

### Motorised vertical test stand SAUTER TVO



# Robust test stand for laboratory applications

### **Features**

- Motorised test stand for tension an compression tests
- Table-top design for comfortable operation
- Robust design for durable use
- Easy-to-access safety switch-off
- Upper and lower end point, can be set individually
- Automatic or manual operation mode
- Can be used for force gauges up to 500 N (e.g. SAUTER FH-S, not included, for details see page 12)

### **Technical data**

- Maximum tensile and compressive force: 500 N
- Maximum travel distance: 270 mm
- Speed accuracy: 2 % of [Max]
- Net weight approx. 25 kg

### Accessories

- Digital length measuring device, measuring range 300 mm, readout 0,01 mm, details see page 45, SAUTER LB 300-2.
- 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

STANDARD







#### Model Measuring range Speed range Maximum travel distance Overall dimensions [Max] W×D×H **SAUTER** mm/min Ν mm mm 500 TVO 500N300 15-300 270 236×428×570

## **SAUTER CATALOGUE 2021**



#### **Pictograms**



#### 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



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IR

SWITCH

ANALOG

STATISTIC

**KCP** 

valves, etc.

Analogue interface:

Analog output:

4 mA - 20 mA) Statistics:

PC Software:

Printer:

#### WLAN data interface:

Data interface Infrared:

To connect relays, signal lamps,

To transfer data from the balance/measuring instrument to a printer, PC or other peripherals

To transfer data from the measuring instrument

to a printer, PC or other peripheral devices

Control outputs (optocoupler, digital I/O):

To connect a suitable peripheral device for

analogue processing of the measurements

For output of an electrical signal depending

Using the saved values, the device

calculates statistical data, such as

To transfer the measurement data

to print out the measurement data

from the device to a PC

Network interface:

to an Ethernet network

digital systems

Measuring units:

GLP/ISO record keeping:

average value, standard deviation etc.

A printer can be connected to the device

For connecting the scale/measuring instrument

It is a standardized interface command set for

KERN balances and other instruments, which

parameters and functions of the device. KERN

devices featuring KCP are thus easily integrated

with computers, industrial controllers and other

allows retrieving and controlling all relevant

Of measurement data with date, time and

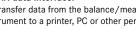
serial number. Only with SAUTER printers

Weighing units can be switched to e.g.

non-metric at the touch of a key. Please

KERN Communication Protocol (KCP):

on the load (e.g. voltage 0 V - 10 V or current





# Protection against dust and water

#### splashes IPxx:

The type of protection is shown in the pictogram.



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



#### Verification possible:

The time required for verification is specified in the pictogram



### 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



PRINTER

### 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

Your KERN specialist dealer:

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