

RHEOTEST Messgeräte Medingen

Serie RHEOTEST® LK



The patented capillary viscometer, serie RHEOTEST® LK, is successful used to a quick and precise viscosity control at low viscous measuring substances. Like showed in the pictures, three basic versions can be offered:

Basic version without temperature control jacket for measurements at f.e.:

- beer and wort
- milk, drink yoghurt
- inks, paints, slurries

viscosity fluctuations caused through temperature fluctuations near room temperature are corrected to a reference temperature through the electronic viscosity-temperature-compensation



Basic version with temperature control jacket around the measuring chamber (additional a double walled special cup with 30 ml aluminium measuring cups can be delivered) for measurement at f.e.:

- hydraulic oils and lubricating oils
- silicone solutions
- polymer solutions



PC-controlled, automated viscosity measuring place, (for laboratories with daily more than 15 measurements) consists of:

- basic version RHEOTEST® LK, without temperature control jacket
- sampler for 20 samples



User advantages:

- Saving of laboratory capacity, because
 - the measuring result is showed on display and is available at the serielle interface connection after only 25 seconds
 - the viscometer can be used direct in production rooms through its easy handling and its compact construction with stainless steel measuring systems
 - the measuring system can calibrated and cleaned very easy
- Simple operation with only 4 keys or by PC
- Already internal existing quality standards, based on other measuring methods can be used furthermore, because the RHEOTEST® LK can be calibrated easy and quickly to such other measuring values
- An additional temperature control unit can be saved, if viscosity measurement is realized near room temperature. The viscosity-temperature-compensation calculates exact viscosity values to a reference temperature in a temperature fluctuation range of appr. ± 5 K. On display are showed in mPas as well as the measured viscosity at actually temperature and the calculated viscosity at reference temperature
- For viscosity measurements in a temperature range of 0 to 80°C we offer the viscometer version with temperature control jacket to temperate the measuring chamber by using a separate thermostate. Additional a double walled special cup with one set of aluminium measuring cups for a sample volume of 30 ml can be delivered to temperate also sample and metal capillary
- Slurries or other samples with sedimentation properties can be measured with very well reproducibility, because our used difference pressure measuring method is not important influenced through sedimentation effects
- Number of measuring cycles and averaging are free selectable. Therefore the reproducibility of the measuring result can be yet increased
- The RHEOTEST® LK can be delivered as well as in „one point calibration“ or „two point calibration“. Especially in a measuring range up to 10 mPas we suggest a „two point calibration“ to increase yet the measuring accuracy
- At demand, the capillary viscometer can be controlled by a PC. In such case please order our special windows software for PC-controlled tests
- If there are daily more than 15 measurements we suggest to use our PC-controlled automated measurement work station with sampler for 20 samples

We offer also different types of process viscometers for a continously viscosity control during the manufacturing process. Detailed information as well as to our further viscometer and rheometer program and to our company you will find in our homepage with: www.rheotest.de

Selected technical data

- Viscosity measuring ranges:

Capillary 1	appr.	1	...	20	mPas
Capillary 2	appr.	5	...	100	mPas
Capillary 3	appr.	20	...	400	mPas
Capillary 4	appr.	100	...	2 000	mPas
Capillary 5	appr.	500	...	10 000	mPas
Special capillary 6, individual measuring range, f.e.:	appr.	1 to 3,	1 to 10,	5 to 35	mPas
- Relative error (% of limit value of partial measuring range): 2 %
- Reproducibility (% of limit value of partial measuring range): 1 %
- Temperature range of the measuring substance: - 10 ... + 80 °C
- Serielle interface connection: RS 232 for printer / PC
- Operating voltage (please ask for special voltage): 220 V ± 10%
- Operating frequency (please ask for special frequency): 50 / 60 cycles
- Dimensions: (length x depth x height): appr. 200 x 200 x 600 mm
- Weight: appr. 12.5 kg
- Necessary sample volume: appr. 25 ml

Delivery list

Ordering no.	Discription
Basic versions	
3051.1.00004	Basic unit with stand and Pt 100 (measuring chamber without temperature control jacket)
3051.1.00005 without	Basic unit with temperature control jacket, stand and Pt 100 PC-controlled measuring place with sampler, consists of: - Basic unit (version 3051.1.00004) - Capillary at request - Sampler - Disc with software for PC-controlled tests PC at special request
Measuring capillaries	
3051.2.12100	Capillary 1 (two-point-calibration)
3051.2.12200	Capillary 2 (one-point-calibration)
3051.2.12300	Capillary 3 (one-point-calibration)
3051.2.12400	Capillary 4 (one-point-calibration)
3051.2.12500	Capillary 5 (one-point-calibration)
3051.2.12600	Special capillary 6 (two-point-calibration)
Special accessories	
3051.6.80000	Double walled special cup incl.20 pieces measuring cups of aluminium (sample volume appr. 30 ml)
without	Thermostate at special request
3051.2.80000	Software, windows for PC-controlled tests
LE - 000 673	Printer cable D-Sub 25 / D-Sub 9