



# Rheomat R 140

The well-established  
viscometer for fast and  
reliable determination  
of viscosity

### USER ORIENTED

Reduction on the essential without renouncement of quality or flexibility. These were the premises for developing the Rheomat R140. This guideline was completely achieved. The enormous precision in viscosity measurement at this unusually favorable price offers a never achieved price-performance ratio. The premise for developing the Rheomat R140 was to achieve an excellent value for money solution, without compromising performance or flexibility. This goal has been achieved in this unit, with all the major customer requirements being fulfilled, yet at an attractive price.

### DURABLE

The Rheomat R140 is protected inside a rugged instrument housing that stands up to the demands of everyday usage. In addition to this, the Rheomat R140 uses an integrated grip built right into the housing for ease of use.

### MEASUREMENT

Taking a measurement starts by entering the measuring system, the desired rotational speed and simply pressing the „point“ key. The bob rotational speed can also be changed during measurement thus allowing the detection of changing of viscosity with time as well as change due to different rotational speeds.



### OVERVIEW

The following values are displayed and continuously updated:

- Temperature
- Measurement System Number
- Torque and shear rate
- Rotational speed and shear stress
- Viscosity

### SAFE TO HANDLE

A clear dialog guides you through the necessary input options. The buttons marked „Manual“, „Automatic“, „Printer“ and „PC“ start the respective functions directly.

### FIELD-PROVEN

The R140 uses an integrated grip built right into the housing for ease of use.

### MEMORY

The integrated memory has a separate lithium battery that stores your preset/last used configurations, i.e. the last used measuring system, rotational speed and language. As a result, repeated routine measurements without new settings becomes simple.

- Switch on Rheomat R 140 ...
- Start measurement ...
- Confirm defaults ...
- Read measured value ...
- Complete!

### BATTERY OPERATION

The built-in rechargeable battery allows flexible use of the instrument, even without a power supply at hand.

### PRACTICAL

The R140 is supplied with all accessories in a carrying case, making it quickly ready for use anywhere.



#### R140 DIMENSIONS

Weight: 2,35 kg

Dimension: 100 x 300 x 135 (W x H x D/mm)

#### INSTRUMENT OPERATIONAL INFORMATION

The equipment may be stored and operated in an environment from -20 to 60 °C.

#### VOLTAGE

with power supply:

100 to 250 V AC with 50/60 Hz, 1.0 A



#### TORQUE

0,25 to 10 mNm +/- 0,01 mNm

#### ROTATIONAL SPEED

5 to 1000 rpm +/- 1 rpm

#### MEASURING SYSTEMS

11 predefined measuring systems

99 programmable measuring systems

#### MEASUREMENT RANGE

Viscosity: 0,002 Pas to 10.000 Pas

according to measurement systems.

Shear range: 0,8 s<sup>-1</sup> to 3.000 s<sup>-1</sup>

#### TEMPERATURE OF SAMPLE

-9,9 to 99,9 °C +/- 0,1 °C

100 to 120 °C: +/- 1,0 °C

|                                 | Measurement systems                    | Measurement tube Ø mm                     | Measurement bob Ø mm         | Viscosity (Pas)min.   | Viscosity (Pas)max.                                 | filling volume (ml)                            |
|---------------------------------|--|---|------------------------------|---|---|--|
| <b>DIN 53018/<br/>DIN 53019</b> | 11<br>22<br>33                         | 32,54<br>26,03<br>15,18                   | 30<br>24<br>14               | 0,005<br>0,010<br>0,050                                     | 19<br>38<br>191                                     | ca. 24<br>ca. 16<br>ca. 9                      |
| <b>Relative systems</b>         | 19<br>12<br>13<br>23<br>14             | 32,54<br>32,54<br>32,54<br>26,03<br>32,54 | 31,5<br>24<br>14<br>14<br>14 | 0,002<br>0,027<br>0,210<br>0,240<br>0,545                   | 7<br>104<br>800<br>906<br>2.080                     | ca. 20<br>ca. 18<br>ca. 26<br>ca. 18<br>ca. 26 |
| <b>Special relative systems</b> | 71<br>71<br>73<br>74<br>75             |   |                              | 0,003<br>0,027<br>0,160<br>0,665<br>2,580                   | 10<br>104<br>605<br>2.530<br>9.800                  |  |
| <b>ISO 2555</b>                 | 61<br>62<br>63<br>64<br>65<br>66<br>67 |   |                              | 0,007<br>0,028<br>0,070<br>0,139<br>0,278<br>0,696<br>2,783 | 26<br>106<br>264<br>529<br>1.057<br>2.643<br>10.574 |  |