

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

- THM 500N500S: Step motor for greatest ease of use
 - 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 overrun, 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 THM 500N500N: Linear adjustable jaw vice. The clamping vice can be locked and finely adjusted sidewards and up/down using the setting wheel
- 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

- Pigure shows the premium operating panel of SAUTER THM 500N500N
- Solid and versatile fixing options of SAUTER force measuring devices, see accessories page 40
- Suitable for all SAUTER force gauges up to 500 N (not included in delivery)

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. 34 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

Accessories

- Only THM-S: Linear potentiometer for length measurement, measuring range: 300 mm, readability: LD. For details see page 48, SAUTER LD
- Only THM-S: Mounting the length measuring device LD onto a SAUTER test stand at the factory, SAUTER LD-A06
- Only THM-S: Data transfer software with graphic display of the measurement process, Force-time, SAUTER AFH FAST Force-displacement only in combination with SAUTER LD, SAUTER AFH LD

STANDARD









Model Measuring range

Speed range

Motor

SAUTER	[Max] N	mm/min		
THM 500N500N	500	50-500	Electric motor	
THM 500N500S	500	1-500	Step motor	
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MEASURING TECHNOLOGY & TEST SERVICE 2023

SAUTER 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



WLAN data interface:

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



Data interface Infrared:

To transfer data from the measuring instrument 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



Analog output:

For output of an electrical signal depending on the load (e.g. voltage 0 V - 10 V or current 4 mA - 20 mA)



Statistics:

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



PC Software:

To transfer the measurement data from the device to a PC



Printer:

A printer can be connected to the device to print out the measurement



Network interface:

For connecting the scale/measuring instrument to an Ethernet network



KERN Communication Protocol (KCP):

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



GLP/ISO record keeping:

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



Measuring units:

Weighing units can be switched to e.g. non-metric. 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



Protection against dust and water splashes IPxx:

The type of protection is shown in the pictogram cf. DIN EN 60529:2000-09, IEC 60529:1989+A1:1999+A2:2013

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



Plug-in power supply:

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



Integrated power supply unit: 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:

Models with type approval for construction of verifiable systems



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



Pallet shipment:

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

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