

Gehman Tester, ET 02

for determination of the relative stiffness characteristics



Gehman Tester, ET 02 for determination of the relative stiffness characteristics of vulcanized or thermoplastic rubbers, also called the Gehman procedure. The test is done according to ISO 1432, ASTM D1053, or technical equivalent standards.

The Elastocon Gehman Tester, has 6 test stations, is computerized and performs the test automatically.

The computer controls both the temperature rise and measures the torsion angle of the samples. The results are displayed in a graph and RM_2 , RM_5 , RM_{10} and RM_{100} values are calculated. The result can also be presented as a table.

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

Technical specifikation, ET 02

Temperature control

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

Angle measurement

Indicators, no:	6 pc digital encoders
Resolution, °:	0,2
Measuring range, °:	0-182 ¹⁾

Test rig

Material:	Stainless steel and aluminium
Test stations:	6
Min/max test samples, mm:	1 x w x t, 40 ^{+2,5} x 3 ^{+0,2} x 2 ^{+0,2}

Other specifications

External size, w x h x d,mm:	575 x 1 010 (1 260) ² x 400
Weight, kg:	46
Cooling liquid volume, l:	about 8
Voltage, V:	220 - 240 VAC 50/60Hz (alt. 110-120 VAC)
Power, W:	600
Air supply, Bar:	4 - 5
Computer connection:	COM-port (serial, RS 232C)

¹⁾ Testing range adjustable from 0-182 °. Adjusted at 0-180 °.

²⁾ Test rig in raised position

- 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 021 Windows software for the Gehman Tester is included, a Pentium 133 with 64 MB RAM or better is required.

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

Options

- ET 012 Automatic cooling by liquid Nitrogen
- ET 022 Grips for ASTM D1053 method B

