

TAKASAGO FLUIDIC SYSTEMS

TFS PIEZOELECTRIC MICRO PUMP - Highly Inert Models APP Series

DESCRIPTION

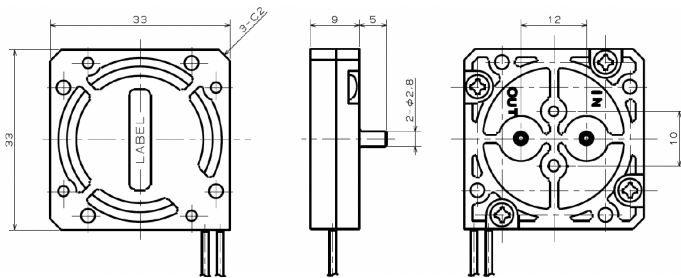
The APP Series was developed using a piezoelectric pump design for highly inert applications. The small, lightweight pump weights only 17 grams. The pump is quiet and consumes very low power. The wetted materials are available in PTFE or PEEK with a designed flow rate of 15 ml/min. The APP piezo pump can be adjustable, self-priming, and the compact slim design is suitable for miniaturization applications.

Accessory/optional drive boards and controllers are available with voltage output of 50-340 Vp-p.

FEATURES

- Small-sized, lightweight and slim.
- Typical flow is 15 ml/min, which is adjustable by changing drive voltage or drive frequency.
- Low noise and low power consumption.
- Self-priming is possible.

DIMENSIONS (MM)



DRIVER BOARD MPD-200A

This driver board is a thin, compact and lightweight, yet high-voltage circuit board, designed for the piezoelectric micro pumps. From a regular 5 VDC input voltage, it can easily generate the high voltage supply of approximately 250 Vp-p, 40 Hz necessary for driving the micro pumps.



Item	Specifications
Input Voltage	5 VDC ± 5%
Output Frequency	1 ~ 60 Hz
Output Voltage	50 ~ 340 Vp-p
Number of Pumps Connectable	2 pieces (maximum)
External Dimensions	30 x 30 x 18 mm
Weight	approx. 9 g



SPECIFICATIONS

GENERAL

Model Number	APP-20KG
Pump Type	Piezoelectric Diaphragm Pump
Flow Rate	15 ml/min (typical)
Pump Pressure	25 kPa
Drive Voltage	60 ~ 250 Vp-p
Drive Frequency	10 ~ 60 Hz
Suction Load Pressure	~ 1.0 kPa
Operating Temperature	5 ~ 50 °C
Wetted Materials	PTFE, PEEK (polyether ether ketone) and Perfluoroelastomer
Outer Dimensions	33 × 33 × 9 mm
Weight	17 g
Input / Output Pipes	φ1.4 - φ2.8 - L5.0 mm

Note: Details including specifications may change without notification.

CONTROLLER MPC-200B

This is a compact and lightweight controller that can provide the high voltage power necessary for driving the micro pumps. It is user-friendly with a front panel digital display for configuring the output voltage and output frequency, and a memory function to store the latest setting used.



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TYGON® TUBING (ACCESSORY): Product Name Tygon 2375 (for use with methanol, water and most general uses) **Size:** I.D. 2.38 mm

Note : If the flow decreases with the above tubing, please use the larger size tubing. Tygon is a trademark of Saint-Gobain Performance Plastics.