







# Premium test stand in table-top version – now also with step motor

### **Features**

- Motorised test stand for tension/compression force testing
- New: 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
- 2 A wide range of application possibilities because of its large travelling distance
- · Automatic or manual process mode
- · Premium operating panel
  - Digital speed display
  - Digital repeat function
  - Control of the test stand using PC software SAUTER AFH
- · Table-top version for easy operation

- · Robust construction
- Fixation of SAUTER force measuring devices up to 2 kN possible
- II Solid and flexible possibilites of fixation of mouns for test objects, see accessory page 25 et seqq.
- 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 drawings see instruction manual on www.sauter.eu

### **Accessories**

- · Digital length measuring device SAUTER LB, only for TVO 500N300S and TVO 500N300, SAUTER LB 300-2.
- · Mounting the length measuring device 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 36, 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, SAUTER AFH FD
- Data transfer software for repeat tests, SAUTER AFH FGT
- · Mount for force measuring devices of the SAUTER FH range with external load cell, SAUTER TVO-A01











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

## **SAUTER Pictograms:**





#### Adjusting program (CAL):

For quick setting of the balance's accuracy. External adjusting weight required.



# Control outputs

### (optocoupler, digital I/O):

to connect relays, signal lamps, valves, etc.



#### Rechargeable battery pack:



#### 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.



## Data interface USB:

To connect the balance to a printer, PC or other peripheral devices.



#### Data interface Infrared:

To transfer data from the balance to a printer, PC or other peripheral devices.





#### Analogue interface:

to connect a suitable peripheral device for analogue processing of the measurements.



STATISTIC

#### Statistics:

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



### PC Software:

to transfer the measurements from the device to a PC.



#### Printer:

a printer can be connected to the device to print out the measurements.



### GLP/ISO record keeping:

of measurements with date, time and serial number. Only with SAUTER printers.



### 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



Resets the display to "0".



## **Battery operation:**

Ready for battery operation. The battery type is specified for each device.



rechargeable set.



# Mains adapter:

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 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



#### DAkkS calibration possible:

by a single lever movement.

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 pictogram.



#### Pallet shipment:

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

# Your SAUTER specialist dealer: