THE NEW MAGNA1
A SIMPLE AND EFFICIENT SOLUTION

FULL RANGE OF CIRCULATOR PUMPS
TO GET THE SIMPLE JOBS DONE

be
think
innovate

GRUNDFOS

SIMPLICITY AT ITS MOST EFFICIENT

Looking for a circulator pump that will get the job done? Look no further. Combining cost-efficiency with simplicity and reliability, MAGNA1 offers the ideal solution.

In short, MAGNA1 is a simple, energy-efficient circulator pump. Built on tried and tested MAGNA technology, it offers a cost-efficient solution for jobs in which simple control and monitoring features are sufficient. Compared to the previous edition, MAGNA1 offers improved technology as well as unmatched levels of energy-efficiency, reliability and user-friendliness – strengthening its position as one of the best circulators for simple solutions.

COST-EFFICIENT

A simple and energy-efficient circulator

INPUT/OUTPUT

Integration with simple building management systems

ENERGY-EFFICIENT

Best-in-class efficiency for replacement pumps

EASY INSTALLATION

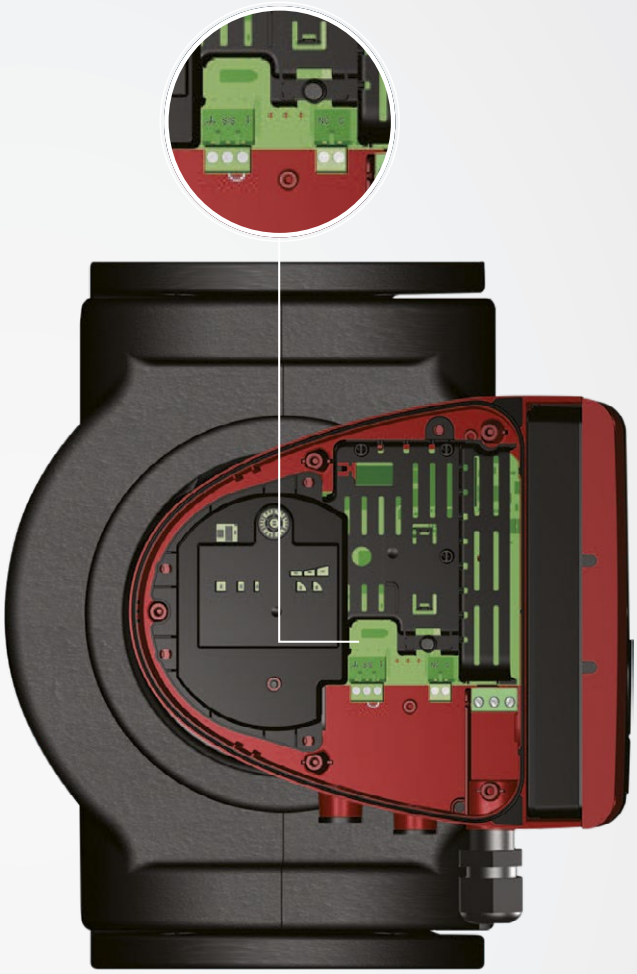
Easy to install and commission with just one button

TWIN PUMP FUNCTIONALITY

Wireless, alternating twin pumps for improved reliability

NEW INPUT/OUTPUT TO INCREASE COMFORT

With the digital input and fault-relay output, MAGNA1 can easily be connected to external controllers or remote management systems. Controlling and monitoring pumps remotely will decrease downtime and increase comfort.



TRIGGER OTHER ACTIONS THROUGH EXTERNAL CONTROLLERS

Integrating the pump with external controllers makes it possible to trigger other actions – for instance, stopping the pump. MAGNA1 can be connected to external control systems such as a PLC controller mounted in the pump room, or a Building Management System, which allows for remote control and monitoring.

A CLOSER LOOK AT THE INPUT/OUTPUT

Potential-free relay, normally closed
In a potential-free relay with a normally closed function, the relay opens whenever a fault occurs, ensuring that you'll be notified if a wire breaks, for instance. Grundfos utilises proven, reliable technology for its relay functionalities, providing a very robust solution on both low and high voltages.

Digital start/stop operation
The pump can be set to start or stop by means of external input. For instance, if it's set in weather compensation control, the pump will stop if the outside temperature changes.

Installer-friendly terminal plugs
Standard installer-friendly plugs provide easy accessibility and make it easier for the installer to find a spare part if, for instance, a plug is lost during installation. In addition, you can test the relay function by removing the terminal plug. In such a scenario, it will be perceived as a fault in the pump, which may be helpful in connection with BMS programming and troubleshooting.

COMMISSIONING BY THE PUSH OF A BUTTON

MAGNA1 was built with simplicity in mind – something that's evident in the pump's user interface, where the pump can be commissioned by means of just one button. This is also a direct advantage when replacing older 3-speed circulators of the same size.

NINE CONTROL FUNCTIONS

MAGNA1 has nine predefined control functions, which makes it easy to select the optimum one for the application at hand. There are three proportional pressure curves, three constant pressure curves and three constant speeds. The pump is factory set to run in proportional pressure curve 2. The control function can be changed by means of the button on the interface.

THE GRUNDFOS EYE

The Grundfos Eye is your way of understanding your pump's status. It gives you a perfect and fast pump performance status, which comes in handy when performing normal operation inspection and troubleshooting scenarios in a boiler room.

SIMPLE USER INTERFACE

The light fields in the LED display provide a clear overview of which of the nine control functions the pump is operating in.

BEST-IN-CLASS EFFICIENCY

BEST in class

EuP 2015 READY

EEI ≤ 0.20

PUMP TECHNOLOGY

GRUNDFOS

Based on familiar MAGNA technology, MAGNA1 offers an unprecedented level of energy-efficiency with an EEI of ≤ 0.20 for single pumps – bringing significant energy savings and reducing operational costs compared to similar pumps. Additionally, its high efficiency makes it a perfect replacement pump for pumps that are older or broken.

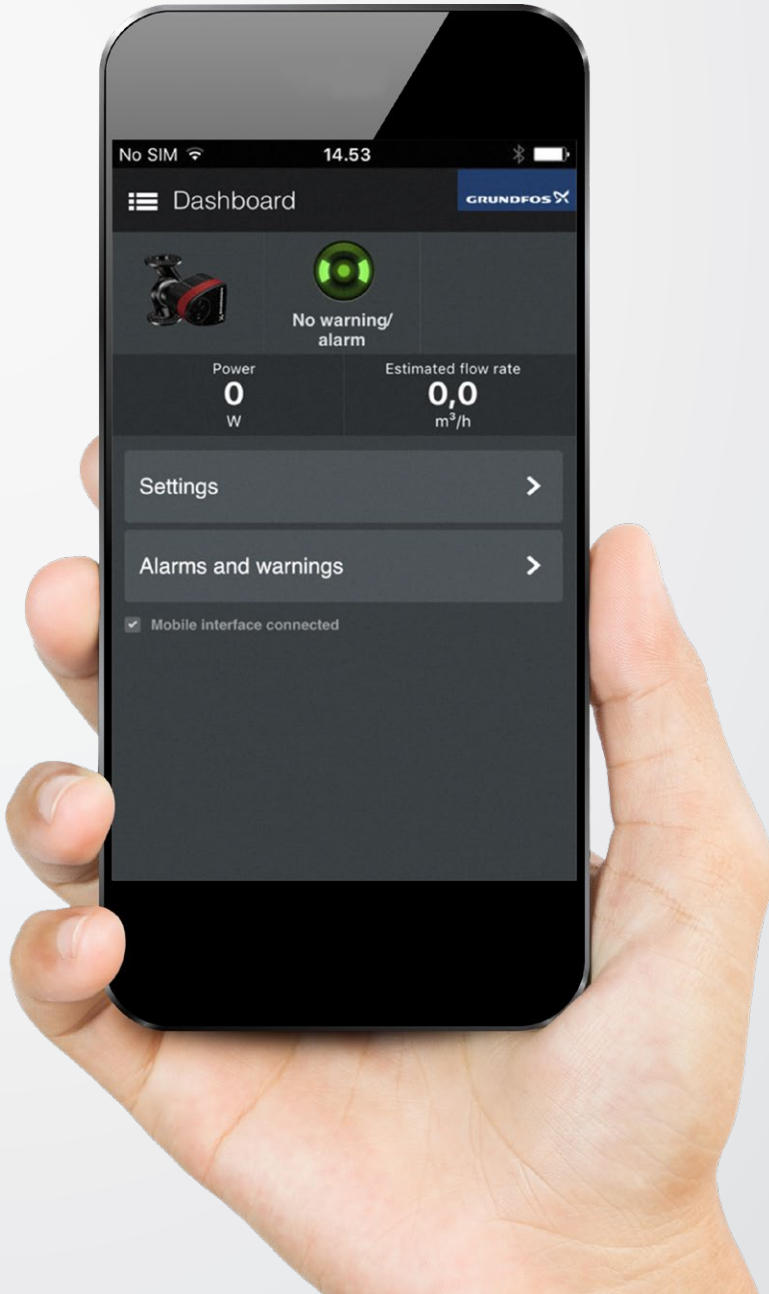
GRUNDFOS GO COMPATIBILITY

FREE TO DOWNLOAD AND EASY TO PAIR

MAGNA1 also offers Grundfos GO compatibility. Simply pair the app with MAGNA1 via direct infrared for single pumps and via radio for twin pumps. Grundfos GO can be downloaded for free from both AppStore and GooglePlay.

EASY TROUBLESHOOTING

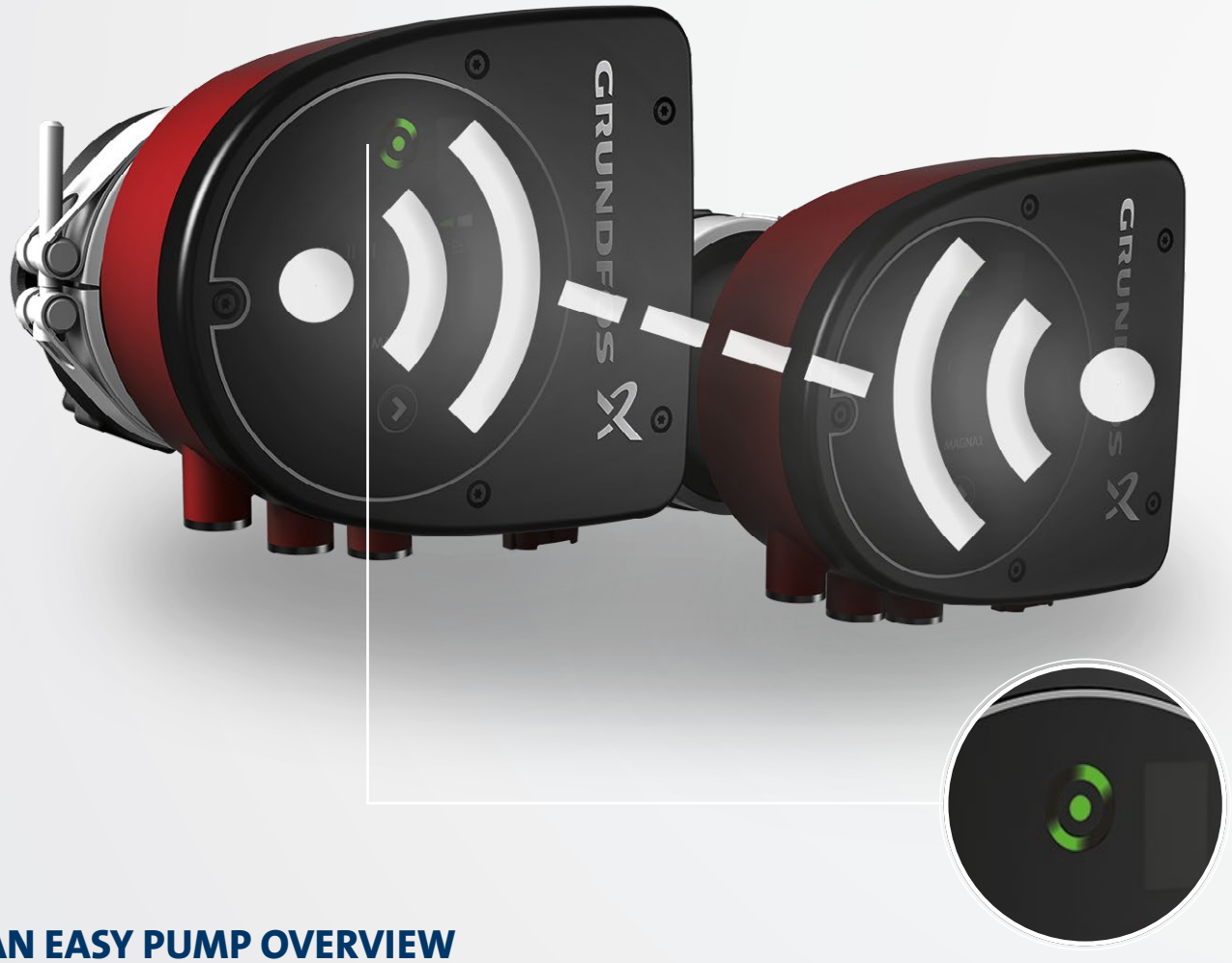
If a pump issues a problem, you can connect the pump to Grundfos GO and get a description of the alarm or warning in question. You can also generate pump reports for your customer.



GOING WIRELESS: TWIN PUMP FUNCTIONALITY

One of the features of MAGNA1 is its twin pump functionality, in which both pumps alternate to share the pump load over time. That way, one is redundant, and can take over if the other is not able to perform. Both pumps can handle the full flow individually – **ensuring a security of supply**. The two pump heads communicate wirelessly and can reach flow levels of up to 70m3/h.

The alternating function is specifically implemented in twin products, in which two heads share the same pump housing, thereby optimising installation costs. The function is factory-enabled, but it can easily be switched off by pressing the button on the user interface of one of the pumps for 5 seconds. In order to prevent wear on the output relay of the external controller, it is recommended that you use the digital input to remotely control the pump heads.

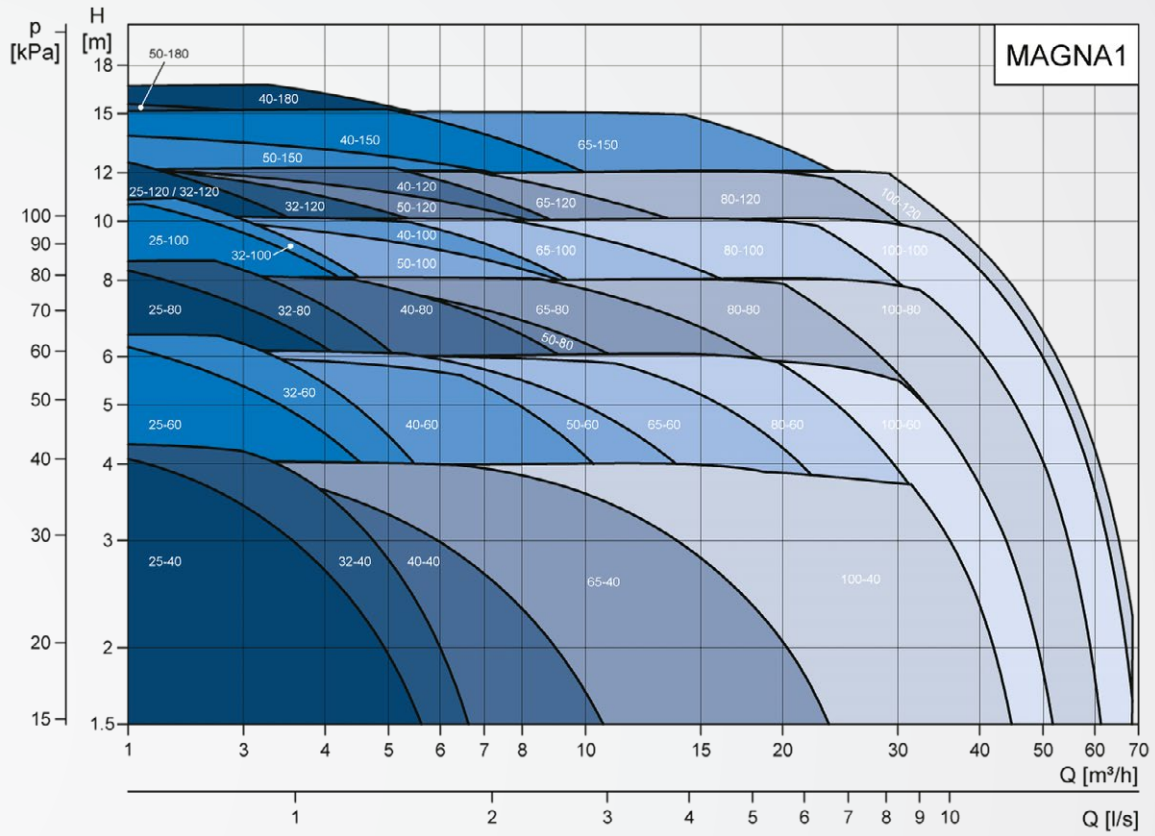


AN EASY PUMP OVERVIEW

The twin pumps are connected from the factory. The centre of the Grundfos Eye will light up green if the connection is successful. If the two heads lose connection, it will issue a warning on the user interface. Additionally, you can use Grundfos GO to configure whether this warning should be visible on the relay.

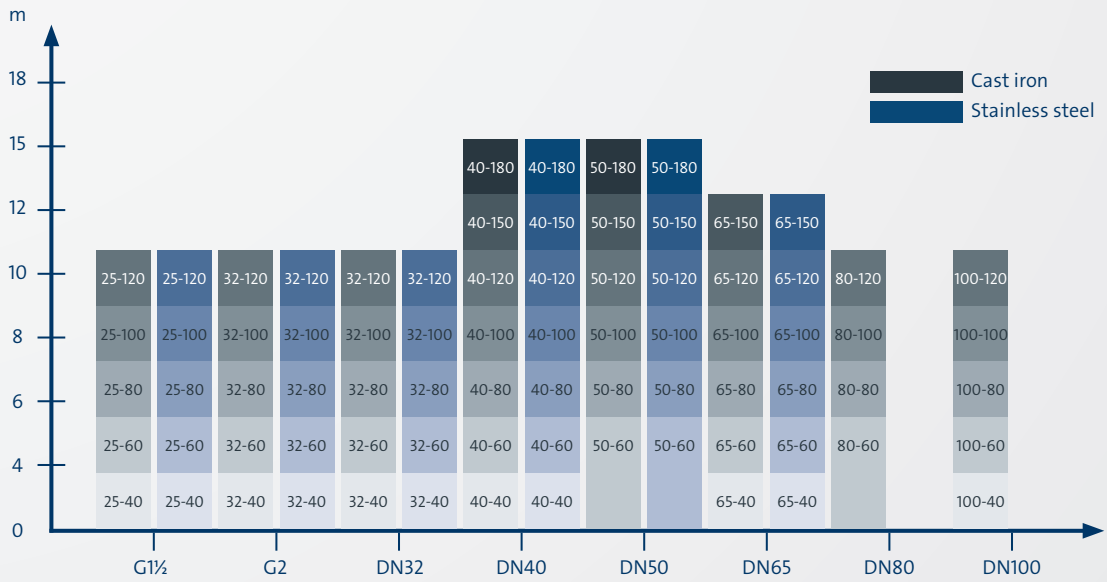
PERFORMANCE RANGE

Our MAGNA1 product range offers solutions for any duty points – ensuring that you can get the exact performance you're looking for.



PRODUCT RANGE

Our MAGNA1 range offers more than 200 different single and twin pumps in cast iron and stainless steel. It can reach a maximum head of 18m and a maximum flow of 70m3/h. Furthermore, all single variants are available for PN16.



CUSTOMER ADVANTAGES AND BENEFITS

Characteristics	Installer benefits	User benefits	Consultant benefits
Broad portfolio for backwards compatibility with older Grundfos products.	No need for extensive search for circulators that fit existing dimensions.	No need to replace other elements or modify pipes ahead of installation.	The tailored portfolio ensures that there's always a MAGNA1 available.
Relay output for fault detection. Also used to provide remote notifications.	Easy connection of the I/O without using extra accessories.	Improved reliability allows for quick fault detection.	Basic BMS integration.
Digital input to start and stop the pump by means of external input.	Easy connection of the I/O without using extra accessories.	Offers remote pump control when integrated with BMS.	Basic BMS integration.
Wireless twin pump functionality with integrated redundancy.	Save time on installation as the pumps are connected from the factory. Integrated redundancy eliminates the need for external control.	Redundancy results in a reliable operation, reducing downtime.	Secures uptime for end-users – particularly relevant for hospitals, for instance.
Basic connection via Grundfos GO.	Efficient monitoring and troubleshooting as well as the ability to share reports.	Easy access to basic pump status when in proximity of the pump.	Easy access to digital fault-finding reports without being on-site.
Best-in-class efficiency of EEI ≤ 0.20 on single pumps and ≤ 0.23 on twin pumps.	Current legislation is met in terms of the best-in-class technology.	Energy consumption and operational costs are reduced.	Supports project regulations focusing on "nearly zero impact buildings".
9 different control functions to adapt the pump to your needs.	Easy to adjust to the required application and quick to adapt to system requirements.	Easy to adjust if set up incorrectly at installation.	Includes all required control functions to use in basic HVAC applications.
Grundfos Eye on the pump's interface.	Get a quick, visual overview of service or troubleshooting requirements.	Easy understanding of the proper functioning of the pump.	A relevant reference when handling complaints.
Insulation shell for single pumps for an easier and faster installation.	Easy and quick installation as the shell is fit for purpose.	Reduces energy consumption and saves money on the heating bill.	Supports the general trend in terms of more efficient installations.
Easy commissioning via one button.	Save time with easy commissioning of the pump.	Easy to change the performance level if peak conditions occur.	Easy setup equals a limited number of mistakes, resulting in less time spent on complaints.

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