

Products Catalog



# We make pumps

For 50 years, **TACMINA** has specialized in manufacturing diaphragm metering pumps, and water treatment, disinfection, and process equipment systems.

The products we make are in active use worldwide in a wide range of leading-edge fields of industry – chemical plants, pharmaceuticals and food production processes, energy and environmental conservation, disinfection and water treatment – for the injection and transfer of hazardous chemicals, high-viscosity liquids, liquids containing slurry, and hot liquids.

Responding to all kinds of liquid control needs through highly-skilled personnel and creative technology. This is our on-going commitment in making pumps – **TACMINA**

## Main Fields of TACMINA Product Application

**Chemical industry:** Transfer/feed of raw materials, injection of additives

**Food industry:** Drink production processes, transfer of food raw materials, injection of additives

**Semiconductor processes:** CMP process, feed and circulation of EL chemicals

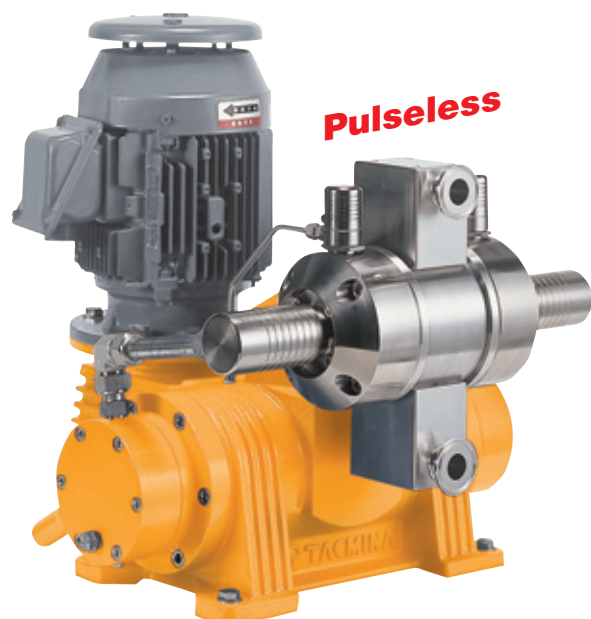
**Precision painting:** Films for FPDs and LCDs, production of photographic film and magnetic tape

**Water treatment/disinfection:** Industrial waste water and sewage treatment, disinfection of city water/swimming pools/spas

**Boilers/air-conditioning:** Injection of boiler chemicals, deoxidants, air-conditioning chemicals, and algicides



Reproducibility of  $\pm 0.1\%$  or less,  
pulsation rate of  $\pm 1\%$  or less!



## TPL

### Hydraulic Diaphragm Type

High-spec model designed for maximum precision  
[Max. discharge volume] 100 mL/min to 30 L/min



## PL

### Hydraulic Diaphragm/ Hydraulic Double-diaphragm Type

High-performance model capable of  
continuous high-pressure and high-  
precision injection  
[Max. discharge volume]  
230 mL/min to 24.8 L/min



## PL

### Direct-driven Diaphragm/ Direct-driven Double-diaphragm Type

Standard model with excellent  
durability  
[Max. discharge volume]  
240 mL/min to 13.2 L/min



## PL

### Plunger Type

Capable of high-precision injection  
of even small amounts and high-  
pressure injection of liquids  
[Max. discharge volume]  
11 mL/min to 25.8 L/min

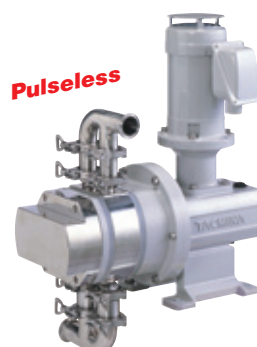


## APL

### Direct-driven Diaphragm Type

Equipped with a diagonal diaphragm  
that contributes to the downsizing  
of the pump without losing its high  
capacity.

[Max. discharge volume]  
5.5 L/min to 47 L/min



## APLS

### Direct-driven Diaphragm Type

Compatible with hazard analysis critical  
point (HACPP) systems. Conforms to  
sanitary specifications, and ensures  
ease of disassembly and cleaning.

[Max. discharge volume]  
1.1 L/min to 47 L/min

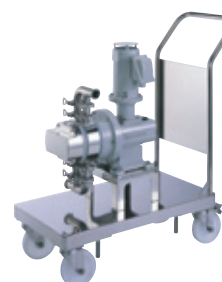


### Handy Unit Type

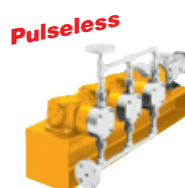
Thanks to the integrated hopper  
and control panel, you are free from  
troublesome wiring and piping work.  
Rearrangement of the line and  
maintenance is also made easier  
as the unit is very easy to clean.

### Trolley Type

The trolley type unit with casters  
can be easily moved for installation  
at different sites and easily integrated  
into other equipment.



※Specifications can be changed as required to suit customer specifications.  
For details, contact TACMINA.



## PL

### Triplex Type

Pulseless on both  
discharge and suction  
sides



## CMPL

### Direct-driven Diaphragm Type

Long-life diaphragm (6 months or longer) for 24-  
hour continuous operation. Oil-free and sealed  
structure prevents unexpected intrusion of oil.

[Max. discharge volume]  
50 mL/min to 440 mL/min

# Metering Pumps for Processes and General Applications

\* The indicated maximum discharge volume shows the value per pump head.

**Simple & Durable**



## S·Z·R

### Direct-driven Diaphragm Type

The simple mechanisms on this pump make maintenance easier. It is also highly resistant to corrosion, which allows it to be used in a wide range of applications. [Max. discharge volume] 30 mL/min to 43 L/min\*

### Direct-driven Double-diaphragm Type

The durability and safety of this pump have been enhanced for the transfer of highly corrosive liquids. [Max. discharge volume] 30 mL/min to 43 L/min\*

### Hydraulic Diaphragm Type

With its relief function for protecting the pump, this pump can transfer even hazardous liquids without allowing them to contact air. [Max. discharge volume] 97 mL/min to 10.3 L/min\*

### Hydraulic Double-diaphragm Type

This enhanced hydraulic diaphragm pump can discharge slurry and high-viscosity chemicals at high pressure. [Max. discharge volume] 97 mL/min to 10.3 L/min\*

### Plunger Type

This pump is capable of high-precision and high-pressure metered injection, and is not affected by pressure fluctuations. [Max. discharge volume] 4 mL/min to 10.7 L/min\*

**Compact**



## CSII

### Direct-driven Diaphragm Type

An easy-to-use, tough and safe pump in a stylish design with minimal dead space. [Max. discharge volume] 10 mL/min to 1 L/min



**With a built-in flow meter**

## MDiA

### Direct-driven Diaphragm Type

Constantly monitors actual discharge volume and automatically corrects the discharge volume to the target value. [Max. discharge volume] 240 mL/min to 7 L/min

# Metering Pumps for Special Applications



### Sanitary Type

Made in a seal-free and hygienic liquid-end structure



### Remote Head Type

Conduction of heat between pump and chemical is minimized. Also, radiator fan or insulation jacket can be installed.



### T-branch Remote Head Type

No contact between slurry and diaphragm, which securely protects the pump. Transferred liquid also is not affected.



### Multiplex Type

For the proportional injection of many liquids and synchronous injection to many lines

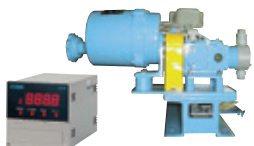


### Combination Type

For proportional synchronous injection of many liquids

## Related Products

## Optional Products



Electric Servo and Digital Servo Controller



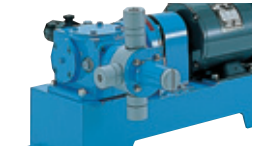
Inverter



Leak Monitor



Pulse Sensor



Head with Relief Valve

## Solenoid-driven Metering Pumps



### PZiG

Large capacity and high-pressure injection are achieved. It also provides complete and various control configurations, simplifying your system and drastically reducing overall costs.  
[Max. discharge volume]  
340 mL/min to 1300 mL/min



### PZi

This intelligent pump has a multi-function to support ex-tensive automatic control.  
[Max. discharge volume]  
30 mL/min to 540 mL/min



### PZ

Universal Standard Model that supports a wide power supply specification also available on the PVDF lineup.  
[Max. discharge volume]  
30 mL/min to 100 mL/min



### PZD

Discharge volume can be set in three ways: flow rate, stroke speed and percentage.  
[Max. discharge volume]  
30 mL/min to 540 mL/min



*With a built-in flow meter*

### PZiA

Constantly monitors actual discharge volume and automatically corrects the discharge volume to the target value.  
[Max. discharge volume]  
30 mL/min to 100 mL/min



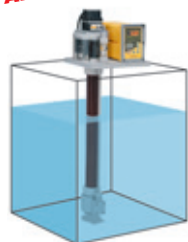
### PTU

Metering pump and chemical tank are integrated. Just connect power supply and piping, and the unit is ready for operation.  
[Tank capacity]  
25 to 100 L

※ Photo shows 25L capacity unit.

## Metering Pumps for Disinfection

*Anti-Gas Locking*



### GLX

#### Gas-lockless Type

This pump thoroughly eliminates the factors causing gas locking. It also can be easily installed on existing tanks, and accepts a wide voltage range as well.  
[Max. discharge volume]  
0.012 mL/min to 390 mL/min



### AR Type

#### Auto Air-release Type

CL type with automatic air-release mechanism  
[Max. discharge volume]  
30 mL/min to 93 mL/min

※ Photo shows ARPZ.



### CL Type

#### Chlorine Sterilization Type

Solenoid-driven metering pump with further improved pump efficiency for countering gas lock.

※ Photo shows PZD-CL.

## Related and Optional Products



Parts Kit



Discharge Volume Checker



Digital Panel Meter



Flow Indicator



Hose Flange



Relief Valve



Back Pressure Valve



## TACMINA GLOBAL NETWORK



## TACMINA CORPORATION

2-4-8 Minami-Semba, Chuo-ku, Osaka 542-0081 Japan  
 Tel. +81 (0) 6-6271-3974 Fax. +81 (0) 6-6271-4677  
 URL <http://www.tacmina.com>  
 E-mail [trade@tacmina.com](mailto:trade@tacmina.com)

## TACMINA (THAILAND) CO., LTD

### Manufacturing Facility

20/1 Soi Ramkhamheang 16, 2nd. Branch Ramkhamheang Rd.,  
 Huamak, Bangkok, Bangkok 10240 Thailand  
 Tel. +66 (0) 2319-9315 or 9316 Fax. +66 (0) 2319-7390

## EUROPE REPRESENTATIVE OFFICE

Hochstr. 35 56235 Ransbach-Baumbach, Germany  
 Tel. +49 (0)2623-928-345 Fax. +49 (0)2623-928-507  
 E-mail [trade@tacmina.com](mailto:trade@tacmina.com)

## SOUTHEAST ASIA REPRESENTATIVE OFFICE

20/1 Soi Ramkhamheang 16, 2nd. Branch Ramkhamheang Rd.,  
 Huamak, Bangkok, Bangkok 10240 Thailand  
 Tel. +66 (0) 2319-9315 or 9316 Fax. +66 (0) 2319-7390  
 E-mail [tacmina\\_sea@pacific.net.sg](mailto:tacmina_sea@pacific.net.sg)



ISO 9001 Registration  
 JQA-1274 Production Division



ISO 14001 Registration  
 JQA-EM0637 Production Division



To protect the environment, TACMINA uses 100% recycled paper and soy-based ink in its printed publications.

EC-02123

2006/8/CSS