

Digital Shore hardness tester SAUTER HD









Professional Shore hardness tester

Features

- Shore A, 0 and D to measure the hardness of plastics through penetration measurement
- Shore A rubber, elastomers, neoprene, silicone, vinyl, soft plastics, felt, leather and similar material
- · Shore 0 foam, sponge
- Shore D plastics, formica, epoxides, plexiglass etc.
- · Delivered in a robust carrying case
- Particularly recommended for internal comparison measurement. Standard calibrations
 e. g. to DIN 7619-1 are not possible because of very narrow standard tolerances
- Can be attached to the test stands TI-ACL (for Shore A and 0), TI-DL (for Shore D) to improve measuring uncertainty
- Large display with backlight
- Selectable: AUTO-OFF function or continuous operation, battery level indicator

Technical data

- Tolerance: 1 % of [Max]
- Overall dimensions W×D×H 65×38×162 mm
- Net weight approx. 173 g
- Transfer via RS-232 to the PC, e.g. to Microsoft Excel®
- Battery operation, batteries standard 2× 1.5 V AAA
- Material thickness of the sample, min. 4 mm

Accessories

- 1 7 hardness comparison plates for Shore A, tolerance up to ± 2 HA, SAUTER AHBA-01
- 3 hardness comparison plates for Shore D, tolerance up to ± 2 HD, SAUTER AHBD-01
- Factory calibration of the comparison plates, SAUTER 961-170
- Test stand for HDA and HD0, SAUTER TI-ACL
- Test stand for HDD, see page 66, SAUTER TI-DL

STANDARD













Model	Hardness type	Measuring range	Readout	
SAUTER		[Max] HS	[d] HS	
HDA 100-1	Shore A	100 HA	0,1 HA	
HD0 100-1	Shore 0	100 H0	0,1 H0	
HDD 100-1	Shore D	100 HD	0,1 HD	

SAUTER CATALOGUE 2021



Pictograms



Adjusting program (CAL):

For quick setting of the instrument's accuracy. External adjusting weight required



Calibration block:

Standard for adjusting or correcting the measuring device



Peak hold function:

Capturing a peak value within a measuring process



Scan mode:

Continuous capture and display of measurements



Push and Pull:

The measuring device can capture tension and compression forces



Length measurement:

Captures the geometric dimensions of a test object or the movement during a test process



Focus function:

Increases the measuring accuracy of a device within a defined measuring range



Internal memory:

To save measurements in the device memory



Data interface RS-232:

Bidirectional, for connection of printer and PC



Profibus:

For transmitting data, e.g. between scales, measuring cells, controllers and peripheral devices over long distances. Suitable for safe, fast, fault-tolerant data transmission. Less susceptible to magnetic interference.



Profinet:

Enables efficient data exchange between decentralised peripheral devices (balances, measuring cells, measuring instruments etc.) and a control unit (controller). Especially advantageous when exchanging complex measured values, device, diagnostic and process information. Savings potential through shorter commissioning times and device integration possible



Data interface USB:

To connect the measuring instrument to a printer, PC or other peripheral devices



Bluetooth* data interface:

To transfer data from the balance/measuring instrument to a printer, PC or other peripherals



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IR

SWITCH

ANALOG

STATISTIC

KCP

valves, etc.

Analogue interface:

Analog output:

4 mA - 20 mA) Statistics:

PC Software:

Printer:

WLAN data interface:

Data interface Infrared:

To connect relays, signal lamps,

To transfer data from the balance/measuring instrument to a printer, PC or other peripherals

To transfer data from the measuring instrument

to a printer, PC or other peripheral devices

Control outputs (optocoupler, digital I/O):

To connect a suitable peripheral device for

analogue processing of the measurements

For output of an electrical signal depending

Using the saved values, the device

calculates statistical data, such as

To transfer the measurement data

to print out the measurement data

from the device to a PC

Network interface:

to an Ethernet network

digital systems

Measuring units:

GLP/ISO record keeping:

average value, standard deviation etc.

A printer can be connected to the device

For connecting the scale/measuring instrument

It is a standardized interface command set for

KERN balances and other instruments, which

parameters and functions of the device. KERN

devices featuring KCP are thus easily integrated

with computers, industrial controllers and other

allows retrieving and controlling all relevant

Of measurement data with date, time and

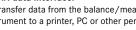
serial number. Only with SAUTER printers

Weighing units can be switched to e.g.

non-metric at the touch of a key. Please

KERN Communication Protocol (KCP):

on the load (e.g. voltage 0 V - 10 V or current





Protection against dust and water

splashes IPxx:

The type of protection is shown in the pictogram.



Resets the display to "0"



Battery operation:

Ready for battery operation. The battery type is specified for each device



Rechargeable battery pack:

Rechargeable set



Mains adapter:

230V/50Hz in standard version for EU. On request GB, AUS or USA version available



Power supply:

Integrated, 230V/50Hz in EU. More standards e.g. GB, AUS or USA on request



Motorised drive:

The mechanical movement is carried out by a electric motor



Motorised drive:

The mechanical movement is carried out by a synchronous motor (stepper)



Fast-Move:

The total length of travel can be covered by a single lever movement



Verification possible:

The time required for verification is specified in the pictogram



DAkkS calibration possible:

The time required for DAkkS calibration is shown in days in the pictogram



Factory calibration: The time required for factory calibration is specified in the pictogram



Package shipment:

The time required for internal shipping preparations is shown in days in the pictogram



Pallet shipment:

The time required for internal shipping preparations is shown in days in the pictogram



PRINTER

refer to website for more details Measuring with tolerance range (limit-setting function):

Upper and lower limiting can be programmed individually. The process is supported by an audible or visual signal, see the relevant model

Your KERN specialist dealer:

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