

Intro to Recirculating Pump Training Flyer

Hot water at the tap:

When we are not using hot water in our homes the water in the supply lines cools down. This is why cold water comes out of the faucet when you initially turn the hot water on. Hot water **recirculation “recirc” pumps** are a convenient way to ensure that you have immediate hot water from the tap. These systems slowly pump hot water through your hot water pipes which means hot water is always available at the tap.

Reduced Cold Water Wasted:

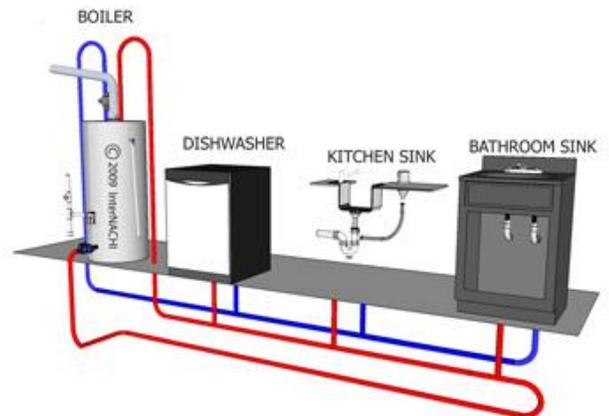
No wait time on hot water means less cold water ran down the drain waiting for the water to get hot. Grundfos, our main vendor, estimates their recirc pumps help save the “12,000 to 38,000 gallons of water a typical U.S. home wastes annually waiting for hot water.”

How Recirc Pumps are Set Up:

There are two main setups of Recirculating Pumps: **Dedicated Loop System** and the **Recirc with Comfort Valve System**.

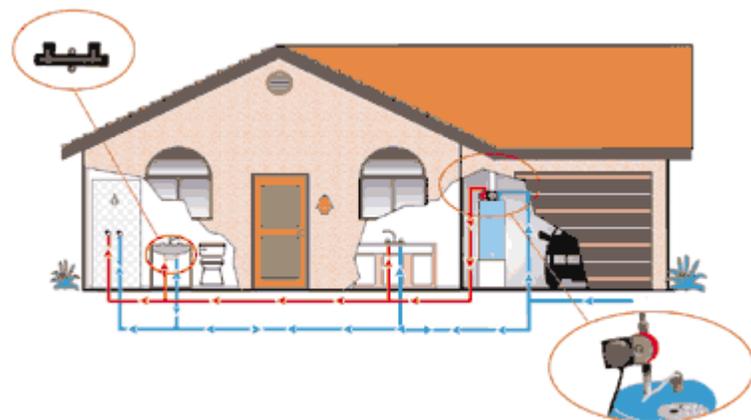
In a **Dedicated Loop System** hot water is slowly pumped through the hot water lines in a house. When it reaches the point furthest from the water heater a designated line is ran directly back to the water heater.

This type of set up can be difficult or sometimes impractical to retrofit to existing houses as a new line will need ran. When building a **new house** this will be the type of system used.



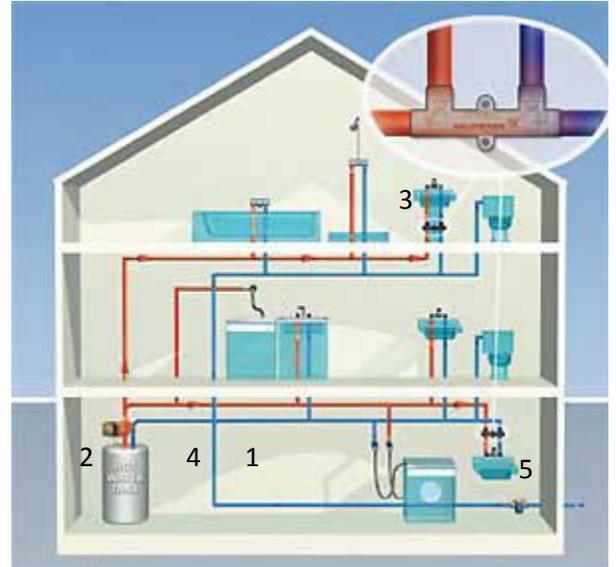
In a **Recirc with Comfort Valve System** no return line is needed so it is an ideal set up for an **already build house**. This system doesn't need a return line because it continually runs the cooled water in the hot water supply line back to the water heater through the cold water supply line. The pump actually pulls the hot water back through the cold water supply and into the heater.

A **Comfort Valve** is a patented valve from Grundfos that is installed at the faucet furthest from the water heater. The valve has both the hot water supply and the cold water supply ran into it before the lines supply the faucet. This valve is what allows the water to flow back through the cold supply line when needed. Below is a step by step look at how this system works.



To help further explain how the Comfort System works we can show the process step by step.

1. Water comes into the house through the cold supply line and is split into two directions; the water heater and the cold supply line to all the things it will supply.
2. The water heater heats the water and the recirc pump sends the water through the hot water supply lines.
3. When the water reaches the furthest point from the water heater, and the cold water is not turned on, the hot water passes through the comfort valve and back through the cold water supply.
4. It is ran back to the point the cold water was split when it first entered the home.
5. A check valve on the cold supply before the split stops water from leaving the house and forces it back into the water heater.



Things that make the Comfort System even more efficient:

There are few optional accessories that will save energy (and money). These are a timer and a thermostat.

The **timer** only allows the pump to turn on at certain times. So if you only need hot water in the morning, you could set the timer for 6am to 8am. Then the pump would only recirculate the hot water during that time.

The **thermostat** turns off the pump when the water in the pipes reaches a certain temperature. So once the water in the pipe is hot, the pump turns off.

When the timer and thermostatic controls are **installed together**, in series, the circulator operates **ONLY** at the preset clock times specified by the user **AND ONLY** when the temperature conditions of the thermostat are met.

Hot water without the wait

Before Grundfos, hot water recirculation solutions were difficult, if not impossible. Now, installations in both new construction and existing homes are quick, easy and profitable.

Features & Benefits:

- Installations take an hour or less
- In retrofits, the Comfort System bypass valve makes it all possible with no return line and no need for electricity under the sink
- Uses less energy than a 25-watt light bulb (Comfort System Only)
- Can save up to 16,000 gallons of water per year
- Backed by a 30-month warranty
- All products certified to NSF-61 and NSF-372 standards



Comfort System
UP 15-10 SU7P TLC
Pump, valve, line-cord,
and (2) S.S. flex hoses.

135854

w/Timer

What do we stock and how to look it up: Below are item lists Rick White Put Together

Note: Pumps need to be sized to the structure they will be installed in.



*135856 1/2 FIP
UP1016PMBN5LC
Brass 115/220V

Circulator Pumps



*180531 115V
UPS1555SFC
Stainless 1/8 HP
6 1/2" port to port
3 speed 15/26



*180511 115V
UPS1558FC
Cast 1/25th HP
6 1/2" port to port
3 speed 15/26



*180512 115V
UPS1558FRC
Cast 1/25 HP
6 1/2" port to port
3 speed 15/26
rotated flange



*180529 115V
UP1016BUATLC
Brass 1/25 HP
1 1/4" union Tread
1 speed w/timer
Union connector



*180530
UPS1535SFC
Stainless 1/15 HP
6 1/2" port to port
3 speed 15/26



*180513 230V
UPS2699FC
Cast 1/6 HP
6 1/2" port to port
3 speed 15/26



*180514 115V
UPS2699BFC
Bronze 1/6 HP
6 1/2" port to port
3 speed 15/26



*180515 115V
UPS4344FC
Cast 1/6 HP
8 1/2" port to port
3 speed 40/43



*180516 115V
UPS4344BFC
Bronze 1/6 HP
8 1/2" port to port
3 speed 40/43



*180518 115V
UPS26 150SF
Stainless 1/3 HP
6 1/2" port to port
3 speed 15/26



*180517 115V
UPS26 150F
Cast 1/3 HP
6 1/2" port to port
3 speed 15/26



*172865 230V
UP1542F
Cast 1/25 HP
6 1/2" port to port
3 speed 15/26



*162947 115V
UP1542F
Cast 1/25 HP
6 1/2" port to port
3 speed 15/26



*135854 115V
UP1510SU7PTLC
Stainless 1/25 HP
3/4NPT
Timer w/valve



*135855 115V
UP1016B5LC
Brass
1/2 sweat
*135856 > 1/2" IP



*180528 115V
UP1016BN5ATLC
Brass
1/2 IPS
Timer w/aquastat



*135859 115V
UP1510B5TLC
Bronze 1/25 HP
1/2 sweat
W/timer & cord



*135858 115V
UP1510B5
Bronze 1 25 HP
1/2 sweat



*180505 115V
ALPHA1555F
Cast 15/26
6 1/2 port to port



*180510 115V
ALPHA1555FLC
Cast w/cord
6 1/2 port to port
15/26

Magnet motc
< Display
watts/gpm

< Display
watts/gpm



Flange Sets

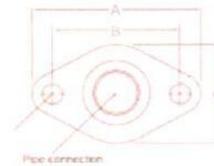


Pump Connection	Pipe Size	Part Number	ITEM #
GF15/26 Flange	3/4"	G519601	*219320
Cast Iron	1"	G519602	*219321
	1 1/4"	519603	
	1 1/2"	519604	
GF40/43 Flange	1 1/2"	G539605	*219322
Cast Iron	2"	91584910	
GF 53 Flange	2"	91584910	
Cast Iron	2 1/2"	91584911	
	3"	91584912	
GF15/26 Flange	3/4"	G519651	*219323
Bronze	1"	G519652	*219324
	1 1/4"	96409356	
GF40/43 Flange	1 1/2"	G539615	*219329
Bronze			
GF 53 Flange	2"	91584913	
Bronze	2 1/2"	91584914	
	3"	91584915	

Flange sets includes 2 each flanges, gaskets, bolts, with nuts
Use bronze flanges for stainless steel units.

Union Flanges

Item #	Part Number	Pipe Size	Connection
*219325	G529913	1/2"	sweat
*219326	G529911	3/4"	sweat
*219327	G529912	3/4"	IP



	A	B
GF15/26	4 1/4"	3 1/8"
GF40/43	4 3/4"	3 1/2"
GF53	5 1/4"	4"

The next steps and a couple questions:

The first next step is to learn more the second is to start bringing these up with our customer. You can learn more about the comfort system at the video below.

https://www.youtube.com/watch?v=udXNqKoeH_c

1. True or False: The Comfort System has a designated return line to the water heater.
2. True or False: The Comfort System requires power at the faucet furthest from the water heater to run the pump.