

Product Information

Digital Shore hardness testers



Digital ZwickRoell 3130 Hardness Tester to Shore

Applications

CTA: 258827 258829

These digital hardness testers (Shore A, D, B, C, D0, 0, 00, 000, A0) are suitable for the following applications:

• determining hardness of plastics and rubber to ISO 48 -4, ISO 7619-1 (withdrawn), ASTM D2240, ISO 868 and NFT 51109.

It is essential for standard-compliant testing that specimens have a plane-parallel contact surface of at least 35 mm diameter and a material thickness of 6 mm.

Advantages and features

- Hardness testing can be carried out in both vertical and horizontal orientations, on-site or at a fixed location. With digital hardness testers, the differing times after which measured values are to be determined (ISO specifications) can be input.
- Their low weight, compact dimensions and rechargeable battery operation make them suitable for portable use or for fixed laboratory testing (optional test device).
- A navigation bar with the functions measurement value storage, zero adjustment, battery display and user levels supports ease of operation and an overview of the most important data.



Hardness Tester ZwickRoell 3130, navigation bar

- The compression spring is integrated into the measuring head in such a way that the contact ring allows accurate parallel positioning of the hardness tester on the specimen, eliminating measurement errors.
- When the measurement time has expired, it is followed by a visual and acoustic signal. The measured value automatically appears on the display. This value can be transmitted to a PC by means of the ZwickRoell testing software via a RS232/USB interface for processing and archiving.
- The testing instrument always displays the current measured value. Up to 300 hardness values can be stored. If a significant length of time elapses without a test being performed, the instrument will switch to standby mode.
- The optional test device with load weight is suitable for Shore A and D digital hand-held hardness testers (ZwickRoell 3130/31). It ensures accurate positioning of the hardness tester at right angles to the specimen surface, leading to a significant overall reduction in measured-value scatter. The repeatability of the test procedure is considerably improved by the elimination of operator influence. Use of a test device is therefore recommended for laboratory tests.



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Technical data

Vigital Shore hardness tester	A
Description	ArticleNumber
ZwickRoell 3130 digital hardness tester to Shore A, hardness testing to DIN ISO 48-4, DIN EN ISO 868, ASTM D2240; measurement time adjustable; measurement value storage for 300 measurements; USB/RS232 port (incl. cable); wall power supply unit with EU, UK, US adapter; 40 shore control ring (for travel accuracy); includes storage case Applications: soft rubber, elastomers and natural rubber	1101525
ZwickRoell 3131 digital hardness tester to Shore D, hardness testing to DIN ISO 48-4, DIN EN ISO 868, ASTM D2240; measurement time adjustable; measurement value storage for 300 measurements; USB/RS232 port (incl. cable); wall power supply unit with EU, UK, US adapter; 40 shore control ring (for travel accuracy); includes storage case Applications: hard rubber, rigid thermoplastics	1101526
ZwickRoell 3132 digital hardness tester to Shore B, hardness testing to ASTM D2240; measure- ment time adjustable; measurement value storage for 300 measurements; USB/RS232 port (incl. cable); wall power supply unit with EU, UK, US adapter; includes storage case Applications: harder elastomers	1101527
ZwickRoell 3133 digital hardness tester to Shore C, hardness testing to ASTM D2240; measure- ment time adjustable; measurement value storage for 300 measurements; USB/RS232 port (incl. cable); wall power supply unit with EU, UK, US adapter; includes storage case Applications: medium-hard elastomers	1101528
ZwickRoell 3134 digital hardness tester to Shore D0, hardness testing to ASTM D2240; measure- ment time adjustable; measurement value storage for 300 measurements; USB/RS232 port (incl. cable); wall power supply unit with EU, UK, US adapter; includes storage case Applications: dense granular materials, textile fabrics	1101529
ZwickRoell 3135 digital hardness tester to Shore 0, hardness testing to ASTM D2240; measure- ment time adjustable; measurement value storage for 300 measurements; USB/RS232 port (incl. cable); wall power supply unit with EU, UK, US adapter; includes storage case Applications: soft elastomers, textile fabrics	1101530
ZwickRoell 3136 digital hardness tester to Shore 00, hardness testing to ASTM D2240; com- pression platen Ø28 mm; measurement time adjustable; measurement value storage for 300 measurements; USB/RS232 port (incl. cable); wall power supply unit with EU, UK, US adapter; includes storage case Applications: expanded rubber, sponge rubber, foam rubber and human skin	1101531
ZwickRoell 3137 digital hardness tester to Shore 000, hardness testing to ASTM D2240; com- pression platen Ø28 mm; measurement time adjustable; measurement value storage for 300 measurements; USB/RS232 port (incl. cable); wall power supply unit with EU, UK, US adapter; includes storage case Applications: gels	1101532
ZwickRoell 3138 digital hardness tester to Shore A0, hardness testing to DIN ISO 48-4; measure- ment time adjustable; measurement value storage for 300 measurements; USB/RS232 port (incl. cable); wall power supply unit with EULUK_US adapter: includes storage case.	1101533

EU, UK, US adapter; includes storage case



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Description	ArticleNumber
Range of application: see Shore A with Shore A < 20	
ZwickRoell 3139 digital hardness tester for foam motor vehicle components; measurement time adjustable; measurement value storage for 300 measurements; USB/RS232 port (incl. cable); wall power supply unit with EU, UK, US adapter; includes storage case Applications: foam motor vehicle components	1101534

Optional accessories

Test device and verification device

Description	ArticleNumber
Test device with 12.5 N load weight for Shore A (divided into 10 N + 2.5 N) for ZwickRoell 3130	320224
Load weight (37.5 N) for Item No. 320224 for Shore D (total load 50 N)	318883
Test device for Shore 00/000, total load 3.924 N	375919
Retaining ring for Shore test devices	045769
Verification device for analog hardness testers (3114-7, 3370-90) and digital hardness testers (3130/1) with weight set for Shore A	342743
Supplementary weights for Item No. 342743 for Shore D	342732
40 Shore test ring with baseplate in carry-case	342735

Additional accessories

Description	ArticleNumber
120° prism for rubber rollers 10 - 40 mm diameter (for ZwickRoell 3130 - 7)	342749
150° prism for rubber rollers 40-100 mm diameter (for ZwickRoell 3130 - 7)	342750
Replacement battery for 313X	371063

Test certificates

Description	ArticleNumber
Quality inspection certificate O to DIN 55350, Part 18 No. 4.2.1, without specification of deter- mined characteristic values	342725
Quality inspection certificate M to DIN 55350, Part 18 No. 4.2.2, with check of the spring characteristic; to ISO 9000	342726
Quality inspection certificate M to DIN 55350, Part 18 No. 4.2.2, with check of the spring characteristic, check of the indenter, complete check of the measurement travel distances for Shore hardness 0-100; to ISO 9000	342727
Quality inspection certificate M to DIN 55350, Part 18 No. 4.2.2 for verification device (Item No. 342743), with check on test load Shore A	342734
Quality inspection certificate M to DIN 55350, Part 18 No. 4.2.2 for verification device (Item No. 342743), with check on test load Shore A and Shore D	342733

testXpert[®] III testing software

Description	ArticleNumber
testXpert III Standard Test Program data connection via serial port	1035143
testXpert III Master Test Program data connection via serial port (3rdlicense)	1035512
PC connection cable for 313x digital hardness tester; 9 pole (RS232)	1112336