



The Revolutionary Viscometer

## How it works

## Principle

A full measurement routine takes as little as 1 minute, and is easy to do.



1 Load the sample into the disposable positive displacement pipette.

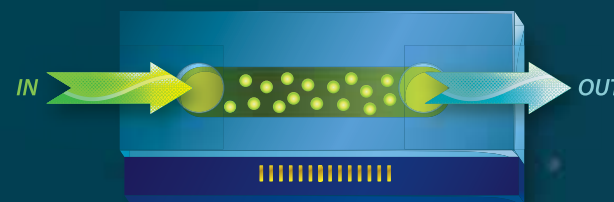


2 Mount the pipette.



3 Push the RUN button.

VROC® (Viscometer-Rheometer-on-a-Chip) is the only MEMS microfluidic chip-based viscometry technology in the world. The operating principle of this technology is well-known for its simplicity and accuracy in the field of rheology, and is described in most rheology textbooks. Utilizing this principle, VROC® technology requires a much smaller sample volume than traditional methods, and provides accurate viscosity measurements for a wide range of applications.



*VROC your sample!  
See the difference!!*



μVISC™, pronounced "micro visk", is powered with VROC® (Viscometer/Rheometer-On-a-Chip) technology making your routine viscosity measurement easier and more reliable; perfect for quality control

• See it done! Go to: [www.youtube.com/user/rheosense](http://www.youtube.com/user/rheosense)

### Accuracy and repeatability

Accuracy exceeds 1% of Full Scale or 2% of the reading. Repeatability is within 1%. Test liquid is fully enclosed, preventing evaporation during measurement, and thus eliminating a major source of uncertainty.

### No need to clean

For routine viscosity measurement of the same family of liquids, lengthy cleaning is no longer needed. Simply load the new sample with a new pipette and run the test.

### Fast results, user-friendly interface

Loading is quick and easy, and results are displayed in less than a minute for most samples. Multiple operational modes assist any user, whether beginner or advanced.

### Portable

The rechargeable battery-powered system weighs only 1.5 lbs.



## Specification

Accuracy	1% of Full Scale or 2% of reading, whichever is smaller	
Repeatability	1%	
Flow rate, $\mu\text{L}/\text{min}$	0.5 – 450	
Temperature range, $^{\circ}\text{C}$	18 – 40*	
Temperature accuracy, $^{\circ}\text{C}$	0.15	
Battery life	100 measurements per charge, battery low indicator**	
Power	8VDC	
Pipette volume	400 $\mu\text{L}$	
Available sensor cartridges	HA01-01	HB02-01
Flow channel depth, $\mu\text{m}$	50	100
Accessible shear rate range, 1/s	6.5 – 5,850	1.7 – 1,453
Viscosity range, mPa-s	0.2 – 100	60 – 5,000

*Note:*

- Calibration of the sensor is recommended after 6 months. Certification service is available.
- Contact Rheosense for availability of sensor cartridges for testing samples with higher viscosities than indicated in specifications.

\* Contact Rheosense for applications outside this range.

\*\* Use only the supplied adaptor.

## Applications

$\mu\text{VISC}^{\text{TM}}$  can be an integral part of manufacturing and quality control for:

- biopharma
- inks
- lubricants
- coatings
- paints
- oils
- polymers

...and many more

 **RHEOSENSE, INC.**

2678 Bishop Drive, Suite 270, San Ramon, CA 94583  
Phone: 925-866-3801, Fax: 925-866-3804; Web: [www.rheosense.com](http://www.rheosense.com), Email: [info@rheosense.com](mailto:info@rheosense.com)