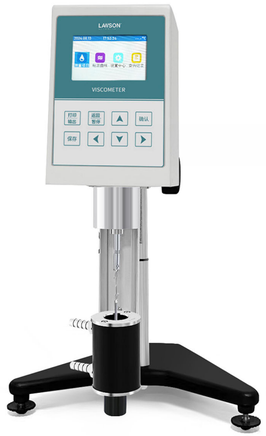
ROTATIONAL VISCOMETER



LAWSON_Chou
WhatsApp

Product I Introduction

Viscometer is an upgraded product of our company's digital viscometer. This instrument adopts more advanced mechanical design technology, manufacturing process and microcomputer control technology, with correct data acquisition. The display adopts a high-resolution TFT display screen, and the data is displayed clearly with more comprehensive functions.

Viscometer has the characteristics of high measurement sensitivity, reliable test results, easy operation, and beautiful 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 products such as fats, paints, plastics, pharmaceuticals, food, coatings, adhesives, viscometers, resins, and chemical raw materials.

Product I Features

○ Viscometer has 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, pharmaceuticals, foods, coatings, adhesives, viscometers, resins, and chemical raw materials.

○ Viscometer is a digital viscosity meter. 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 generates a viscosity torque on the rotor. The greater the viscosity of the liquid, the greater the viscosity torque; conversely, the smaller the viscosity of the liquid, the smaller the viscosity torque. The viscosity torque acting on the rotor is detected by a sensor, and the viscosity of the measured liquid is obtained after being processed by a computer. It comes with 6 rotors (R2, R3, R4, R5, R6, R7) and two variable speed modes: infinitely variable speed and fixed speed. The fixed speed has 10 speed levels (0.5, 1, 2, 2.5, 4, 5, 10, 20, 50, 100 rpm), which form 60 combinations that can measure the viscosity values of various liquids within the measurement range. It also comes with a temperature measurement device, which directly displays the temperature on the screen and allows the user to observe the viscosity changes caused by temperature changes.

Shear force and shear rate can only be displayed when the 0# rotor and small sample adapter are selected.

Application I 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.

HBT Series: Suitable for even higher viscosity materials with viscosity higher than those measured by HA torque. Typical examples include: asphalt, joint compounds, and molasses.

Application I Parameters

Small adapter	Volume	LVT-6M	RVT-40M	HBT-320M
14#	2.1ml	586～1.2M cp	6250～12.5M cp	50000～100M cp
18#	6.7ml	15.00～30.00K cp	160～320K cp	1280～2560K cp
21#	7.1ml	24.00～46.90K cp	250～500K cp	2000～4000K cp
27#	10.4ml	117～234K cp	1250～2.5M cp	10000～20M cp
28#	11ml	234～469K cp	2500～5.00M cp	20000～40M cp
29#	13.5ml	469～937K cp	5000～10M cp	40000～80M cp
0#	1～15 cp	1～15 cp	1～15 cp	1～15 cp

*Viscosity unit conversion：

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

ROTATIONAL VISCOMETER

LV Series Viscometer（cp） I Range Datat

Remarks：K=1000 M=100万

Speed	No.1	No.2	No.3	No.4
0.3	20K	100K	400K	2M
0.6	10K	50K	200K	1M
1.5	4K	20K	80K	400K
3	2K	10K	40K	200K
6	1K	5K	20K	100K
12	500	2.5K	10K	50K
30	200	1K	4K	20K
60	100	500	2K	10K

RV Series Viscometer（cp） I Range Datat

Remarks：K=1000 M=100万

Speed	R1*	R2	R3	R4	R5	R6	R7
0.5	20K	80K	200K	400K	800K	2M	8M
1	10K	40K	100K	200K	400K	1M	4M
2	5K	20K	50K	100K	200K	500K	2M
2.5	4K	16K	40K	80K	160K	400K	1.6M
4	2.5K	10K	25K	50K	100K	250K	1M
5	2K	8K	20K	40K	80K	200K	800K
10	1K	4K	10K	20K	40K	100K	400K
20	500	2K	5K	10K	20K	50K	200K
50	200	800	2K	4K	8K	20K	80K
100	100	400	1K	2K	4K	10K	40K

Technical I Parameters

Model	LVT-6M	RVT-40M	HBT-320M
Measurement range:	10-6000000 mPas	10-40000000 mPas	10-320000000 mPas
Temperature display:	Available		
Viscosity-temperature curve:	Output of viscosity-temperature time curve available		
Rotor specifications:	Rotors 1-4	Rotors R2-R7	Rotors R2-R7
Rotor speed:	0.1-200 rpm stepless speed regulation		
Automatic gear:	Able to automatically select the appropriate rotor number and speed		
Operating interface selection:	Chinese/English		
Shear force display:	Available (only for small amount adapter and rotor 0)		
Shear rate display:	Available (only for small amount adapter and rotor 0)		
Communication/Printing:	Connected with computer interface and LAWSONSQ software and printer output		
Timer function directly settable:	Able to set the time to reach the specified torque, stop time (or measure based on the lastsaved parameter settings)		
Measurement accuracy:	+1%(Newtonian liquid)		
Repeatability:	+0.2% full scale		
Display Information:	Viscosity (cP or mPa・s) Temperature (°C)(Temperature probe included) Rotational speed (RPM) Time Rotor used		
Working Environment:	Temperature:5'C~35'C, Relative humidity: not more than 80%		
Dimensions:	370*325*280mm		
Power Supply:	AC 220V+10% 50Hz+10%		
Net Weight:	7.2kg		