

# Grundfos Pumps Hot Water Recirculation Products UP15-10, UP15-18 & UP15-42

**G**rundfos Pumps has developed several circulator pump models to meet the needs of "Domestic Hot Water Recirculation" systems, otherwise known as "Instant Hot Water".

**T**hese models are available with various configurations including bronze housings with 1/2" & 3/4" sweat (B5 & B7) and stainless steel housings with union threaded connections (SU). Also, Grundfos has developed the first circulators that include an integrated check valve inside a union fitting on a sweat pump housing (BUC5 & BUC7).

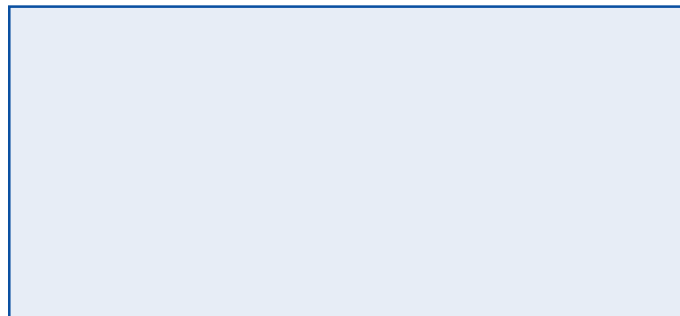
**T**hese models have been fitted with the options of built-in 115 volt line cord ("LC") or line cord and 24 hour programmable timer ("TLC").

**A**s with other Grundfos circulators pumps, these feature the following:

- Easy to install user friendly application of product.
- Wet rotor design for quiet, maintenance free operation.
- Stainless Steel rotor cladding and canister construction to prevent corrosion.
- Composite impeller design for optimal application performance.
- Built-in 6 foot, 115 volt ac line cord ("LC & TLC" models) with a NEMA, 3 prong male plug.
- Optional Built-in 24 hour programmable timer and line cord ("TLC" models).
- Fully grounded connection ("LC" & "TLC" models).
- UL Recognized strain relief and wire connections ("LC" & "TLC" models).
- All models are fully UL Recognized.
- Each unit is run and "High Pot" tested.
- Available volute configurations include bronze sweat (B5&7), bronze sweat with integrated check valve in a bronze union fitting (BUC5&7), and stainless steel union (SU).
- Designed specifically for Hot Water Recirculation applications.



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*Please ask your local  
Grundfos Sales Representative for details!*

**GRUNDFOS**



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# How to Choose the Proper Circulator Pump Model

Find the table below that best describes the design you plan to use. Select the pump model based on the supply pipe length, size and pump options.

## *Circulator Pump Models used on 1/2" Supply & 1/2" Return Pipes*

### UP-Bronze Model Circulators

Model #	1/2" Supply Pipe, Max. Length (ft.)	Total Max. Pipe Length (ft.)	Supply Line Volume (gallons)
UP15-10B5	100	200	2.4

### UP-Bronze Model Circulators with Built-In Check Valve

Model #	1/2" Supply Pipe, Max. Length (ft.)	Total Max. Pipe Length (ft.)	Supply Line Volume (gallons)
UP15-10BUC5	85	170	2.0

## *Circulator Pump Models used on 3/4" Supply & 1/2" Return Pipes*

### UP-Bronze Model Circulators

Model #	3/4" Supply Pipe, Max. Length (ft.)	Total Max. Pipe Length (ft.)	Supply Line Volume (gallons)
UP15-10B5	200	400	10.0
UP15-10B7	215	430	10.8
UP15-18B5	460	920	23.1
UP15-18B7	500	1000	25.1

### UP-Stainless Steel Model Circulators

Model #	3/4" Supply Pipe, Max. Length (ft.)	Total Max. Pipe Length (ft.)	Supply Line Volume (gallons)
UP15-18SU	255	510	12.8
UP15-42SU	425	850	21.4
UP25-64SU	700	1400	35.2

### UP Bronze Model Circulators with Built-In Check Valve

Model #	3/4" Supply Pipe, Max. Length (ft.)	Total Max. Pipe Length (ft.)	Supply Line Volume (gallons)
UP15-10BUC5	170	340	8.5
UP15-10BUC7	195	390	9.8
UP15-18BUC5	460	920	23.1
UP15-18BUC7	500	1000	25.1

## *Circulator Pump Models used on 3/4" Supply & 3/4" Return Pipes*

### UP-Bronze Model Circulators

Model #	3/4" Supply Pipe, Max. Length (ft.)	Total Max. Pipe Length (ft.)	Supply Line Volume (gallons)
UP15-10B7	500	1000	25.1
UP15-18B7	1600	3200	80.4
UP15-42B7	1800	3600	90.5

### UP-Stainless Steel Model Circulators

Model #	3/4" Supply Pipe, Max. Length (ft.)	Total Max. Pipe Length (ft.)	Supply Line Volume (gallons)
UP15-18SU	1275	2550	64.1
UP15-42SU	1350	2700	67.8
UP25-64SU	2200	4400	110.7

### UP Bronze Model Circulators with Built-In Check Valve

Model #	3/4" Supply Pipe, Max. Length (ft.)	Total Max. Pipe Length (ft.)	Supply Line Volume (gallons)
UP15-10BUC7	620	1240	31.2
UP15-18BUC7	1575	3150	79.2
UP15-42BUC7	1700	3400	85.4

NOTE: Calculations are based on 110°F water at 1 gpm for type "L" copper pipe with 20 elbows and 10 tees for the hot water supply. Also, allows use of type "L"-copper pipe of equal length as the supply with 20 elbows and 1 check valve for the return pipe. Check valve is removed from calculations for models with built-in check valves. For other selections, call your local Grundfos Sales Representative.

## *For Additional Piping Components*

Pipe Component	Equiv. Pipe Length of 1/2" Component (ft.)	Equiv. Pipe Length of 3/4" Component (ft.)
90° Elbow	1.55	2.06
45° Elbow	0.83	1.10
Tee (Straight Port)	1.00	1.40
Tee (Side Port)	3.10	4.10
Flow Check	5.10	6.86

NOTE: For each additional pipe component on the system, its equivalent length must be subtracted to the supply pipe max. length on the pump selection charts to get the revised max. supply pipe length.

