Motorised horizontal test stand SAUTER THM-N, THM-S







Motorised test stand with digital display for horizontal force measurement where highest standards are required

Features

- · Step motor for greatest ease of use only at THM 500N500S
 - for constant speed from the smallest to the maximum load
 - allows testing at minimum speed and full load
 - for higher positioning accuracy. Precise starting and stopping, without follow-up movement, even at high speeds
- precise adjustment of the process speed using the information shown on the display
- · Easy to use
- · Efficient working
- · Robust design and heavy duty metal construction
- II Linear adjustable jaw vice The clamping vice can be locked and finely adjusted sidewards and up/down using the setting wheel (THM 500N500N)
- · Repeat function for fatigue tests
- · Digital speed display to read the process speed straightaway
- Premium operating panel:
 - Digital speed display
 - Digital repeat function display - Control of the test stand using PC software SAUTER AFH
- STANDARD ELECTRO STEPPER 2 DAYS SCALE SOFTW

THM 500N500S

- of SAUTER THM 500N500N
- · Solid and versatile fixing options of SAUTER force measuring devices, see accessory page 35 et seqq.
- Suitable for all SAUTER force measuring devices up to 500 N (not supplied with the product)

Technical data

3 THM-N:

- · Minimum distance between left and right object fastening: 30 mm
- Maximum travel distance: 220 mm (protected by electronic end switches)
- Overall dimensions W×D×H 550×170×345 mm Net weight approx. 35 kg

THM-S:

- · Maximum travel distance: 240 mm (protected by electronic end switches)
- Overall dimensions W×D×H 695×235×300 mm
- Net weight approx. 48 kg

OPTION





500

IHM IHM-S				
Model	Measuring range	Speed range	Motor	
	[Max]			
SAUTER	N	mm/min		
THM 500N500N	500	50-500	Electric motor	

1-500

- Image: Figure shows the premium operating panel
 - · Digital length measuring device, measuring range 200 mm, readout 0,01 mm, details see page 45, SAUTER LB 200-2.
 - · Mounting the length measuring device LB onto a SAUTER test stand at the factory, SAUTER LB-A02
 - · Linear potentiometer for length measurement, measuring range: 300 mm, readout: 0.01 mm, for details see page 46, SAUTER LD 300
 - · Mounting the length measuring device onto a SAUTER test stand at the factory, SAUTER LD-A06
 - Only THM-S:

Accessories

Data transfer software with graphical representation of the measuring process, Force-time SAUTER AFH FAST Force-displacement only in combination with SAUTER LD, SAUTER AFH LD Force-displacement only in combination with SAUTER LB, SAUTER AFH FD

Step motor



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

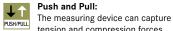
the measuring device

Peak hold function: PEAK

Capturing a peak value within a measuring process



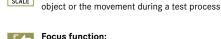
Scan mode: Continuous capture and display of measurements



tension and compression forces



Length measurement: Captures the geometric dimensions of a test



FOCUS

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:

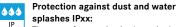
To connect the measuring instrument to a printer, PC or other peripheral devices

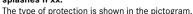
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Bluetooth* data interface: To transfer data from the balance/measuring

instrument to a printer, PC or other peripherals









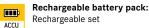
ZERO: Resets the display to "0"

Battery operation:



Ready for battery operation. The battery type is

specified for each device



Rechargeable set

230 V



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 ELECTRO out by a electric motor



Motorised drive:

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



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Fast-Move:

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



Verification possible:

The time required for verification is specified +3 DAYS in the pictogram



DAkkS calibration possible:

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

ISO +4 DAYS

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

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Your KERN specialist dealer:



It is a standardized interface command set for KERN balances and other instruments, which allows retrieving and controlling all relevant parameters and functions of the device. KERN devices featuring KCP are thus easily integrated with computers, industrial controllers and other digital systems

For connecting the scale/measuring instrument

GLP/ISO record keeping:

Of measurement data with date, time and PRINTER serial number. Only with SAUTER printers

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

average value, standard deviation etc.

A printer can be connected to the device

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

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SWITCH

ANALOG

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KCP

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valves, etc.

Analogue interface:

Analog output:

4 mA – 20 mA) Statistics:

PC Software:

Printer:

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

(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

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