# **Product Overview 2022**

Products for chemical fluid handling, water treatment and disinfection as well as digital solutions



# Inventive, progressive and global

#### Our foundation

The foundation of ProMinent's global success story is high-quality products based on decades of engineering expertise, an in-depth understanding of applications and continuous innovation. The group of companies therefore invests continuously in research and development. ProMinent also has a high degree of vertical integration at its twelve production sites worldwide, including Heidelberg, guaranteeing outstanding levels of quality for our customers and ensuring our independence from fluctuations in supplier markets.

#### Our commitment

We are passionately committed to environmentally sound, sustainable and cost-effective solutions for metering technology and water treatment. In more than 100 countries, around 2,700 employees in our own sales, production and service companies work hard to deliver fast and reliable service for every product, day in, day out. Because the ProMinent group's position as a global market leader means a continuous commitment to excellent products and services and an obligation to think and act responsibly.

#### Our aim

The modular ProMinent range enables our customers in a wide range of industries to achieve maximum safety and efficiency in their production processes, at all times and in any location. For us, customer proximity means working with the customer to find the right solution for individual needs. Personal, practical advice and smooth project handling are as much a part of our offering as our worldwide customer service.



## Low-pressure metering pumps

Diaphragm metering pumps are available in capacities ranging from 0.74 to 80 l/h at a back pressure of 25 to 2 bar. To be able to meter almost any liquid chemicals, ProMinent uses a very extensive range of materials.



#### Solenoid-driven metering pump beta

Simple all-purpose solenoid metering pump for metering liquid media in water treatment and chemical processes: Cost-effective, overload-proof, can be adapted to signal transducers present.

■ Capacity range: 0.74 – 32 l/h, 25 – 2 bar



#### Flow meter **DulcoFlow**

The flow meter DulcoFlow reliably measures pulsating flows in the range above 0.03 ml/stroke based on the ultrasound measuring principle. The flow meter achieves maximum chemical resistance as all wetted parts are made of PVDF and PTFE.

Measures pulsating volumetric flows in the range of 0.03 to 10 ml/stroke



#### Solenoid-driven metering pump gamma/ X

Discover a metering pump that sets new standards in productivity, reliability and cost-effectiveness.

■ Capacity range: 2.3 – 45 l/h, 25 – 2 bar



#### Solenoid-driven metering pump gamma/ XL

gamma/XL is the big brother to gamma/X. It has the same intelligence and connectivity and extends the capacity range of the gamma/X.

Capacity range: 8 – 80 l/h, 25 – 2 bar

# Peristaltic metering pumps

Peristaltic metering pumps DULCOFLEX Control are used in a capacity range of between 10 ml/h and 410 l/h. They pump against a pressure of up to 8 bar. The incredible durability and broad chemical compatibility of the high-performance hoses used by ProMinent are particularly impressive.



#### Peristaltic metering pump DULCOFLEX DFXa

The peristaltic metering pump DULCOFLEX DFXa meters outgassing, viscous, abrasive or shear-sensitive media. Linear and reproducible metering ( $\pm$  2 %) is guaranteed with this peristaltic pump under all process conditions.

■ Capacity range: 6ml/h - 65 l/h, at up to 7 bar



#### Peristaltic metering pump DULCOFLEX DFYa

The valveless peristaltic metering pump DULCOFLEX DFYa guarantees precise, linear and reproducible metering in all process conditions. It meters outgassing, viscose, shear-sensitive media, possibly containing particles, with ease.

■ Capacity range: 5.1 l/h - 410 l/h, at up to 8 bar

# Motor-driven metering pumps for all capacity ranges

Motor-driven metering pumps need to be robust, reliable and able to run on their own without supervision. Metering pumps with mechanically actuated diaphragms can be used almost universally in low pressure ranges. And what about servicing? Minimal. Precision? Uncompromising. Value for money? The best.



#### Motor-driven metering pump sigma/ 1 (Basic type)

The sigma/ 1 Basic is an extremely robust motor-driven metering pump with a patented multi-layer safety diaphragm for excellent process reliability. It offers a wide range of power end designs, such as three-phase or 1-phase AC motors, and is also suitable for use in areas at risk from explosion.

■ Capacity range: 17 – 144 l/h, 12 – 4 bar



#### Motor-driven metering pump sigma/ 2 (Basic type)

Robust motor-driven metering pumps like the sigma/ 2 Basic guarantee excellent process reliability with their patented multi-layer safety diaphragm. The diaphragm metering pump offers a number of power end versions and is also suitable for use in areas at risk from explosion.

■ Capacity range: 50 – 420 l/h, 16 – 4 bar



#### Solenoid-driven metering pump sigma/ 3

The patented multi-layer safety diaphragm for excellent process reliability is just one feature of the extremely robust motor-driven metering pump sigma/ 3 Basic. It also offers a wide range of power end versions, such as three-phase or 1-phase AC motors, and is also suitable for use in areas at risk from explosion.

■ Capacity range: 146 – 1,030 l/h, 12 – 4 bar

#### The new sigma X family - reliable, smart and with scope for networking





# Motor-driven metering pump sigma X Control type sigma/ 1

The sigma Control type is a smart, flexible motor-driven metering pump that is setting new standards in terms of operating convenience, reliability and safety.

■ Capacity range: 21 – 117 l/h, 12 – 4 bar



# Motor-driven metering pump sigma X Control type sigma/ 2

The sigma Control type is a smart, flexible motor-driven metering pump that is setting new standards in terms of operating convenience, reliability and safety.

■ Capacity range: 61 – 353 l/h, 16 – 4 bar



# Motor-driven metering pump sigma X Control type sigma/ 3

The sigma Control type is a smart, flexible motor-driven metering pump that is setting new standards in terms of operating convenience, reliability and safety.

Capacity range: 182 – 1,040 l/h, 12 – 4 bar



#### Motor-driven metering pump sigma Hygienic

The Hygienic Design version of the sigma diaphragm metering pump is optimised in terms of dead space, features as few gaps as possible and has smooth, wetted surfaces for flexible and easy use in hygienically sensitive applications.

■ Capacity range: 25 – 1,000 l/h, 10 – 4 bar

# Process metering pumps for all capacity ranges

There is no room for compromise in high-end applications in the petrochemical and oil and gas industries. Risks associated with the metering of toxic, corrosive and flammable liquids must be fully eliminated. Reliable metering pumps need to be able to withstand very high pressure levels and extreme temperatures. What could be a more obvious solution for very challenging applications than ProMinent cutting-edge technology?



#### Hydraulic diaphragm metering pump Evolution mikro EMFa

The Evolution mikro is an innovative micro-metering pump for high pressures. The hydraulic diaphragm metering pump is the first of its kind with an electronically regulated linear direct power end. The power end has few mechanical functional elements and thus operates with relatively minimal maintenance.

■ Capacity range: 0.01 – 18 l/h, 400 – 10 bar



#### Hydraulic diaphragm metering pump HYDRO HA1a, HA2a, HA3a, HA4a

This product range meets the requirements of API 675. They stand out on account of their full-motion drive and automatic bleeding. There are a variety of power end options, including some for use in areas at risk from explosion.

Capacity range: HA1a 0 – 18.1 l/h, 100 – 10 bar HA2a 13 – 91 l/h, 100 – 10 bar HA3a 11 – 201 l/h, 100 – 10 bar HA4a 242 – 1,506 l/h, 40 – 7 bar



#### Hydraulic diaphragm metering pump HYDRO HP2a, HP3a

As extremely robust hydraulic diaphragm metering pumps, the HYDRO/ 2 and HYDRO/ 3 meet the most exacting safety requirements. Their modular construction offers extremely good flexibility in terms of application, for example in the oil and gas industry.

Capacity range: HYDRO 2
 HYDRO 3
 3 - 72 I/h, 100 - 25 bar
 0 - 180 I/h, 100 - 25 bar



#### Hydraulic diaphragm metering pump HYDRO HP4a

The HYDRO/ 4 is an extremely robust hydraulic diaphragm metering pump, which meets the most exacting safety requirements – it comes with a pressure relief valve and PTFE multi-layer diaphragm with diaphragm rupture warning system as standard. Its modular construction makes it extremely versatile.

Capacity range: 76 – 1,450 l/h, 40 – 7 bar



#### The Orlita Evolution product range is designed to comply with API.



# Hydraulic diaphragm metering pump with stainless steel liquid end Orlita Evolution EF1a, EF2a, EF3a, EF4a

This product range with stroke lengths of 16 to 40 mm offers a number of power end versions, including some for use in Zone 1 or Zone 2 areas at risk from explosion with ATEX certification.

Capacity range:EF1a
 EF2a
 EF3a
 EF



## Hydraulic diaphragm metering pump with plastic liquid end Orlita Evolution EF1a, EF2a, EF3a, EF4a

Also available with "Plastic dosing head". The PVC and PVDF wetted materials enable the even more flexible use of this industry-safe pump in an even greater number of applications.

Capacity range:EF1a
 EF2a
 EF3a
 EF3a
 EF3a
 FF3a
 FF



#### Plunger metering pump Orlita Evolution EP1a, EP2a

The Orlita Evolution plunger metering pumps EP1a and EP2a form an integrated product range with stroke lengths of 16 to 40 mm. A wide range of power end versions is available, including some for use in Zone 1 or Zone 2 areas at risk from explosion with ATEX certification.

■ Capacity range: EP1a 5 – 540 l/h, 330 – 9 bar EP2a 5 – 540 l/h, 520 – 22 bar



#### Hydraulic diaphragm metering pump Orlita Evolution EF1F, EF2F, EF3F, EF4F

The Orlita Evolution EF1F to EF4F form an integrated product range with stroke lengths of 16 to 40 mm. The products can be used in Zone 1 or Zone 2 areas at risk from explosion with ATEX certification.

Capacity range: Size 1 3 – 540 l/h, 400 – 9 bar Size 2 6 – 960 l/h, 400 – 12 bar Size 3 24 – 2577 l/h, 397 – 6 bar Size 4 66 – 7400 l/h, 400 – 12 bar



#### Hydraulic diaphragm metering pump Orlita MF

The hydraulic diaphragm metering pump Orlita MF offers reliable capacities even under high pressure and has a modular construction, making it highly versatile. Thanks to its modular construction, this pump is tailored to meet your requirements even at very high pump capacities.

■ Capacity range: 0 – 14,000 l/h, 450 – 30 bar



#### Hydraulic diaphragm metering pump Orlita MH

The diaphragm metering pump Orlita MH has a robust metal diaphragm. This permits precise pump capacities even at very high pressure. The Orlita MH has a modular construction and is therefore very flexible. A wide range of power end versions is available. Drives, power ends and dosing heads can be freely combined.

Capacity range: up to 320 l/h, up to 780 bar



#### Plunger metering pump Orlita PS

The high-performance plunger metering pump Orlita PS enables precise pump capacities even at maximum pressure and temperatures of up to  $+400\,^{\circ}$ C. The Orlita PS pump has a modular construction and is therefore very flexible.

■ Capacity range: 0 – 2,800 l/h, 600 – 11 bar



#### Plunger metering pump Orlita DR

The plunger metering pump Orlita DR does not need valves and can therefore be operated within a broad stroke rate range. This makes it suitable for use with high-viscosity and extremely high-viscosity media of up to 106 mPas within a wide temperature range from -40 °C to 400 °C, for example in the food industry.

■ Capacity range: 0 – 280 l/h, 400 – 250 bar



#### Diaphragm pumps and plunger metering pumps MAKRO TZ

This range of metering pumps has a modular construction and offers an application-matched solution for every use.

Capacity range:

Diaphragm pump: 260 – 2,100 l/h, 12 – 4 bar Plunger pump: 8 – 1,141 l/h, 320 – 11 bar

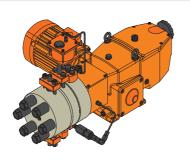


# Hydraulic diaphragm pumps and plunger metering pumps MAKRO/ 5

MAKRO/ 5 can also be expanded one module at a time and is another product range available as a diaphragm pump, hydraulic diaphragm pump or plunger metering pump, which can be used for higher capacity ranges.

Capacity range:

Hydraulic diaphragm pump: 450-6,108 l/h, 25-6 barPlunger metering pump: 38-6,014 l/h, 320-6 bar



#### Hydraulic metal diaphragm metering pump Orlita MHHP

The metal diaphragm metering pumps Orlita MHHP are special pumps, which provide precise pump capacities even at maximum pressures of up to 3000 bar.

Capacity range: 3 – 11 l/h, 3000 bar

## Chemical transfer pumps

Chemical transfer pumps are used to pump liquids from tank A to tank B.

Different media have very different chemical properties so the pumps need different functional principles. Liquid and pump must be fully compatible. The same ProMinent standards of maximum diligence and quality are applied to every single task.



#### Eccentric screw pump Spectra

The eccentric screw pump Spectra meters liquid polyelectrolytes in concentrated and dilute form.

It can be used, for example, in waste water treatment or sludge dewatering.

■ Capacity range: 2.4 – 12,000 l/h, 12 – 3 bar



#### Centrifugal pump von Taine

The solenoid-coupled centrifugal pump von Taine for pumping liquid media works safely and reliably: liquid media are pumped leak-free.

 Capacity range: up to 22,500 l/h, delivery height up to 23.5 mWs



#### Air-operated diaphragm pump Duodos

Air-operated diaphragm pump Duodos for pumping liquid media.

Capacity range: up to 12,000 l/h, delivery height up to 70 mWs



#### **Barrel pump DULCOTRANS**

The field of application of the DULCOTRANS depends on the chemical resistance of the materials used.

■ Pump capacity according to size 900, 2800 or 3750 l/h

### **Tanks**

Standard tanks for chemical storage and transfer are a fixed element of the ProMinent range. However, if you have specific requirements ProMinent can also supply tanks customised to a wide range of specifications.



#### Rotary lobe pump ROTADOS

The compact rotary lobe pump pumps viscous and even abrasive media at up to 100 m³/h. It even provides a reversible pumping direction thanks to its valveless construction. Housing, plunger and seals are available in different materials to match the medium.

■ Capacity range: 25 – 100 m<sup>3</sup>/h, 10 – 4 bar



#### Dosing tanks and retaining tanks

PE tanks produced in a rotation process. Can be supplemented by ProMinent metering pumps, suction lances and stirrers. The stackable PE retaining tanks are available in matching sizes.

■ Useful capacity of 35 – 1,500 l

In combination with chemical transfer pumps and peristaltic pumps, the tanks and retaining tanks can be used for metering tasks in many applications with virtually any conceivable pump capacity.

## Peristaltic pumps

Peristaltic pumps DULCOFLEX are amongst the most adaptable pumps available from ProMinent. They are suitable for a very wide pump capacity range. The smaller pumps of types DF2 to DF4 have been specially designed for metering tasks in swimming pools, hot tubs or spa and wellness zones. The large peristaltic pumps DFBa, DFCa and DFDa are ideal for specific tasks using maximum pump capacities and pressures in the laboratory and in industry.

All models are based on a simple operating principle and are extremely safe and easy to use.



#### Peristaltic pump DULCOFLEX DF2a

The peristaltic pump DULCOFLEX DF2a meters chemicals functionally, cost-effectively and quietly – ideal for use in swimming pools, hot tubs and in spa and wellness facilities.

■ Capacity range: 0.4 – 2.4 l/h, 1.5 bar



#### Peristaltic pump DULCOFLEX DF4a

The peristaltic pump DULCOFLEX DF4a for metering flocculants and active carbon treats water precisely and accurately. It is ideal for use in swimming pools, hot tubs or spa and wellness facilities. An operating pressure up to 4 bar is possible.

■ Capacity range: 0.35 – 12 l/h, 4 – 2 bar



#### Peristaltic pump **DULCOFLEX DFBa**

The peristaltic pump DULCOFLEX DFBa (designed as a low-pressure pump) is suitable for metering the smallest volumes in laboratories.

Capacity range: up to 649 l/h, 8 bar



#### Peristaltic pump DULCOFLEX DFDa

The peristaltic pump DULCOFLEX DFDa is designed for maximum

pump capacities and high pressures and wins customers over with its very smooth nature and long service life. It is fitted with shoes and fabric-reinforced hoses – perfect for industrial use.

Capacity range: up to 15,000 l/h, 15 bar



#### Peristaltic pump DULCOFLEX DFCa

High pump capacities are not a problem with the peristaltic pump DULCOFLEX DFCa. It is also equipped with rollers and fabric-reinforced hoses for industrial use.

Capacity range: up to 8,900 l/h, 8 bar

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# CUSTOMER SERVICE - UNLIMITED



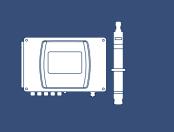


Support hotline Rapid support

**Ongoing operation** 











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