

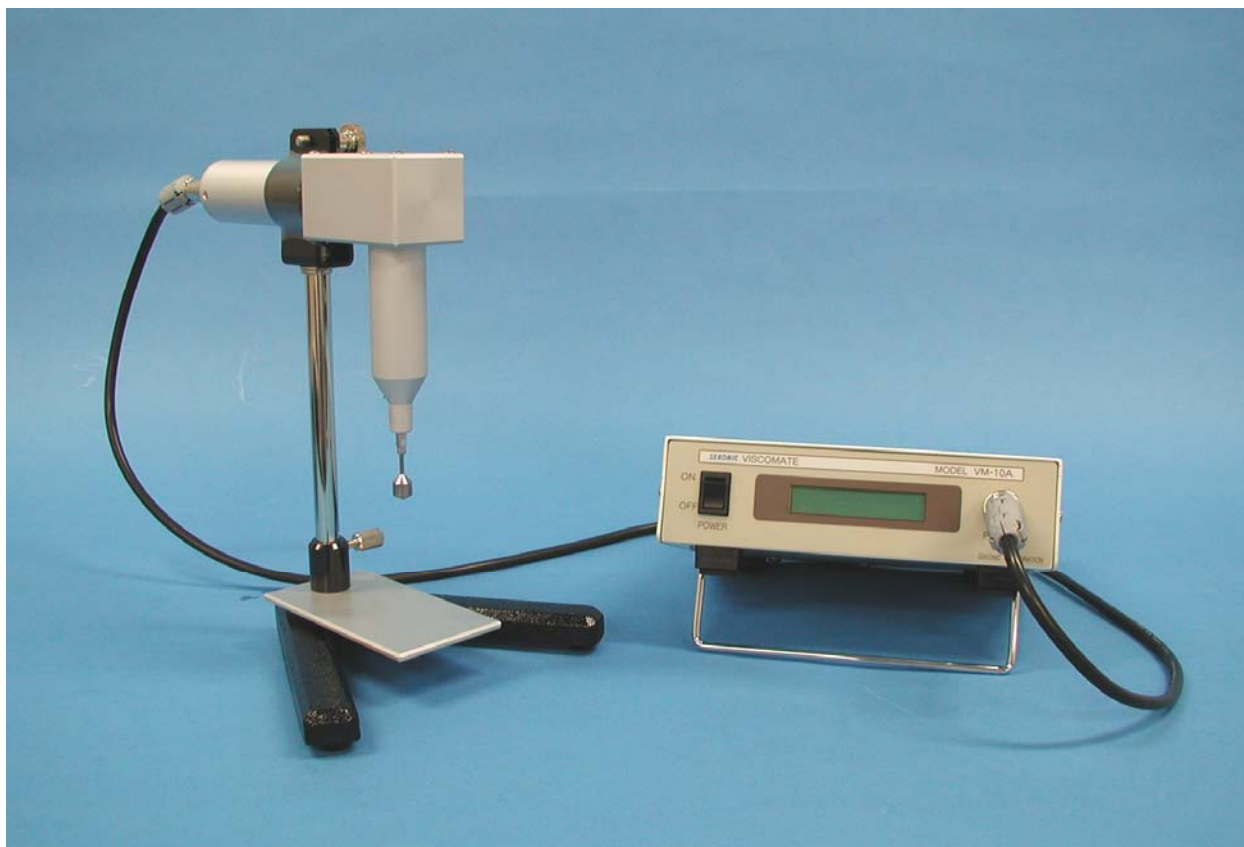
SEKONIC

Patented overseas and domestically in Japan

Lab-type Torsional
Oscillation-type Viscometer
VM-10A/100A Series

“Torsional Oscillation-type viscometer” has been specified in JIS.

(JIS Z 8803:2011, “Methods for viscosity measurement of liquid” amended in May 2011)^{*1}



Viscometer easy to use, our unique technology

- 1. Easy measurement**
For measurement, just submerge the tip (probe) into liquid.
- 2. Measurement of a minimal amount**
A minimum amount of 2 to 3 ml is sufficient for measurement with some ingenuity applied on a container.
- 3. Easy to clean**
What is necessary for the next measurement is only wiping off liquid attached around the probe.
- 4. Virtually any container accepted**
As viscosity of a minimal amount of liquid around the probe is measured, virtually no constraint exists on the size and shape of a container.



Measurement in a 10 mL beaker

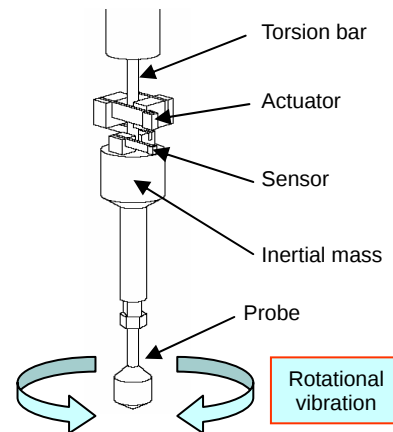
Torsional Oscillation-type Viscometer VM-10A/100A Series

< Features >

1. Submerging the probe in liquid is only required for measurement.
2. The sample of liquid in a minimal amount enables highly accurate measurement of viscosity!
3. Easy to clean: Only wipe off liquid attached around the probe!
4. No constraint exists on the size and shape of a container.
5. Measurement disregards the existence/nonexistence of flow.
6. Appended software enables easy analysis of data imported into a personal computer!
7. The customer can carry out calibration.
(Comparison calibration by using the standard liquid for viscometer calibration as specified in JIS Z 8809)
8. Superior corrosion resistance is assured because of titanium used for the probe, enabling measurement of almost all types of liquid.

* VM-10A/100A Series is subject to calibration in accordance with JCSS.

Operation principle



VM-10A Series



VM-100A Series



Model	VM-10A-L	VM-10A-M	VM-10A-MH	VM-10A-H	VM-100A-L	VM-100A-M	VM-100A-H
Measuring method	0.4-1,000 mPa.s	10-5,000 Pa.s	0.5-30.0 Pa.s	10-500 Pa.s	0.4-1,000 mPa.s	100-10,000 mPa.s	5.0-500 Pa.s
Measuring accuracy	±5% (Reading) (*2)						
Repeatability	±2% (Reading) (*2)						
Temperature range	-				-20 to 100°C		
Viscosity calibration	Comparison calibration using the standard liquid for viscometer calibration (JIS Z 8809)						
Viscosity display	LCD 3-digit display (excluding the decimal point)						
Temperature display	-				LCD 3-digit display (excluding the decimal point)		
Use environment	10 to 40°C, 20 to 80%RH (No dew condensation allowed except the wetted part)						
Analog output	-				0 to 5 VDC corresponding to the full scale of viscosity and temperature		
Digital output	RS232C interface output						
Power source	AC adapter (input: 100 to 240 VAC, 50/60 Hz; output: 9 VDC, 2600 mA)						
Dimensions and mass	Probe: H150 × W38 × D180, approx. 0.7 kg Controller: H70 × W195 × D175, approx. 1.2 kg				Probe: H170 × W36 × D190, approx. 0.7 kg Controller: H110 × W190 × D230, approx. 1.7 kg		
Options	Connection cable, dedicated stand, AC adapter, power cord, carrying case, operating manual, and communications software (CD)						

*1: We idiomatically use the conventional nomenclature of "***-type viscometer" such as "torsional oscillation-type viscometer," even though the expression of "capillary viscometer" or "rotational viscometer" is specified to use after the amendment of JIS in May 2011.

*2: Measurement conditions: Measured while stirring with a stirrer at liquid temperature of $23 \pm 3^\circ\text{C}$ under the room temperature environment by using the standard liquid for viscosity calibration as specified in JIS Z 8809

SEKONIC

Certified for
ISO 9001 and
ISO 14001

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Precautions regarding safety

Be sure to thoroughly read the operating manual before properly using the product.

- * Note for use of this catalog
- The content of this catalog is subject to change without prior notice for improvement or other reasons.
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Recycled paper is used.

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