

Product Information

Rebound resilience tester Zwick 5109



Range of applications

The Zwick 5109 rebound resilience tester is available in two basic models for the following applications and standards:

- For tests on elastomers and rubber to
 - DIN 53512 (Elastomers and rubber)
 - ISO 4662 and ASTM D 7121 (Rubber)
- For tests on foam material to
 - DIN 13014 (Polyether foam hospital mattresses)

Basic model

The basic models contain all assembly groups that are required for carrying out tests to the named standards: An anvil with test piece mounting, a movable frame for adjusting to the test piece thickness, automatic pendulum release and return, incremental test data encoder, LCD display and pendulums to test standards.

Advantages/Features

Device's equipment/data

- The resolution is 0.06 degrees
- The device requires very little maintenance: The gear motor is the only actuator during fully automatic sequences
- The pendulum encoder is frictionless
- The free from wear mechanics is qualified optimally for continuous operation
- The keyboard is dust proof
- The standby mode and LCD display turn this device into a low energy device

Operation

- Operation is menu driven
- The pendulum height is easily adjustable via an eccentric
- Two test programs for determination of the duration of swing as well as the friction are integrated in the device
- The required standard is selectable and the sequence can be configured
- Several languages can be set (English, German and a third one that can be freely occupied)
- Via an integrated RS232 interface a link to a PC and the Zwick test software testXpert II is possible: The test software offers comprehensive possibilities for data transfer (device to PC) as well as evaluation, further processing, documentation and saving of results
- A rapid error analysis is possible through an integrated routine

Option Specimen tempering

The specimen can be tempered externally in a climatic chamber together with the interchangeable holding device.

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Item number	324802	324804	
Description	Rebound resilience tester for elastomer and rubber tests	Rebound resilience tester for foam tests	
Specimen dimensions			
Diameter, or	dia. 28...50 mm		
Length x Width	28...50 x 28...50 mm	80 x 80 mm	
Thickness	0...15 mm	50 mm	
Distance from anvil to hammer fin	0...60 mm steplessly adjustable	0...60 mm steplessly adjustable	
		Pendulum 1	Pendulum 2
Pendulum's capacity	0.5 J	0.2 J	0.196 J
Hammer fin (hemispherical)	dia. 15 mm	-	dia. 30 mm
Ball radius		R _k = 40 mm	-
		Cyl. dia. 40 mm	-
Pendulum length (L _{red.})	200 mm	200 mm	200 mm
Pendulum mass	255 g	-	-
Apparent deformation energy density	426.5 kJ/m ³	-	-
Angle of release	90°		
Impact velocity	1.98 m/s		
Display	LCD with two rows		
Power ratings	100 ... 240 V / 50 Hz or 60 Hz, power rating approx. 50 VA		
Interface for PC	RS232		
Dimensions (H x W x D)	330 mm x 450 mm x 230 mm		
Weight	approx. 51 kg		

Options

Description	Item number
Specimen mounting, electrically heatable, for replacing the standard specimen mounting. Temperature range: ambient temperature to 100 °C (± 2 °C) with PT 100 temperature sensor. Specimen holders for dia. 30 to 65 mm, height 0 to 12 mm, heating rating 200 W, cable length to the control unit approx. 0,5 m	324808
Temperature control unit for connecting the specimen mounting, digital temperature preselection (0 to 399 °C), steel housing 150 x 200 x 200 mm, electrical connections 220/230 V, 50/60 Hz, mains cable with plug, length 2 m	324810
Transformer for connecting to the power supply 110 V/60 Hz of 324808 / 324810	324812
Dust cover (plastic sheeting)	324806

Test software testXpert® II

Description	Item number
Standard Test Program for accepting test data from different devices via an RS232 C interface (Rebound resilience tester, pendulum impact tester, thickness gauge, etc.)	374496