

TR Tester, ET 01

for determination of low temperature retraction



TR Tester, ET 01, for determination of low temperature characteristics by the temperature retraction procedure according to ISO 2921 and ASTM D-1329.

The Elastocon TR Tester, has 6 test stations, is computerized and performs the test automatically after the cooling media has been cooled down and the samples has been mounted. An automatic release of the samples, after the precooling period, is included.

The computer controls both the temperature rise and measures the length change of the samples. The results are displayed in a graph and TR_{10} , TR_{30} , TR_{50} and TR_{70} values are calculated. The result can also be presented as a table with length change versus temperature. The TR-values and the table values can be exported to other software such as spreadsheets.

As an extra option, an automatic cooling system with liquid Nitrogen can be supplied.

Technical Specification, TR Tester, ET 01

Temperature control

Temperature range, °C: -80 to + 30
Accuracy, °C: ± 0,5
Resolution, °C: ± 0,1
Sensor: PT 100, 1/3 DIN

Length measurement

Indicators 6 pc digital encoders
Resolution, mm: 0,04
Measuring range, mm: 0-150

Test rig

Rig material: stainless steel and aluminium
Specimen sizes, mm: 25 to 100
Max extension%: 250 (with 50 mm test piece)
Test stations: 6

Other specifications

Dimensions, external, w x h x d, mm: 575 x 1 100 (1 420)*x 400
Weight, kg: approx 40
Cooling liquid volume, l: about 8
Voltage, V: 220-240 VAC 50/60 Hz (alt 110-120 VAC)
Power, W: 600
Air supply, Bar: 4 - 5
Computer connection: COM-port (serial, RS 232C)

*Raised test rig

- The casing consists of steel, painted with epoxy paint.
- The rig is raised with the help of a pneumatic cylinder.
- Temperature controller with 0,1 °C setpoint and RS232 interface.
- Solid state relay for safe control.
- Temperature sensor close to the samples.
- Run-time meter.
- ET 011 Windows software for the TR-tester is included, a Pentium 133 with 64 MB RAM or better is required.

Options

ET 012 Automatic cooling by liquid Nitrogen

ET 013 Grips for O-rings (both whole and cut)

ELASTOCON reserve the right to modify this specification in part or in whole.

