





Linear potentiometer for length measurement

Features

- This linear displacement sensor, with its lengthways coupling without rods, is specially constructed for accurate recording of distances
- By means of its compact design it is also suitable for high processing speeds
- Il Can be used in all electrical SAUTER force testing systems to determine distances e.g. within the scope of tensile or pressure testing
- Long service life: on average up to 100×10⁶ cycles
- · High data collection speed
- High-resolution linear position sensor with 65,000 points over the whole measuring range
- Data transfer box with 16-bit AD converter for high resolution and speed
- 2 You will need the SAUTER AFH LD software to read and evaluate data. This allows clear force-displacement analyses
- Scope of supply: Linear potentiometer, Data transfer box, mains adapter, USB cable

Technical data

- Precision: ± 0,5 % of [Max]
- Reproducibility < 0,03 mm
- Internal measuring frequency: 100 Hz
- Overall dimensions W×D×H LD 225: 374×68×38 mm LD 300: 449×68×38 mm LD 500: 653×68×38 mm LD 700: 855×68×38 mm
- Cable length approx. 1 m
- Cable length mains adapter approx. 1,2 m
- Net weight approx. 0,7 kg

Accessories

 In Force-displacement data transfer software with graphical representation of the measuring process, only in combination with SAUTER LD, SAUTER AFH LD

STANDARD





Model	Measuring range [Max]	Readout [d]	Direction of measurement
SAUTER	mm	mm	
LD 225	225	0,01	vertical/horizontal
LD 300	300	0,01	vertical/horizontal
LD 500	500	0,01	vertical/horizontal
LD 700	700	0,01	vertical/horizontal

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:

rechargeable set.



PEAK

Calibration block:

Peak hold function:

measuring process.

standard for adjusting or correcting the measuring device.



Analogue interface:

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



Mains adapter:

230V/50Hz in standard version for EU. On request GB, AUS or USA version available.



Statistics:

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



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.



SCAN

Scan mode:

Push and Pull:

continuous capture and display of measurements.

capturing a peak value within a



PRINT

PC Software:

Printer:

to transfer the measurements from the device to a PC.

a printer can be connected to the

device to print out the measurements.



Motorised drive: The mechanical movement is carried out

by a synchronous motor (stepper).

DAkkS calibration possible:

is shown in days in the pictogram.



Length measurement:

and compression forces.

captures the geometric dimensions of a test object or the movement during a test process.

the measuring device can capture tension



GLP/ISO record keeping:

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



Fast-Move:

the total length of travel can be covered by a single lever movement.



MEMORY

Focus function:

Internal memory:

to save measurements

in the device memory.

increases the measuring accuracy of a device within a defined measuring range.



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





DAkkS

+3 DAYS

Factory calibration:

The time required for factory calibration is specified in the pictogram.

The time required for DAkkS calibration



Data interface RS-232:

bidirectional, for connection of printer and PC.



Resets the display to "0".



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.



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.



Battery operation:

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

