




# Lowara ecocirc BASIC and ecocirc PREMIUM

THE NEW HIGHLY EFFICIENT CIRCULATORS WITH THE  
PATENTED ANTI-BLOCK-TECHNOLOGY

 **LOWARA**  
a xylem brand

# How can efficiency even v

## The simple spherical motor design....

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 parts.



**ErP**  
ready  
**2015**

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



# work harder?

...with the patented Anti-Block-Technology!



### The spherical rotor

With the evolutionary Anti-Block-Technology, the ceramic bearing ball is now encapsulated inside in the centre of the rotor/impeller unit.

### The new design

Magnetite and sudge, which are both found in the pumped liquid are both magnetic, this can accumulate at the permanent magnetic parts of a high efficiency pump, and therefore block and damage it, or decrease the pump's efficiency. 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.



### Dry-run protection and enhanced motor technology







Ecocirc circulators come standard with an internal temperature sensor which measures the temperature directly at electronic components. Electronic temperature from 105°C to 115°C makes the pump reduce its speed continuously. The pump stops automatically at 125°C, and restarts again after cooling down at 115°C.

In addition, the inrush-current limitation of 6,5 Amp protects also older external heating controls that may be installed on site.

### Easy settings

One single knob serves all needs: stepless control options, automatic air purge and maximum hydraulic performance. The multi-colour LED inside the transparent knob indicates the currently chosen control option:

#### Control options:

-   white: stepless fixed speed, especially for boiler feed, single-pipe heating systems, systems with hydraulic separators;
-   blue: automatic proportional pressure control  $\Delta p-v$ , especially for thermostatic radiator valves
-   green: automatic constant pressure control  $\Delta p-c$ , especially for underfloor heatings (available only in PREMIUM models)

In addition, a blink code of the LED indicates about potential messages.

#### Automatic air purge:

Simply turn the knob towards the air purge symbol for more than 5 seconds. This will start the automatic air purging, no matter which control option had been chosen before. This will effectively remove the air from the inner of the pump. The circulator will return automatically to all it's previously chosen settings after having finished this service mode.

### Quick connection

ecocirc: pre-wired power cord (2 meter);

ecocirc PREMIUM: plug, no tools required for assembly



# 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 has started 1<sup>st</sup> 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.

Xylem now offers two options, both focus on a quick payback time: the Lowara ecocirc, a highly efficient circulator, and also the ecocirc PREMIUM, which offers in addition a multi-display, a plug for a quick and easy installation and even one more control option.

## ecocirc BASIC

The Lowara ecocirc BASIC focuses on quick amortisation and short payback times. No compromise in reliability and high efficiency, all with a clear focus on the essentials in mind.



### Two stepless control options

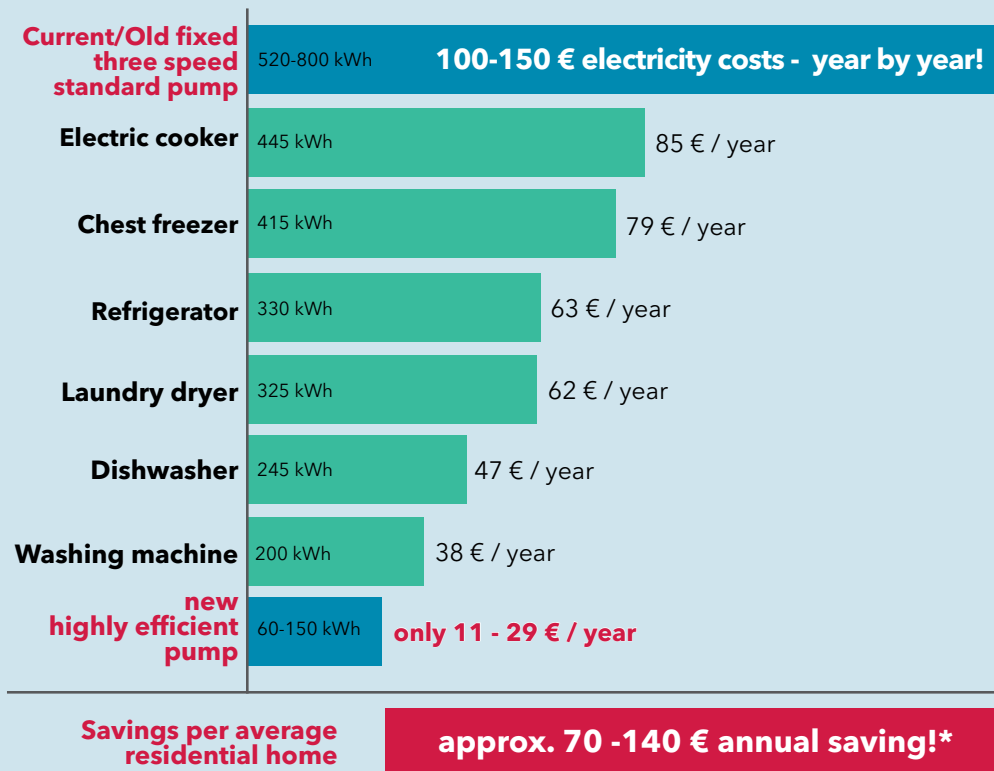
- stepless fixed speed
- automatic proportional pressure control  $\Delta p-v$



The Lowara ecocirc BASIC circulator has won the Plus X "**Best Product of the Year 2013**" award.

The Plus X Awards is the world's largest innovation award ceremony for technology, sport and lifestyle products, and honors manufacturers of unique, innovative high-quality products. The winners of Plus X Awards are chosen by an independent, international panel of 25 judges from various industries.

In addition, it also was awarded as best in class for Innovation, High Quality and Functionality.



\* 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.

## ecocirc PREMIUM

All Lowara ecocirc PREMIUM come standard with three control options, a plug that does not require a tool for assembly, and even a multi-display mounted on the end cap:



### Multi-Display

The automatically alternating display shows either the currently consumed power, the pump head or the flow rate.



### Three stepless control options

- stepless fixed speed
- automatic proportional pressure control  $\Delta p-v$
- automatic constant pressure control  $\Delta p-c$



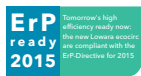
### Plug, no tools required for assembly

An easy and quick electrical connection. The female plug is compatible also with male plugs from previously on site installed third-party circulators.

By turning the stator via the screw ring, the plug can be fixed in any position, making an installation even in the hardest and tightest environment easy.



# Product range



## Highly efficient circulators for domestic heating Lowara ecocirc BASIC

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; shaftless, maintenance-free spherical motor, magnetite resistant Anti-Block-Technology, switchable control options (step-less manually or automatic variable differential pressure), cataphoresis coated cast iron pump housing, LED operation indicator, initial current limitations, automatic air purge mode;

P/N	Description	Version	Pump Housing length (mm)	Connection	For union fittings	EEl	Electric connections	Control options	Magnetite resistance
605008312	ecocirc BASIC 25-4/180	4 meter	180	G 1 1/2"	1"	≤ 0,21	plug	- stepless fixed speed - automatic proportional pressure control	Anti-Block Technology
605008411	ecocirc BASIC 32-4/180			G 2"	1 1/4"	≤ 0,21			
605008006	ecocirc BASIC 15-4/130		130	G 1"	1/2"	≤ 0,21			
605008106	ecocirc BASIC 20-4/130			G 1 1/4"	3/4"	≤ 0,21			
605008209	ecocirc BASIC 25-4/130			G 1 1/2"	1"	≤ 0,21			
605008362	ecocirc BASIC 25-6/180	6 meter	180	G 1 1/2"	1"	≤ 0,23			
605008461	ecocirc BASIC 32-6/180			G 2"	1 1/4"	≤ 0,23			
605008056	ecocirc BASIC 15-6/130		130	G 1"	1/2"	≤ 0,23			
605008156	ecocirc BASIC 20-6/130			G 1 1/4"	3/4"	≤ 0,23			
605008263	ecocirc BASIC 25-6/130			G 1 1/2"	1"	≤ 0,23			



## Highly efficient circulators for domestic heating Lowara ecocirc PREMIUM

Like ecocirc, however in addition with Multi-Display to show power consumption, pump head and flow rate; automatic constant pressure control  $\Delta p$ -c suitable especially for underfloor heating, plug;

P/N	Description	Version	Pump Housing length (mm)	Connection	For union fittings	EEl	Electric connections	Control options	Magnetite resistance
605008311	ecocirc PREMIUM 25-4/180	4 meter	180	G 1 1/2"	1"	≤ 0,21	plug	- stepless fixed speed - automatic proportional pressure control - automatic constant pressure control	Anti-Block Technology
605008410	ecocirc PREMIUM 32-4/180			G 2"	1 1/4"	≤ 0,21			
605008005	ecocirc PREMIUM 15-4/130		130	G 1"	1/2"	≤ 0,21			
605008208	ecocirc PREMIUM 25-4/130			G 1 1/4"	3/4"	≤ 0,21			
605008105	ecocirc PREMIUM 20-4/130			G 1 1/2"	1"	≤ 0,21			
605008361	ecocirc PREMIUM 25-6/180	6 meter	180	G 1 1/2"	1"	≤ 0,23			
605008460	ecocirc PREMIUM 32-6/180			G 2"	1 1/4"	≤ 0,23			
605008055	ecocirc PREMIUM 15-6/130		130	G 1"	1/2"	≤ 0,23			
605008155	ecocirc PREMIUM 20-6/130			G 1 1/4"	3/4"	≤ 0,23			
605008262	ecocirc PREMIUM 25-6/130			G 1 1/2"	1"	≤ 0,23			

## 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	ecocirc xx-4: 4 - 23 Watt ecocirc xx-6: 4 - 42 Watt
Accepted liquids	Heating water VDI 2035 Water/Glycol mixtures* Anti-Block-Technology
Magnetite resistance	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

Connection in DN      Pump head in meter




ecocirc PREMIUM 25 - 4 / 180

Model      Pump housing length (in mm)

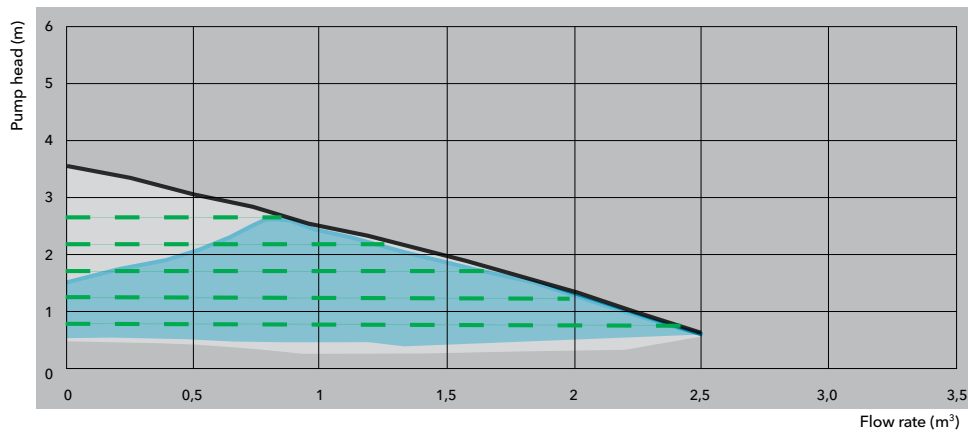


Replacement tool online:  
[www.lowara.com](http://www.lowara.com)

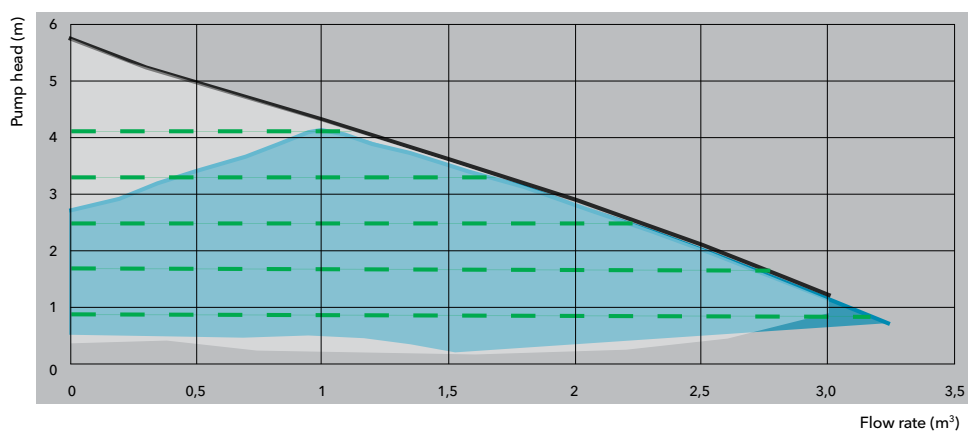
## Pump curves

-  stepless fixed speed, especially for boiler feed, single-pipe heating systems, systems with hydraulic switch
-  automatic proportional pressure control  $\Delta p-v$ , especially for radiator heating
-  automatic constant pressure control  $\Delta p-c$ , especially for underfloor heating (available only in PREMIUM models)

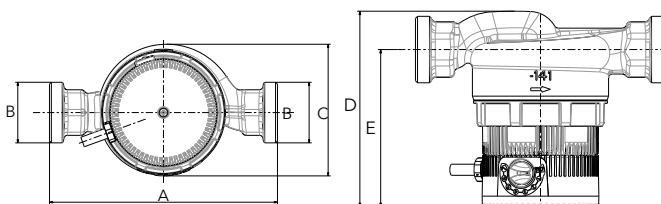
### Lowara ecocirc and ecocirc PREMIUM - 4-Meter-Versions



### Lowara ecocirc and ecocirc PREMIUM - 6-Meter-Versions



## Dimensional drawings



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