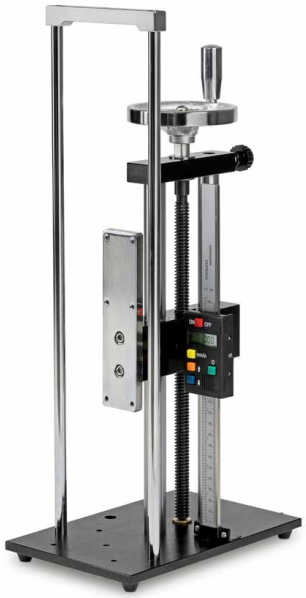
Manual Test Stand SAUTER TVL · TVL-E · TVL-O · TVL-XLS

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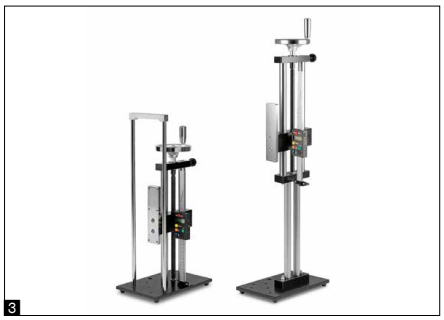
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Manual test stand for highly accurate tensile and compressive force measurements

Features

- For vertical and horizontal use
- Precise measurement results
- High level of security at repeated measurements
- Large base plate with high versatility of fastening objects
- SAUTER TVL, TVL-XLS: Digital length meter SAUTER LA (without interface) as standard
  - Measuring range: max. 200 mm
  - Readability: 0,01 mm
  - Zero setting possible
  - Pre-length can be set manually
- 1 NEW: SAUTER TVL-O, Manual test bench without SAUTER LA length measuring device
- 2 NEW: SAUTER TVL-E, Test bench for force-measuring devices with an external measuring cell
- SAUTER TVL-O, TVL-E:
  As an option, the SAUTER LB length measuring device (with interface) can be fitted, see *Accessories*
- SAUTER TVL, TVL-XLS, TVL-O:
  Suitable for all SAUTER force measuring devices with internal measuring cell up to 1000 N (not included in delivery)
- SAUTER TVL-E: Suitable for all SAUTER force measuring devices with external measuring cell up to 2000 N (not included in delivery)
- SAUTER TVL: Hook with M6 thread as standard
- SAUTER TVL-XLS: consisting of:
  SAUTER TVL + SAUTER TVL-XL, see *Accessories*
- 3 Model TVL and TVL-XLS in size comparison

STANDARD

SCALE 1 DAY

TVL, TVL-XLS

Technical data

- Base plate with threaded hole M6
- Travel distance per knob rotation (stroke per one turn):
  SAUTER TVL-XLS, TVL, TVL-O: 3 mm
  SAUTER TVL-E: 2 mm

Accessories

- Extension kit for SAUTER TVL-XL, extends the working area by 340 mm, enabling larger test pieces to be measured. The traverse distance (spindle height from base plate) remains the same: 230 mm. Overall dimensions W×D×H 35×110×344 mm, Net weight approx. 2,8 kg, can be retrofitted, SAUTER TVL-XL
- Digital length measuring device, measuring range 200 mm, readability 0,01 mm, details see page 49, SAUTER LB 200-2
- Mounting the length measuring device LB onto a SAUTER test stand at the factory, SAUTER LB-A02
- Data transfer software with graphic display of the measurement process, force-time, SAUTER AFH FAST
  Force-displacement only in combination with SAUTER LB, SAUTER AFH FD

Save with our practical bundles of test stand, force gauge and matching clamps, e.g.
SAUTER TVL 500FHS71, consisting of:
- 1× TVL
- 1× FH 500 (Details see page 14)
- 2× AE 500 (Details see page 43)

You can find our bundles on page 28/29

Model SAUTER		Measuring range [Max] N	Maximum travel distance mm	Length measuring device at delivery	Dimensions W×D×H mm	Net weight approx. kg
TVL-XLS		500	230	Length measuring device with display	200×300×800	12
TVL		1000	230		151×234×465	9
TVL-O	NEW	1000	230	Length measuring device with display and data interface (optional)	151×234×465	9
TVL-E	NEW	2000	290		154×240×550	9

NEW **New model**

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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

WIFI 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

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)

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 data

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 US version available

Integrated power supply unit
Integrated, 230V/50Hz in EU. More standards e.g. GB, AUS or US 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

Conformity assessment
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 (ISO)
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