

## [original Japan vibration viscometer for lab](#)



- Visco Mate series is a vibration type viscometer which can measure the viscosity quickly and easily at tabletop, in the control room and laboratory.
- The sample—as small as 1ml depending on the condition—can be measured only by immersion in liquid detection terminal, in any container.
- It is easy to wash by wiping only the detection terminal.
- Based on the technology of piezoelectric ceramics, ceramics device is used for angular acceleration detection and driving source.
- It is a viscometer that anyone can handle small that utilizes the resonance phenomenon.



- Due to wetted parts detection terminal is very small, It can measure very small sample.
- Due to the use of the resonance phenomenon, it can measure at high-accuracy with high resolution.
- Measurement time is very short.
- Good repeatability



- R&D of various liquids.
- Sampling inspection in production line.
- R&D of medicine and pathology.



- When it is immersed in a liquid detection terminal using the piezoelectric ceramic as a driving source of the vibration is attenuated in proportion to the viscosity.
- It detects the change of the vibration by the acceleration sensor and displays it as a viscosity value.
- It vibrates in the rotational direction so that the resonance state at a fixed frequency detection terminal using a piezoelectric ceramic actuator, and is immersed in the liquid in the tip (detection terminal) Viscometer captures the change of the amplitude of the vibration by the magnitude of the fluid viscosity as a change of the angular acceleration of a piezoelectric type acceleration sensor. The measured value is converted into an electrical signal.
- In the mechanism of our own, there is no other way to use. The measuring the viscosity using a resonance phenomenon in rotational vibration (torsional vibration) by the piezoelectric ceramics as a driving source is our original mechanism. (Patented)



It is a [Vibration viscometer](#) of the most generic types. It measures simply by immersion in liquid detection terminal and measures from the small amount of liquid about 3~5ml, therefore it does not choose the container. Cleaning is very easy. It needs only wipe the detection terminal, It can record and storage data to the PC by data communication software.

TYPE	VM-10A		
Measuring Method	Torsional Oscillation		
Measuring Range	L		0.40[1,000 mPa.s
	M		10[5,000 mPa.s
	MH		0.50[30.0 Pa.s
	H		10[500 Pa.s
Accuracy	±5%(Reading) *Note 1		
Repeatability	±2%(Reading) *Note 1		
Temperature Range	No thermometer		
Calibrating method	Calibration with Standard Liquids for Calibrating Viscometers(JIS Z8809-2011)		
Display viscosity	3-digit display (Without decimal point)		
System requirements	10[40°C, 20[80%RH(Non condensation)		
Analog output	No analog output		
Digital output	RS-232C interface output		
Power AC adapter	Output DC9V 2600mA Input AC100[240V 50 / 60Hz 0.6A AC Adapter, DC 6[9V		
Weight and Dimensions	Probe	PR-10	36 × 220 × 170 [mm] [About 0.6kg
	Controller	VM-10	W110 × H190 × D230 [mm] [About 1.2kg
Components	Connecting Cable		
	Stand for measurement		
	AC adapter[UIA324-09]		
	Carrying case		
	Instruction Manual		

\*Note 1 Room temp, liquid temp, 23±3°C, stirred well