



Universal products for industrial, municipal and building services applications







# The full range from one single source

Grundfos offers a comprehensive range of dosing pumps and systems, disinfection solutions, accessories, measurement and controls.

The Grundfos dosing and disinfection product range covers everything from disinfection of drinking water to water treatment in highly sensitive industrial processes. With one of the most extensive product ranges in the market, we are a natural partner for products and solutions within the municipal, industrial and building services industries.

Grundfos also offers innovative solutions in water supply and waste water disposal, chemical and process engineering, food and beverage industry and heating and cooling technology. You can always rely on Grundfos as a competent partner for all applications.

#### **Dosing pumps**

Grundfos offers a wide range of dosing pumps. Our innovative drive concepts cover a large performance range with only a few models, and our dosing pumps offer many advantages such as smooth continuous dosing and universal connections to existing process control systems. Digital Dosing™, an optimised dosing head design and 100% stroke length enable you to smoothly dose degassing liquids. With optional integrated flow intelligence features, malfunctions in your dosing process will be detected and displayed, and our AutoFlowAdapt or AutoCal features ensure automatic compensation and recalibration during the dosing process.

#### Digital Dosing™

- accuracy through superior technology

Traditional dosing pumps regulate the dosed quantity by adjusting stroke length and/or frequency. However, reducing the stroke length adversely affects dosing accuracy. In cases where the dosing pump cannot operate at 100% stroke length, valves will suffer from reduced performance leading to inefficient dosing. Digital Dosing™ offers obvious advantages against solenoid pumps: using a stepper motor, the volume dosed is altered by the discharge stroke speed while continuously utilising 100% of the stroke length, leading to optimum dosing accuracy and better handling of degassing liquids.





#### Dosing stations and pump accessories

Dosing is precision work and one of the main tasks in chemical and process engineering as well as in water treatment. Dosing stations are easy to install and deliver cost-efficiency and process optimisation, accurately dosing liquids such as coagulants or neutralising agents. Grundfos also offers a wide range of accessories to suit your application.

#### Disinfection

Grundfos offers a variety of chemical disinfection systems to ensure appropriate disinfection for your applications. For sustainable disinfection, our Selcoperm system generates sodium hypochlorite onsite using only salt, water and electricity. Our Oxiperm system offers a wide range of possibilities for the production and dosing of chlorine dioxide, while our Vaccuperm system offers disinfection using chlorine gas.

#### Measurement and control

Grundfos offers measurement and control equipment for disinfectants, pH, ORP, conductivity as preassembled compact backboard mounted systems or tank immersed sensors.



# Digital dosing pumps

### SMART Digital diaphragm dosing pumps up to 200 l/h

Covering flow rates up to 200 litres an hour, and output pressure ratings up to 16 bar, the SMART Digital range delivers reliable, safe, and cost-effective dosing in any application across a wide selection of businesses including water treatment, with industry-leading user friendliness and flexibility. And the advanced monitoring and self-analysis features offered by several control variants provide intelligent process control that looks beyond the pump and keeps an eye on the entire system for you.

#### A complete package with two pump sizes

The SMART Digital range includes the original SMART Digital DDA, DDC, and DDE pumps which cover flows up to 30 l/h, and the SMART Digital XL DDA and DDE pumps which cover flows up to 200 l/h. All pumps can be supplied with a wide selection of accessories such as installation kits, signal cables, and dosing tanks that make it even easier to customise the pumps to any application.

#### Service and maintenance friendly

SMART Digital pumps have very long service and maintenance intervals, significantly lowering pump life-cycle cost and contributing to disruption-free, reliable dosing performance. And when service is needed, our tailor-made service kits ensure optimal service that keeps pumps running in top condition for years.

## DDA: high-end solution for complex and demanding applications

- AutoFlowAdapt: automatically adapts measured flow to attain target flow
- Auto-deaeration during pump standby
- Flexible Fieldbus control
- Turn-down ratio 1:3000 with constant 100% stroke length

#### DDC: optimal price-performance ratio

- Two SlowMode steps (25% and 50%), calibration mode, service display
- External stop, dual-level tank control, 2 relay outputs

#### DDE: a cost-effective Digital Dosing™ solution

- Control options: manual control 0.1-100 %, pulse in % of stroke volume, and analogue control (DDE XL)
- External stop, empty tank control





General-purpose high-performance dosing pumps

# DME: digital diaphragm dosing pumps up to 940 l/h

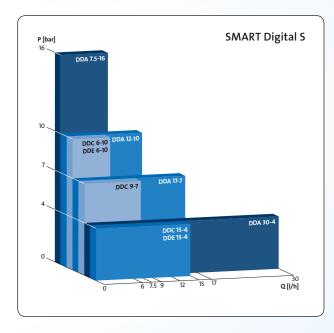
Dosing is precision work, and Digital Dosing™ represents state-of-the-art technology. Grundfos DME Digital Dosing™ pumps combine perfect precision with user-friendliness, covering large dosing quantities up to 940 l/h with few variants.

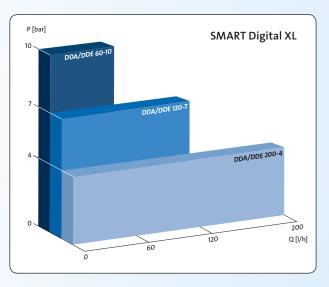
#### DME: precise and easy setting

- Two pump variants: 375 l/h at 10 bar, or 940 l/h at 4 bar
- Turn-down ratio 1:800 with constant 100% stroke length
- Adjustable slow mode for dosing high viscosity liquids (up to 3000 mPas)



#### Flow rates and pressure, SMART Digital





#### **Application areas**

#### Chemical treatment and conditioning of water

- Disinfection and pH adjustment
- Drinking water, process water and wastewater
- Food and beverage, Clean-In-Place
- Ultrafiltration and reverse osmosis
- Pulp and paper, boiler feed water
- Swimming pool water, cooling towers
- Coagulation, flocculation, precipitation
- Chemical industry, car wash, irrigation



# Mechanical diaphragm dosing pumps

#### DMX: mechanical diaphragm dosing pumps "Pre-selected Range" up to 765 l/h

DMX pre-selected range is the fast lane to reliable, tough and well-proven DMX dosing pumps up to 765 l/h. The DMX pre-selected range in the product portfolio of mechanical diaphragm dosing pumps covers the most common applications with a wide performance range from 16 l/h (12 bar) to 765 l/h (3 bar) and a variety of accessories. DMX pre-selected products can be chosen easily and delivered quickly. If necessary, they can be replaced simply and quickly.

# DMX: mechanical diaphragm dosing pumps "Standard Range" up to 2 x 4000 l/h

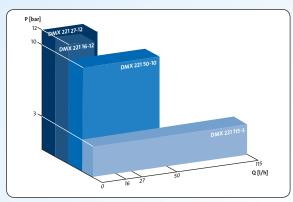
The Grundfos DMX range has proven its worth in dosing applications worldwide. With their robust diaphragm-based design

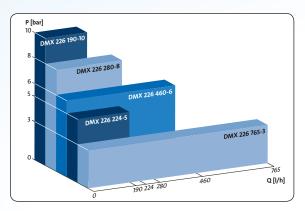
and high-quality motors, DMX pumps require minimum maintenance and are the best choice for many dosing applications. The DMX range is highly versatile: it covers a wide flow range and offers a variety of dosing head sizes, materials and accessories.

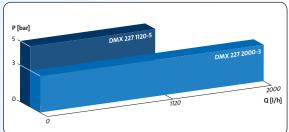
#### DMX: robust design for minimum maintenance

- Capacity from 0.4 to 2 x 4000 l/h and up to 10 bar
- Double-head versions increase flexibility or dosing flow rate
- Available with ATEX design certified for EX classified

#### Flow rates and pressure, DMX (50 Hz)







# 0 1120 Q[I/h]

DMX 221 DMX 226

#### **Application areas**

Disinfection, coagulation, flocculation, pH correction, etc. in:

- Drinking water treatment
- Waste water treatment
- Pulp and paper industry
- Textile industry
- Cleaning water treatment
- Food & Beverage industry, dairies
- Cooling tower water treatment
- Low-pressure boiler feed water treatment



# Hydraulic piston diaphragm dosing pumps

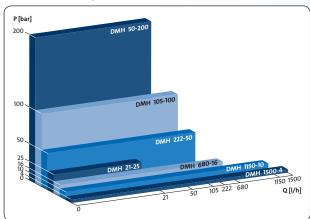
## DMH: hydraulic piston diaphragm dosing pumps up to 2 x 1500 l/h and up to 200 bar

The Grundfos DMH range is a series of extremely strong, robust pumps for applications requiring reliable dosing and high-pressure capability, such as process engineering. The range is highly versatile: it covers a wide flow range and offers a variety of dosing head sizes, materials and accessories.

#### DMH: long lifetime in high-pressure applications

- Capacity from 0.15 to 2 x 1500 l/h and up to 200 bar; available in simplex and duplex versions
- Integrated pressure relief valve and active diaphragm protection system
- Available with ATEX design certified for EX classified zones and API 675 certificate
- Double diaphragm design and breakage monitoring for max. safety

#### Flow rates and pressure, DMH (50 Hz)



#### **Application areas**

- Power plants
- High pressure boiler feed water treatment
- Petrochemical industry, refinery
- Treatment of process water
- Drinking water treatment
- EX zones / dosing of flammable liquids



**DMH 251** 



**DMH 254** 



**DMH 257**