

THE MAGNA1 FAMILY

A SIMPLE YET EFFICIENT SOLUTION



FULL RANGE OF CIRCULATOR PUMPS
TO GET THE SIMPLE JOBS DONE

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 Model C pumps are built on tried and tested MAGNA technology. They are designed for circulating liquids in a wide range of light commercial and commercial applications including:

- Heating systems
- Air conditioning and cooling systems
- Domestic water systems
- Ground-source heat pump systems
- Solar heating systems

These pumps offer the perfect solution in refurbishment situations where you need to either replace a Grundfos UPS product or a smaller model from the original Magna family.

They are designed for circulating liquids in heating systems with variable flows where it is desirable to optimise the settings of the pump duty point, thus reducing energy costs. MAGNA1 Model C pumps also offer some basic communication options.



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

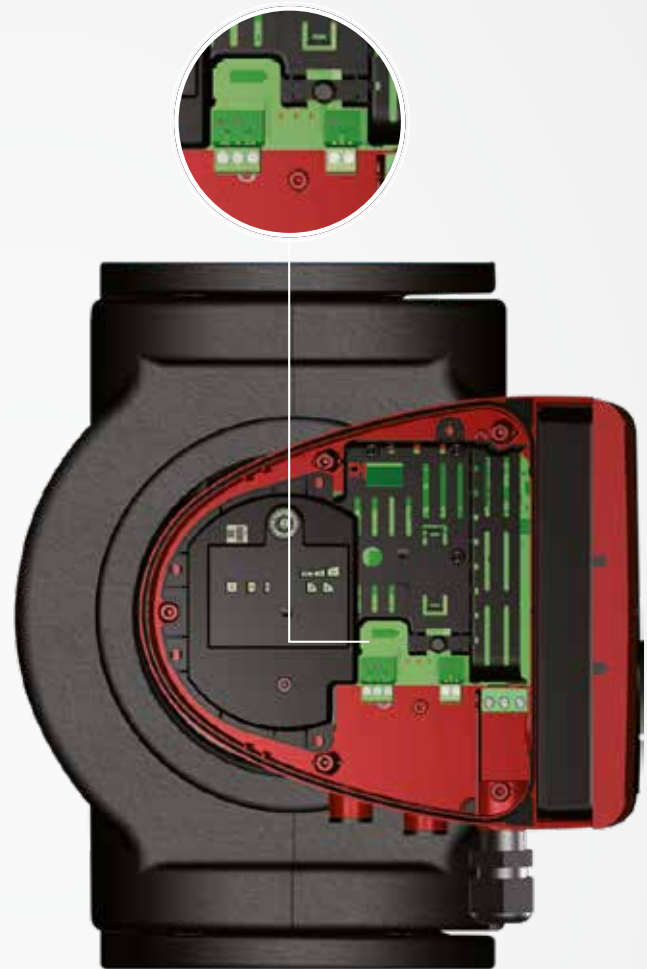
Wireless, alternating twin pumps for improved reliability

NEW INPUT/OUTPUT FOR IMPROVED COMMUNICATION

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 prompt 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.

Digital start/stop operation

The pump can be set to start or stop by means of external input.

Installer-friendly terminal plugs

Standard installer-friendly plugs provide easy accessibility. In addition, you can test the relay function by removing the terminal plug.

SIMPLIFIED COMMISSIONING

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 Model C 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.

SIMPLE USER INTERFACE

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



BEST-IN-CLASS EFFICIENCY

BEST
in class

Based on familiar MAGNA technology, MAGNA1 Model C offers an excellent level of energy-efficiency with an EEI of ≤ 0.20 for single head 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 at end of life.



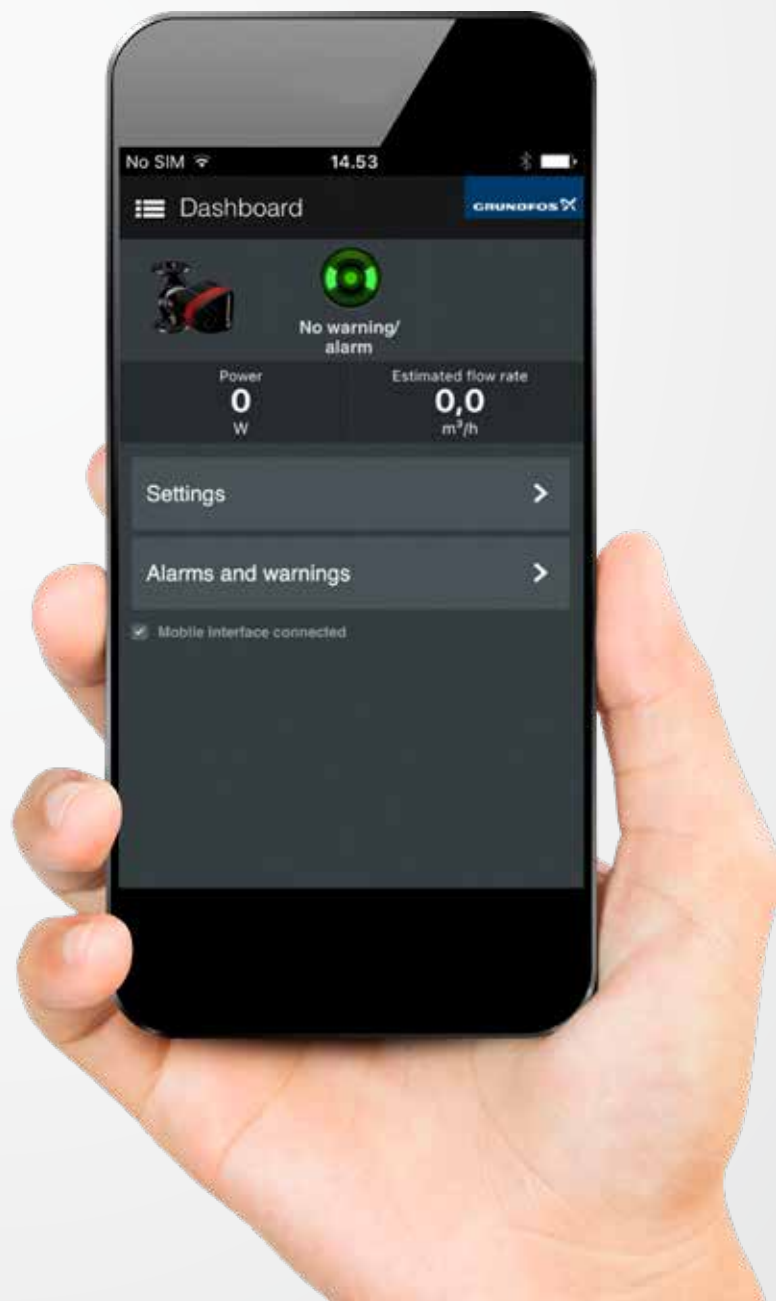
GRUNDFOS GO COMPATIBILITY

FREE TO DOWNLOAD AND EASY TO CONNECT

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

EASY TROUBLESHOOTING

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



GOING WIRELESS: TWIN PUMP FUNCTIONALITY

One of the features of MAGNA1 Model C is its twin pump functionality, in which both pumps alternate. 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 implemented in twin pump models, 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.

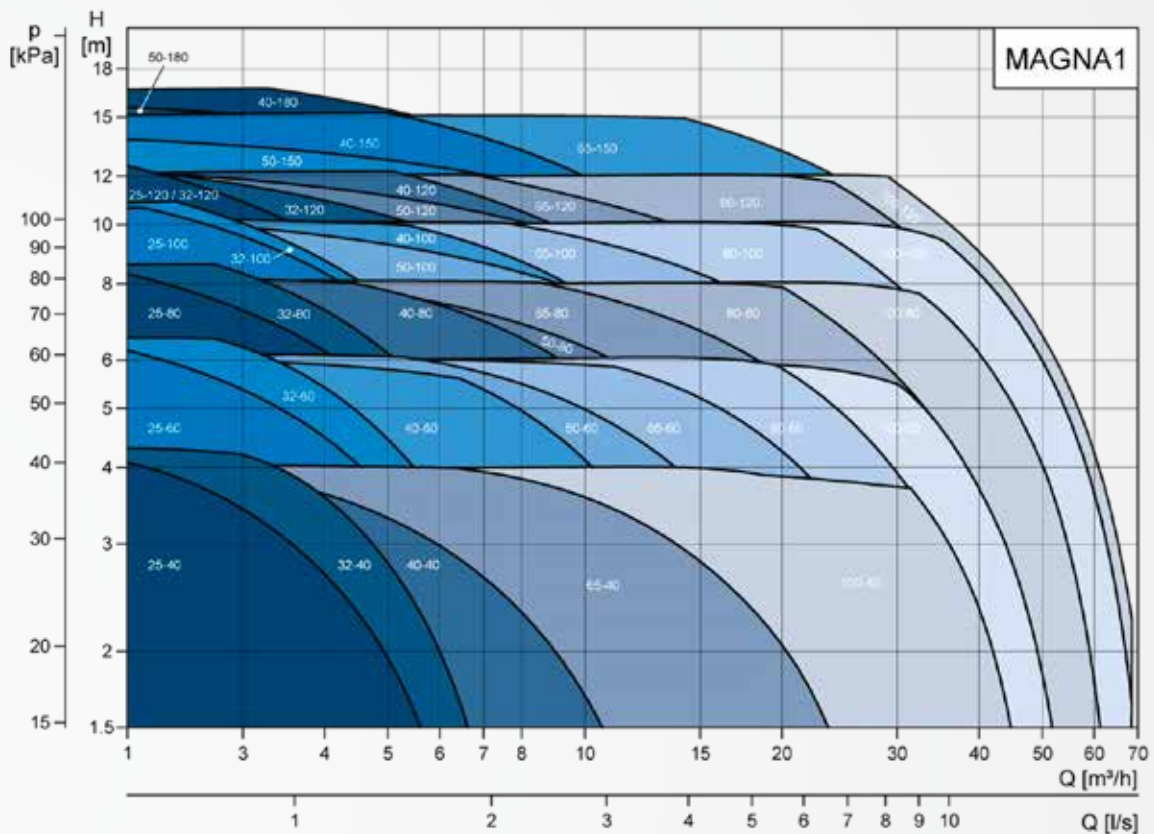


AN EASY PUMP OVERVIEW

The twin pumps have the Multipump function enabled in 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 visual warning within the user interface. Additionally, you can use Grundfos GO to configure whether this warning should trigger the alarm via the signal relay.

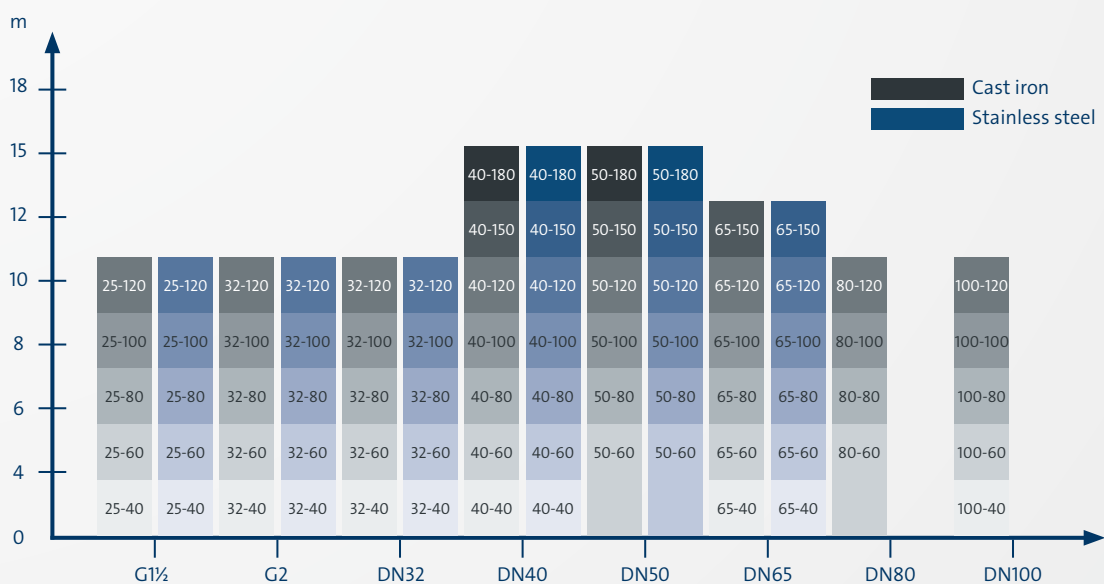
PERFORMANCE RANGE

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



PRODUCT RANGE

Our MAGNA1 Model C 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.



CUSTOMER ADVANTAGES AND BENEFITS

DESCRIPTION		MAGNA3	MAGNA1 MODEL C (UPDATED MODEL)	MAGNA1 (PREVIOUS MODEL)
System intelligence	Heat Energy Monitor	+	-	-
	AUTOADAPT	+	-	-
	FLOWLIMIT & FLOWADAPT	+	-	-
	ΔT/ΔP control with 1 additional sensor	+	-	-
Control modes	Proportional pressure	Multi curves	3 curves	3 curves
	Constant pressure	Multi curves	3 curves	3 curves
	Constant speed	Multi speed	3 speed	3 speed
	Constant differential pressure	+	-	-
Other	External I/O	1 x analogue input 2 x relay outputs 3 x digital inputs	1 x relay output, fault 1 x digital start/stop	-
	Integrated add-on comm. module	+	-	-
	Twin pump	+	-	-
	Wireless comm. & remote control	+	Alarms/warnings/reports	-
	Automatic night setback	+	-	-
	Work log	+	-	-
	Display	+	-	-
	Grundfos GO communication	Wireless via Radio	Wireless via IR	-