

Domestic hot water / Sanitary pumps

ultracirc®

Instant hot water at every faucet
More comfort · Saves water and energy

- extended service life
- maintenance free without blockage
- long-lasting, silent operation
- resistant to scale build-up
- with thermostatic dry run protection
- with extremely hard ceramic bearing ball
- with rotor snap-on fastening



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simply the best · by design

Domestic hot water / Sanitary pumps

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Application

Domestic hot water pumps are installed in the recirculation pipe of the hot water system. By circulating the hot water they ensure that hot water is available instantly even at the faucet furthest away from the water heater.

Depending on the system design, Ultracirc pumps can service installations with up to 15 faucets. Recirculation pumps can benefit the environment by saving precious water. Other applications: Solar systems, heat pumps, industrial applications

Ultracirc pumps are normally maintenance free. The rotor is magnetically centered on the bearing and therefore can tilt to avoid blocking by small dirt particles. If there are significant scale deposits in the pump, it can be cleaned using conventional scale removers. Additionally, the rotor can be replaced easily. Only in very rare cases the whole pump must be replaced during service.

The Ultracirc pumps are easy to install. To avoid reverse flow through the pump, a check valve must be used. In combination with a ball valve, the whole pump can be isolated quickly if service should become necessary. To facilitate installation, Ultracirc pumps are also available with integrated check valve and ball valve.

The stator of the Ultracirc pumps is fully encapsulated with resin. This reliably eliminates corrosion problems due to circulation of cold water. Ultracirc pumps therefore can be used without problems in cold water systems, for example heat pumps or open solar loops. An integrated thermostatic dry run protection reduces damage to the motor caused by dry operation by switching off the pump when the stator runs too hot. The models with integrated scale protection thermostat switch off at 55° C already, so that scale deposits, which start above 60° C, are significantly reduced. After cooling down, the pump restarts automatically.

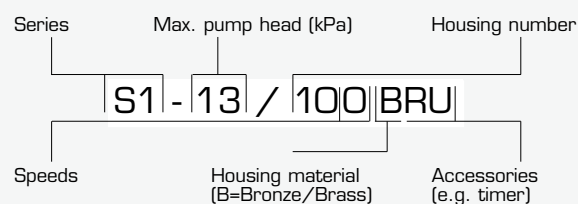


Technical Data

Motor design	Shaftless spherical motor
Max. system pressure	10 bar
Electrical connection	230 V, 50 Hz
System temperature	- 10 °C to + 110 °C (non-freezing)
Protection class/Insulation	IP 42/F
Acceptable media	Domestic hot water; heating water; water/glycole mixtures*. Other media on request.
Max. power consumption	25 W

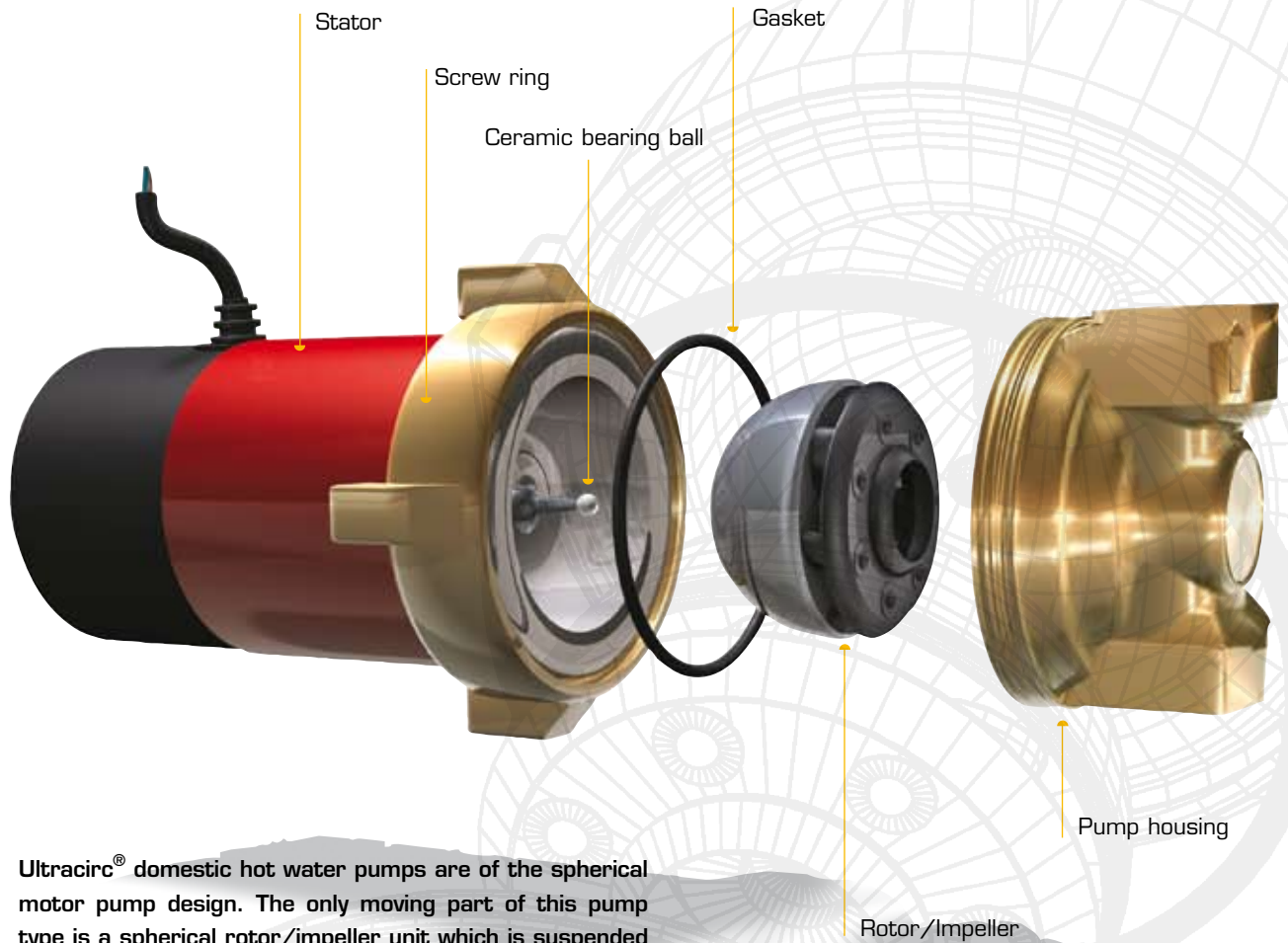
*Check pump performance for mixtures of 20% or more glycole.

Model designation



Design

Domestic hot water / Sanitary pumps Ultracirc®



Ultracirc® domestic hot water pumps are of the spherical motor pump design. The only moving part of this pump type is a spherical rotor/impeller unit which is suspended on an extremely wear resistant ceramic ball. Therefore the pump is completely shaftless.

The suspension on a ball eliminates any bearing play – even after years of use. The pump therefore will operate quietly for years.

The bearing is self-optimizing. It is automatically lubricated by the pumped media (wet rotor pump). Ultracirc® pumps are normally maintenance free. The rotor is magnetically centered on the bearing and therefore can tilt to avoid blocking by small dirt particles.

Even after a long time of shut-off a safe start-up is guaranteed.

The Ultracirc® pumps are also available with built-in timer (day- or week-program). This allows a setting of the recirculation to those hours when instant hot water may be required. An adjustable thermostat allows to further set the maximum temperature to an appropriate level. Both measures ensure minimum power consumption while maintaining maximum comfort.





ultracirc[®] Model S1 without check and ball valve

Model	Art. No.	Connection	Pump housing length	Thermostatic dry run protection	Scale prot. thermostat (55 °C)	Electron. control thermostat (20-70 °C)	Timer (day-program)	Timer (week-program)	Product category
S1-15/700 B	10 00 001	1/2" female	65	•					C
S1-15/700 BU	10 00 005			•			•		
S1-15/700 BW	10 00 010			•				•	
S1-15/700 BT	10 00 015	1/2" female	65		•				C
S1-15/700 BTU	10 00 020				•		•		
S1-15/700 BTW	10 00 025				•			•	
S1-15/700 BR	10 00 030	1/2" female	65			•			C
S1-15/700 BRU	10 00 035					•	•		
S1-15/700 BRW	10 00 040					•		•	



ultracirc[®] Model S1 with integrated check and ball valve

Model	Art. No.	Connection	Pump housing length	Thermostatic dry run protection	Scale prot. thermostat (55 °C)	Electron. control thermostat (20-70 °C)	Timer (day-program)	Timer (week-program)	Product category
S1-13/100 B	10 00 003	1 1/4" male* +1/2" female	110	•					C
S1-13/100 BU	10 00 008			•			•		
S1-13/100 BW	10 00 013			•				•	
S1-13/100 BT	10 00 018	1 1/4" male* +1/2" female	110		•				C
S1-13/100 BTU	10 00 023				•		•		
S1-13/100 BTW	10 00 028				•			•	
S1-13/100 BR	10 00 033	1 1/4" male* +1/2" female	110			•			C
S1-13/100 BRU	10 00 038					•	•		
S1-13/100 BRW	10 00 043					•		•	

ultracirc[®] Replacement motors for model S1



Model	Art.No.	Replacement motors (incl. two optional gaskets) for	Product category
S1-15/000	10 00 080	S1-15/700 B and S1-13/100	C and competitive pumps Grundfos UP 15-14
S1-15/000 U	10 00 081	S1-15/700 BU and S1-13/100 BU	
S1-15/000 W	10 00 082	S1-15/700 BW and S1-13/100 BW	
S1-15/000 T	10 00 083	S1-15/700 BT and S1-13/100 BT	
S1-15/000 TU	10 00 084	S1-15/700 BTU and S1-13/100 BTU	
S1-15/000 TW	10 00 085	S1-15/700 BTW and S1-13/100 BTW	
S1-15/000 R	10 00 086	S1-15/700 BR and S1-13/100 BR	
S1-15/000 RU	10 00 087	S1-15/700 BRU and S1-13/100 BRU	
S1-15/000 RW	10 00 088	S1-15/700 BRW and S1-13/100 BRW	
S1-11/000	10 00 090	Competitive pumps Vortex, Wilo Z15 + Grundfos UP 15 - 13B	
S1-11/000 U	10 00 091	Competitive pumps Vortex, Wilo Z15 C + Grundfos UP 15 - 13 BU	

*for connections to 3/4" union components. Housing has additionally a 1/2" female connection. Union connections are not included in pump delivery. Please order separately.

ultracirc[®] Accessories: Components and spare parts

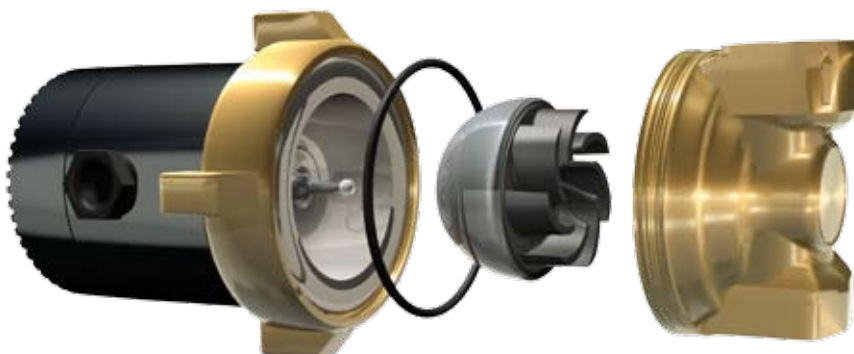


Model	Art.No.	Description	Product category
RV 1/2"	95 00 001	Brass check valve 1/2" male x 1/2" female	C
RV 3/4"	95 00 002	Brass check valve 3/4" male x 3/4" female	
KH 1/2"	95 00 020	Brass ball valve chrome plated 1/2" male x 1/2" female	
KH 3/4"	95 00 021	Brass ball valve chrome plated 3/4" male x 3/4" female	
AV 1/2"	95 00 024	2 pieces union fitting brass 1/2" male x 1/2" female	
AV 3/4"	95 00 025	2 pieces brass half union 1 1/4" female x 3/4" female	
F 58	95 00 718	Rotor for series S1, incl. gasket	

NEW:

Do you already know our highly efficient sanitary pumps

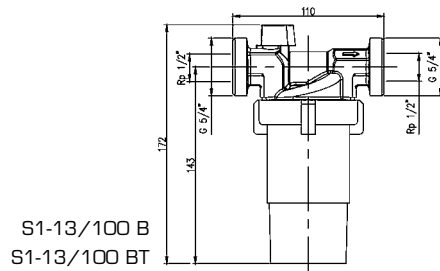
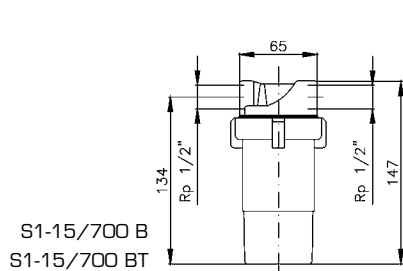
ecocirc[®] E1 ?



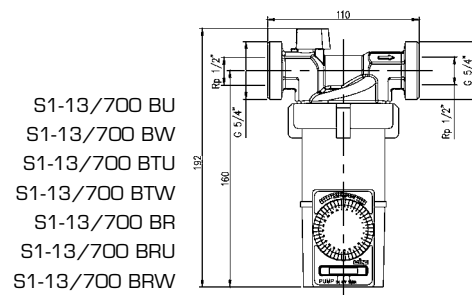
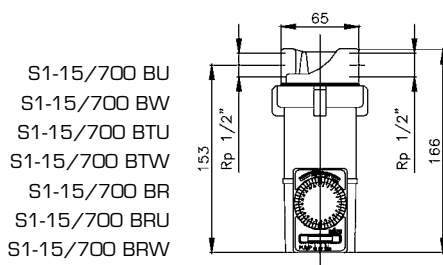
ECM-Technology,
max. input only

8 Watt!

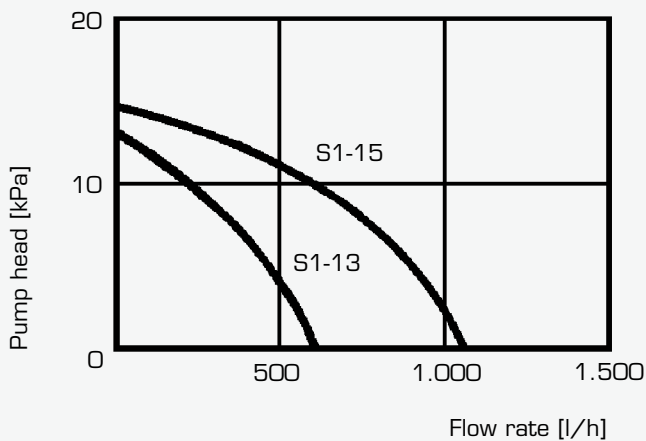
Dimensional drawings Domestic hot water / Sanitary pumps Ultracirc®



Version with timer and / or adjustable thermostat:



Pump curves



21/04/2008 Subject to change without notice.

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