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Operating instructions for a manual test stand

SAUTER TVL/TVL-XLS/TVL-O/TVL-E

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GB



PROFESSIONAL MEASURING

TVL-BA-e-2330



SAUTER TVL/TVL-XLS/TVL-O/TVL-E

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1 Scope of delivery

- 1x manual test bench
- 1x hook for TVL, TVL-O, TVL-XLS (none for TVL-E)

2 Technical description

2.1 Technical data manual test stand

	TVL/TVL-O	TVL-XLS	TVL-E
Maximum force	1000N	500N	2000N
Measuring direction	vertical and horizontal		
Spindle stroke per revolution	3mm		2mm
Thread hook/load cell	M6		M12
Spindle height from base plate	300mm		350mm
Thread of the gauge mounting plate	4x M3 (included in delivery)		-
Workspace	approx. 210mm	approx. 450mm	approx. 290mm
Weight	8kg	15kg	9kg

2.2 Technical data of LA linear encoder (not for TVL-E and TVL-O)

	TVL	TVL-XLS	TVL-E/TVL-O
Scale length	200mm		no length measuring device LA included in scope of delivery
Readability	0,01mm		
Control buttons			
On/0	<ul style="list-style-type: none"> • Switch on • Zeros of the display of the LA 		
mm/in	Change units between millimeter and inch		
▲	Manual length preselection, upwards		
▼	Manual length preselection, downward		

Optionally available for all test stands:

1. LB-200 (Length measuring device with interface)
2. LB-A02 (Attaching the linear encoder to the test stand)
3. AFH FD (Software for force-displacement measurements)

3 Functional description

3.1 TVL/TVL-O/TVL-XLS

The TVL/TVL-O/TVL-XLS test stands are designed for force gauges with an internal measuring cell up to 1 kN (for the maximum force of the respective test stand, please refer to the table in the technical data).

The test stand should be set up on a solid base, such as a workbench or a base plate. A SAUTER force gauge can then be attached to the test stand using the four M3 cylinder head screws provided.

There are several holes in the base plate of the test stand for attaching various accessories, such as clamps, linear encoders, etc. The handwheel can be used to turn the test stand.

The test stand can be moved with a spindle stroke of 3mm/revolution via the existing handwheel.

3.2 TVL-E

The TVL-E test stand is designed for force gauges with an external measuring cell up to 2 kN. The test stand should be set up on a solid base, such as a workbench or a base plate. The external measuring cell can then be attached to the test stand via an M12 cylinder head screw.

There are several holes in the base plate of the test stand for attaching various accessories, such as clamps, linear encoders, etc. The external measuring cell can then be attached to the test stand via an M12 cylinder head screw.

The test stand can be moved with a spindle stroke of 2mm/revolution via the existing handwheel.

4 Maintenance

To prevent rust, the test stand should be cleaned with a lint-free, soft cloth after each use.

Under no circumstances should aggressive cleaning agents be used.

5 General safety instructions

WARNING

Risk of injury due to overridden functions of the protective devices!

De-energized functions of the protective devices can lead to severe lead to injuries.

- Never override the functions of the protective devices, neither you nor third parties.
- Never test with protective devices disabled.
- Never tamper with protective devices.
- Comply with all safety instructions.

WARNING

Risk of injury from falling parts!

Falling parts can cause serious injuries.

- Use only suitable and technically flawless lifting gear.
- Use lifting gear with sufficient lifting capacity.
- Carefully fasten individual parts and larger assemblies with lifting gear.
- Secure individual parts and larger assemblies with lifting gear.
- Make sure that no danger can emanate from the hoist.
- Lift individual parts and larger assemblies slowly.

WARNING

Risk of injury from rotating components!

The drive can start automatically. Rotating components such as spindles on the drive of the crosshead or the extensometer can catch long hair, loose clothing and also sleeves or jewelry. This can lead to serious injuries.

- Work only in clothing with tight-fitting sleeves.
- Wearing jewelry while working on the test system is prohibited.
- Use hairnet if necessary.
- Wear suitable protective equipment

WARNING



Risk of injury when handling in the test chamber!

When handling in the test room during operation of the test system, there are Risk of injury. Your hands and arms can be pinched and crushed.

- Never handle anything in the test chamber while the test system is running.
- Never handle anything in the test room during a test.

WARNING



Danger of tipping due to the use of heavy specimens!

In the case of heavy specimens that are inserted off-center, as well as by improper behavior can tip the test system.

- Ensure that the test system is securely positioned.
- Never use the test system as a climbing aid.
- Place the test stand on a stable surface.

CAUTION

Risk of injury!

There is a risk of injury when working on/with the test system.

- Comply with the applicable and binding national regulations on the accident prevention.

Comply with the recognized technical regulations for safety and professional work.

- Comply with the regulations on safety and health protection during the Provision of work equipment and its use.
- Observe company regulations such as supervision and reporting requirements.
- Read the operating instructions completely.
- Read the operating instructions and data sheets of external components completely through.
- Observe all safety instructions in the operating manual.
- Observe all safety signs attached to the test system.
- Always wear appropriate safety equipment.

NOTE

Work on the test system may only be carried out by specialists qualified for this work. be carried out.

NOTE

Only one operator may work on the test system at a time.