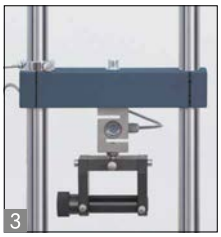


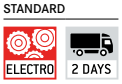
Test stand with electric motor for standard measurements – now with longer guide columns

- For dimensional drawing see operating instructions on www.sauter.eu/en/TVM-N/...TVM-NL
- Net weight on request

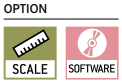
Features

- **Premium operating panel**
  - Digital speed display
  - Digital repeat function
  - Control of the test stand using PC software SAUTER AFH
- **Force controlled automatic switchoff,** Teststop after achieving an adjusted limit load, only in combination with a SAUTER FH force gauge
- **Repeat function** for long-term loading tests
- **Digital speed display** to read the travelling speed straightaway
- Maximum travel distance protected by electronic end switches
- SAUTER LA length measuring device as standard, to read the travel distance with a readout of 0.01 mm
- **Solid and versatile fixing options** of mounts for test objects, see accessory page 25 et seqq.
- Particularly flexible installation options for the most variable force measuring devices, such as, SAUTER FH, FA, FK, FL:
  - 1 Direct installation of measuring devices with internal load cell up to a measuring range of 500 N (only with TVM 5000N230N. and TVM 10KN120N.)
  - 2 Direct installation of the load cell for measuring devices with external load cell with a measuring range starting from 1,000 N
  - 3 Direct installation of the external load cell on the cross beam (only for TVM-N. ≥ 20 kN
  - 4 Mount for force-measuring devices from the SAUTER FH range with external measuring cell
- The large figure shows the TVM-N test stand with: SAUTER FH force measuring device, SAUTER LD length measuring device, longer guide columns as well as mount for force measuring device and test objects, not supplied with the product

STANDARD



OPTION



Technical data

- Speed accuracy: 3 % of [Max]
- Initial height of the mounting plate from the upper edge of the motor housing: 171 mm
- Maximum stroke of the mounting plate: 385 mm
- Minimal distance between mounting plate and underside of the upper device mounting: 85 mm
- Overall dimensions W×D×H 410×255×1550 mm

Accessories

- **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
- **Length measuring device** SAUTER LB, SAUTER LB 300-2.
- **Mounting the length measuring device** onto a SAUTER test stand at the factory, SAUTER LB-A02
- **Force-displacement data transfer software** with graphical representation of the measuring process, only in combination with SAUTER LD, SAUTER AFH LD
- **Force-displacement data transfer software** with graphic display of the measurement process, SAUTER AFH FD
- **Mount for force measuring devices** from the SAUTER FH range with external load cell, SAUTER TVM-A01
- **Longer columns** with the same travel distance, up to 500 mm, SAUTER AFH 18

Model **SAUTER**	Measuring range [Max] N	Speed range mm/min	Length of columns mm	Max. travelling distance mm	
TVM 5000N230N.	5000	10–230	635	210	
TVM 5000N230NL	5000	10–230	1135	210	
TVM 10KN120N.	10000	30–120	1135	210	
TVM 20KN120N.	20000	30–120	1135	210	
TVM 30KN70N.	30000	5–70	1135	210	

SAUTER GmbH · c/o KERN & SOHN GmbH · Ziegelei 1 · 72336 Balingen · Germany · Tel. + 49-[0]7433-9933-0 · Fax + 49-[0]7433-9933-149 · **www.sauter.eu**

SAUTER Pictograms:

Adjusting program (CAL):
For quick setting of the balance'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.

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.

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.

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

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.

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 by a single lever movement.

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 pictogram.

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

Your SAUTER specialist dealer: