

4. Identification

Type key

Example	UP	S	15	-58	()	F	C	/
Circulator pump								
S: 3-speed								
10: Comfort series								
15: Small-stator UP								
25, 26, 43, 50: Large-stator UP								
Maximum head [dm]								
Pump housing								
= Cast iron (no letter = cast iron)								
S = Stainless steel								
B = Bronze								
Pipe connection								
F = Flange								
FR = Flange rotated 90 °								
U = Union connection								
5 = 1/2" internal sweat								
7 = 3/4" internal sweat								
N = NPT female thread fitting								
7P = 3/4" male x female connection								
Special features								
A = Thermostat (Aquastat)								
C = Check valve (removable)								
/T = Timer								
/LC = Line cord								
/TLC = Timer line cord								
/VS = Variable-speed control								
/MR = Mixing-reset control								

5. Applications

The Grundfos circulator pumps, series UP(S), are specifically designed for heating systems. The pumps are also suitable for recirculation of hot domestic water and for circulation of liquid in cooling and air-conditioning systems.

Heating systems

Common uses:

- Boiler/hydronic
- ground-source
- radiant floor
- hydronic and fan-coil
- solar
- heat recovery.

Pump types with a cast iron pump housing are generally used for pumping water or water/glycol mixtures in these closed-system applications. However, when water conditions are not compatible with cast iron, we recommend the use of bronze or stainless steel.

Optional variable-speed and mixing-reset controls are available to customize heat output versus heat demand for increased comfort.

Domestic hot-water systems

Common uses:

- Solar water heating
- hot-water recirculation
- domestic hot-water heating.

Pump types with a bronze, brass or stainless steel pump housing are used for pumping potable water in these open-system applications.

Optional timer and thermostat controls are available to limit pump operation to periods when hot water is required and to save energy.

Cooling systems

Common uses:

- Chilled-water pumping.

We recommend that you use pump types UP(S) 25, 26, 43, 50 and pump housings compatible with the pumped liquids for chilled water due to their motor construction, which is suitable for 32 °F (0 °C) water.

Construction

The UP(S) pumps are of the wet-rotor type, i.e. pump and motor form an integral unit without a shaft seal and with only two gaskets for sealing. The bearings are lubricated by the pumped liquid.

The pumps are characterized by these features:

- Ceramic shaft and radial bearings
- carbon thrust bearing
- stainless steel rotor can and bearing plate
- impeller of corrosion-resistant material
- pump housing of cast iron, bronze or stainless steel.

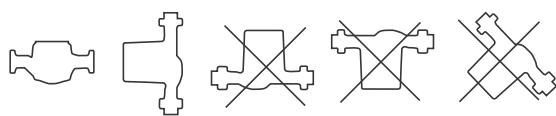
Installation

The pump must always be installed with the motor shaft in horizontal position. See fig. 3.

Proper installation of the pump will have the terminal box located to one side of the pump or the other, with the conduit entry down.

UP(S) pumps can be installed in both vertical and horizontal lines.

UP(S) pumps are intended for indoor use only.



TM04 5038 2509

Fig. 3 Acceptable pump positions

Motor

The motor is a 2-pole, asynchronous, squirrel-cage PSC (permanent split capacitor) motor with UL, CUL, ETL and CSA approvals.

UP(S) pumps are available in single-phase 115 V and 230 V versions with one or three speeds.

The terminal box is easily accessible and has functional cables connecting conductors or terminals.

Insulation class(es): F, H.

The motor incorporates thermal overload or impedance protection. Therefore, no external motor protection is required.

UP models are single-speed pumps.

UPS model pumps are multi-speed pumps, and the speed can be changed by means of a speed selector switch located on the front of the terminal box.

If the speed of UPS 15-35 or 15-55 TLC models has to be changed, the timer control has to be removed first.

UP models with VS or MR suffixes are variable-speed pumps with integrated control.

Depending on the pump model, motor horsepower range from 1/25 to 1/6 and power consumption from 5 to 385 W.

Pumped liquids

Depending on the type, Grundfos circulator pumps are designed for the following liquids:

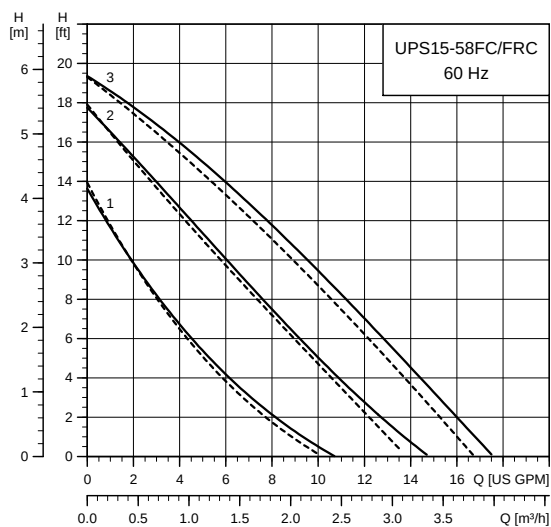
- Potable water
- non-potable water
- water-glycol mixtures
- chilled water
- domestic hot water
- softened water.

If the circulator pump is used for a glycol mixture with a higher viscosity than that of water, the hydraulic performance of the pump will be reduced.

Example: 50 % glycol at 68 °F (20 °C) means a viscosity of approx. 10 cSt and a reduction of pump performance by approx. 15 %.

When selecting a pump, the viscosity of the pumped liquid must be taken into consideration.

UPS 15-58 FC/FRC



TM03 5535 4412

Flow range:	0-17 gpm (0 - 3.9 m ³ /h)
Head range:	0 - 19.5 ft (0 - 5.9 m)
Motor:	2-pole, single-phase
Max. liquid temperature:	230 °F (110 °C)
Min. liquid temperature:	36 °F (2 °C)
Max. system pressure:	145 psi (10 bar)

Model	Speed	Volts	Amps	Watts	Hp	Capacitor
UPS 15-58 FC/ FRC	3	115	0.75	87	1/25	10 µF / 180 V
	2		0.66	80	1/25	
	1		0.55	60	1/25	

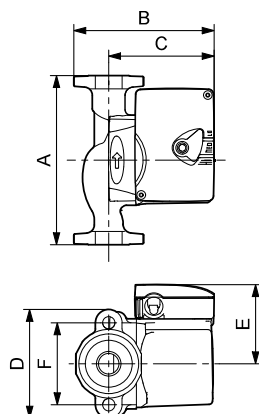
— Without check valve

- - - With check valve

Approvals

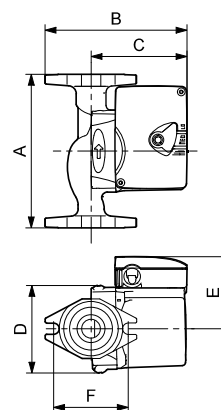


UPS 15-58 FC



TM03 8757 2407

UPS 15-58 FRC



TM03 8531 1907

Model	Product number 115 V	Dimensions [inches (mm)]						Connection type and size	Shipping weight [lbs (kg)]
		A	B	C	D	E	F		
UPS 15-58 FC	59896341	6.50 (165)	5.25 (133)	4.00 (102)	4.19 (106)	3.00 (76)	3.16 (80)	GF 15/26 flange (2) 1/2" dia. bolt holes	7.3 (3.3)
UPS 15-58 FRC	59896343	6.50 (165)	5.25 (133)	4.00 (102)	4.19 (106)	3.00 (76)	3.16 (80)	GF 15/26 flange (2) 1/2" dia. bolt holes	7.3 (3.3)

Note: The check valve can be removed.
Dimensions in inches unless otherwise stated.