

Ultrasonic Homogenizer VP-050N

Automatic tuning and easy operation. Various operation modes according to the condition of samples. Small hand-held type suitable for small-volume samples. For disruption of E. coli etc after expression of protein.



VP-050N with Stepped Micro Tip

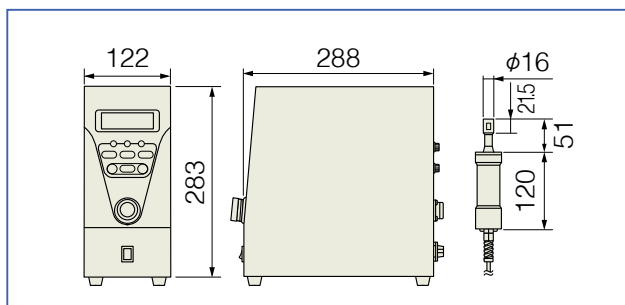
Automatic tuning and Operation mode

The automatic tuning before use is completed in about 5 seconds just pressing the button. Possible for Timer operation and Program interval operation. Equipped with PWM operation mode that automatically adjusts the output according to the viscosity change of the sample and POW operation mode that performs stable oscillation when the sample viscosity and temp. change are small.

Model	VP-050N
High frequency output	Maximum 50W
Transducer normal output	10 to 40W
Oscillation frequency range	19.5 to 20.5Hz
Turning	Automatically
Operation mode	PWM operation: Automatic output adjustment according to viscosity change of sample POW operation: Stable oscillation when change in viscosity or temp are small
Other functions	Timer operation (1sec to 120min) Programmed interval operation (ON: 3 to 60sec, OFF: 1 to 60sec)
Display	Real time output value %, Output value setting %, Output value when oscillation start (%), Oscillation frequency
Configuration	Main unit, Converter (Horn/Oscillation switch integrated)
Oscillation switch	Equipped in both Main unit and Converter (Optional foot switch can be used)
Dimensions	122 x 288 x 283mm
Weight	Approx. 4.5kg
Power supply	AC100 to 240V/1A

- Optional step type Micro Tip required for use.
- The chips for the former model VP-5S cannot be used.
- The chips for this model can be used in former model VP-5S.
- The chips for the former model VP-5 cannot be used.

Dimensions



Features

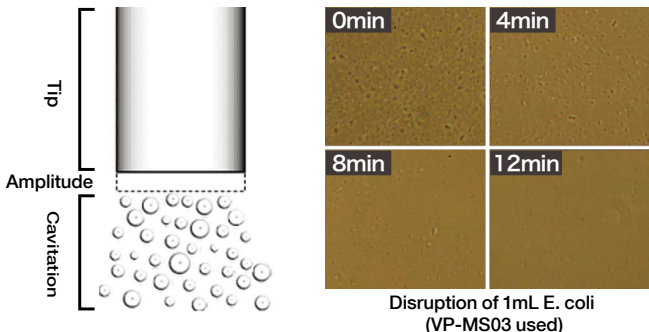
- Handy type for small volume. The throughput is 0.1 to 10mL
- Easy tuning completed in about 5 seconds
- Auto power operation to adjust output automatically during use

Applications

- Disruption and Solubilization of E. coli that protein expressed.
- Random fragmentation of Genomic DNA
- Homogenization and Emulsification of samples

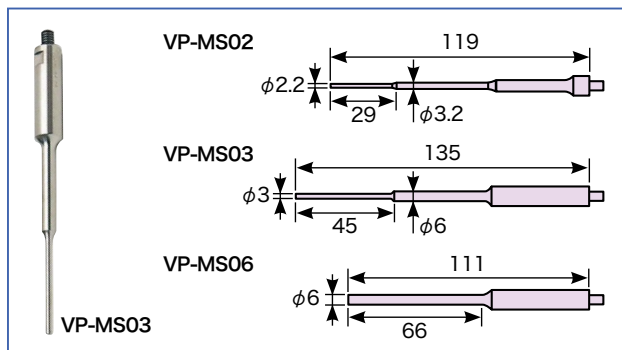
Sonication

The vibration of tip causes a cavitation of innumerable bubbles in the liquid to disrupt the object. The advantage is that the object can be disrupted uniformly. On the other hand, Intermittent operation or Ice-cooling of the sample is recommended as the sample might generates heat.



Disruption of 1mL E. coli (VP-MS03 used)

Optional accessories



Product Name/Model	Remarks
φ2mm Stepped Micro Tip VP-MS02	Throughput 0.1 to 10mL
φ3mm Stepped Micro Tip VP-MS03	Throughput 0.25 to 10mL
φ6mm Stepped Micro Tip VP-MS06	Throughput 2 to 10mL
Foot switch VP-FS01	Compatible with VP-300N

(*) Microtubes (0.5/1.5/2.0 ml) can be used with φ2mm and φ3mm.

• Each material of Chip is Titanium. Replace Chips if necessary due to the consumable.

• Compatible with Former models (VP-5S/15S/30S/60S). Confirm Chips that can be used in the instruction manual.