

Motorised vertical test stand SAUTER TVO-S



SAUTER TVO 1000N500S

Premium test stand in table-top version  
 – with precise step motor



SAUTER TVO 2000N500S

**Solid and flexible possibilities of fixation** for supports of test objects, as well as universal force measuring clamps, inox ball heads for compression and fracture tests, bending devices etc., see accessories page 30ff

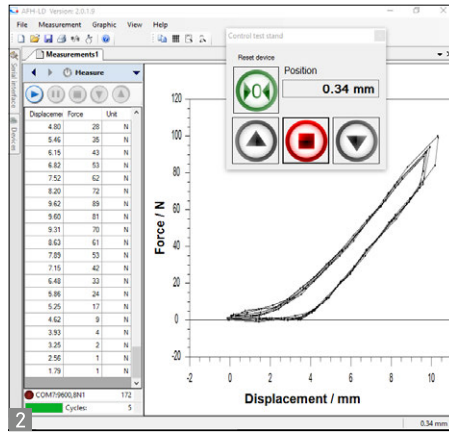


A wide range of application possibilities because of its large travelling distance



A wide range of interfaces for easy transfer of the data collected

Motorised vertical test stand SAUTER TVO-S



**Features**

- Motorised test stand for tension/compression force testing
- **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
- Automatic or manual process mode
- **1 Premium operating panel**
  - Digital speed display
  - Digital repeat function
  - **2** Control of the test stand using PC software SAUTER AFH
- **Table-top version** for easy operation
- **Robust construction**
- **3** Fixation of SAUTER force measuring devices up to 2 kN possible
- The large diagram shows the TVO 1000N500S test stand with: SAUTER FH force measuring device, length measuring device SAUTER LD as well as mounts for the force measuring device and test objects, not supplied with the product

**Technical data**

- Speed accuracy: 1 % of [Max]
- Positioning accuracy when shutting down: ± 0,05 mm
- Dimensional drawing see on the internet


























**Accessories**

- **Digital length measuring device SAUTER LB**, only for TVO 500N300S and TVO 500N300, SAUTER LB 300-2.
- **Mounting the length measuring device LB** onto a SAUTER test stand at the factory, SAUTER LB-A02
- **Linear potentiometer for length measurement**, measuring range: 225, 300, 500 or 700 mm, readout: 0.01 mm, for details see page 39, SAUTER LD
- **Mounting the length measuring device** onto a SAUTER test stand at the factory, SAUTER LD-A06
- **Force-displacement data transfer software** with graphical representation of the measuring process, only in combination with SAUTER LD, SAUTER AFH LD
- **Force-time data transfer software** for graphical representation on the PC and data transfer to Microsoft Excel®, SAUTER AFH FAST
- **Force-displacement data transfer software** with graphic display of the measurement process, only in combination with SAUTER LB, SAUTER AFH FD
- **Data transfer software for repeat tests**, only in combination with SAUTER LB, SAUTER AFH FGT
- **Mount for force measuring devices** of the SAUTER FH range with external load cell, SAUTER TVO-A01

<b>STANDARD</b>	<b>OPTION</b>
STEPPER 2 DAYS	SCALE SOFTWARE

Model	Measuring range [Max] N	Speed range mm/min	Max. travelling distance <b>2</b> mm	Dimensions W×D×H mm
SAUTER TVO 500N500S	500	1-500	300	236×428×570
SAUTER TVO 1000N500S	1000	1-500	500	265×405×980
SAUTER TVO 2000N500S	2000	1-500	700	300×465×1185

## Pictograms

 <b>Adjusting program (CAL):</b> For quick setting of the instrument's accuracy. External adjusting weight required.	 <b>Control outputs (optocoupler, digital I/O):</b> to connect relays, signal lamps, valves, etc.	 <b>Battery operation:</b> Ready for battery operation. The battery type is specified for each device.
 <b>Calibration block:</b> standard for adjusting or correcting the measuring device.	 <b>Analogue interface:</b> to connect a suitable peripheral device for analogue processing of the measurements	 <b>Rechargeable battery pack:</b> rechargeable set.
 <b>Peak hold function:</b> capturing a peak value within a measuring process.	 <b>Statistics:</b> using the saved values, the device calculates statistical data, such as average value, standard deviation etc.	 <b>Mains adapter:</b> 230V/50Hz in standard version for EU. On request GB, AUS or USA version available.
 <b>Scan mode:</b> continuous capture and display of measurements.	 <b>PC Software:</b> to transfer the measurement data from the device to a PC.	 <b>Power supply:</b> Integrated, 230V/50Hz in EU. More standards e.g. GB, AUS or USA on request.
 <b>Push and Pull:</b> the measuring device can capture tension and compression forces.	 <b>Printer:</b> a printer can be connected to the device to print out the measurement data.	 <b>Motorised drive:</b> The mechanical movement is carried out by a electric motor.
 <b>Length measurement:</b> captures the geometric dimensions of a test object or the movement during a test process.	 <b>GLP/ISO record keeping:</b> of measurement data with date, time and serial number. Only with SAUTER printers	 <b>Motorised drive:</b> The mechanical movement is carried out by a synchronous motor (stepper).
 <b>Focus function:</b> increases the measuring accuracy of a device within a defined measuring range.	 <b>Measuring units:</b> Weighing units can be switched to e.g. non-metric at the touch of a key. Please refer to website for more details.	 <b>Fast-Move:</b> the total length of travel can be covered by a single lever movement.
 <b>Internal memory:</b> to save measurements in the device memory.	 <b>Measuring with tolerance range (limit-setting function):</b> Upper and lower limiting can be programmed individually. The process is supported by an audible or visual signal, see the relevant model	 <b>DAkkS calibration possible:</b> The time required for DAkkS calibration is shown in days in the pictogram.
 <b>Data interface RS-232:</b> bidirectional, for connection of printer and PC.		 <b>Factory calibration:</b> The time required for factory calibration is specified in the pictogram.
 <b>Data interface USB:</b> To connect the measuring instrument to a printer, PC or other peripheral devices.		 <b>Package shipment:</b> The time required for internal shipping preparations is shown in days in the pictogram.
 <b>Data interface Infrared:</b> To transfer data from the measuring instrument to a printer, PC or other peripheral devices.	 <b>ZERO:</b> Resets the display to "0".	 <b>Pallet shipment:</b> The time required for internal shipping preparations is shown in days in the pictogram.

Your KERN specialist dealer: