

# IS IT POSSIBLE TO BEAT THE HUMAN HEART?



BE > THINK > INNOVATE >

GRUNDFOS 



# THE HEART IS OUR INSPIRATION

Unmatched for its reliability, adaptability, and efficiency, the heart is the perfect pump that inspires us to make the world's best circulators.

Grundfos has been at the forefront of the pump industry for over 60 years, continually providing our customers with the benefits of groundbreaking innovation and unmatched quality. We have achieved this position because we always pursue performance excellence. In fact, our ultimate goal – however impossible it may seem – is to create a circulator that is as precise, adaptable, durable, and efficient as the human heart.

#### Specifically designed

We've created two collections of energy-optimized circulator pumps for North America. They've been designed to specifically match the characteristics and applications of the market, based on our in-depth market knowledge, dialogue with contractors and end-users, and rugged field testing. The Grundfos ALPHA™ and MAGNA meet the needs of most residential and commercial applications. Finally, this combination makes energy efficiency, quality, reliability, and ease of installation possible.

#### Driven to accomplish even more

The heart is our inspiration in our attempts to achieve the impossible: the perfect circulator. This goal fuels the development of our groundbreaking technology. It drives us to set new standards in efficiency and ease of installation.

We refuse to accept that there are limits to how good a circulator can possibly be. That's why we say we are Powered by the Impossible.

**POWERED BY THE IMPOSSIBLE**

AUTO  
ADAPT



# THE HEART WON'T MISS A BEAT

Just like the heart, a circulator must be reliable. It must run perfectly for years and years.



Just as we depend on our hearts, we depend on the reliability of our pump solution. Whatever application it is designed for, customers expect – and deserve – that their pump is completely reliable. The Grundfos promise is faultless pump performance, and the industry knows we deliver.

#### **Your customers will appreciate it**

The ALPHA™ and MAGNA ranges embody this reliability. Every aspect of their design and assembly is intended to maximize reliability. Your customers will be happy with the pump you've given them, for many years to come.

# THE HEART ALWAYS USES ENERGY EFFICIENTLY

The heart never uses more energy than necessary

## Fighting climate change

It's no secret that reducing energy consumption is an important step in reducing the CO<sub>2</sub> emissions responsible for global warming. And lower energy consumption means lower energy bills. Choosing an ALPHA™ or a MAGNA for residential and commercial applications saves the earth and money at the same time.

The energy-optimized ALPHA is so efficient, it can operate on as little as 5 Watts. This amazingly low power consumption is always visible on the easy-to-read real-time display, showing customers just how much energy they are saving.

To find out just how much energy Grundfos energy-efficient circulators could really save your customers, please visit us at:

[poweredby.grundfos.com](http://poweredby.grundfos.com)

up to **80%**  
energy savings  
when you use

**AUTO  
ADAPT**



# THE HEART ADAPTS TO CHANGING DEMANDS

Like a heart, a circulator must be able to change its performance to match the changing demands of the system.

In order to deliver the best possible comfort and efficiency, standard pumps need to be manually adjusted to keep pace with changing system conditions. However, our circulators with the unique Grundfos AUTOADAPT function, do so on their own. That is because AUTOADAPT analyzes system demand, then automatically adjusts pump performance to match it. It does this continuously, fine-tuning its performance while running, saving both energy and money.

#### **AUTOADAPT™ changes installation forever**

Installation has never been easier, as this factory preset turns itself on once the pump is plugged in.

Imagine a feature on your car that uses every drop of gas as efficiently as possible. Think of it as an autopilot that reads the terrain and traffic, and adjusts your speed accordingly, rather than simply holding the same speed like cruise control does. Everywhere you go, your car is driven at the most energy-efficient speed, automatically calculated based on the conditions. AUTOADAPT does just this for your pumps.

AUTOADAPT is so effective that in virtually all cases, no further adjustment is ever necessary. It also allows your customers to reduce their energy bills, as the optimized Grundfos ALPHA™ and MAGNA pumps deliver even bigger savings automatically.



# THE HEART IS BUILT WITH PERFORMANCE IN MIND

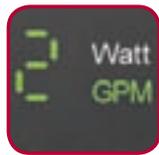
Like the heart, the ALPHA™ always delivers the flow that's required. Easy-to-use interfaces and a range of unique features make it simple to install and operate.



The unique ALPHA Plug removes the need to open the terminal box to make electrical connections. Just plug-and-pump.



The large, real-time display automatically shows current energy consumption in Watts. The lower the number, the bigger the savings.



Every four seconds, the display toggles to a flow indicator. Estimating system flow has never been easier.



The integrated check valve prevents back-flow from occurring. This is a standard feature in ALPHA.



Built into the flanges, the nut capture holds the bolt head during tightening. One wrench and one hand are all you need.



A one button, easy-to-use interface makes setting the ALPHA quick and simple. Select the operating mode by pressing the arrow.



Its compact, streamlined design makes the ALPHA easier to install in systems where space is at a premium.



# THE HEART NEVER RESTS

The heart must be robust and reliable enough to endure the strain of constant activity throughout its lifetime.



ROTATIONS  
23.1789.09 M



Just as we depend on our hearts, we depend on the reliability of our pump solution. Whatever application it is designed for, customers expect – and deserve – a pump that is durable and reliable. Grundfos circulators are as tough as they get. Constructed from the highest quality materials, customers can count on them for years of peak performance.

#### Stronger motors through advanced technology

The motors of our optimized circulators are a perfect example of our uncompromising dedication to quality. They work re-

liably under all flows, thanks to a combination of permanent-magnet principles, compact stator, and rotor technology. Robustness is increased, as there are only a few connections within the motors.

#### Harnessing the strength of steel

For hot-water recirculation systems and very demanding hydronic heating applications, the ALPHA™ is also available in a stainless-steel version. The stainless-steel pump housing is virtually corrosion-free, prolonging the lifetime of both the pump and system valves.

# GRUNDFOS IS ALL YOU'LL EVER NEED

When it comes to choosing the right circulator, Grundfos makes selection easy. For flows up to 170 GPM, our optimized circulator ranges cover most residential and commercial needs.



ALPHA™

MAGNA

SuperBrute

SuperBrute XL

## ALPHA™

The super-efficient ALPHA effortlessly provides comfort in all hydronic heating applications. The large, easy-to-read real time display shows the pump's low power consumption and flow indication, simplifying system trouble shooting. The unique AUTOADAPT™ function, power connections, and one-touch interface make it exceptionally quick and easy to install.

## MAGNA

Covering flows as high as 170 GPM and head up to 42 feet, MAGNA is the range of choice for most commercial heating systems. All MAGNA pumps are energy-optimized with electronic speed control and an exceptionally efficient permanent-magnet motor.

The unique Grundfos AUTOADAPT™ function is standard, just as it is on the ALPHA.

## SuperBrute

This powerful and reliable 3-speed pump is easy to install and operate. It fits the bill for most hydronic heating applications. Enjoy trouble-free performance thanks to the patented electronic starting unit, which provides an exceptionally high starting torque.

## SuperBrute XL

This collection extends the range of Grundfos UP pumps. Used in both hot water and hydronic heating systems, it can be used in both residential as well as commercial applications. The multi-speed, wet-rotor pump offers a maximum head of 0 - 49 feet and maximum flow of 0 - 120 GPM. An optional check valve can be built into the pump house, prohibiting backflow.

AUTOADAPT™

Multi-Speed

BUS communication available

IR communication with R100 controller

External relay/Fault signal

ALPHA Plug

Permanent-magnet motor

Automatic Night-setback function

Stainless-steel pump housing available

Power on indicator

Check valve

Max H, feet

Max Q, GPM

Power input [W] or Hp

	19	42	19	49
	22	170	17	120
	5-45	810	87	1/3

# GRUNDFOS HELPS YOU KEEP IN TOUCH WITH THE FUTURE

Our new website is also Powered by the Impossible. Here you'll find all the information, downloads, marketing materials, and tips you need. The web site explains energy saving with E-circulators in your applications.

Find out how Grundfos just keeps getting better at: [poweredby.grundfos.com](http://poweredby.grundfos.com)

Visit [grundfos.us/handbook](http://grundfos.us/handbook) to order a **FREE** copy of the Grundfos Handbook. Use **Promo Code: 1812**



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