

TACMINA

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

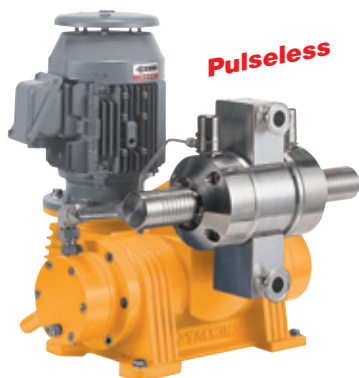
**Semiconductor processes:** CMP process, feed and circulation of EL chemicals

**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 40 L/min  
[Max. discharge pressure] 15MPa



## 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



## TPL-MC

### For pumping coating liquid

[Max. discharge volume] 0.1 to 10.5 L/min

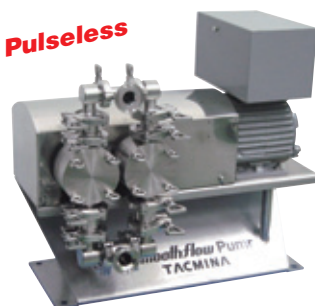


## APLS

### 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



## PLSS

### For pumping coating liquid and electrode materials

[Max. discharge volume] 0.14 to 2.5L/min



## BPL

### Direct-driven Diaphragm Type

Basic model which can be used to transfer a wide variety of chemical liquids over a long distance and to a high pump head.

[Max. discharge volume]  
0.05 L/min to 30 L/min

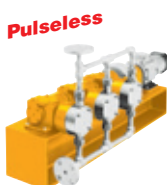
**PL** Can be customized for a lot of applications according to liquid type and your purposes.

## Units and Systems

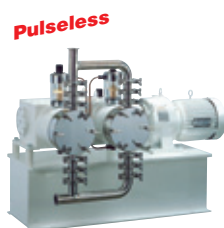


### Duplex Type

[Max. discharge volume]  
10 mL/min to 25.



### Triplex Type



### Sanitary Type



### Handy Unit Type



### Trolley Type

# 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]

w/ Relief Valve 10 mL/min to 300 L/min

w/out Relief Valve 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

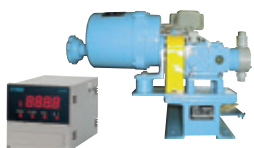


### Combination Type

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]**  
 w/ Relief Valve 30 mL/min to 100 L/min  
 w/out Relief Valve 30 mL/min to 540 L/min



## PZ

Universal Standard Model that supports a wide power supply specification.  
**[Max. discharge volume]**  
 w/ Relief Valve 30 mL/min to 100 L/min  
 w/out Relief Valve 30 mL/min to 100 L/min



## PZD

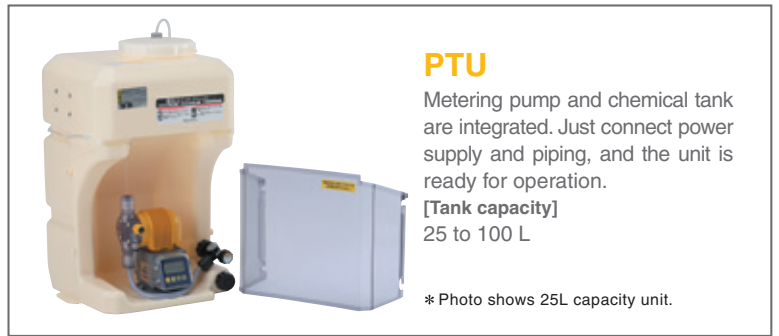
Discharge volume can be set in three ways: flow rate, stroke speed and percentage.  
**[Max. discharge volume]**  
 w/ Relief Valve 30 mL/min to 100 L/min  
 w/out Relief Valve 30 mL/min to 540 L/min



*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



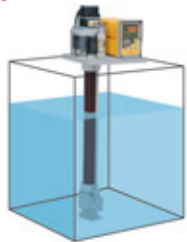
## PTU

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 CLPZD.

# Related and Optional Products



Parts Kit



Discharge Volume Checker



Flow Indicator



Hose Flange



Relief Valve



Back Pressure Valve

TACMINA GLOBAL NETWORK



# TACMINA CORPORATION

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Product designs and specifications are subject to change without notice for product improvement.

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ISO 9001 Registration  
 JQA-1274 Production Division



ISO 14001 Registration  
 JQA-EM0337 Production Division