# GRUNDFOS **HYDRO BOOSTER SYSTEMS** CONSTANT PRESSURE GUARANTEED

1



-

be think innovate

## GRUNDFOS HYDRO BOOSTER SYSTEMS PROVIDE DEPENDABILITY, SUPREME TECHNOLOGY AND EASY OPERATION FOR A RANGE OF PURPOSES

#### Rely on us for constant pressure

Whatever the demand, our booster systems provide constant pressure at all levels. Whether you require pressure boosting in residential buildings or high-rise office buildings, Grundfos has the right solution for you. Our booster systems are famous for always maintaining the pre-set pressure level, thereby providing optimal stability and minimising energy consumption.

#### Water supply in

- High-rise buildings
- Hotels
- Hospitals
- Schools
- Residential buildings



## BOOSTER SYSTEMS BUILT TO LAST

Grundfos Hydro Booster systems come as complete units of superior quality, designed to provide boosting wherever additional pressure is needed. They are built on the world's number one multistage centrifugal pumps – the highly renowned CR and CRE pumps. The CR and CRE pumps are known for their reliability, efficiency and adaptability and form the perfect base for the Grundfos booster systems. Every component in our systems is Grundfos made which means that you are guaranteed long lasting technology that requires a minimum of maintenance and provides a maximum of efficiency.

### High efficiency by latest technology

The New MGE is an electronically commutated permanent magnet motor with extremely high efficiency. The total efficiency of this new motor is exceeding IE4 level including VFD (IE4 acc. to IEC 60034-30-1 (CD) relevant speed). This makes the New MGE unique for its class when it comes to efficiency.

### < 2.2 kW IE4\* > 2.2 kw IE3\*\*

Efficiency exceeding IE4 level including VFD(IE4 acc. to IEC 60034-30-1 (CD) relevant speed) \*Efficiency exceeding IE3 level excluding VFD(IE3 acc. to IEC 60034-30-1 (CD) relevant speed)

## WATER SUPPLY BOOSTING

It is really quite simple: whatever your need, we have it covered. Our booster systems fully cover any need for water supply in commercial buildings.

#### High rise, residential or stadium

We take pride in supplying excellent comfort to residents in all types of buildings and users of any type of commercial facility. Grundfos Hydro boosters are ideal for water supply systems and easily meet the varying needs for water during the day in multi-storey buildings.

#### The Hydro MPC

Our most advanced booster set, the Hydro MPC, features application-optimised software. Here you find functions such as the proportional pressure function which is used for friction loss compensation in large pipe grids. Furthermore, you find the soft pressure build-up function which can be used if your installation has an unstable power supply. The Hydro MPC also features a clock program function which can be used for starting / stopping the booster set for desired periods of the day at different discharge pressures.

#### High efficiency – small footprint

Highly efficient booster systems do not have to take up a lot of space and Grundfos' compact booster systems have a very small footprint indeed. Furthermore, our booster systems are turnkey products – the installer simply connects the service-friendly system to water and electricity, and it is ready to start working.



## WHAT A DIFFERENCE **AN E MAKES**

The Hydro MPC-E system is in a class of its own. It features a booster set fitted with motors with integrated frequency converters that ensure perfect control and extreme flexibility of output. The Hydro MPC-E makes sure that the flow and the pressure are always adapted to the current demand. This translates into high energy efficiency and high savings.

A Grundfos Hydro booster set usually consists of 2 to 6 identical CR(I) or CR(I)E pumps connected in parallel. The pumps are mounted on a base frame and connected to a control cabinet. Grundfos provides customised solutions for all types of pressure boosting needs.





## SYSTEM CONTROL **AT YOUR FINGERTIPS**

The mastermind behind the efficiency and flexibility of our Hydro MPC booster systems is the Multi Pump Controller, CU 352. The primary job of the CU 352 is to control how many pumps should be in operation at any given time, as well as control the speed of the individual pump. The advanced controller optimises the performance of the booster system and thereby minimises energy costs.

### Connect, install, go!

CU 352 performs a complex task, but installing and operating the unit could not be simpler. The installation wizard guides the installer through a series of steps until the booster system is correctly installed and commissioned. The installation process is performed by following the on-screen instructions of the control unit. When the installation is complete, the simple, user-friendly interface ensures that the day-to-day operation is equally easy.

#### Long distance communication

The Hydro MPC booster set is compatible with the following communication systems:

- Ethernet (built-in VNC server is standard)
- PROFIBUS via CIM modules
- LON via CIM modules
- Modbus RTU via CIM modules
- GSM and GPRS via CIM modules
- PLC via IO 351B module
- GRM via CIM
- Modbus TCP via CIM modules
- PROFINET IO via CIM modules
- BACnet MS/TP via CIM

Connecting Hydro MPC to a computer via Ethernet allows remote monitoring and control of your booster system. This gives you easy and unlimited access to system performance and allows you to optimise system settings wherever you are.



The intuitive CU 352 interface enables simple day-to-day operation as well as easy and inlimited access to system ettinas whereever vou are



The log function makes it possible via curves to see ds in operation and





Page 7

Page 8

## TAKING A STAND For hygiene

Choosing a Grundfos booster system is choosing not to gamble with the health of your end user. Every year a number of people become sick from exposure to legionella – a disease caused by bacteria in drinking water. One of the ways to prevent legionella is to ensure that pressure booster systems which carry drinking water live up to the highest standards of hygiene.

#### The Grundfos standard

Grundfos leads the way when it comes to ensuring hygienically designed booster systems. Grundfos manifolds are manufactured in stainless steel. The stainless steel solution guarantees protection against corrosion and the use of high-precision production technologies ensures that surfaces and connections are completely smooth, rounded, and without cracks. The result is hydraulic optimisation with reduced pressure loss and noise as well as the best conditions for hygiene control.





## MAKE THE MOST OF OUR KNOW-HOW

Grundfos is not simply in the pump-selling business, we are also in the knowledge-sharing business. Let us help you plan your pressure boosting system, and we will make all of our collective expertise available to you. You can also consult our Thinking Buildings Universe at **www.cbs.grundfos.com** where you can use our quick pump selection. Here you can find full pump data, dimensioning guides, technical information, educational videos and much more.

#### Made-to-stock to completely customised

No job is too small, no challenge too big. Our pre-defined booster range covers the pressure booster systems most in demand. However, all elements of a booster system can be combined in a number of ways to make sure that the requirements of any given application are matched. Please contact Grundfos for a detailed look into the specific requirements of your application.

### THINKING Buildings

At Grundfos CBS, we are always thinking buildings, and our products contribute to making buildings that can almost think for themselves. We do not just consider our products as stand-alone devices – we consider them an integral part of a living building whose purpose is to function in the best way possible for its inhabitants.

Grundfos CBS offers products across the full range of applications, including heating, air conditioning, waste water, booster systems, fire protection systems and district energy.

Our expertise is founded in decades of global experience, and we are proud to share our knowledge with our clients. We are also determined to take the lead on new technologies and innovation opportunities.

To learn more about Grundfos CBS and to find out how we can be of assistance, contact Grundfos or visit us at **www.cbs.grundfos.com**.



### EXPLORE OUR ONLINE UNIVERSE

Make the most of Grundfos CBS – visit the Thinking Buildings Universe at **www.cbs. grundfos.com**.

Our website contains a range of services that function as your online Grundfos CBS expert:

- Quick Pump Selection with an extensive product database and dimensioning tool that helps you choose the right pump for your needs
- E-learning programme that lets you improve your specialist knowledge
- Access to Thinking Buildings E-News, which keeps you up to date on the latest technology, product information and background material
- Lexicon where you can look up definitions of relevant professional terms

Welcome to the Grundfos CBS Thinking Buildings Universe!

### www.cbs.grundfos.com



### **A COMPLETE RANGE**

Whatever your boosing needs, Grundfos has the solution for your system. The highly advanced and modular Hydro MPC with application-optimised software and special energy-saving functions ensure that the system behaviour can be adapted to the needs of all applications – whereever pressure boosting is needed.

It is easy to use the "plug 'n' pump" Hydro Multi-E solution with integrated controller and highly energy efficient speed-controlled pumps – perfect for simple boosting applications.

The fixed-speed Hydro Multi-S with IE3 motors and automatic cascade control – when you just need pressurised water.

