



**LET'S  
FOCUS ON  
PURE  
EFFICIENCY.  
DROP THE BELLS  
AND WHISTLES.**

**ErP  
ready  
2015** Tomorrow's high  
efficiency ready now:  
the new Lowara  
Ecocirc® are  
compliant with the  
ErP-Directive for 2015

# Lowara Ecocirc®

THE REVOLUTIONARY HIGHLY EFFICIENT CIRCULATORS  
FOR DOMESTIC HEATING WITH THE SIMPLE AND  
SHAFTLESS SPHERICAL MOTOR DESIGN

# Affordable efficiency!

Approximately 10 to 15 percent of the electricity consumption of an average household is caused by domestic heating circulators. The overwhelming majority of these consist of fixed three speed standard circulators. The EU's new Eco-Design Directive, the ErP-Directive EC 641/2009 is starting 1st January 2013. The purpose is to reduce the energy consumption significantly. Again in 2015 these strict requirements will be tightened further.

To date there was only the choice of purchasing an inexpensive inefficient standard circulator with high energy consumption, or selecting a modern high efficiency pump which was quite costly but very energy saving. The new Lowara Ecocirc® made by Xylem strikes the balance between these two options: a modern, electronically controlled high efficiency pump, which pays for itself within a short period of installation.

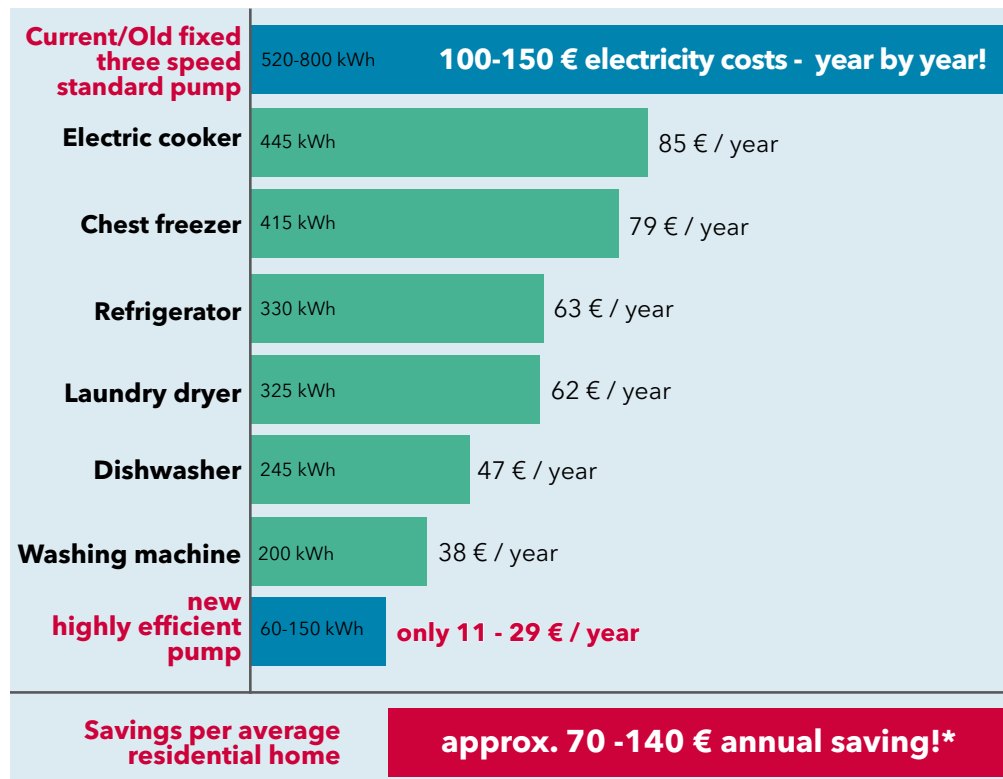
The high efficiency technology was reduced to the essentials by the simple spherical motor design. No compromise in high efficiency, and a clear focus on what a high efficiency pump should do best: pump efficiently! No more, no less!

A clear focus on a smart cost and performance ratio without any additional costly features. Concentrating on the basics, on reliable high efficiency and a maximum in profitability and payback. These essentials are the reason why we call this pump the Ecocirc®. This already complies with the ErP directive of 2015. High efficient circulators have not been a new market to us: since 2009 we are one of Europe's leading high efficiency circulator manufacturers, home to high efficiency comes as standard.

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# The unknown electricity consumer becomes a highly efficient saving miracle!



## A clear message to all plumbers and installers!

Domestic heating circulators have seen a dramatic technology leap in the last years.

The new high efficiency pump Lowara Ecocirc® made by Xylem saves up to 90% electricity costs compared to old standard heating circulators.

Depending on the exact purchasing and installation costs, the new Ecocirc® pays for itself normally within 2-3 years - good news for the home owner.

The clear message to all plumbers and installers: it does pay back to replace every old circulator, even if it's still working. In every household, on every construction site. Great potential for additional sales! Fit one on your current or next job.

This would mean incremental sales for wholesale and craftsmen and savings for the homeowner. That's focusing on the essentials. That's the Lowara Ecocirc® .

\* Every household and every heating habit differ. The facts above are based on a standard one family home with 3 inhabitants in Germany, electricity costs of 20 Cent / kWh, all according to the independent testing institute „Stiftung Warentest“ published 9/2007, page 76ff.

# How can efficiency even work harder?

The answer is as simple as the spherical motor design!

The very best ideas are always the simple ones. Impressively simple, that's the shaftless spherical motor design. It requires only one single bearing, which is even self re-aligning but does not require any shaft at all. That significantly reduces the number of costly and complicated precision parts. In detail this results in many technical advantages and benefits. But the most important benefit is: Combining the simple spherical motor design with the modern ECM high efficiency technology results in quick payback times - and therefore affordable efficiency.

## Improved hydraulics - improved efficiency

The very latest computer simulations have further optimised the pump housing and the impeller. The cast iron pump housing is cathaphoresis coated completely and is therefore resistant to corrosion.

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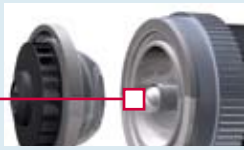


**NEW**

## Blockage-free even under the very hardest conditions: the revolutionary and patented Anti-Block-Technology!

### The spherical rotor

The permanent magnet rotor/impeller-unit is the only moving part. Spherical motor pumps are shaftless, and therefore whisper quiet over the whole lifetime. In case of an indicated rotor blocking, emergency software shakes and vibrates the rotor to avoid further



blocking. The evolutionary Anti-Block-Technology is visible the best also

with the position of the ceramic bearing ball: in former versions it was quite visible from outside, today it sits inside in the centre of the rotor.

### The new design is separating the magnetic chamber from the flow

Magnetite and Sludge, which are both found in the pumped liquid and are both magnetic, this can accumulate at the permanent magnetic parts of a high efficiency pump, and therefore block and damage it. Our new Anti-Block-Technology separates the main flow of the pumped media completely from the permanent magnetic parts, Blocking up even in very old, open systems is impossible by our pump design.



The main flow of the pumped media (blue) and its magnetite and sludge particles (red) flows outside the influence area of the permanent magnet rotor (bottom).



The side flow of the wet running circulators, which is required for lubrication and cooling of the bearing, is separated from the main flow with its magnetite and sludge.



### Automatic air purge

Quick automatic air-venting-mode for a safe operation.

### Easy to control

Two in one control:  
- Step-less manually control with constant speed, displayed by a white LED, or alternatively  
- Automatic differential pressure, displayed by a blue LED.

### Always easy to access

The screw ring design results in a pump motor that can be rotated in any position around the 360° circle. The electrical connection as well as the control knob is therefore easy to access.

### Efficient quick installation

due to pre-wired 2 meter power cord

### Optimized motor technology

Doubled electric windings combined with the latest 32 Bit processor technology - that also makes the Ecocirc® even more efficient. The integrated over-temperature protection can automatically reduce the speed of the pump or even make it stop and start again to protect the electronics and the bearing in case of dry run situations.

# Product range



## Highly efficient circulators for domestic heating Lowara Ecocirc®

High efficiency pumps with ECM-technology and permanent magnet rotor for applications like radiant heating (one- and two pipe systems), underfloor and surface heating, boiler feed, solar stations and similar applications; Efficiency ErP ready 2015; shaftless, maintenance-free spherical motor, magnetite resistant Anti-Block-Technology, switchable control options (step-less manually or automatic variable differential pressure), cathaphoresis coated cast iron pump housing, LED operation indicator, pre-wired 2 meter power cord;

Model	Part No.	Version	Pump housing length (mm)	Connection	for union fittings	EEI	Control options	Magnetite resistance	Pump housing
Ecocirc 25-4/180	60500 8300	4 meter	180	G 1 1/2"	1"	≤ 0,21	<i>switchable</i> - step-less manually or - automatic variable differential pressure	Anti-Block-Technology	cata-phoresis coated cast iron
Ecocirc 32-4/180	60500 8400			G 2"	1 1/4"	≤ 0,21			
Ecocirc 15-4/130	60500 8000		130	G 1"	1/2"	≤ 0,22			
Ecocirc 20-4/130	60500 8100			G 1 1/4"	3/4"	≤ 0,21			
Ecocirc 25-4/130	60500 8200			G 1 1/2"	1"	≤ 0,21			
Ecocirc 25-6/180	60500 8350	6 meter	180	G 1 1/2"	1"	≤ 0,23	<i>switchable</i> - step-less manually or - automatic variable differential pressure	Anti-Block-Technology	cata-phoresis coated cast iron
Ecocirc 32-6/180	60500 8450			G 2"	1 1/4"	≤ 0,23			
Ecocirc 15-6/130	60500 8050		130	G 1"	1/2"	≤ 0,26*			
Ecocirc 20-6/130	60500 8150			G 1 1/4"	3/4"	≤ 0,23			
Ecocirc 25-6/130	60500 8250			G 1 1/2"	1"	≤ 0,23			

\*ErP ready 2013

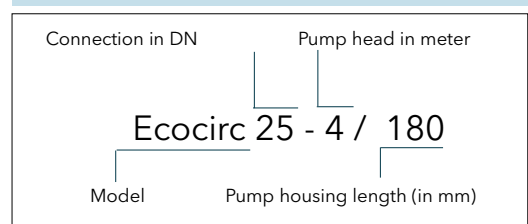
### Technical Data

Motor design	Electronically commutated, shaftless spherical motor design with permanent magnetic rotor
Max. system pressure	10 bar
Electric connection	200 - 240 Volt, 50 / 60 Hertz
Power consumption	Models Ecocirc xx-4: 4 - 23 Watt Models Ecocirc xx-6: 4 - 42 Watt
Accepted liquids	Heating water VDI 2035 Water/Glycol mixtures*
Magnetite resistance	Anti-Block-Technology
Accepted temperature range	-10 °C** to +110° C
Energy efficiency	ErP 2015 ready
Motor protection class	IP 44
Insulation class	F

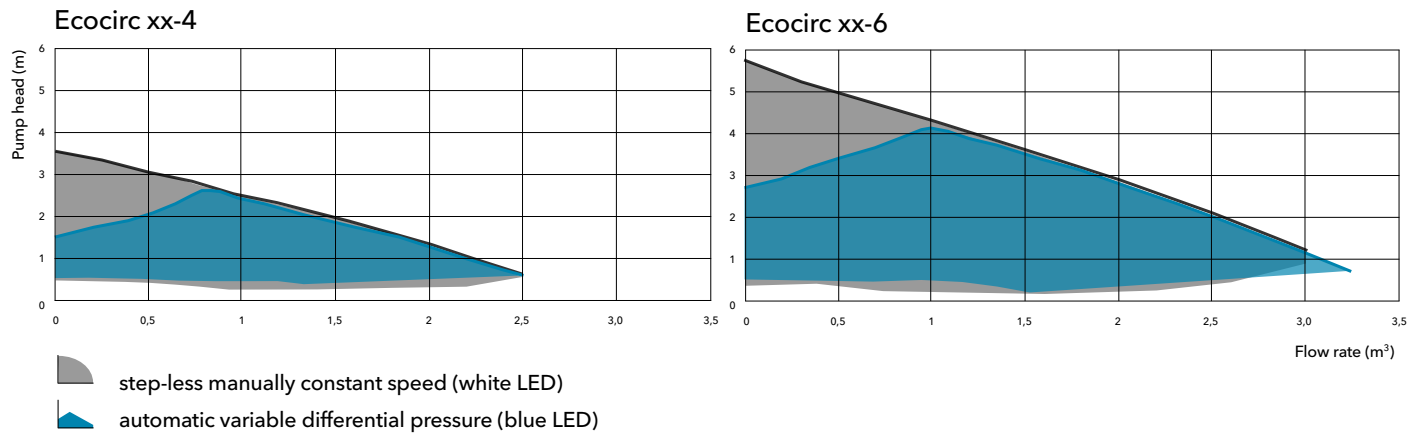
\* check hydraulic performance with more than 20 % glycol

\*\*non-freezing

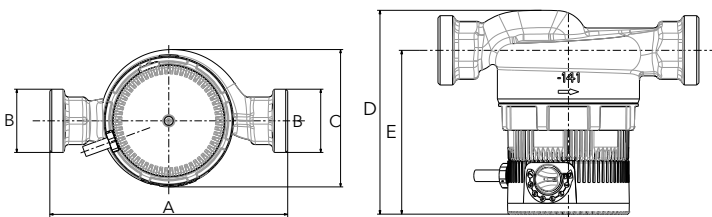
### Model designation



## Pump curves



## Dimensions



Models	A in mm	B in inch	C in mm	D in mm	E in mm
25-xx/180	180	G 1 1/2	104	141	113
32-xx/180	180	G 2	104	141	113
15-xx/130	130	G 1	104	141	113
20-xx/130	130	G 1 1/4	104	141	113
25-xx/130	130	G 1 1/2	104	141	113

## Replacement guide

housing length	Version	Lowara		Third-party manufacturer Grundfos	
		New	Highly efficient motor	Standard motor	Highly efficient motor
180	4m	Ecocirc 25-4/180	EA, EA+, EV, or EV+...25-4/180	UPS, UPE, Alpha or Alpha+ ...25-40	Alpha pro, Alpha 2 or Alpha 2L ...25-40
		Ecocirc 32-4/180	EA, EA+, EV, or EV+...32-4/180	UPS, UPE, Alpha or Alpha+ ...32-40	Alpha pro, Alpha 2 or Alpha 2L ...32-40
	6m	Ecocirc 25-6/180	EA, EA+, EV, or EV+...25-6/180	UPS, UPE, Alpha or Alpha+ ...25-60	Alpha pro, Alpha 2 or Alpha 2L ...25-60
		Ecocirc 32-6/180	EA, EA+, EV, or EV+...32-6/180	UPS, UPE, Alpha or Alpha+ ...32-60	Alpha pro, Alpha 2 or Alpha 2L ...32-60
130	4m	Ecocirc 15-4/130	EA, EA+, EV, or EV+...15-4/130	UPS, UPE, Alpha or Alpha+ ...25-40/130	Alpha pro, Alpha 2 or Alpha 2L ...15-40 130
		Ecocirc 25-4/130	EA, EA+, EV, or EV+...25-4/130	UPS, UPE, Alpha or Alpha+ ...25-40/130	Alpha pro, Alpha 2 or Alpha 2L ...25-40 130
		Ecocirc 20-4/130	EA, EA+, EV, or EV+...20-4/130	UPS 20-40/130	-
	6m	Ecocirc 15-6/130	EA, EA+, EV, or EV+...15-6/130	UPS, UPE, Alpha or Alpha+ ...15-60/130	Alpha pro, Alpha 2 or Alpha 2L ...15-40 130
		Ecocirc 25-6/130	EA, EA+, EV, or EV+...25-6/130	UPS, UPE, Alpha or Alpha+ ...25-60/130	Alpha pro, Alpha 2 or Alpha 2L ...25-60 130
		Ecocirc 20-6/130	EA, EA+, EV, or EV+...20-6/130	UPS 20-60/130	-

housing length	Version	Lowara		Third-party manufacturer Wilo	
		New	Highly efficient motor	Standard motor	Highly efficient motor
180	4m	Ecocirc 25-4/180	EA, EA+, EV, or EV+...25-4/180	Star RS, Star E ...25/4	Stratos Eco, Pico, Yonos ...25/1-4
		Ecocirc 32-4/180	EA, EA+, EV, or EV+...32-4/180	Star RS, Star E ...30/4	Stratos Eco, Pico, Yonos ...30/1-4
	6m	Ecocirc 25-6/180	EA, EA+, EV, or EV+...25-6/180	Star RS, Star E ...25/6	Stratos Eco, Pico, Yonos ...25/1-6
		Ecocirc 32-6/180	EA, EA+, EV, or EV+...32-6/180	Star RS, Star E ...30/6	Stratos Eco, Pico, Yonos ...30/1-6
130	4m	Ecocirc 15-4/130	EA, EA+, EV, or EV+...15-4/130	Star RS, Star E ...15/4-130	
		Ecocirc 25-4/130	EA, EA+, EV, or EV+...25-4/130	Star RS, Star E ...25/4-130	Stratos Eco, Pico, Yonos ...25/1-4-130
	6m	Ecocirc 15-6/130	EA, EA+, EV, or EV+...15-6/130	Star RS, Star E ...15/6-130	
		Ecocirc 25-6/130	EA, EA+, EV, or EV+...25-6/130	Star RS, Star E ...25/6-130	Stratos Eco, Pico, Yonos ...25/1-6-130

And even more:  
visit our replacement guide  
online at [www.lowara.com](http://www.lowara.com)



## Xylem |zīləm|

- 1) The tissue in plants that brings water upward from the roots;
- 2) a leading global water technology company.

We're 12,500 people unified in a common purpose: creating innovative solutions to meet our world's water needs. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. We move, treat, analyze, and return water to the environment, and we help people use water efficiently, in their homes, buildings, factories and farms. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise, backed by a legacy of innovation.

For more information on how Xylem can help you, go to [www.xyleminc.com](http://www.xyleminc.com)



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