ProMinent – Professional solutions for fluid processes.
Our company and its products are dedicated to the metering and preparation of fluids. 40 years ago, Prof. Dr. Viktor Dulger founded this innovative company, and it has expanded steadily ever since. Starting with domestic water systems, the company later moved into the development and manufacture of a solenoid metering pump. Today, these pumps and systems are in operation around the world, supplying the needs of numerous metering applications. The younger generation is now moving into the business. Both sons have become involved in the company management and are taking the company concept forward in the best traditions of ProMinent. Industrial and service companies from different sectors rely on the precision and reliability of our products. The product range covers high performance standard devices to customer-specific individual solutions. Quality is the top priority in every case – one reason why we manufacture 80 % of our products in house. In-house diaphragm production and our own glass blowing works for our sensors ensure that we can deliver maximum quality and availability.

All our technical ideas are conceived at our headquarters in Heidelberg, where our creative team develops the technologies of the future. ProMinent has invested considerably in research and development – and the results speak for themselves.

Our teams can solve practically any metering problem.
ProMinent’s range of products delivers tailored solutions for transporting, mixing, metering and treatment of fluids in any situation. The application range of our pumps and systems is equally wide.

In the chemical industry: adapting flexibly to a wide range of processes

In the swimming pool: crystal clear water for perfect bathing

In the beverages industry: meeting the demand for purity in production and bottling

Water treatment is, as ever, one of the most important fields of application. We are talking here not only about our daily drinking water and the purity of water in our swimming pools, but also about process water in industrial systems as reliable solution; one which really pays off.

RECIPE FOR SUCCESS

In the chemical industry: adapting flexibly to a wide range of processes

In the swimming pool: crystal clear water for perfect bathing

In the beverages industry: meeting the demand for purity in production and bottling

There are equally varied challenges in industry, especially in the chemical industry. The food industry demands precise and hygienic metering, as do brewing and bottling processes in the brewing and beverages industries.

Our specialists are well equipped with the expertise and knowledge to find the best solutions. Our customers get a complete, long term...
Locating our operations around the world and close to our customers is becoming increasingly vital. We decided early on therefore to establish our presence in the industrial centres around the world, stay in close contact with 35 subsidiary companies with marketing, storage, production and service operations. We maintain equally close relations with over 60 authorised dealers around the globe. We have over 1,400 employees worldwide. ProMinent’s global strategy is, in this way, realised in terms of geographical proximity and rapid availability – both for the design and production of new customer proposals and a unified approach to achieving a clean, sustaining environment. We are indebted to our watery planet, and we take our debt seriously.

Our consultants and technicians can be found in all industrial centres and have continued to expand on that concept. From our company headquarters in Heidelberg we

ROUTE TO SUCCESS

ON SITE – WORLD-WIDE: ALWAYS CLOSE TO OUR CUSTOMERS.

Operating globally also means being familiar with relevant national conditions, standards and regulations, but it also enables us to have
Correct dosage is the deciding factor for the success of the most varied of processes. It determines the quality of our drinking water and the environmental sustainability of our wastewater. It ensures the quality of our food, the exact composition of chemical products and the freshness and shelf-lives of drinks and its influences extend right up to the economical and precise running of industrial production processes.

ProMinent has developed a comprehensive range of products to meet the demands of the different sectors of industry. Its product palette comprises a range of metering pumps, with feed rates ranging from 0.1 ml/h to 100,000 l/h. It also incorporates reliable measuring and control technologies and complete systems for water treatment and water disinfection. Two drive options are available for the metering pumps: the ProMinent® solenoid metering pumps are universally applicable, especially with optimised use of microprocessor controllers, while the ProMinent® motor-driven metering pumps are distinguished by their high performance rates. They are designed to be robust in action while maintaining precise feed rates. The comprehensive range of accessories means that these pumps can be integrated into practically any process design.

SUCCESS IN CONTROL
**Universal Applications:**

Our range of low capacity pumps.

The ProMinent® mikro g/5, a solenoid driven piston pump with microprocessor controller, was developed for laboratory and industrial use. It is a high-precision pump working in the micro-litre range from 0.1 to 1500 ml/h. The pumps in the ProMinent® alpha series feature robust, uncomplicated functions. They are used in many sectors of industry for simple metering applications with constant feed rates. As motor-driven diaphragm pumps their capacity ranges from 0.5 to 18.5 l/h.

The ProMinent® Beta® is a range of microprocessor controlled solenoid diaphragm pumps. Its few control elements make installation easy, a “traffic light display” signals the operating status at a glance. Beta® is the reliable choice in water treatment and in many processes in industry. It has a capacity range of between 0.74 and 32 l/h.

Adaptable for a variety of processes: ProMinent® gamma/ L

Precision for the smallest quantities: ProMinent® mikro g/ 5

For straightforward applications: ProMinent® alpha

Reliable and flexible: the solid state ProMinent® Beta®
ProMinent® Pneumados is available complete with a metering pump with pneumatic power end. It is the right choice when there is a compressed air system present – e.g. for handling animal feeds, in lacquering systems, in greenhouses and in car wash systems. The pumps have capacities of between 0.9 and 15 l/h. The ProMinent EXtronic® metering pumps were developed specifically for gamma/ L series. Due to their high-precision metering capability these pumps are used in research and development in the chemical and pharmaceutical industry, in the food and drinks industry and in brewing. Capacity: 0.74 to 32 l/h.

Lower capacity range

<table>
<thead>
<tr>
<th>Model</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>ProMinent® mikro g/ 5</td>
<td>0.1 to 1500 ml/h</td>
</tr>
<tr>
<td>ProMinent® Pneumados</td>
<td>0.9 to 15 l/h</td>
</tr>
<tr>
<td>ProMinent® alpha</td>
<td>0.5 to 18.5 l/h</td>
</tr>
<tr>
<td>ProMinent® Beta/ 4</td>
<td>0.74 to 19 l/h</td>
</tr>
<tr>
<td>ProMinent® Beta/ 5</td>
<td>4.1 to 32 l/h</td>
</tr>
<tr>
<td>ProMinent® gamma/ L</td>
<td>0.74 to 32 l/h</td>
</tr>
<tr>
<td>ProMinent® EXtronic®</td>
<td>0.23 to 60 l/h</td>
</tr>
</tbody>
</table>
The mid capacity range: Compact metering pump variations.

The motor-driven ProMinent® Hydro/2 and Hydro/3 with hydraulically actuated diaphragm can perform precise metering operations even at high pressures, meeting the same high safety requirements. Reproducibility is guaranteed. The pumps perform equally well in many processes within the chemical industry, the petrochemical industry and in industrial production systems. Pump capacity is 60 l/h at back pressures of up to 64 bar and up to 150 l/h at 25 bar.

The pumps in the ProMinent® Vario series have been designed on a modular basis: with interchangeable electronic controller and monitoring inserts, the Vario pumps can be adapted for any process requirement. Capacities reach 144 l/h.
Inside the ProMinent® Sigma there is a proven, durable mechanism guaranteeing the high level of reproducibility of the feed rate. Sigma is available in diaphragm and piston versions for use in water treatment, in the food and beverages industry, in the chemical industry, and in the paper and textiles industries. Sigma has capacities up to 420 l/h. All this applies equally to the Sigma/3, whose only difference to the Sigma is an even higher capacity. A microprocessor ensures numerous internal and variable external control options. An illuminated LCD display makes operating easier. The feed rate of the Sigma/3 is between 145 and 1030 l/h.

### PLAN FOR SUCCESS

ProMinent® Sigma – optimum precision and durability

ProMinent® Sigma/3 – power combined with control versatility

### Mid-capacity range

<table>
<thead>
<tr>
<th>Model</th>
<th>Flow Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>ProMinent® Hydro/2</td>
<td>7 to 60 l/h</td>
</tr>
<tr>
<td>ProMinent® Vario</td>
<td>17 to 144 l/h</td>
</tr>
<tr>
<td>ProMinent® Hydro/3</td>
<td>19 to 150 l/h</td>
</tr>
<tr>
<td>ProMinent® Sigma</td>
<td>50 to 420 l/h</td>
</tr>
<tr>
<td>ProMinent® Sigma/3</td>
<td>145 to 1030 l/h</td>
</tr>
</tbody>
</table>
The high capacity range: The most powerful of the metering pumps.

The ProMinent® Makro TZ takes us into the highest performance class in the ProMinent® pump range. These pumps are available in piston, diaphragm and hydraulic diaphragm versions. The diaphragm version has a capacity of up to 2500 l/h. With Makro/5 we offer high performance and long term reliability in motor-driven metering pumps with feed rate capacities of up to 6000 l/h.

The principle of the piston metering pump maintains feed capacities even at high back pressures. Makro/5 was conceived from the start as a double-headed metering pump. It can be modified at any time, however, to form a simplex or multiplex metering system. With two liquid ends it has a capacity of 12000 l/h at a back pressure of 6 bar. Several power ends can be combined to reach a capacity of up to 40000 l/h.

The metering pumps from ORLITA Dosiertechnik GmbH, a subsidiary of ProMinent, cover the top end of the capacity range in the ProMinent product spectrum. There are four series of high precision metering pumps available. The Mf pump range is fitted with a hydraulically driven PTFE double diaphragm. The diaphragm discharge stroke is actuated exclusively by the hydraulic fluid, while the priming stroke is supported, as necessary, by means of mechanical coupling. The result is extremely high priming capacity.

The operating pressure can reach 400 bar, the pump capacity a max. of 40000 l/h.

Upper capacity range

<table>
<thead>
<tr>
<th>ProMinent® ORLITA® Mh</th>
<th>1.2 to 810 l/h</th>
</tr>
</thead>
<tbody>
<tr>
<td>ProMinent® Makro TZ</td>
<td>8 to 2500 l/h</td>
</tr>
<tr>
<td>ProMinent® ORLITA® DR</td>
<td>1 to 3310 l/h</td>
</tr>
<tr>
<td>ProMinent® Makro/5</td>
<td>38 to 6000 l/h</td>
</tr>
<tr>
<td>ProMinent® ORLITA® PS</td>
<td>1.2 to 39000 l/h</td>
</tr>
<tr>
<td>ProMinent® ORLITA® Mf</td>
<td>4.9 to 39000 l/h</td>
</tr>
</tbody>
</table>
The Mh pump series works up to an operating pressure of 4000 bar. The pumps in the PS series – the classic piston metering pump with the best possible hydraulic efficiency rate for one reach 400 bar. The pumps in the DR series operate without valves. An overlapping oscillating and rotating piston action opens and closes the control pistons on the priming metering of liquids with the highest levels of viscosity, up to 1,000,000 m Pas, and even of those containing suspended solids.

MOTOR SUCCESS

Liquid end – are robust and discharge sides. This means that these pumps can carry out precise operating pressures can carry out precise
One of the greatest
central control systems is found
in nature: the tides. With
never-changing precision
the level of the sea rises
and falls in the cycles
ddictated by the moon.
The DULCOMETER®
sourced solutions at
every stage. Using our
program of optimally
interactive systems, we
can provide you with real
process reliability and
precision.
A perfect control system
precisely tailored to your
individual requests and
requirements. The easy-
to-read monitor means
that the process is always
in view and under control.
Numerous applications
in process technology,

RULES OF SUCCESS

Precise measurement, intelligent processing,
Exact metering: The circle of control is complete.

Measurement and control
technology, the
DULCOTEST®
sensor technology
and ProMinent®
metering pumps
offer equally precise
cycles of control.
Measurement –
control –
adjustment –
metering. Single
research and production
depend on this level of
security: industrial
process control,
chemical waste-
water treatment,
beverage process
water treatment and
the food and drinks
industries – to name
but a few.
MAKING PROCESSES TRANSPARENT:
ProMinent® MEASUREMENT AND CONTROL TECHNOLOGY.

DULCOMETER® stands for a comprehensive, fully interactive product system of measurement and control technology for many areas and applications. Measurement transducers graphically display a range of measured variables. The control range features a choice of several application-orientated control features. Wall-mounted or installed in a control panel – even the external form can be adapted to your requirements.

DULCOMETER® D1C is a versatile measurement transducer and controller incorporating micro-processor technology for a range of measured variables.

The two-channel controller of the DULCOMETER® D2C measures and controls two measurement parameters. Measured variable options are pH/pH, pH/chlorine and pH/redox.

The DULCOMARIN® swimming pool controller was designed especially for swimming pool applications. It is supplied with factory-set reference and threshold values. It is simple to operate, guiding the operator through the necessary settings tasks with clear text prompts. ProMinent® DULCOMETER® D_4a is a controller and metering pump in one. This combination is ideal for laboratory, pilot system, swimming pool and drinking water system applications. Particularly compact and equally intelligent is the DULCOMETER® DMT two-wire measurement transducer. The devices all feature clear text operator prompts, informative displays, numerous internal monitoring functions and are all rapid to install.

| DULCOMETER® DMT | pH | Redox | Conductivity | Temperature | Chlorine |
| DULCOMETER® D1C | pH | Redox | Cl₂ | Conductivity | ClO₂ | O₃ | Temperature | Analogue signal | H₂O, Peracetic acid |
| DULCOMETER® D2C | pH/Cl₂ | pH/pH | pH/Redox | pH/pH | pH/Redox/Cl₂/C | pH redox | Cl₂ |
| DULCOMARIN® | pH/redox/Cl₂/°C | pH | redox | Cl₂ |
Sensor technology is a key factor for the precise measurement results. The sensors form an optimally interactive unit when combined with DULCOMETER® control technology, and so offer total process safety to the user. We supply individual sensors for the following parameters: pH value, redox voltage peracetic acid, H₂O₂, temperature, chlorine, chlorine dioxide and ozone. We also provide lead combinations and other accessories for a complete, turnkey measuring and control system.

SUCCESS CONCEPT

DULCOTEST® sensors: rapid and precise detection of measured variables

Mounted to your specifications: complete control and metering systems for swimming pools
ProMinent offers a whole range of systems especially for water treatment, all of which can operate within the smallest space: Bello Zon® is a series of systems for the production of chlorine dioxide, OZONFILT® OZVa sets the standard in the ozone generating technology for crystal clear swimming pool water. Dulcodes, the UV disinfection system using UVC radiation, is a chemical-up to 99 % of dissolved salts from water, and are therefore highly suitable for desalinating seawater, but also for treating process water. Ultromat® polyelectrolyte batching stations allow an alternative to chlorine for disinfecting drinking and process water.

Under the name Bono Zon® we manufacture high performance ozone generating systems for odour-free disinfection and oxidation of water. Dulcoclean® – the compact waterworks – recovers high quality drinking water from contaminated tap water and brackish water. Dulcosmose® reverse osmosis systems remove maturation of organic floculent. Essential in purification systems, economical in water treatment systems.

Chlorine dioxide instead of chlorine: water disinfection with Bello Zon®

Large ozone capacity in the smallest space: more pleasure from swimming pools with OZONFILT® OZVa

Dulcosmose® reverse osmosis systems, can be transported in a container
SURETY FOR SUCCESS

ProMinent Dosierentechnik GmbH
Im Schuhmachergewann 5-11
D-69123 Heidelberg
Postfach 10 17 60
D-69007 Heidelberg
Phone: +49 (0221) 842-0
Fax: +49 (0221) 842-419
info@prominent.de
www.prominent.de

ProMinent Fluid Controls Pty. Ltd.
Unit 4, Narabang Way
Belrose NSW 2085 (Australia)
Tel.: +61 (972) 2870112, 12
Fax: +61 (972) 2870140

ProMinent Dosierentechnik AG
Sonntagberg
Gewerbepark-Rosenau/
ProMinent Dosiertechnik Ges.m.b.H
Fax: 43632292

ProMinent Fluid Controls Ltd.
1421 Sofia (Bulgaria)
Fax: 43639111, 12
Tel.: +421 (7) 7847196,
Fax: 3469061

ProMinent Fluid Controls (Bangladesh) Ltd.
House No. 9, Road No. 17
Block D, Banani Model Town
Dhaka-1213 (Bangladesh)
Tel.: +(8802) 8181712312,
Fax: 9882706

ProMinent Fluid Controls (Tanzania) Ltd.
W. K. Zanzibar
P.O. Box 6238
Tanzania
Fax: 255 (21) 9267040,
Tel.: +351 (21) 9267008-12,
77900 Olomouc (Czech Republ.)
Fax: 7315730

ProMinent Flow Controls China Co. Ltd.
No. 14 Road Laohe Xisan
Dalian Economic & Techn. Dev. Zone
116000 Dalian (P.R. of China)
Tel.: +(81) (3) 73157377,
Fax: 7315730

ProMinent Fluid Controls Ltd.
8711-12, Bulebel Industrial Estate
Bulebel (Matta)
Tel.: +(356) 6936877, Fax: 693547

ProMinent France S.A.
8, Rue des Frères Lumière
B.P. 39, Eckolsheim
67038 Strasbourg Cedex 2
(France)
Tel.: +(33) (6) 88.15.15.10,
Fax: 88.10.15.20

ProMinent Fluid Controls Ltd.
Resolution Road,
Ashby-de-la-Zouch
Leicestershire LE65 1DW
(Great Britain)
Tel.: +(44 (1) 5339 560555,
Fax: 560777

ProMinent Magyarorszag Kft.
Ives u. 2
9027 Györ (Hungary)
Tel.: +(36 (96) 511400,
Fax: 329981

Heidelberg ProMinent Fluid Controls India Pvt. Ltd.
3A Wito Crisa 14,
Roothouse Crescent
Bangalore 560 001 (India)
Tel.: +(91 (80) 5091496,
Fax: 5959665

ProMinent Fluid Controls Ltd.
Finskin Industrial Estate
Sligo, Co. Sligo (ireland)
Tel.: +(353 (71) 51222, Fax: 51225

ProMinent Italia S.R.L.
Via Albrecht Dürer, 29
39100 Bolzano (Italy)
Tel.: +(39 (471) 921000,
Fax: 920099

ProMinent Fluid Controls (M) Sdn.
Bhd.
921-1, Jalan Radin Anum Salu
Seri Petaling,
57000 Kuala Lumpur (Malaysia)
Tel.: +(60 (3) 90577224,
Fax: 90577219

ProMinent Fluid Controls Ltd.
9027 Györ (Hungary)
Tel.: +(36 (96) 511400,
Fax: 329981

ProMinent Fluid Controls de Mexico S.A. de C.V.
Haley No. 32, Col. Anzures
11590 Mexico, D.F. (Mexico)
Tel.: +(52 (9) 5458733,
Fax: 5458733

ProMinent Verder B.V.
Utrechtseweg 4a
3451 GG Vleuten (Netherlands)
Tel.: +(31 (7) 3438576,
Fax: 3469061

ProMinent Portugal Controlo de Fluidos Ltda.
Estrada da Barrosa, Elsaopark 16
Algueirao
2725 Mom Martins (Portugal)
Tel.: +(351 (21) 9260740,
Fax: 9260749

ProMinent Büro Bulgaria
8 Kr. Sarafov
1421 Sofia (Bulgaria)
Tel.: +(359 (2) 633223,
Fax: 604422

ProMinent Fluid Controls Ltd.
490, Southgate Drive
Guelph, Ontario N1G 4P5
(Canada)
Tel.: +(705) 8365692,
Fax: 8365226

ProMinent Fluid Controls Ltd.
S 11-12, Bulebel Industrial Estate
Bulebel (Matta)
Tel.: +(356) 6936877, Fax: 693547

ProMinent Fluid Controls Ltd.
8711-12, Bulebel Industrial Estate
Bulebel (Matta)
Tel.: +(356) 6936877, Fax: 693547

ProMinent Fluid Controls Ltd.
8711-12, Bulebel Industrial Estate
Bulebel (Matta)
Tel.: +(356) 6936877, Fax: 693547

ProMinent Fluid Controls Ltd.
8711-12, Bulebel Industrial Estate
Bulebel (Matta)
Tel.: +(356) 6936877, Fax: 693547

ProMinent Fluid Controls Ltd.
8711-12, Bulebel Industrial Estate
Bulebel (Matta)
Tel.: +(356) 6936877, Fax: 693547

SURETY FOR SUCCESS

World-wide access to ProMinent – Success has never been closer!