



Advanced features for demanding applications

Features

- **1 Impact (rebound) sensor:** The bounce module is accelerated by a spring against the item being tested. Depending on how hard the object is, the kinetic energy of the module will be absorbed. The speed reduction will be measured and converted to Leeb hardness values.
- **External impact sensor (Type D)** included
- **Mobility:** In comparison with stationary table-top devices and testing devices with an internal sensor, using the SAUTER HMM. offers the highest level of mobility and flexibility
- **All measurement directions possible (360°)** thanks to an automatic compensation function
- **2 Standard block for calibration** included (approx. 790 ± 40 HL)
- **3 Delivered in a robust carrying case**
- **Internal memory** for up to 9 data groups, with up to 9 values per group forming the average value of the group
- **Mini statistics function:** displays the measured result, the average value, the impact direction, date and time
- **New:** SAUTER HMM-NP! This model has identical product features as the SAUTER HMM. model, but comes without the wireless infrared printer.

- **Measurement value display:** Rockwell (B & C), Vickers (HV), Brinell (HB), Shore (HSD), Leeb (HL), tensile strength (MPa)
- **Automatic unit conversion:** The measuring result is automatically converted into all specified hardness units

Technical data

- Precision: 1 % at 800 HLD (± 6 HLD)
- Measuring range tensile strength: 375–2639 MPa (steel)
- Min. sample weight on a solid and stable support: 3 kg
- Minimum sample material thickness: 8 mm
- Minimum sample radius (concave/convex): 50 mm (with support ring: 10 mm)
- Dimensions W×D×H 80×30×150 mm
- SAUTER HMM.: External mains adaptor for printer, as standard
- Ready for use: Batteries included, 3× 1.5V AAA, block, operating time up to 30 h, AUTO-OFF function to preserve battery life, Battery charge indicator
- Net weight approx. 0,2 kg

Accessories

- Connection cable, without impact sensor, SAUTER HMM-A02
- **Attachment rings** for secure positioning, SAUTER AHMR 01
- **4 Impact body**, SAUTER AHMO D01
- **Test block** Type D/DC, Ø 90 mm (± 1 mm), net weight < 3 kg, hardness range 790 ± 40 HL, SAUTER AHMO D02 630 ± 40 HL, SAUTER AHMO D03 530 ± 40 HL, SAUTER AHMO D04
- **5 SAUTER HMM.: Wireless IR printer** standard for o'site printing of measurement protocols (rechargeable battery operated), can be reordered, SAUTER AHN-02
- **Paper roll**, 1 piece, for SAUTER AHN-02, SAUTER ATU-US11

STANDARD


































OPTION



Model	Sensor	Measuring range	Readout	Option	
				Factory calibration certificates	
SAUTER		[Max] HL	[d] HL	KERN	
HMM.	Typ D	170–960	1	961-131	
HMM-NP <small>NEW</small>	Typ D	170–960	1	961-131	

NEW New model

Datasheet_HMM_V1

 CAL EXT	Adjusting program (CAL): For quick setting of the balance's accuracy. External adjusting weight required.	 SWITCH	Control outputs (optocoupler, digital I/O): to connect relays, signal lamps, valves, etc.	 ACCU	Rechargeable battery pack: rechargeable set.
 CAL BLOCK	Calibration block: standard for adjusting or correcting the measuring device.	 ANALOG	Analogue interface: to connect a suitable peripheral device for analogue processing of the measurements.	 230 V	Mains adapter: 230V/50Hz in standard version for EU. On request GB, AUS or USA version available.
 PEAK	Peak hold function: capturing a peak value within a measuring process.	 STATISTIC	Statistics: using the saved values, the device calculates statistical data, such as average value, standard deviation etc.	 230 V	Power supply: Integrated, 230V/50Hz in EU. More standards e.g. GB, AUS or USA on request.
 SCAN	Scan mode: continuous capture and display of measurements.	 SOFTWARE	PC Software: to transfer the measurements from the device to a PC.	 ELECTRO	Motorised drive: The mechanical movement is carried out by a electric motor.
 PUSH/PULL	Push and Pull: the measuring device can capture tension and compression forces.	 PRINT	Printer: a printer can be connected to the device to print out the measurements.	 STEPPER	Motorised drive: The mechanical movement is carried out by a synchronous motor (stepper).
 SCALE	Length measurement: captures the geometric dimensions of a test object or the movement during a test process.	 GLP PROTOCOL	GLP/ISO record keeping: of measurements with date, time and serial number. Only with SAUTER printers.	 FAST-MOVE	Fast-Move: the total length of travel can be covered by a single lever movement.
 FOCUS	Focus function: increases the measuring accuracy of a device within a defined measuring range.	 UNIT	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.	 DAkkS +3 DAYS	DAkkS calibration possible: The time required for DAkkS calibration is shown in days in the pictogram.
 MEMORY	Internal memory: to save measurements in the device memory.	 TOL	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	 ISO +4 DAYS	Factory calibration: The time required for factory calibration is specified in the pictogram.
 RS 232	Data interface RS-232: bidirectional, for connection of printer and PC.	 ZERO	ZERO: Resets the display to "0".	 DAYS	Package shipment: The time required for internal shipping preparations is shown in days in the pictogram.
 USB	Data interface USB: To connect the balance to a printer, PC or other peripheral devices.	 BATT	Battery operation: Ready for battery operation. The battery type is specified for each device.	 1 DAY	Pallet shipment: The time required for internal shipping preparations is shown in days in the pictogram.
 IR	Data interface Infrared: To transfer data from the balance to a printer, PC or other peripheral devices.				

Your SAUTER specialist dealer: