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, epoxies, plexiglass etc.
- Delivered in a hard carrying case
- Particularly recommended for internal comparison measurement. Standard calibrations e. g. to DIN 53505 are often not possible because of very narrow standard tolerances
- Can be attached to the test stands TI-ACL (for Shore A, A0 and 0), TI-DL (for Shore D) to improve measuring uncertainty
- Large display with backlight
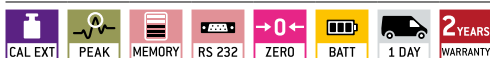- Selectable: AUTO-OFF function or continuous operation, charge indicator

Technical data

- Tolerance: 1 % of [Max]
- Overall dimensions W×D×H 162×65×38 mm
- Net weight approx. 173 g
- Permissible ambient temperature 0 °C/50 °C
- Transfer via RS-232 to the PC, e.g. to Microsoft Excel®
- Measuring frequency: 30 display updates per minute
- Battery operation, batteries standard 2× 1.5V AAA
- Material thickness of the sample, min. 4 mm

Accessories

- **Software,** interface cable included, SAUTER ATC-01
- ▯1 **7 hardness comparison plates** for Shore A, tolerance up to ± 2 H, SAUTER AHBA-01
- ▯2 **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 51, SAUTER TI-DL

STANDARD							OPTION
CAL EXT	PEAK	MEMORY	RS 232	→0← ZERO	BATT	1 DAY	2 YEARS WARRANTY	SOFTWARE

Model SAUTER	Hardness type	Measuring range [Max] HS	Readout [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 Pictograms:

Adjusting program (CAL):
For quick setting of the balance'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.

Data interface USB:
To connect the balance to a printer, PC or other peripheral devices.

Data interface Infrared:
To transfer data from the balance to a printer, PC or other peripheral devices.

Control outputs (optocoupler, digital I/O):
to connect relays, signal lamps, valves, etc.

Analogue interface:
to connect a suitable peripheral device for analogue processing of the measurements.

Statistics:
using the saved values, the device calculates statistical data, such as average value, standard deviation etc.

PC Software:
to transfer the measurements from the device to a PC.

Printer:
a printer can be connected to the device to print out the measurements.

GLP/ISO record keeping:
of measurements with date, time and serial number. Only with SAUTER printers.

Measuring units:
Weighing units can be switched to e.g. non-metric at the touch of a key. Please refer to website for more details.

Measuring with tolerance range:
Upper and lower limiting can be programmed individually, e.g. for sorting and dosing.

ZERO:
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.

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.

Warranty:
The warranty period is shown in the pictogram.

Your SAUTER specialist dealer: