

## DYNAMIC VISCOSITY BY ROTATIONAL VISCOMETERS

STANDARDS: EN 13302 / ASTM D2196 / ASTM D44022 / AASHTO T316

**Test Method:** Determines the dynamic viscosity of a substance by the rotation of a specified spindle within the sample at the speed giving the maximum torque reading on the viscometer. The resulting torque reading is used to calculate the viscosity of the substance.

### B085-21

#### Rotational Viscometer High Performance

- Viscosity range: 20 - 40,000,000 cP in 126 ranges
- Rotational speed range: 0.1 - 200 rpm
- Accuracy:  $\pm 1\%$  of full scale
- Repeatability:  $\pm 0,2\%$
- Temperature range:  $-15^{\circ}\text{C}$  to  $+180^{\circ}\text{C}$
- Resolution  $0.1^{\circ}\text{C}$
- Precision:  $\pm 0.1^{\circ}\text{C}$
- **Temperature sensor PT 100 included**
- Touch key board with 5 keys
- Direct readout on graphic display
- Data displayed: Selected speed: rpm; Spindle used; Dynamic viscosity: mPas or cP; Full scale percentage: %; Sample temperature:  $^{\circ}\text{C}$  or  $^{\circ}\text{F}$ , Auto range to display viscosity limits
- This instrument determines both relative and absolute viscosity
- RS232 bi-directional interface
- Auto alarm in the case of the viscometer works out of the used spindle range
- Stainless steel spindles R2, R3, R4, R5, R6 and R7.

Supplied as a complete system in a very robust carrying case, including a complete set of standard spindles with storage rack (6 spindles) spindle guard and calibration certificate.

Power supply: 230V 50-60Hz 1ph  
 Dimensions: 530 x 430 x 280 mm  
 Weight: 11 kg approx.



**B085-21**



Stainless steel spindles R2, R3, R4, R5, R6 and R7 (included in B085-21)



**B085-21**  
with accessories in the carrying case

#### ACCESSORIES:

##### **B085-25**

##### BASIC SOFTWARE

The software allows downloading data directly from Viscometer. Measured values are shown in a chart and can be saved in Excel format for posterior evaluation.

##### **B085-26**

##### ADVANCED SOFTWARE

The software permits the remote control of the viscometer through PC. In addition, the software allows to program different analysis methods (processes) to obtain graphics and charts including test data. Results obtained can be displayed in graphics. Viscosity plots can be configured vs. different parameters.



**B085-29**

BATH WITH TEMPERATURE CONTROLLER UP TO 200°  
 Temperature range from 5°C to 200°C according to the specification of EN 13302, ASTM D2196 and AASHTO T316.  
 Complete with 12 liters tank and lid.  
 Power supply: 230V 50Hz 2060W  
 Dimensions: 500 x 400 x 500 mm  
 Weight: 12 kg

**B085-33**

TEMPERATURE CONTROL UNIT UP TO 300°C  
 Temperature range from 5°C to 300°C according to the specification of ASTM D4402, EN 13302 and AASHTO T316.  
 Complete with 50 stainless steel disposable chambers for samples.

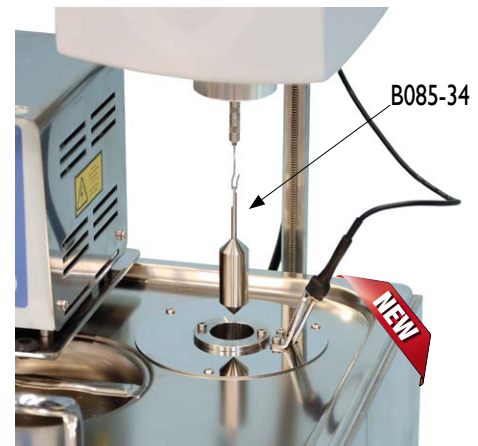
**The Viscometer B085-21 can be used in two different methods:**

**Method A:** B085-21 and B085-29 are needed

**Method B:** B085-21, B085-29 and accessories are needed



Method B



In order to perform test according to EN 13302 and ASTM D4402 (Method B) the following accessories are needed:

**B085-34** Spindle set (TR8, TR9, TR10 AND TR11)

**B085-35** Container for small sample volumes for spindle TR8 (int. dia. 25 mm)

**B085-36** Container for small sample volumes for spindle TR9, TR10, TR11 (int. dia. 19 mm)

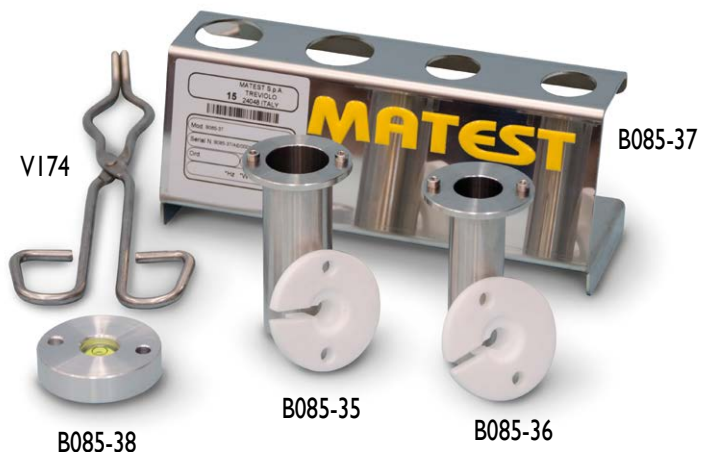
**B085-37** Containers' support

**B085-38** Circular level

**V174** Crucible tongs



B085-34



V174

B085-38

B085-35

B085-36

B085-37