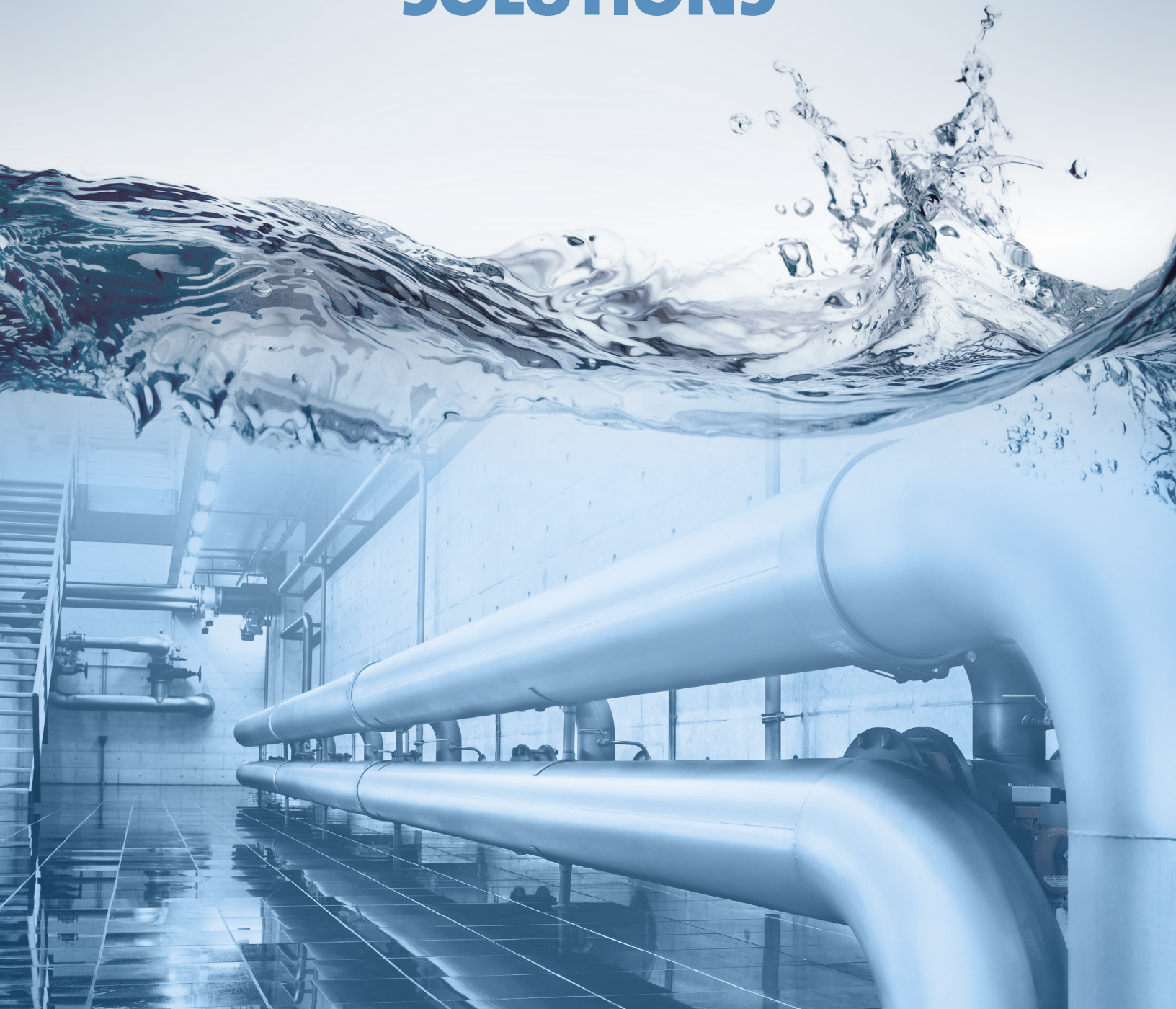


# COMPREHENSIVE WATER TREATMENT SOLUTIONS



be  
think  
innovate

**GRUNDFOS** 



**COMPLETE,  
EFFICIENT  
SOLUTIONS**

**INDUSTRY-  
LEADING  
EXPERTISE**



## **The Right Solution for Decentralized Water Treatment**

With the shift toward decentralized water treatment, Grundfos' extensive product portfolio empowers industrial customers to move and treat water efficiently and effectively across every type of building and industry.

In Grundfos, you gain more than a pump supplier, you gain a partner focused on solving the challenges of your operations and delivering higher efficiency and reliability than you thought possible.

Dedicated to innovation and a trendsetter in water technology, Grundfos continuously advances our products and capabilities to meet the increasing need for connectivity, accuracy, and efficiency in our ever-evolving industry.

## **The World's Most Essential Resource**

Grundfos is committed to making a positive contribution to the world through water technology and energy management. We take pride in constantly pushing the boundaries to offer increasingly energy-efficient and sustainable solutions.

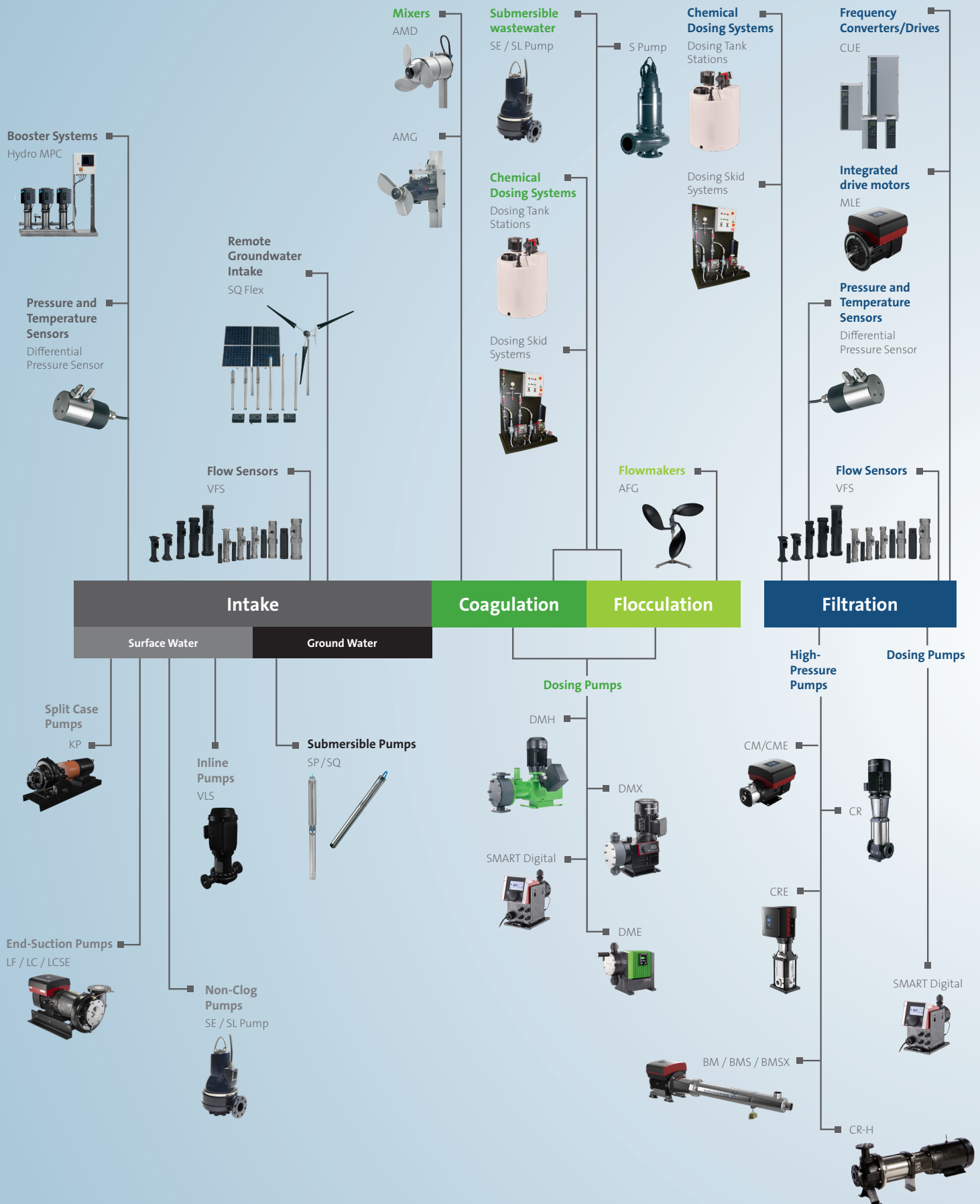
# TOTAL SYSTEM INTELLIGENCE ON DEMAND

Pumps do not exist in isolation, so the optimization of the entire pump system is the key to maximizing efficiency. Grundfos iSOLUTIONS provides a holistic approach. Through intelligent technology, it adapts precisely to system demands and delivers optimal energy efficiency and reliability for every application. With Grundfos iSOLUTIONS, you can be certain that you always get the optimal solution for your specific application and challenge.

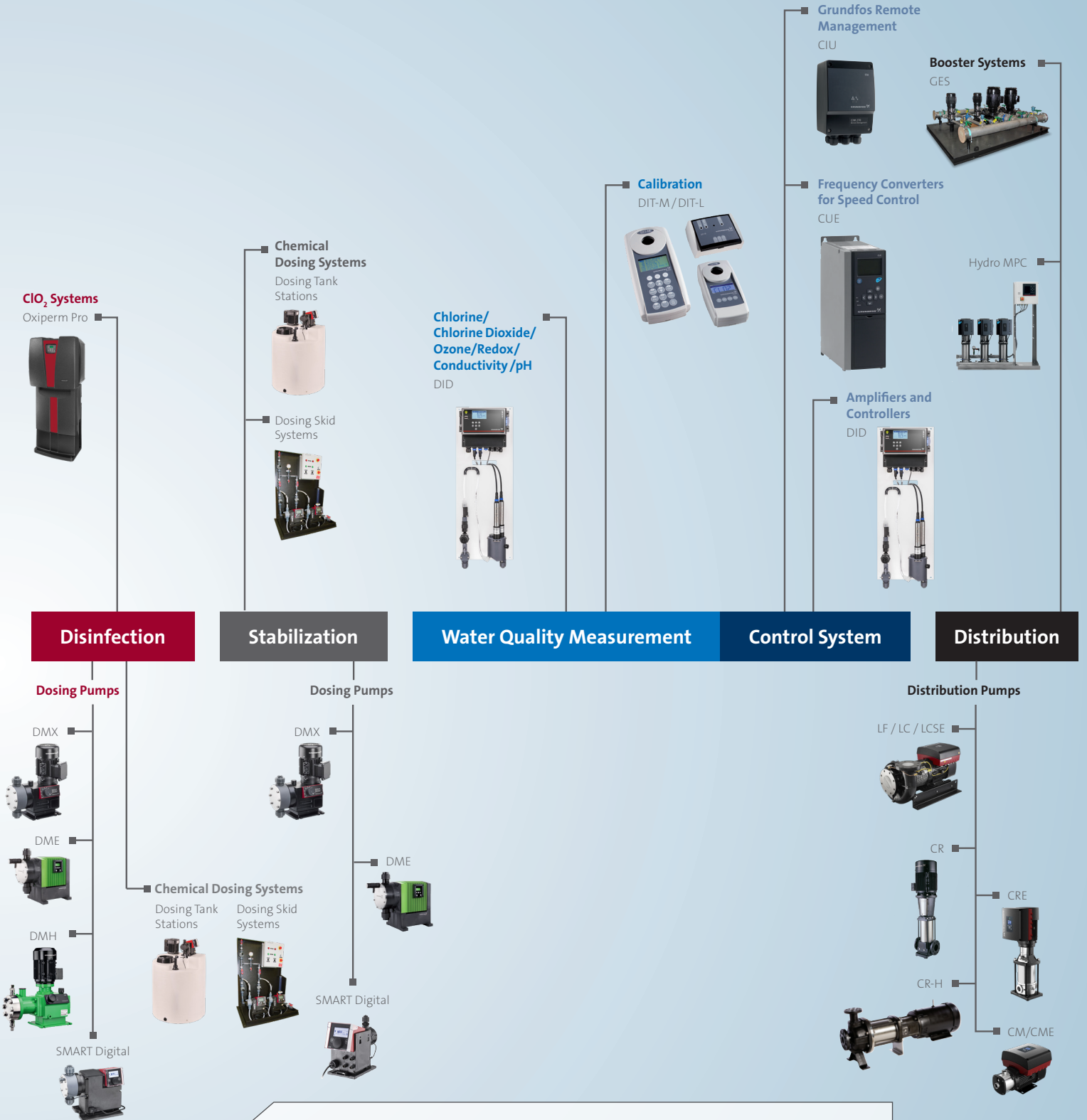
PRODUCT TYPE						
	MEMBRANE FILTRATION	CHEMICAL FEED	DISINFECTION	PRESSURE BOOSTING	INTAKE	DECENTRALIZED WATER TREATMENT
1. <b>DID</b> – Compact measuring systems	●	●	●			●
2. <b>CUE</b> – Variable frequency drives	●	●	●	●		●
3. <b>DSS</b> – Dosing skid systems	●	●	●			●
4. <b>BMS</b> – Booster modules	●			●		●
5. <b>CM/CME</b> – Compact horizontal multistage pumps	●			●		●
6. <b>SL</b> – Submersible wastewater pumps					●	●
7. <b>DDA/DDE</b> – Smart digital dosing pumps	●	●	●			●
8. <b>CR/CRE</b> – Vertical inline multistage pumps		●	●			●
9. <b>SP</b> – Submersible pumps					●	●
10. <b>OXIPERM</b> – Chlorine dioxide dosing systems	●		●			●



# COVERING THE ENTIRE



# WATER TREATMENT PROCESS



**Grundfos Products in Water Treatment**  
 To ensure quality water for your process, Grundfos Water Treatment offers a strong portfolio of products and services. Let our team of water treatment professionals help you find the right component or system for your project or application.

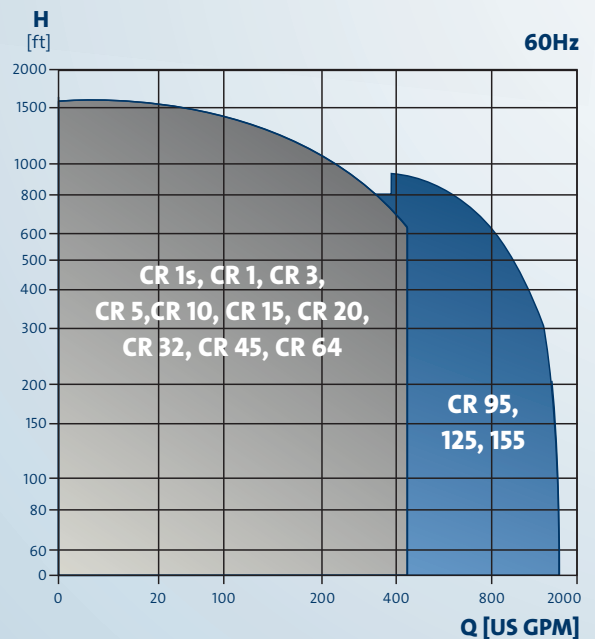


# MEMBRANE FILTRATION

Demanding applications require reliable solutions. Our membrane manufacturing customers turn to Grundfos to provide highly durable, easy-to-use, and efficient pumps as a key component for their water treatment systems. Our CR vertical multistage pump has set the standard for pressure boosting in membrane treatment applications.

More efficient, reliable and durable than ever before, the new range of the Grundfos CRs moves the limits for vertical inline multistage centrifugal pumps. State-of-the-art technology, simulation-driven design, and optimized pump hydraulics come together to offer unmatched efficiency and reliability with significantly higher performance.

## Complete CR Range



CR 1s – CR 64

New models CR 95/125/155



## PRODUCT HIGHLIGHTS

### [1] CR/CRE Vertical Multistage Pumps

A versatile, modular, and reliable standard for membrane boosting, including options for an integrated variable frequency drive.

### [2] DID Analyzer and Controller

Measure and control water disinfectants for membrane pre- and post-treatment.

### [3] DTS Dosing Tank System

The Grundfos Dosing Tank Systems offer a compact, full-supply solution for CIP chemical storage and feed.

### [4] SMART Digital Chemical Feed Pumps

With 3,000:1 turn down ratio, the SMART Digital pumps offer precise dosing for anti-scalant, CIP, and disinfection chemical feed.

### [5] BM/BMS Booster Modules

Compact boosting solutions for membrane systems including high-flow and high-pressure applications, and pressure exchange.

### [6] CIU

The Grundfos fieldbus concept is the ideal solution for complete control of pumps and pumping systems. CIU units have an integrated 24 to 240 VAC/VDC power supply and are prepared for wall-mounting or DIN-rail mounting.

### [7] E-Box Module

With the E-Box module, you can increase the connectivity of the DDA pumps and integrate them into a network for remote monitoring and pump setup.

# CHEMICAL DOSING & DISINFECTION

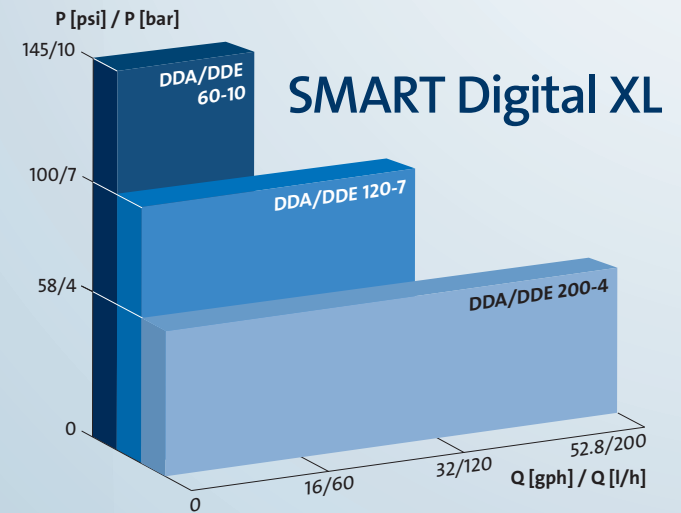
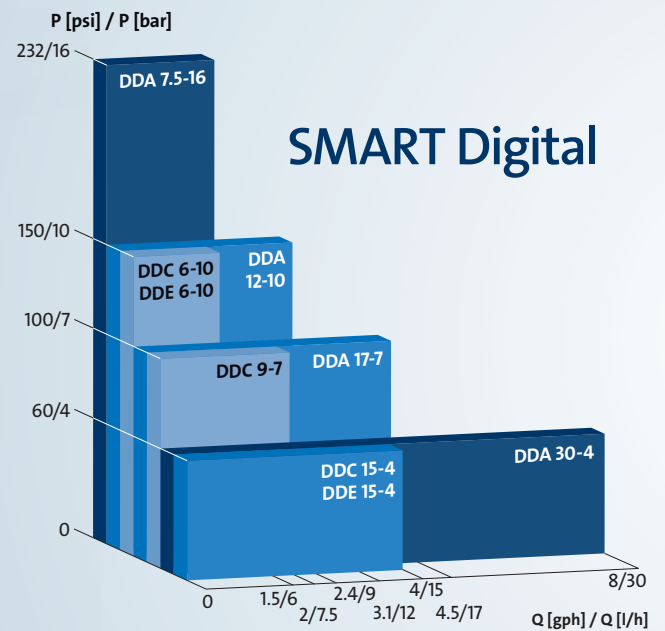
Liquid bleach (sodium hypochlorite) remains the number one water disinfectant. And for operators, the issues associated with feeding it remain a frequent frustration, including loss of prime and gas bubbles.

The Grundfos SMART Digital dosing pumps offer an industry-leading solution for reliable, accurate liquid bleach feed.

Traditional dosing pumps regulate the dosed quantity by adjusting stroke length and/or frequency. However, reducing the stroke length adversely affects dosing accuracy.

Digital Dosing™ offers a clear advantage – by using a stepper motor, the volume dosed is altered by the discharge stroke speed while continuously utilizing 100 percent of the stroke length. This results in optimum dosing accuracy and better handling of off-gassing liquids, such as liquid bleach.

Find your complete chemical dosing solution at [grundfos.us/dosingskids](http://grundfos.us/dosingskids).





## PRODUCT HIGHLIGHTS

### [1] SMART Digital DDA, DDC, DDE

The Smart Digital dosing pumps feature advanced control options and industry-leading accuracy offered by stepper motors in a user-friendly design.

### [2] Multi-Function Valves

An all-in-one solution to provide pressure regulation, pressure relief, and easy priming.

### [3] DMH Hydraulic Pumps

For robust, demanding or high-pressure applications, these hydraulic pumps offer unique features to ensure long life and precise feed.

### [4] Suction Lances

A full line of feed accessories such as drum suction lances and injection quills.

### [5] Installation Kit

A full selection of chemical feed installation sets, including suction and discharge accessories.

### [6] DSS Chemical Feed Systems

Pre-engineered or engineered to order systems that combine the best in Grundfos pumps with required accessories in a straight forward skidded design.

### [7] Oxiperm Pro

The chlorine dioxide production system is the perfect solution for fighting Legionella and other germs in drinking water. The systems produce chlorine dioxide using diluted solutions of precursor chemicals. It is available in four sizes.



# PRESSURE BOOSTING

For efficient, reliable pressure boosting, Grundfos offers fully integrated, all-in-one packaged systems designed to meet changing capacity requirements. Additionally, our high-pressure pumps ensure ultimate performance in a wide array of installations.

Behind the scenes at Sporting Park, a 342,000 square foot stadium in Kansas City, a Grundfos Hydro MPC system ensures the stadium's plumbing is not a source of concern for fans or staff.

The system provides smooth operation, as well as energy and space savings, for all the facility's water fixtures.

The highest flow demand occurs at intermission or halftime and requires a capacity of 1,200 gpm.

The Grundfos Hydro MPC, consisting of three vertical multistage CR pumps, handles this volume, while maintaining constant pressure.

If flow demand drops to zero, the system switches off automatically. When demand is again required, the system automatically switches on and adjusts its capacity to meet the flow and pressure requirements. This feature saves both energy and maintenance costs. In addition to its energy-saving capabilities, the Grundfos Hydro MPC is virtually vibration free compared to alternatives that require on-site adjustments to minimize vibration. The system even passed the "nickel test" – a nickel placed on the edge of the pump running at full speed neither moved nor fell.



## PRODUCT HIGHLIGHTS

### [1] CR/CRE Pumps

A versatile, modular, and reliable standard for pressure boosting, including options for an integrated variable frequency drive.

### [2] Hydro MPC

A complete, plug-and-pump pressure boosting systems that makes the most of Grundfos pumps, drives, and controls for even the most difficult boosting installations.

### [3] Grundfos GO

Real-time connection and control of pumps using a smart phone.

### [4] BM/BMS Booster Modules

Compact boosting solutions for membrane systems including high-flow and high-pressure applications, and pressure exchange.

### [5] CM/CME Pumps

For smaller, compact pressure boosting the CM offers the same advantages in Grundfos multistage pumps, efficiency, and technology.

### [6] GES Packaged Systems

Complete, custom plug-and-pump solutions that integrate any number of Grundfos pumps, motors and controls, delivered on a skid or in an enclosure to meet the unique needs of the application.

### [7] DPI Pressure Sensor

Rugged and robust line of accurate pressure and differential pressure sensors.

## WE ARE IN THE WATER BUSINESS WITH YOU

As a pioneer and global leader in water pump technology, Grundfos creates intelligent, sustainable solutions to help solve the world's water and climate challenges. Through our heritage, we have the experience and innovative capabilities to help our partners, customers and communities move water in an increasingly energy and water efficient manner. We see this as not only a great business opportunity, but as an obligation to ensure the world heads toward a more sustainable tomorrow. Our complete portfolio of pumps and solutions are designed for commercial, residential, groundwater, municipal and industrial applications with emphasis in trendsetting, energy efficient technologies such as permanent magnet motors and advanced pump controls and monitoring. Because water matters, and so does your business.

To learn more, visit [grundfos.us](http://grundfos.us) or follow us on Facebook and LinkedIn.

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