

Motorised Vertical Test Stand SAUTER TVM-N · TVM-NL · TVM-LB

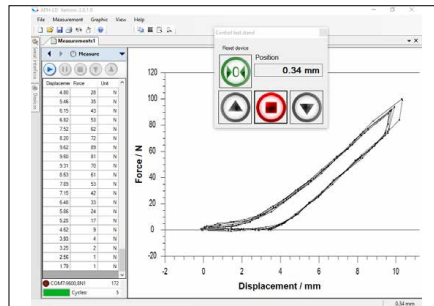


Motorised test stand incl. length measuring device LB

Test stand with electric motor for standard measurements – now also available as a set



Premium operating panel
- Digital speed display
- Digital repeat function

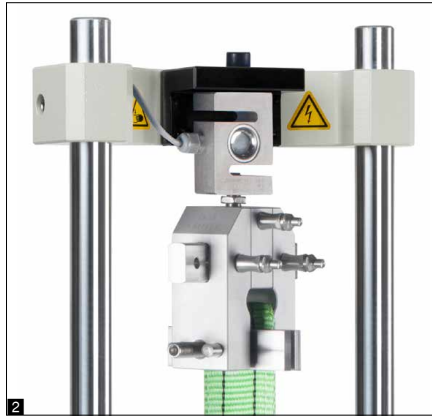


Control of the test stand using PC software SAUTER AFH



Solid and flexible fixing options for many clamps and accessories from the SAUTER product range, see *Accessories*

Motorised Vertical Test Stand SAUTER TVM-N · TVM-NL · TVM-LB



Features

- Motorised test stand for tension/compression force testing
- NEW: Now also available as a practical set for force-displacement-measurements in laboratory and industry
- Set TVM-LB: Five in one - motorised test stand, digital length measuring device LB, interface cable, data transfer software AFH FD, two interface converters AFH 12 and mounting
- Force controlled automatic switchoff, teststop after achieving an adjusted limit load, only in connection with a SAUTER FH force gauge
- Maximum displacement protected by electronic end switches
- SAUTER LA length measuring device as standard, to read the travel distance with a readability of 0,01 mm (only for TVM)
- Particularly flexible mounting options for variable force measuring devices, such as, SAUTER FC, FH, FK, FL:
 - **1** Direct mounting of measuring devices with internal load cell up to a measuring range of 500 N (only for TVM 5000N230N)
 - **2** Direct mounting of the external load cell on the traverse, starting with 1000 N measurement range and higher
 - **3** Holder for force measuring devices of the SAUTER FH range with external load cell
- Set TVM-LB: With digital length measuring device LB for creating force-displacement diagrams on the PC, maximum measuring range 300 mm, readability 0,01 mm, for details see page 49

Technical data

- Maximum travel distance: 210 mm
- Speed accuracy: 3 % of [Max]

Accessories

- Only TVM: Data transfer software with graphic display of the measurement process, force-time, SAUTER AFH FAST
- **3** Holder for force measuring devices of the SAUTER FH range with external load cell, SAUTER TVM-A01
- Force gauges see page 11 et seq., clamps and other accessories see page 39 et seq.

STANDARD



OPTION



Model	Measuring range	Speed range	Length of columns
	[Max] N	[Max] mm/min	mm
SAUTER			
TVM 5000N230N	5000	10 – 230	635
TVM 5000N230NL	5000	10 – 230	1135
TVM 10KN120N	10000	30 – 120	1135
TVM 20KN120N	20000	30 – 120	1135
Sets incl. test stand, length measuring device, interface cable, software AFH FD, assembly:			
TVM 5000N230N-LB <small>NEW</small>	5000	10 – 230	635
TVM 5000N230NL-LB <small>NEW</small>	5000	10 – 230	1135
TVM 10KN120N-LB <small>NEW</small>	10000	30 – 120	1135
TVM 20KN120N-LB <small>NEW</small>	20000	30 – 120	1135

NEW **New model**

 <p>Adjusting program (CAL) For quick setting of the instrument's accuracy. External adjusting weight required</p>	 <p>Bluetooth* data interface To transfer data from the balance/measuring instrument to a printer, PC or other peripherals</p>	 <p>Measuring units Weighing units can be switched to e.g. non-metric. Please refer to website for more details</p>	 <p>Conformity assessment Models with type approval for construction of verifiable systems</p>
 <p>Calibration block Standard for adjusting or correcting the measuring device</p>	 <p>WIFI data interface To transfer data from the balance/measuring instrument to a printer, PC or other peripherals</p>	 <p>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</p>	 <p>DAkkS calibration possible The time required for DAkkS calibration is shown in days in the pictogram</p>
 <p>Peak hold function Capturing a peak value within a measuring process</p>	 <p>Data interface infrared To transfer data from the measuring instrument to a printer, PC or other peripheral devices</p>	 <p>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</p>	 <p>Factory calibration (ISO) The time required for factory calibration is specified in the pictogram</p>
 <p>Scan mode Continuous capture and display of measurements</p>	 <p>Control outputs (optocoupler, digital I/O) To connect relays, signal lamps, valves, etc.</p>	 <p>ZERO Resets the display to "0"</p>	 <p>Package shipment The time required for internal shipping preparations is shown in days in the pictogram</p>
 <p>Push and Pull The measuring device can capture tension and compression forces</p>	 <p>Analogue interface To connect a suitable peripheral device for analogue processing of the measurements</p>	 <p>Battery operation Ready for battery operation. The battery type is specified for each device</p>	 <p>Pallet shipment The time required for internal shipping preparations is shown in days in the pictogram</p>
 <p>Length measurement Captures the geometric dimensions of a test object or the movement during a test process</p>	 <p>Analogue output For output of an electrical signal depending on the load (e.g. voltage 0 V - 10 V or current 4 mA - 20 mA)</p>	 <p>Rechargeable battery pack Rechargeable set</p>	
 <p>Focus function Increases the measuring accuracy of a device within a defined measuring range</p>	 <p>Statistics Using the saved values, the device calculates statistical data, such as average value, standard deviation etc.</p>	 <p>Plug-in power supply 230V/50Hz in standard version for EU. On request GB, AUS or US version available</p>	
 <p>Internal memory To save measurements in the device memory</p>	 <p>PC Software To transfer the measurement data from the device to a PC</p>	 <p>Integrated power supply unit Integrated, 230V/50Hz in EU. More standards e.g. GB, AUS or US on request</p>	
 <p>Data interface RS-232 Bidirectional, for connection of printer and PC</p>	 <p>Printer A printer can be connected to the device to print out the measurement data</p>	 <p>Motorised drive The mechanical movement is carried out by an electric motor</p>	
 <p>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</p>	 <p>Network interface For connecting the scale/measuring instrument to an Ethernet network</p>	 <p>Motorised drive The mechanical movement is carried out by a synchronous motor (stepper)</p>	
 <p>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</p>	 <p>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</p>	 <p>Fast-Move The total length of travel can be covered by a single lever movement</p>	
 <p>Data interface USB To connect the measuring instrument to a printer, PC or other peripheral devices</p>	 <p>GLP/ISO record keeping of measurement data with date, time and serial number. Only with SAUTER printers</p>		