

## ecocirc - a smarter choice

HIGH-EFFICIENCY CIRCULATORS FOR RESIDENTIAL HEATING, COOLING AND DOMESTIC WATER APPLICATIONS



# "Give us a smarter choice in circulation pumps"

Faster setups. Fewer call-backs. Lower costs. These are just a few key factors you told us separate highly successful plumbers from the rest. Interestingly, it wasn't just one thing but a combination. And, when we asked you about circulation pumps for domestic applications, we heard a similar refrain: "Give us a smarter choice that combines high efficiency, simplicity and reliability in a single, cost-efficient package."

#### You asked, we listened

Combining all these benefits in a single circulator wasn't easy. But it proved to be the perfect brief to Lowara engineers for the development of ecocirc, our new range of high-efficiency circulation pumps for hydronic and domestic hot water applications. Available in basic (ecocirc) and advanced versions (ecocirc+), these revolutionary new circulators are ideal for heating and cooling, domestic hot water and underfloor heating systems, solar thermal and systems with thermostatic radiator valves.

#### Smarter for your customers, smarter for you

There were two key parts to our design thinking. First, we wanted to give your customer a smarter, more efficient and reliable product that could lower their energy bills by up to 80% and, consequently, cut CO<sub>2</sub> emissions. Secondly, and equally important, we wanted to provide you with an "easy to install and forget" circulator that would let you get in and out of jobs quickly. No hassles, no surprises, no call-backs. In short, a smarter choice.

#### ecocirc



#### ecocirc+



#### **EFFICIENCY**

Best-in-class energy efficiency enabled by ECM motor, optimized hydraulics and low power consumption.

#### **SIMPLICITY**

Compact and easy to install in confined spaces with "one turn control knob" to facilitate setups.



#### **RELIABILITY**

Robust design equipped with safety alerts and automatic shut-off to avoid pump burnout.

#### **ECONOMY**

Cost savings with Night Mode and eAdapt functions (ecocirc+); faster payback compared to standard circulators.

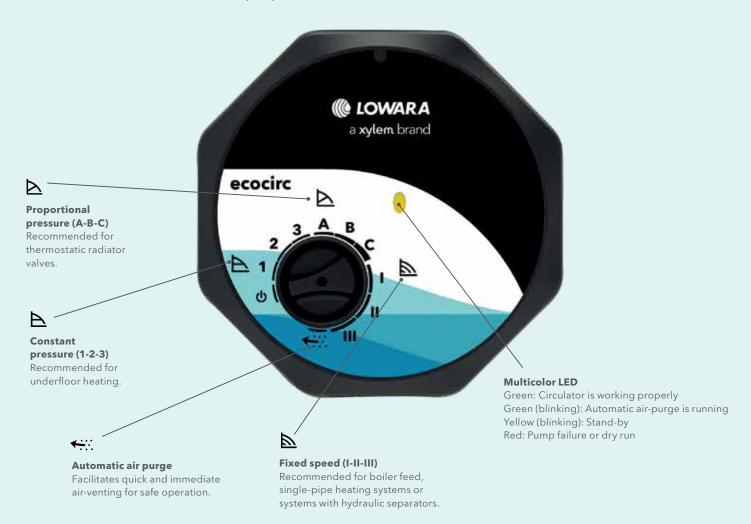
### Ready, set, go

Simplicity is key for the new ecocirc range. Lightweight and easy to install, these robust circulators are all equipped with a convenient, multifunctional control knob to select functional modes and speed settings. You also get just the right level of display information to monitor the circulator's status. This is ecocirc, a smarter choice.

#### ecocirc

#### One control knob, three control modes

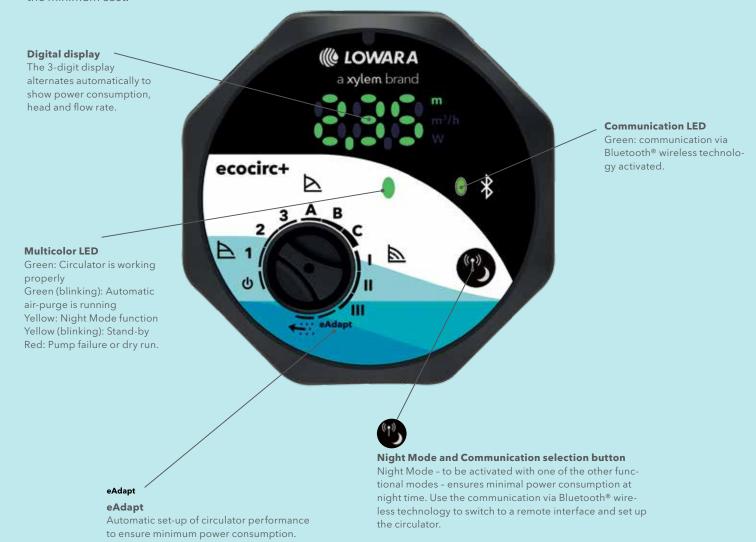
The basic ecocirc range consists of 28 models, including options for either cast iron or stainless steel pump housings. Like all ecocirc pumps, they are easy to set up and operate with "just one turn". The human-machine interface gives you all the information you need, with a multicolor LED to indicate pump status.



#### ecocirc+

#### Higher visibility, functionality and connectivity

Our more advanced ecocirc+ range takes the idea of smart simplicity to a whole new level. Equipped with the same functionality as the basic ecocirc range, these 14 models all come with a three-digit display, the communication via **Bluetooth®** wireless technology, for external monitoring, Night Mode and eAdapt to ensure optimal comfort at the minimum cost.



## Robust, reliable and cost-efficient

The ecocirc and ecocirc+ ranges are precision-engineered by Lowara, a global brand within Xylem Inc., based on more than half a century of R&D expertise and real-life testing experience. Our ambition in the HVAC sector is, quite simply, to give you a smarter choice of circulation pumps - easier-to-install units that just keep on running, delivering high efficiency and good value for money, day in and day out.

#### Cutting electric bills and CO<sub>2</sub> emissions

Studies show that 10-15% of the electricity consumption in domestic households is due to heating circulators. The ecocirc motor and hydraulics are carefully engineered to minimize this. All ecocirc pumps feature high-efficiency ECM motors that allow energy savings of up to 80% compared to conventional circulators. The EEI level, rated at  $\leq$ 0.18, ensures a fast payback on investment.

#### Automatic air purge

The automatic air purge mode facilitates quick and immediate air venting for safe operation.



#### Always hot and protected

The insulation shell keeps the temperature of the pumped liquid and surrounding environment at just the right level and provides protection during transportation.



The high efficiency ECM motor and optimized hydraulics keep your operational costs to a minimum. EEI level ≤ 0.18.

#### **High visibility**

A larger, easier-to-read digital display facilitates quick viewing of the pump's operating status, warnings and alarms (ecocirc+ range).



The built-in dry-run protection stops the pump and prevents damage if it runs without water.

#### Communication

via Bluetooth® wireless technology for external control and monitoring from your laptop, smartphone and tablet (ecocirc+ range).

#### **Economical operations**

Night Mode and eAdapt operational modes ensure optimal comfort at the minimum cost (ecocirc+ range).

#### Quick and easy to install

Interchangeable plug for electrical connection. The female plug is also compatible with the male plugs from previous circulators installed on site by third parties.



# How to choose the perfect circulator for your needs

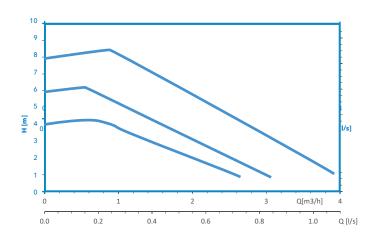
Need a circulator for underfloor heating? Or maybe one to move sanitary hot water from the boiler on up to taps and shower fixtures? Do you find it easier to view large digital displays? And what about the port-to-port dimension you need? No worries, we've got you covered.

#### Easy to choose, easy to use

The ecocirc range consists of 42 different models, including a wide variety of materials, sizes and configurations. It also meets all requirements for residential heating, cooling and domestic hot water

applications. Below is an overview of hydraulic performances and main features. For details regarding your preferred model, please refer to the product range tables and measurements.

#### Hydraulic performance range



#### Main features

|                                | ecocirc   | ecocirc+  |
|--------------------------------|-----------|-----------|
| Range                          |           |           |
| No. of models                  | 28        | 14        |
| Max head (m)                   | 4 - 6 - 8 | 4 - 6 - 8 |
| Reading and setting            |           |           |
| Knob                           | X         | X         |
| Fault indication               | X         | X         |
| Display                        |           | X         |
| Control and operating modes    |           |           |
| Proportional pressure          | Х         | Х         |
| Constant pressure              | X         | X         |
| Constant speed                 | X         | X         |
| e-Adapt                        |           | X         |
| Night mode                     |           | X         |
| Bluetooth® wireless technology |           | X         |
|                                |           | En-Rev_A  |

### We've got you covered

After delivering a circulator, we sometimes say in jest: "We hope to never see you again." There's some truth in this. That's because ecocirc circulation pumps are designed to just keep on running for many trouble-free years. However, should you experience any challenges along the way, our commitment does not stop with the delivery.



#### **Service Centers & Authorized Partners**

We offer full-range global service for pumps and systems through a network of service centers and Authorized Service Partners. Our certified technicians are trained to provide onsite support, if required, or answer any questions. The aim is to provide you with end-to-end support, from commissioning to replacement, ensuring zero downtime and high quality.

## "We don't just buy pumps - we buy a relationship based on trust and knowledge."

Hungarian customer, Xylem Learning Center, Vicenza, Italy

#### **Xylem Learning Centers**

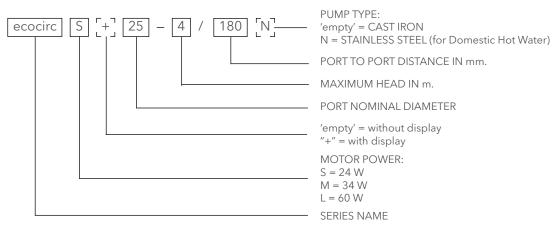
For the benefit of our customers, we also operate a Xylem Learning Center at a number of our manufacturing facilities across Europe. Here, in addition to a plant tour, you can learn more about pump theory, pumping systems, sizing and more. You also have an opportunity to meet colleagues and exchanges views and best-practice experiences.



### "They just keep going and going and going."

Ecocirc Demo Tester, Hamburg, Germany

#### **Model designation**



EXAMPLE: ecocirc S + 25-4/180

Electronic circulator of the ecocirc series, motor power = 24 W, equipped with display, port nominal diameter = 25, max head = 4 m, with port to port distance 180 mm.

#### **Technical data**

Flow rate: Up to 4.5 m<sup>3</sup>/h

Head: Up to 8 m

Maximum power consumption: 60 W

Temperature of pumped liquid: -10°C - 110°C

Ambient temperature: -10°C - 110°C

Maximum operating pressure: 10 bar (PN 10) Power supply: Single-phase 200-240 V 50/60 Hz

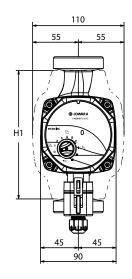
Insulation class F (155°C) Protection class IP 44 Sound level ≤ 43 dB(A)

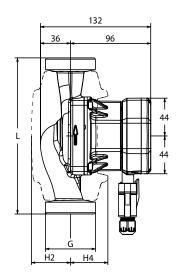
EMC (electromagnetic compatibility) EN 55014-1:2006 and EN 55014-2:1997

| Pump type            |     | Dimension (mm)  |     |    |    |  |  |  |  |
|----------------------|-----|-----------------|-----|----|----|--|--|--|--|
|                      | L   | G               | H1  | H2 | H4 |  |  |  |  |
| ecocirc S 15-4/130 N | 130 | G 1 / R ½       | 142 | 46 | 44 |  |  |  |  |
| ecocirc S 20-4/150 N | 150 | G 1 1/4 / R 1/2 | 142 | 46 | 44 |  |  |  |  |
| ecocirc S 25-4/180 N | 130 | G 1 ½ / R 1     | 142 | 46 | 44 |  |  |  |  |
| ecocirc S 25-4/180 N | 180 | G 1 ½ / R 1     | 148 | 47 | 45 |  |  |  |  |
| ecocirc S 32-4/180 N | 180 | G 2 / R 1 1/4   | 148 | 47 | 45 |  |  |  |  |
| ecocirc M 15-4/130 N | 130 | G 1 / R ½       | 142 | 46 | 44 |  |  |  |  |
| ecocirc M 20-4/150 N | 150 | G 1 1/4 / R 3/4 | 142 | 46 | 44 |  |  |  |  |
| ecocirc M 25-4/130 N | 130 | G 1 ½ / R 1     | 142 | 46 | 44 |  |  |  |  |
| ecocirc M 25-4/180 N | 180 | G 1 ½ / R 1     | 148 | 47 | 45 |  |  |  |  |
| ecocirc M 32-4/180 N | 180 | G 2 / R 1 1/4   | 148 | 47 | 45 |  |  |  |  |
| ecocirc L 15-8/130 N | 130 | G 1 / R ½       | 142 | 46 | 44 |  |  |  |  |
| ecocirc L 25-8/130 N | 130 | G 1 ½ / R 1     | 142 | 46 | 44 |  |  |  |  |
| ecocirc L 25-8/180 N | 180 | G 1 ½ / R 1     | 148 | 47 | 45 |  |  |  |  |
| ecocirc L 32-8/180 N | 180 | G 2 / R 1 1/4   | 148 | 47 | 45 |  |  |  |  |

| Pump type             | Dimension (mm) |                 |     |    |    |  |  |
|-----------------------|----------------|-----------------|-----|----|----|--|--|
|                       | L              | G               | H1  | H2 | H4 |  |  |
| ecocirc S(+) 15-4/130 | 130            | G 1 / R ½       | 142 | 46 | 44 |  |  |
| ecocirc S(+) 20-4/150 | 130            | G 1 1/4 / R 1/2 | 142 | 46 | 44 |  |  |
| ecocirc S(+) 25-4/180 | 130            | G 1 ½ / R 1     | 142 | 46 | 44 |  |  |
| ecocirc S(+) 25-4/180 | 180            | G 1 ½ / R 1     | 148 | 47 | 45 |  |  |
| ecocirc S(+) 32-4/180 | 180            | G 2 / R 1 1/4   | 148 | 47 | 45 |  |  |
| ecocirc M(+) 15-6/130 | 130            | G 1 / R ½       | 142 | 46 | 44 |  |  |
| ecocirc M(+) 20-6/150 | 130            | G 1 1/4 / R 3/4 | 142 | 46 | 44 |  |  |
| ecocirc M(+) 25-6/130 | 130            | G 1 ½ / R 1     | 142 | 46 | 44 |  |  |
| ecocirc M (+)25-6/180 | 180            | G 1 ½ / R 1     | 148 | 47 | 45 |  |  |
| ecocirc M(+) 32-6/180 | 180            | G2/R11/4        | 148 | 47 | 45 |  |  |
| ecocirc L(+)15-8/130  | 130            | G 1 / R ½       | 142 | 46 | 44 |  |  |
| ecocirc L(+) 25-8/130 | 130            | G 1 ½ / R 1     | 142 | 46 | 44 |  |  |
| ecocirc L(+) 25-8/180 | 180            | G 1 ½ / R 1     | 148 | 47 | 45 |  |  |
| ecocirc L(+) 32-8/180 | 180            | G2/R11/4        | 148 | 47 | 45 |  |  |

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#### **Product ranges**

| Models ecocirc         | Power limit           |     | Port nominal |   | Connection      | EEI level | Part number |           |
|------------------------|-----------------------|-----|--------------|---|-----------------|-----------|-------------|-----------|
|                        | [W] [mm] diameter [m] | [m] |              |   | Cast iron       | AISI304   |             |           |
| ecocirc S 15-4/130 (N) | 24                    | 130 | 15           | 4 | G 1 / R ½       | ≤ 0.16    | 60B0L1000   | 60B0L1001 |
| ecocirc M 15-6/130 (N) | 34                    | 130 | 15           | 6 | G 1 / R ½       | ≤ 0.17    | 60B0L1002   | 60B0L1004 |
| ecocirc L 15-8/130 (N) | 60                    | 130 | 15           | 8 | G 1 / R ½       | ≤ 0.18    | 60B0L1003   | 60B0L1005 |
| ecocirc S 20-4/130     | 24                    | 130 | 20           | 4 | G 1 1/4 / R 3/4 | ≤ 0.16    | 60B0L1006   | -         |
| ecocirc S 20-4/150 N   | 24                    | 150 | 20           | 4 | G 1 1/4 / R 3/4 | ≤ 0.16    | -           | 60B0L1008 |
| ecocirc M 20-6/130     | 34                    | 130 | 20           | 6 | G 1 1/4 / R 3/4 | ≤ 0.17    | 60B0L1007   | -         |
| ecocirc M 20-6/150 N   | 34                    | 150 | 20           | 6 | G 1 1/4 / R 3/4 | ≤ 0.17    | -           | 60B0L1009 |
| ecocirc S 25-4/130 (N) | 24                    | 130 | 25           | 4 | G 1 ½ / R 1     | ≤ 0.16    | 60B0L1010   | 60B0L1013 |
| ecocirc S 25-4/180 (N) | 24                    | 180 | 25           | 4 | G 1 ½ / R 1     | ≤ 0.16    | 60B0L1016   | 60B0L1019 |
| ecocirc M 25-6/130 (N) | 34                    | 130 | 25           | 6 | G 1 ½ / R 1     | ≤ 0.17    | 60B0L1011   | 60B0L1014 |
| ecocirc M 25-6/180 (N) | 34                    | 180 | 25           | 6 | G 1 ½ / R 1     | ≤ 0.17    | 60B0L1017   | 60B0L1020 |
| ecocirc L 25-8/130 (N) | 60                    | 130 | 25           | 8 | G 1 ½ / R 1     | ≤ 0.18    | 60B0L1012   | 60B0L1015 |
| ecocirc L 25-8/180 (N) | 60                    | 180 | 25           | 8 | G 1 ½ / R 1     | ≤ 0.18    | 60B0L1018   | 60B0L1021 |
| ecocirc S 32-4/180 (N) | 24                    | 180 | 32           | 4 | G2/R11/4        | ≤ 0.16    | 60B0L1022   | 60B0L1025 |
| ecocirc M 32-6/180 (N) | 34                    | 180 | 32           | 6 | G 2 / R 1 1/4   | ≤ 0.17    | 60B0L1023   | 60B0L1026 |
| ecocirc L 32-8/180 (N) | 60                    | 180 | 32           | 8 | G 2 / R 1 1/4   | ≤ 0.18    | 60B0L1024   | 60B0L1027 |

| Models ecocirc + P  | Power limit | Port to port<br>[mm] | Port nominal diameter | Max head<br>[m] | Connection      | EEI level | Part number |         |
|---------------------|-------------|----------------------|-----------------------|-----------------|-----------------|-----------|-------------|---------|
|                     | [W]         |                      |                       |                 |                 |           | Cast iron   | AISI304 |
| ecocirc S+ 15-4/130 | 24          | 130                  | 15                    | 4               | G 1 / R ½       | ≤ 0.16    | 60B0L1028   | -       |
| ecocirc M+ 15-6/130 | 34          | 130                  | 15                    | 6               | G 1 / R ½       | ≤ 0.17    | 60B0L1029   | -       |
| ecocirc L+ 15-8/130 | 60          | 130                  | 15                    | 8               | G 1 / R ½       | ≤ 0.18    | 60B0L1030   | -       |
| ecocirc S+ 20-4/130 | 24          | 130                  | 20                    | 4               | G 1 1/4 / R 3/4 | ≤ 0.16    | 60B0L1031   | -       |
| ecocirc M+ 20-6/130 | 34          | 130                  | 20                    | 6               | G 1 1/4 / R 3/4 | ≤ 0.17    | 60B0L1032   | -       |
| ecocirc S+ 25-4/130 | 24          | 130                  | 25                    | 4               | G 1 ½ / R 1     | ≤ 0.16    | 60B0L1033   | -       |
| ecocirc M+ 25-6/130 | 34          | 130                  | 25                    | 6               | G 1 ½ / R 1     | ≤ 0.17    | 60B0L1034   | -       |
| ecocirc L+ 25-8/130 | 60          | 130                  | 25                    | 8               | G 1 ½ / R 1     | ≤ 0.18    | 60B0L1035   | -       |
| ecocirc S+ 25-4/180 | 24          | 180                  | 25                    | 4               | G 1 ½ / R 1     | ≤ 0.16    | 60B0L1036   | -       |
| ecocirc M+ 25-6/180 | 34          | 180                  | 25                    | 6               | G 1 ½ / R 1     | ≤ 0.17    | 60B0L1037   | -       |
| ecocirc L+ 25-8/180 | 60          | 180                  | 25                    | 8               | G 1 ½ / R 1     | ≤ 0.18    | 60B0L1038   | -       |
| ecocirc S+ 32-4/180 | 24          | 180                  | 32                    | 4               | G 2 / R 1 1/4   | ≤ 0.16    | 60B0L1039   | -       |
| ecocirc M+ 32-6/180 | 34          | 180                  | 32                    | 6               | G2/R11/4        | ≤ 0.17    | 60B0L1040   | -       |
| ecocirc L+ 32-8/180 | 60          | 180                  | 32                    | 8               | G 2 / R 1 1/4   | ≤ 0.18    | 60B0L1041   | -       |

#### **Applications**



Heating and Cooling Systems



Residential Buildings



Domestic Hot Water Systems



Systems with Thermostatic Radiator Valves



Underfloor Heating Systems



Thermal Solar Systems

### Xylem |'zīləm|

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

We're a global team unified in a common purpose: creating advanced technology solutions to the world's water challenges. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. Our products and services move, treat, analyze, monitor and return water to the environment, in public utility, industrial, residential and commercial building services settings. Xylem also provides a leading portfolio of smart metering, network technologies and advanced analytics solutions for water, electric and gas utilities. 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 with a strong focus on developing comprehensive, sustainable solutions.

For more information on how Xylem can help you, go to www.xylem.com



For information and technical support Xylem Service Italia Srl

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