# Take Control with Smarter Plumbing

Hot Water Recirculation

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Boosting



Possibility in every drop

grundfos.us/plumbing

# **Smarter plumbing solutions**

## Simple connectivity, commissioning, and flow management with Grundfos intelligent plumbing pumps + controls

Today's buildings depend on interconnected solutions to transport water efficiently and precisely. Grundfos complete plumbing solutions for pressure boosting, hot water recirculation, sump & sewage, and stormwater applications combine our expertly engineered pumps with ultra-efficiency IE5 motors and pre-programmed, intelligent controls making connectivity, commissioning, and flow management simple so you can take control and easily optimize system performance.







# Pressure boosting systems

Optimized water pressure for commercial buildings designed with Grundfos-made components for single-source accountability and peace of mind. Our fully integrated, all-in-one packaged systems are made to meet changing capacity requirements with optimal efficiency.

## Hydro MPC

Industries most advanced pumping system

Hydro MPC BoosterpaQ systems are superior pump systems with advanced control capability. The Hydro MPC BoosterpaQ system offers the greatest flexibility, together with control capability and available system variation, for applications requiring the best in quality, reliability and control.

#### Technical data

- Max flow rate: 4200 gpm
- Max head: 635 ft
- Liquid temp: 32°F to 176°F
- Customizable solution: up to 435 psi



#### Feature and benefits

- Optimized control with advanced functionality
- Constant pressure
- Low-energy consumption
- Intuitive control interface
- ASHRAE 90.1-2010 compliant
- NSF/ANSI 61 and 372 drinking water certified
- BMS integration utilizing Grundfos CIM cards

## Hydro Multi-E Intelligent multi-pump system

The Hydro Multi-E pumping system is an innovative pressure boosting solution that delivers energy savings and comfort through parallel-mounted Grundfos CRE variable-speed pumps. This space-saving solution provides simple control via a multi-pump VFD control, and arrives ready to install.

#### **Technical data**

- Max flow rate: 1000 gpm
- Max head: 535 ft
- Liquid temp: 32°F to 176°F
- Max working press: 232 psi



#### Feature and benefits

- Constant pressure, all-variable speed control
- Simple installation
- Low-energy consumption
- ASHRAE 90.1-2010 compliant
- NSF/ANSI 61 and 372 drinking water certified
- BMS integration utilizing Grundfos CIM cards



#### Hydro MPC CME Compact, high-efficiency boosting system

The compact CMBE booster pump systems provides unmatched reliability, quiet operation, and energy savings with an all-in-one modular solution that includes pump(s), motor, tank, pressure and flow sensor, controller and check valve. Thanks to the integrated speed controller, the CMBE and CMBE twin keeps a constant pressure in the pipe system.

#### Technical data

- Max head: 360 ft
- Max flow: 160 gpm
- Max working press: 145 psi



#### Feature and benefits

- All-in-one compact boosting solution
- Constant pressure
- Reliable and easy to install
- High efficiency ECM motor reduces operating costs
- Low noise (55dB or less in typical use)







### Hydro MPC CRE-H Vertical Multistage ANSI Dimensional Pumping System

The DELTA HCU CRH(E) provides all the benefits of the renowned Grundfos CR for an ANSI dimensional solution that will fit into your existing pump and piping footprint. It offers optimized duty points to maximize pump efficiency and minimize internal wear, which significantly lowers energy costs, increases pump life, and reduces maintenance.

#### Technical data

- Max flow rate: 1750 gpm
- Max head: 475 ft
- Liquid temp: max. 32 to 176°F
- Max working press: 363 psi

#### Feature and benefits

- Compact, inline design fits into small footprint
- Highly efficient design reduces energy consumption by up to half compared to fixed speed pumps
- Unique cartridge seal design can be replaced in minutes



Wall hung CRE-H model pumps in hot and chilled water system



#### Grundfos Engineered Systems Expertly engineered, custom fluid handling solutions

Grundfos Engineered Systems (GES) are engineered-to-order, fluid-handling solutions. These solutions include optimized pumping systems with the selection of the most efficient pump types, technologies, and intelligent controls available for each application. They arrive pre-piped, pre-wired, and pre-tested with all the pumps, piping, valves, fittings, accessories, instrumentation, electrical, and controls mounted on a skid or in an enclosure. The base and its accessories include options for customizing your perfect solution. A GES packaged pumping system will eliminate the headaches of cost overruns and unforeseen operational problems often experienced with a component system. Total cost and schedule are accurately determined long before installation is completed.

#### Feature and benefits

- Easy plug-and-pump installation: pre-wired, pre-piped, pre-commissioned, pre-tested
- 100% Grundfos-sourced for one point of contact
- Built in a Grundfos-enclosed facility to ensure fewer delays and timely delivery
- Systems integration
- Hydraulic design
- Controls and communications
- Project management and execution
- BMS integration utilizing Grundfos CIM cards

#### **Typical selections include**

- Pumps
- Structural Steel Base with or without Steel Decking
- Built in a Grundfos-enclosed facility to ensure fewer
- Carbon Steel Headers
- Isolation Valves
- Check or Combination Valves
- Suction Diffusers
- Pressure sensors
- PNSF/ANSI 61 and 372 compliant components





# Pressure boosting pumps

Sustaining commercial water pressure and managing changing demand can be challenging. Grundfos booster pumps remedy that challenge by providing optimal water pressure when and where it's needed.

#### **CMBE/CMBE Twin** High-efficiency compact booster

The compact CMBE booster pump systems provides unmatched reliability, quiet operation, and energy savings with an all-in-one modular solution that includes pump(s), motor, tank, pressure and flow sensor, controller and check valve. Thanks to the integrated speed controller, the CMBE and CMBE twin keeps a constant pressure in the pipe system.

#### Technical data

- Max head: 360 ft
- Max flow: 160 gpm
- Max working press: 145 psi



#### Feature and benefits

- All-in-one compact boosting solution
- Constant pressure
- Reliable and easy to install
- High efficiency ECM motor reduces operating costs
- Low noise (55dB or less in typical use)

#### CRE-Plus Simplex pump system

A simplex vertical inline multistage plug-and-pump system with control capability via an integrated VFD. The CRE Plus optimizes efficiency at all times, saving energy, driving down costs and lessening system wear and tear. CRE pumps maintain constant pressure, even with the most challenging demand variations.

#### Technical data

- Max flow rate: 450 gpm
- Max head: 790 ft.
- Liquid temp: max. +176°F
- Max working press: 362 psi



#### Feature and benefits

- Constant pressure, variable speed control
- Simple installation
- Low energy consumption
- Reduced maintenance
- ASHRAE 90.1-2010 compliant
- NSF/ANSI 61 and 372 drinking water certified
- BMS integration utilizing Grundfos CIM cards

#### **CR pump line** Complete range of vertical multistage variable speed pumps

The Grundfos CR is the world's number one vertical multistage centrifugal pump, known for its reliability, efficiency and adaptability. Our complete CR pump range provides every option necessary for commercial building boosters.

#### Feature and benefits

- Compact, inline design fits into a small footprint
- Easy installation and operation with factory-installed settings and internal connections
- Highly efficient design reduces energy consumption by up to half, compared to fixed speed pumps
- Unique cartridge seal design can be replaced in minutes
- Remote control/fieldbus monitoring and data collection
- Building management system compatible



## 20-Day Lead Time on Selected Boosters

Hydro Booster Fast Track Program

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Special Terms and Conditions Apply.

## Grundfos Quality. Fast Delivery!

Now you don't have to compromise between Grundfos quality and fast delivery, with our 20-day lead time on a selected range of two and three pump Hydro MPC and Hydro Multi-E pressure boosting systems. Free freight is included on all fast track booster systems. Contact your local Grundfos sales partner to learn more.

## **Grundfos Express**

Can't find your system in the fast track boosters range? We offer a more extensive range of standard hydro boosters, including a wider range of Hydro MPC - CR(E), Hydro MPC - CME, Hydro Multi-E, and Grundfos Engineered Systems within our Grundfos Express Selection Tool (GXS). In addition to providing selections for boosters, GXS provides:

- A complete offering of energy-efficient pumps and systems for all commercial building applications
- Simplified performance data sheets
- Quick access to submittal documents
- More prominent thumbnail curves
- Easy access to standard/pre-configured pumps with orderable part numbers
- The ability to easily manage projects



Visit Grundfos Express





# Sump and sewage

Optimized wastewater removal for commercial building applications designed with innovative hydraulics, providing industry-leading solids handling, enhanced wear resistance and maximized energy-efficiency.

## Unilift KP/AP Sump water ejection in elevator pits

Submersible drainage pumps suitable for both temporary and permanent free-standing installation. They can be used for pumping drain water or grey wastewater and are suitable for installation in collecting tanks.

#### Technical data

- Max flow rate: 140 gpm
- Max total dynamic head: 52 ft
- Material: Stainless steel

#### Feature and benefits

- Simple installation
- Service and maintenance-free
- Reliable

#### SEG Grinder Effluent and untreated sewage transfer

The patented grinder system ensures extremely high efficiency and reliable operation. The SEG Grinder combines cost-effectiveness with maximum environment protection by facilitating the use of smaller pressure pipes for minimal investment costs.

#### Technical data

- Max flow rate: 158 gpm
- Max head: 158 ft
- Material: Cast iron & stainless steel

#### Feature and benefits

- Efficient grinder system
- Watertight cable plug
- Quick removal system





#### SL (48 range) Commercial wastewater ejection

Free-flow (SuperVortex) and single-channel S-tube impeller pumps designed for pumping wastewater in a wide range of applications. Made of resistant materials to ensure a long and reliable operation.

#### Technical data

- Max flow rate: 1300 gpm
- Max head: 147 ft
- Max solid size: 4 in
- Material: Cast iron and stainless steel

#### Feature and benefits

- Quick removal system
- Watertight cable plug
- Easy to open clamp

## Packaged lift station

## Wastewater ejection of high fiber content, effluent and groundwater

Quick removal systems are pre-installed for easy installation of up to two pumps. In addition, all necessary components, such as piping and valves, are built-in and supplied in corrosion-resistant materials.

#### Technical data

- Diameter size: Up to 48 in for SEG pumps
- Diameter size: Up to 67 in for SL1/SLV pumps
- Depth size: 78-236 in

#### Feature and benefits

- Tank is designed to withstand uplift caused by high water table
- Easier installation as concrete foundation is not necessary





## Stormwater

Dependable stormwater pumping solutions can protect buildings from flooding damage. Grundfos offers powerful pump and control solutions with the high flow and low head required by pumping stations for stormwater management.



#### SE/SL (52 and 56 ranges) Powerful and dependable stormwater control

Technologies rooted in high overall efficiencies, advanced physical pumps design, superior hydraulic performance, and adaptive control features help make the SE/SL 52 and 56 ranges the most fundamentally sound stormwater pumps on the market.

#### Technical data

• Max head: 279 ft

• Max flow rate: 7000 gpm

Max solid size: up to 5 in

#### Feature and benefits

- S-TUBE® Impeller reduces clogs and maximizes efficiency
- Moisture-proof stainless steel plug
- Smarter trim system to maintain high-efficiency operation



#### CU362 dedicated control Intelligent monitoring and control solution

The panel-mounted CU362 controls up to six sump and sewage pumps and includes display for pump operation, alarm status, run times, cycle counter, and with continuous level transmitter applications, provides simple set point selection of all pump control and alarm levels. When used with Grundfos SL/SLV pumps with the WIO sensor version, the CU362 Controller will display the motor temperature and the percent of Water and Oil in the double seal chamber.

#### Benefits

- User-friendly display interface with intuitive setup wizard simplifies installation and operation
- In addition to comprehensive basic features, user-defined input/output functions can be added
- Continuously learns and adapts to duty conditions to ensure the lowest energy consumption
- Automatically and precisely monitors flow using innovative Grundfos integrated flow calculation feature, or by wiring in a physical flow meter

## LC241 control box

#### Simplex and duplex level control panels

Single or two-pump controllers designed for level control and monitoring and protection of wastewater pumps, water supply and drainage systems. They offer effective and reliable control functions; and basic control with easy commissioning and maintenance.

#### **Benefits**

- A complete controller with motor protection relay and control unit for protection against water hammer
- Automatic pump changeover, ensuring even distribution of operating hours on both pumps
- Selection of automatic test run (every 24 hours) during long periods of inactivity, and of alarms and alarm resetting, automatic restart and more

Grundfos offers non mercury type float switches for standard & explosion proof pumps as an accessory option.



# Hot water recirculation

Minimize water waste and maximize comfort and convenience with instant hot water when and where building occupants need it with Grundfos hot water recirculation pumps for commercial buildings.

## **MAGNA3**

#### Wet rotor circulator with intelligent permanent magnet motor

MAGNA3 is the most efficient circulator pump for domestic hot water recirculation systems. Designed with Grundfos' unrivaled, industry-leading, electronic pump expertise, the permanent magnet motor, intelligent temperature control capabilities and integrated frequency converter make MAGNA3 an energy-saving, intelligent pumping solution.

#### **Technical data**

- Max flow rate: 550 gpm
- Max head: 60 ft TDH
- Liquid temp: 14°F to 230°F
- Max working press: 145 psi

#### Feature and benefits

- · Market-leading efficiency minimizes energy costs
- Easy installation with integrated pump, motor and control
- · Intelligent control modes, likes temperature control, reduce investment costs and provide complete system control
- · Full range of single and twin circulators ensure perfect fit and low life-cycle costs

#### Intelligent domestic hot water recirculation

- · Minimize water waste and maximize comfort and convenience with instant hot water when and where building occupants need it
- Save energy with onboard temperature controls and dramatically reduce time required to balance system with VFD
- Dual head MAGNA3 and TPE3 smart pumps operate in parallel, or alternate, to reduce wear and tear, and provide redundancy for mission critical applications
- Grundfos CIM technology provides 30+ points of data and control, out-of-the-box, that deliver real-time information to your BMS, allowing users to combat Legionella growth

## **UP/UPS** Wet rotor circulators

For low flow and smaller commercial applications. UP/UPS circulators offer multi-fixed speed for single fixed speed models.

#### Technical data

- Max flow rate: 275 gpm
- Max head: 60 ft
- Liquid temp: 140°F
- Max working press: 145 psi

#### Feature and benefits

- Quiet operation
- Wet rotor technology uses the pump medium to cool the motor
- · Maintenance-free
- · No bearings or mechanical seal



#### Optional

#### Timers and thermostat controls are available to limit pump operation during periods when hot water is consumed.





# Additional pumping solutions



### Tanks, separators and heat exchangers

Grundfos offers a complete line of pump system accessories for efficient system operation and energy transfer.

#### Feature and benefits (Grundfos GFXA tanks)

- Hydro-pneumatic tanks with replaceable bladder for pressure boosting applications
- ASME Code and comply with NSF/ANSI Standard 61
- Allow for efficient operation and provide pressure reference for energy saving STOP Function
- · Integrated pressure gauge and bladder integrity monitor with easy access air valve





#### **Grundfos GO App** Pump monitoring and controller



Our 3-in-one, Grundfos Go app makes installing, commissioning, and controlling pump and multi-pump performance easy and efficient for commercial buildings. GO can monitor all pump data, group pumps for increased manageability, change settings and much more. It works with all Grundfos E-pumps, communicating via both radio and infrared technology and provides live pump data feeds (duty point, power consumption, speed, liquid temperature). The alarm log system has been designed to make error codes fully descriptive and intuitive.

#### **Stay connected**

With GO, you will never be out of touch with access at the touch of a button from anywhere at any time, directly from your laptop, tablet, or smartphone. You get around-the-clock help such as quick-links to all documentation and full integration with our easy, online sizing and replacement tools. You will always be at the forefront of mobile pump technology.

#### Save time

GO has been designed to save you time and effort. The built-in PDF generator stores your pump reports (documenting your pump configurations) and important notes safely in an easy-to-share format. This saves you the hassle of dealing with pen, paper and printouts. In larger systems, you can install or reconfigure groups of pumps easily and quickly with the Clone Pump settings function.



Whether your commercial building requires pressure boosting, hot water recirculation, sump and sewage or stormwater, Grundfos has an intelligent pumping solution for your plumbing application needs. grundfos.us/plumbing

Visit grundfos.us/pei to learn more about Department of Energy (DOE) pump energy index (PEI) requirements and PEI ratings on specific Grundfos models.

