

# HIGH-TEMPERATURE VISCOMETER



## Product | Introduction

RVT-40M-F300 high-temperature viscometer is an upgraded product of our company's digital viscometer.

High-temperature viscometer adopts more advanced mechanical design technology, manufacturing process, and microcomputer control technology, with accurate data acquisition and a high-resolution TFT display screen for clear data display and more comprehensive functions.

High-temperature viscometer features high measurement sensitivity, reliable test results, easy operation, and an elegant appearance. It is a precision instrument used to measure the absolute viscosity of Newtonian fluids and the apparent relative viscosity of non-Newtonian fluids. It can be widely used in hot melt adhesives, asphalt, paraffin, high polymers, and other products.

## Product | Features

- High-temperature viscometer has the characteristics of high measurement sensitivity, reliable test results, easy operation, and elegant appearance. It is a precision instrument used to measure the absolute viscosity of Newtonian liquids and the apparent relative viscosity of non-Newtonian liquids. It can be widely used in products such as oils, paints, plastics, medicines, foods, coatings, adhesives, viscometers, resins, and chemical raw materials.
- High-temperature viscometer is a high-temperature digital viscometer. The motor drives the rotor to rotate at a constant speed through a variable speed belt. When the rotor rotates in the liquid, the liquid will produce a viscosity torque acting on the rotor. The greater the viscosity of the liquid, the greater the viscous torque; conversely, the smaller the viscosity of the liquid, the smaller the viscous torque. The viscous torque acting on the rotor is detected by a sensor, and the viscosity of the tested liquid is calculated after being processed by a computer.
- It is equipped with 4 types of rotors (R21, R27, R28, R29) and two variable speed modes: infinitely variable speed and fixed speed. The fixed speed mode has 10 speed levels (0.5, 1, 2, 2.5, 4, 5, 10, 20, 50, 100 rpm), which form 40 combinations that can measure the viscosity values of various liquids within the measurement range. It is also equipped with a temperature measurement device, which can directly display the temperature on the screen, allowing the observation of the viscosity change caused by temperature variation.
- Can display shear rate and shear stress.
- Viscosity value is displayed continuously, and an alarm will sound when it exceeds the measurement range.
- The high-temperature furnace uses a ceramic inner liner for overall heating, ensuring uniform heating and good thermal stability.

## Application | Range

LVT Series: Suitable for low viscosity materials, can measure the thinnest materials. Typical examples include: ink, oil, and solvents.

RVT Series: Suitable for medium viscosity materials with viscosity higher than those measured by LV torque. Typical examples include: cheese, food, and paint.

HAT Series: Suitable for higher viscosity materials with viscosity higher than those measured by RV torque. Typical examples include: gelling agents, chocolate, and epoxy resins. (Not currently available)

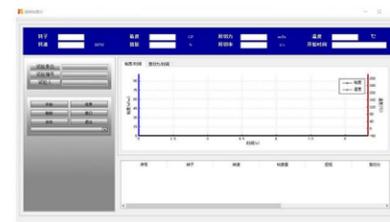
## Application | Parameters

Rotor	volume	LVT-6M-F300	RVT-40M-F300	HAT-80M-F300
21 #	7.1ml	24.00~46.90K cp	250~500K cp	500~1000K cp
27 #	10.4ml	117~234K cp	1250~2.5M cp	2500~5.0M cp
28 #	11ml	234~469K cp	2500~5.00M cp	5000~10M cp
29 #	13.5ml	469~937K cp	5000~10M cp	10000~20M cp



### \*Common viscosity unit conversion:

1cp=1mPa.s    100cp=1p    1000mPa.s=1Pa.s    10dPa.s=1Pa.s    1Pa.s=1000cp=1000mPa.s=10P=10dPa.s



**Standard I Rotor**

**Rotor**

No.21

No.27

No.28

No.29



**Technical I Parameters**

Model	LVT-6M-300F	RVT-40M-300F	HAT-80M-300F
Measurement Range:	5~1M cp	50~40M cp	400~80M cp
Temperature Measurement Display:	Available		
Viscosity-Temperature Curve:	Can output viscosity-temperature-time curve		
Rotor Specifications:	Rotor No. 21, 27, 28, 29, one of each		
Rotor Speed:	0.1-200 RPM, stepless speed regulation		
Sample Capacity:	10~20 ml		
Operation Interface Selection:	Chinese/English		
Shear Force Display:	Available		
Shear Rate Display:	Available		
Communication/Printing:	For computer interface connection with LAWSONSO software and printer output		
Directly Set Timing Measurement Function:	can set the time to reach the specified torque, stop time		
Measurement Accuracy:	+1% (Newtonian fluid)		
Repeatability:	0.2% of full scale (FS) (Newtonian fluid)		
Display Information:	Viscosity (cP or mPa · s) Temperature (°C) (temperature probe included) Speed (RPM) Time Rotor used		
Temperature Range/Temperature Accuracy:	Room temperature +10~ 300°C / ±0.1°C		
Operating Environment:	Temperature 5°C~35°C, relative humidity no more than 80%		
Dimensions:	370*325*280 mm		
Power Supply:	AC 220V ±10% 50Hz ±10%		
Net Weight:	9.2 kg		