

## Sauter GmbH

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# Instruction manual mechanical force gauge

# SAUTER FA

Version 2.0 04/2020 GB



**PROFESSIONAL MEASURING** 

FA-BA-e-2020



### **SAUTER FA**

V. 2.0 04/2020

Instruction manual mechanical force gauge

Congratulations on the purchase of a digital force measuring device with internal measuring cell from SAUTER. We hope you will enjoy your quality measuring device with a wide range of functions. Please do not hesitate to contact us if you have any questions, requests or suggestions.

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#### 1 Introduction

Please read these operating instructions carefully before commissioning, even if you already have experience with SAUTER measuring instruments.

After receipt of the force gauge, it should be checked in advance that no transport damage has occurred, that the outer packaging, the plastic housing, other parts or even the gauge itself have not been damaged. If any damage is evident, please notify SAUTER GmbH immediately.

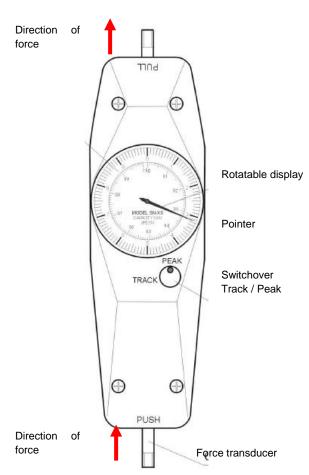
The FA can measure tensile and compressive forces very accurately and it is easy to operate. It can be held in the hand for measurements or mounted on a suitable test stand.

SAUTER offers optional software and accessories to make the measuring instrument more versatile in use. Please ask SAUTER or the SAUTER supplier or visit our website <u>www.sauter.eu.</u>

#### 2 Scope of delivery

- SAUTER FA
- Transport case
- Standard attachments, as shown





Explanation:

Track = continuous measurement Peak= Peak value acquisition

#### 3 Working conditions

Working temperature: 10°C to 30°C Humidity: 15% to 80%.

#### 4 Technical data

- Measuring path of the measuring system when reaching the maximum load: 10 mm
- Measurement uncertainty: ± 1 % of Max (measuring range)
- Weight: 560 g
- Size in mm: L 230 x W 60 x H 50

#### 5 Exhibitions

Attach a suitable attachment (standard accessories see contents of case)

<u>Track or Peak:</u> Switch by <u>pressing and turning</u> the knob<u>simultaneously to the</u> corresponding position.

<u>Zero position:</u> In peak position by pressing the shift button once.

<u>Tare function:</u> Zeroing of the display by turning the display accordingly

Note: The longevity of the spring measuring system is improved if the device is set to peak during rest periods.

#### 6 Adaptation to test benches

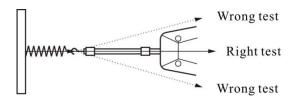
At all test stands with four M3 screws. This requires the disassembly of the rear half of the housing.

#### 7 Warnings

Incorrectly performed force measurements can lead to serious injury to persons and damage to property and should therefore only be performed by trained and experienced personnel.

In particular, it must be avoided that the purchased measuring instrument is subjected to forces that exceed the maximum load (Max) of the instrument or that do not act axially on the instrument via the force transducer; or if high pulse forces act on the measuring instrument.

Avoid twisting the instrument, as this could cause the instrument to break and in any case reduce the measuring accuracy.



#### Inappropriate use

Do not use the measuring instrument for medical weighing.

If small quantities of the material to be measured are removed or added, incorrect measurement results may be displayed due to the "stability compensation" in the measuring instrument! (Example: Slow flow of liquids out of a container suspended from the measuring instrument).

Do not leave a permanent load hanging on the measuring device.

**Overloading of** the measuring instruments above the specified maximum load (Max), minus any tare load already present, must be prevented at all costs. This could damage the measuring device (risk of breakage!).

#### Attention:

- Make sure that there are never people or objects under the load, as they could be injured or damaged!
- The measuring instrument is not suitable for weighing people, do not use it as an infant measuring instrument!
- The measuring device does not comply with the German Medical Devices Act (MPG).
- Never operate the measuring instrument in rooms where there is a risk of explosion. The standard version is not explosion-proof.
- The design of the measuring instrument must not be changed. This can lead to incorrect measurement results, safety-related defects and the destruction of the measuring device.
- The measuring instrument may only be used in accordance with the described specifications.
- SAUTER must give written approval for any other areas of use / applications.

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#### <u>Warranty</u>

Warranty expires in the event of

- Non-compliance with our specifications in the operating instructions
- Use outside the described applications
- Modification or opening of the device, mechanical damage, and damage by media, liquids
- natural wear and tear
- improper setup or electrical installation
- Overload of the measuring unit

#### Test equipment monitoring

As part of quality assurance, the metrological characteristics of the measuring instrument and any test weight that may be present must be checked at regular intervals. The user responsible must define a suitable interval for this purpose as well as the type and scope of this inspection.

Information on the monitoring of measuring instruments and the necessary test weights is available on the SAUTER homepage (www.sauter.eu).

#### **IMPORTANT**

Observe the information in the operating instructions: Read this operating manual carefully before commissioning, even if you already have experience with SAUTER measuring instruments.

#### 8 Technical drawings

