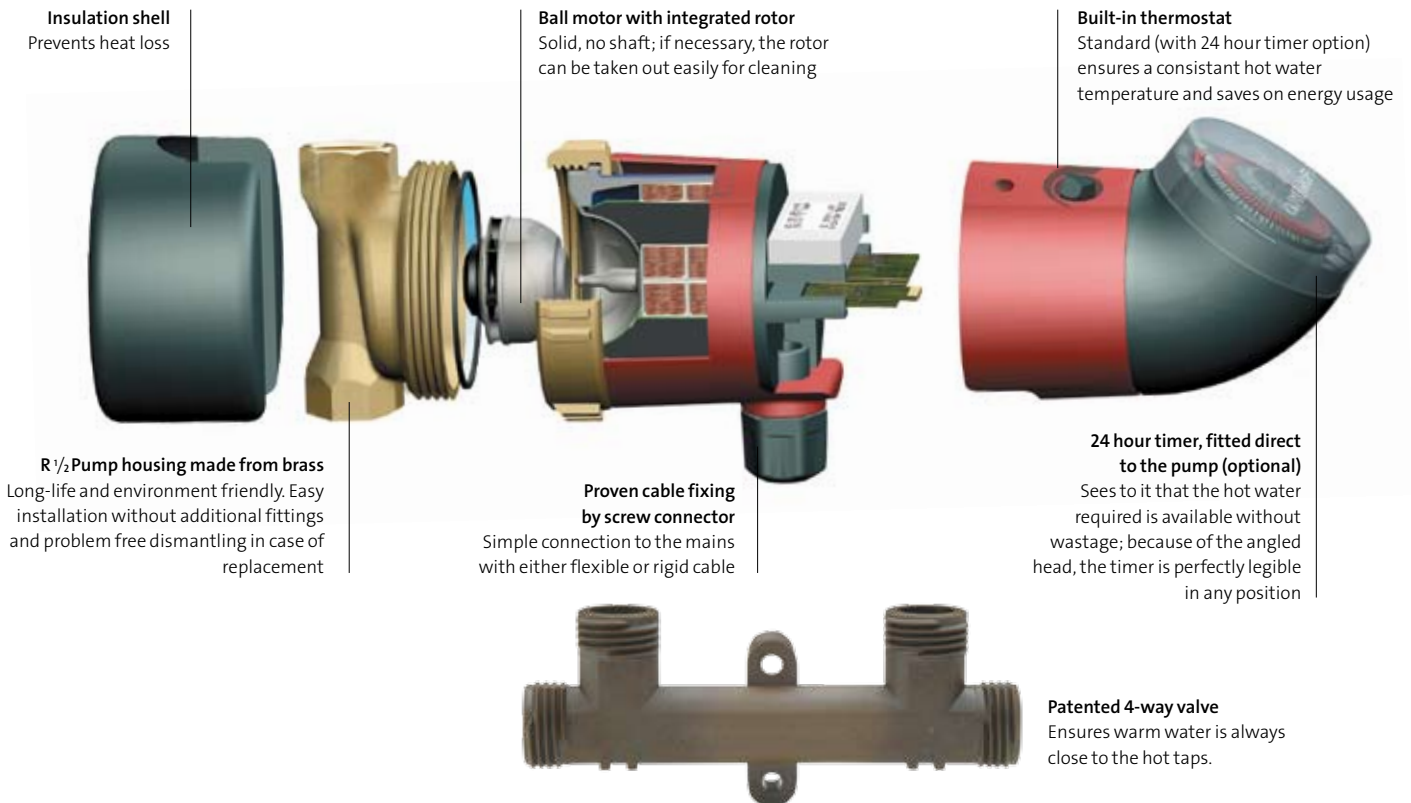
Existing home



> Hot Water Recirculation Solutions

State-of-the-Art

The Grundfos Comfort System UP15-14 is based on state-of-the-art technology and after years in the market it has proven its high reliability. The ball motor technology makes the Grundfos Comfort particularly resistant to limescale which ensures the pump a long life time.



Applications and limitations

The system is suitable in these applications

- The Grundfos Comfort System is suitable for installation into mains pressure hot water storage type systems
- The Grundfos Comfort System is suitable for homes where the hot and cold water pressure feed are the same
- Hot water storage tanks often come with a pressure limiting valve. If this is the case, Grundfos recommends installing a pressure limiting valve of the same rating in the cold water supply
- The pump can be installed anywhere in the hot water circuit. For optimum performance Grundfos recommend the pump is installed after any tempering valves or devices. In addition Grundfos recommends allowing a minimum of 3m piping between the pump and the comfort valve
- If the application requires two valves, then the pump needs to be installed in a position where both valves are on the discharge side of the pump

The system will not be suitable in these applications

- Any conditions on site that prevent the hot water and cold water pressure being equal at the comfort valve position
- Any conditions that prevent a small amount of water from the hot water circuit being bled across to the cold water circuit
- For instantaneous hot water systems, the limited flow through the valve (2.5 l/min) might not be sufficient to start the system. Please consult the supplier before installing the Grundfos Comfort System
- The system is not suitable for applications where a pressure limiting valve or other device varies the hot and cold water pressures at the comfort valve
- The Grundfos Comfort System is not suitable where jumper-type isolation valves are present and prevent the bypass of hot water to the cold water circuit at the comfort valve (typically installed under the vanity sink)

➤ Benefits for Plumbers and Dealers

A unique opportunity

The Grundfos Comfort System is not just another pump. It is an opportunity to build business and improve customer satisfaction. Our system is unique. Not only in the products we manufacture, but in the way we help you make the most for your business. So, whether you are a one man operation or you run a fleet of 20 vehicles, Grundfos has the solution and the proven track record that will generate more profit for you.

Sydney plumber Dave Adams says the Grundfos Comfort system has boosted his income

"I have installed a number of Comfort Systems and I am discovering that it really sells itself. Now I keep at least two systems in stock. Whenever I do a job, I ask customers if they are experiencing long delays in getting hot water, and the answer is generally 'yes'. I tell them about the Comfort System, and I convert about 90 percent of enquiries into installations. My customers really like it - and so do I, especially as it is easy to sell and has provided me with an expanding new income stream."

Success overseas

For years the Grundfos Comfort System has been a success in the USA. More than 100,000 systems have been installed, not only providing comfort to the end-users but a good business opportunity for our Dealers and Plumbers.

Paul Nebrasky, Nebrasky Plumbing - New York

"We carry a Comfort System on every one of our trucks. When my team answer a hot water service call, two-thirds of the time we end up installing a Comfort System during that call. My plumbers and customers love them. The Comfort System has been fantastic. It has revolutionised the hot water recirculation industry."

Roger Peugeot, Roger the Plumber - Kansas City

"We have installed the Comfort System in everything from starter homes to million dollar mansions. They are easy to sell. You just have to ask the right questions. Let your customers know they don't have to wait for hot water when they want it. All of our trucks carry a Comfort System. Having it on the truck is the key. You can sell it a lot easier if you already have it with you."



Benefits

- Additional revenue
- Quick and easy installation
- Excellent profit margin
- New customers

➤ Benefits for Home Owners

Home Owner benefits of Hot Water Recirculation

Home Owners today are constantly seeking improvements to their lifestyle. Dishwashers, microwave ovens, electric garage doors – all once considered optional home features are now standard. Instant hot water is destined to become another one of these standard features.

Convenience and Comfort

Home builders and plumbers are making Hot Water Recirculation a feature that not only adds value to the home, but delivers the comfort and convenience of instant hot water that should be expected.

Imagine turning on a shower and getting hot water immediately. Why wait while cold water is going down the drain?

Savings and Payback

How many stop and think what happens to the litres of water that run down the drain during the wait? Those litres of water are wasted, and in an average household that takes four showers per day, that will add up to thousands of litres per year. Multiply it by all the homes in the community and you will have millions of litres of water going down the drain into the sewer system every single year. Hot Water Recirculation means hot water in an instant without unnecessary waste. Payback will result from the reduction of water usage and water waste.

Helping the Community and the Environment

Fresh water is a precious natural resource that is slowly being depleted. In many parts of the world, stringent water conservation is already a part of everyday life. In Australia, arid climates and rising populations have resulted in higher costs and stronger focus on water conservation. Hot water recirculation is a cost-effective method of controlling any additional waste of water.



Benefits

- Hot water in an instant
- Water conservation
- Reduced utility bills
- Maintenance free

BE > THINK > INNOVATE >

Being responsible is our foundation
Thinking ahead makes it possible
Innovation is the essence

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