

# Pursuing Durability & High-Efficiency

# GASTORR Degassing Unit

New in-line degasser

Dedicated models that are suitable for fluorine-based solvents, including analytical models that minimize complications using a self-cleaning function

## AG / BG-4x

Degassing Unit  
for Analytical



AG-42-01

BG-44-02

FLOM's fourth generation analytical degasser is a low-cost, high-efficient degassing unit. AG-40 series and our large-capacity BG-40 series are now available.

AG-40 uses Teflon™ AF for the vacuum tubing. The auto cleaning function prevents liquefaction of solvent left inside the vacuum chamber to protect the vacuum pump from deterioration.

BG-40 uses a real time organic EL display/OLED to show vacuum levels with ease.

Degassing Unit  
for Fluorine-based Solvents

## FG-42

Corrosion problems caused by fluorine-based solvents are resolved with FLOM's vacuum tube structure and technology. The self-cleaning function keeps moisture under control making this unit an exceptionally durable degasser.



FG-42

## PG-4x

Degassing Unit  
for Semi-Prep Scale



PG-41P

PG-42P

A degassing device for preparative work that supports a flow rate of 50 mL/Min. Using FLOM's unique vacuum tube structure to ensure degassing of the solvent. This unit has a self-cleaning function which prevents vacuum pump deterioration and a vivid real time organic EL display/OLED display of vacuum levels.

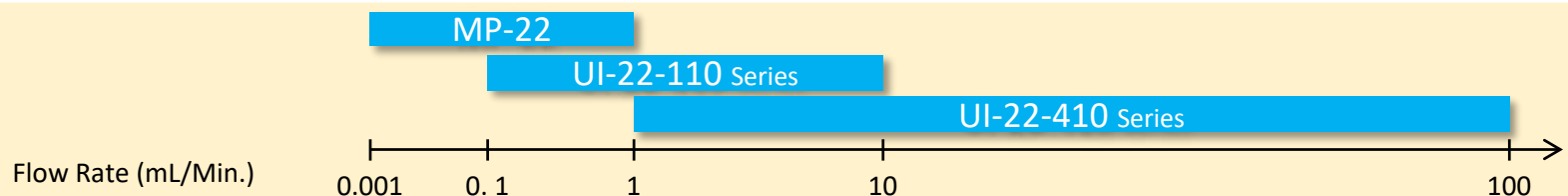
# Low Pulsation Continuous Flow with Ease of Use

# Intelligent Pump

Pumps are equipped with an intelligent control function that detects a small amount of pressure change during liquid delivery and regulates pulsating flow! High-precision continuous liquid delivery is made possible with simple operation.



## How to choose an Intelligent Pump



## MP-22

### Intelligent Micro Pump



MP-22-110S

This is a check valve-less design for low pulse control under low flow rates. We developed a linear drive mechanism with a switching valve and a small mechanical operating load. Stable liquid delivery can be achieved at a low flow range. In addition to the highly accurate liquid feed performance that can be set from 0.1  $\mu\text{L}/\text{Min}$ . This pump is equipped with an auto-prime function at the touch of a button.



Measurement data of pressure during MP-22 continuous operation

### Intelligent Pump

Our compact linear drive plunger pump is popular worldwide. There are two types of flow rate ranges and three types of pump head materials to choose from. User friendly and designed for high-performance, allows not only continuous liquid delivery at low pulse flow, but also liquid delivery mode can be selected according to the application in use.

Selectable Flow Modes	Pulsation Data	Conditions for Use
1 <b>Performance Mode</b>		When flow is stable without causing air bubbles (Ex. Combination of using with degassing units).
2 <b>Easy Mode</b>		When a small amount of air bubbles are appeared and when high viscosity solvent was ran (without use of degassing units).
3 <b>Mixing Mode</b>		When the backpressure is completely stable and when several pumps are connected at the outlet flow line.

## UI-22



UI-22-110S



# Non-contact liquid level sensor

# Sonic Reservoir Sensor

A unique liquid volume sensor that uses sound waves.  
Depletion of solvent bottles and overflow of waste tanks

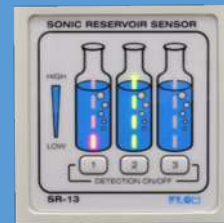
## SR-13

Sonic Reservoir Sensor



**SPEAKER  
&  
MICRO  
PHONE**

Resonates the sound in the bottle/tank to detect the fluid level.



The liquid level is readily visible in a four-step LED light.



**PLUG  
&  
PLAY**

Easy installation! Detection starts automatically with just plugging the sensors.



Buzzer sound notifies before causing lack of solvent or waste's overflow.

### RS-232C (Remote control optional interface)

To meet the needs of product development and if your product specifications call for a liquid level monitoring function, our communication sensor interface can be added to allow **data measurement of the remaining liquid in 1% units.**

The data is conveniently transmitted to your software.

# More than six hundred types Automatic / Manual Switching Valves

We offer various flow path patterns with excellent chemical resistance, high pressure resistance, and durability.

## VA-21 — Auto Valve Unit



VA-21-601

Easy to use with only two buttons, you can switch the flow path simply and reliably. A compact design that allows installation virtually anywhere. The valve adopts the V600 series that has been completely improved. (23 types in total)

The wetted materials can be selected from stainless steel and PEEK resin, and the maximum withstand voltage is ~ 40MPa (~ 5800psi). It is up to five times more durable than conventional products.

## Compact Manual Valves

# Manual Valves

We have a large number of small valves that are perfect for all your chromatography needs. For example, to easily switch the flow path in an experiment. Although it is a small size with a diameter of about 25 mm, it is a full-scale valve with a withstand pressure specification of up to 20 MPa (~ 2900psi).



V200

V512

Models	V200	V201	V204	V512	V239
Specifications	6-port for Analytical	2 3-port for Semi-Prep	1-2 port for Analytical	1-2 port for analytical	1-2 port for Semi-Prep
Types of Valve					
Max. Pressure	20 MPa (2900 psi)	20 MPa (2900 psi)	20 MPa (2900 psi)	30 MPa (4350 psi)	1 MPa (145 psi)
Wetted Materials	PEEK	PEEK	PEEK	SUS , PEEK	PEEK
Tubing Sizes	OD 1/16"	OD 1/16"	OD 1/16"	OD 1/16"	OD 3.0 mm or 1/8"
Path Diameter	0.6 mm	0.6 mm	0.8 mm	0.8 mm	1.0 mm
Thread Size	No. 10-32 UNF	No. 10-32 UNF	No. 10-32 UNF	No. 10-32 UNF	1/4-28 UNF