

# elcometer® 2300 Rotational Viscometers

Can be used in accordance with:  
**ISO 2555, ISO 2884,  
 ASTM D 1296, ASTM D 4287, BS 3900 A7**



The Elcometer 2300 Rotational Viscometer range measures the viscosity of liquids in accordance with several standards. Using a rotational viscometer, the properties of liquids and their resistance to shear or flow can be accurately measured.

Available in four model variants, with a large selection of speeds, spindles and accessories, this range ensures determining the viscosity of liquids has never been easier.

## Features

- **Accurate, easy to use and reliable:**
  - Easy to use control panel.
- **Clear, backlit LCD display:**
  - Shows viscosity reading in cP or mPa, spindle rotation speed, % torque, sample temperature, auto range, shear rate and shear stress:
- **Quick connect spindles:**
  - Rapid and simple attachment to any of the Elcometer 2300 rotational viscometers.
- **Selectable speeds:**
  - Provides a wide range of viscosity and shear rate measurements.
- **Wide range of spindles and accessories:**
  - Versatile viscometer can test any liquid.
- **RS232 interface:**
  - Allows for data download and complete control of spindle speed via PC on RV2 models.
- **Temperature probe:**
  - Directly measure sample temperature.
- **ViscosityMaster™ Software:**
  - Powerful yet easy to use software specifically designed to maximise the versatility of the viscometer. Stores data along side associated photographs, test notes and any other information.

## Rotational viscometers & other viscosity products

Rotational Viscometers and Cone & Plate are used to gather data on a material's viscosity behaviour under different conditions. They are ideal for determining viscosity of liquids which do not depend solely on temperature & pressure.

Flow cups and dip cups - Frikmar, Zahn, Shell etc.- measure viscosity using the process of flow through an orifice. This is used as a relative measurement & classification of viscosity. This kinematic viscosity is expressed in seconds of flow time which can be converted into Centistokes.

Elcometer offer the most comprehensive range of flow cups, dip cups, cone & plate and rotational viscometers to meet your viscosity requirements.

## Technical Specifications

	Elcometer 2300 RV1-L	Elcometer 2300 RV1-R	Elcometer 2300 RV2-L	Elcometer 2300 RV2-R
Low to medium viscosity	•		•	
Medium to high viscosity		•		•
Backlit LCD	•	•	•	•
Readings (cP & mPa)	•	•	•	•
Sample temperature measurement	•	•	•	•
Measuring range	3 - 2,000,000mPa	20 - 13,000,000mPa	3 - 2,000,000mPa	20 - 13,000,000mPa
Accuracy of full scale	±1%	±1%	±1%	±1%
Max. altitude above sea level	2000m	2000m	2000m	2000m
Surge Class II	•	•	•	•
Contamination level 2	•	•	•	•
Operating voltage	EUR 220VAC 50Hz			
Speeds	0.3, 0.5, 0.6, 1, 1.5, 2, 2.5, 3, 4, 5, 6, 10, 12, 20, 30, 50, 60, 100, 200			
Speed accuracy	< 0.5 of the absolute value			
Thermometer	Range	-15°C to +180°C		
	Resolution	0.1°C		
	Accuracy	± 0.1°C		
Power consumption	23W			
Dimensions (of carry case)	495 x 420 x 200mm			
Weight (including carry case)	9kg			

## Shipping List

All 4 models are packed in a portable, hard carry case and contain: Viscometer head, column with head mounting bracket, base, box spanner tool, spindle guard, power supply cable, storage rack, PT100 temperature probe, operating instructions.

In addition the following items are also supplied:

<b>Elcometer 2300 RV1-L:</b>	Spindles L1 to L4, RS232 connection cable & ViscosityMaster™ software for data transfer from viscometer to PC only.
<b>Elcometer 2300 RV1-R:</b>	Spindles R2 to R7, RS232 connection cable & ViscosityMaster™ software for data transfer from viscometer to PC only.
<b>Elcometer 2300 RV2-L:</b>	Spindles L1 to L4, RS232 connection cable & ViscosityMaster™ software for bi-lateral data transfer between viscometer and PC.
<b>Elcometer 2300 RV2-R:</b>	Spindles R2 to R7, RS232 connection cable & ViscosityMaster™ software for bi-lateral data transfer between viscometer and PC.

## Part Numbers

Model	Description	Part Number
Elcometer 2300 RV1-L	Manually controlled rotational viscometer ideal for low to medium viscosity testing	K0002300M101
Elcometer 2300 RV1-R	Manually controlled rotational viscometer ideal for medium to high viscosity testing	K0002300M102
Elcometer 2300 RV2-L	PC controlled rotational viscometer ideal for low to medium viscosity testing	K0002300M201
Elcometer 2300 RV2-R	PC controlled rotational viscometer ideal for medium to high viscosity testing	K0002300M202
<b>Accessories</b>	Additional set of standard spindles L1 - L4 for use with Elcometer 2300 RV1-L and RV2-L	KT00230019698
	Additional set of standard spindles R2 - R7 for use with Elcometer 2300 RV1-R and RV2-R	KT00230019699
	Large spindle for low viscosity testing	KT00230019700
	Adapter kit for small samples (small volume spindle set required)	KT00230019702
	Adapter kit for small samples with integrated temperature sensor (small volume spindle set required)	KT00230019784
	Spindle set includes TL5, TL6 and TL7	KT00230019703
	Spindle set includes TR8, TR9, TR10 & TR11	KT00230019704
	Adapter kit for low viscosity samples supplied complete with spindle	KT00230019710
	Adapter kit for high temperature, low viscosity samples supplied complete with spindle	KT00230019711
	Helical movement adapter complete with motor and 6 T-shaped spindles	KT00230019706