



RHEOMETER RC20

**ENSURING QUALITY
AND DEVELOPMENT**



Rheometer RC20



Measuring Equipment RC20



The Rheometer RC20 is a rotational viscometer (Searle principle) for quality control and for the development of techniques and products in the laboratory. The highly dynamic measuring drive system enables rotational tests with controlled shear rate and controlled shear stress (CSR and CSS).

SPECIAL FEATURES

- microprocessor-controlled measuring device for mains power operation
- torque overload protection
- PC controlled measuring by using user-software RHEO2000 for graphical data-presentation and regression
- user-friendly, dust proof keyboard for manual use
- integrated alphanumeric display (4 lines) for optional displaying of 4 current parameters of viscosity, shear rate, shear stress, speed, torque, temperature
- data buffering in the RAM, storage of measuring data with and measuring-count for up to 10 measurements with up to 4800 data-points
- assortment of measuring systems and attachments

OPTIONAL TEST MODE

- CSR - rotational test with **controlled shear rate (manually and via personal computer)**
Shear rate levels and ramp-functions with defined speeds or shear rates
- CSS - rotational test with **controlled shear stress (manually and via personal computer)**
Shear stress levels and ramp-functions with defined torque or shear stress
- Creep test

MEASURABLE AND EVALUABLE QUANTITIES

Viscosity
Shear Rate
Shear Stress
Speed
Torque
Temperature
Time

TECHNICAL DATA

Torque range mains power	50 mNm
Torque resolution	0.01 mNm
Angle resolution	0.8 mrad
Speed range	0.7 to 800 min ⁻¹
Viscosity rate range mains power*	10 ⁻⁵ to 3 x 10 ³ Pa s
Shear rate range*	0.9 to 4 x 10 ⁵ s ⁻¹
Shear stress range mains power*	0.7 to 3.4 x 10 ⁴ Pa
Accuracy	± 1 % of maximum value
Temperature range	-20 °C to 180 °C
Temperature measuring	Pt 100 1/3 DIN
Power supply	100 to 240 V Alternating current, 20 W

* dependent on measuring system used

ATTACHMENTS

- Thermostatic device for cylinder measuring systems
- Resistance thermometer Pt 100
- Standard cylinder measuring systems (DIN 53019), also as one-way measuring systems
- Double-gap measuring systems (DIN 54453)
- Optional measuring device for cone/plate and plate/plate measuring systems
- Peltier-thermostatic device for cone/plate and plate/plate measuring systems
- Vertically adjustable stand

ADDITIONAL EQUIPMENT

Personal Computer/Printer
Liquid thermostat
Normal and Calibrating liquid

rheotec

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