

Sensor tester SST

Assembly and operating manual



Imprint

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Technical changes:

We reserve the right to make alterations for the purpose of technical improvement.

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Dear customer,

congratulations on choosing a SCHUNK product. By choosing SCHUNK, you have opted for the highest precision, top quality and best service.

You are going to increase the process reliability of your production and achieve best machining results – to the customer's complete satisfaction.

SCHUNK products are inspiring.

Our detailed assembly and operation manual will support you.

Do you have further questions? You may contact us at any time – even after purchase.

Kindest Regards

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1 About this manual

This instruction is an integral part of the product and contains important information for a safe and proper assembly, commissioning, operation, maintenance and help for easier trouble shooting.

Before using the product, read and note the instructions, especially the chapter "Basic safety notes".

1.1 Warnings

The following key words and symbols are used to highlight dangers.

1.1.1 Key words

DANGER	Dangers for persons. Non-compliance will inevitably cause irreversible injury or death.
WARNING	Dangers for persons. Non-compliance may cause irreversible injury or death.
CAUTION	Dangers for persons. Non-observance may cause minor injuries.
NOTICE	Information about avoiding material damage

1.1.2 Symbols



Warning about a danger point



Warning about dangerous electrical voltage



General mandatory sign to prevent material damage

1.2 Applicable documents

- General terms of business
- Catalog data sheet of the purchased product

The documents listed here, can be downloaded on our homepage www.schunk.com

2 Basic safety notes

2.1 Intended use

The SST sensor tester is used to test and adjust proximity switches from SCHUNK, i.e. the IN, INK, MMS and RMS products.

The module may be used only in the context of its defined application parameters ([👉 5, Page 8](#)).

The product is designed for industrial use.

To use this unit as intended, it is also essential to observe the technical data and installation and operation notes in this manual and to comply with the maintenance intervals.

2.2 Environmental and operating conditions

- Make sure that the environment is free from splash water and vapors as well as from abrasion or processing dust. Exceptions are products that are designed especially for contaminated environments.

2.3 Product safety

Dangers arise from the product, if:

- the product is not used in accordance with its intended purpose.
- the product is not installed or maintained properly.
- the safety and installation notes are not observed.

Avoid any manner of working that may interfere with the function and operational safety of the product.

Wear protective equipment.

NOTE

More information are contained in the relevant chapters.

2.3.1 Constructional changes, attachments, or modifications

Additional drill holes, threads, or attachments that are not offered as accessories by SCHUNK may be attached only with permission of SCHUNK.

2.4 Personnel qualification

The assembly, initial commissioning, maintenance, and repair of the product may be performed only by trained specialist personnel. Every person called upon by the operator to work on the product must have read and understood the complete assembly and operating manual, especially the chapter "Basic safety notes" ([↩ 2, Page 5](#)). This applies particularly to personnel only used occasionally, such as maintenance personnel.

3 Warranty

The warranty is valid for 24 months from the delivery date to the production facility under the following conditions:

- Intended use in 1-shift operation
- Observe the mandatory maintenance and lubrication intervals
- Observe the environmental and operating conditions

Parts touching the work piece and wear parts are not part of the warranty.

4 Scope of delivery

The scope of delivery includes:

- Sensor tester SST in the ordered model.
- Accessory pack

5 Technical data

Designation	SST
Housing material	PA 6.6, blue
IP rating	00 (according to IEC 529, EN 60529)
Connection type	M8 and M12 cable socket with 0.4 m cable
Supply voltage [VDC]	9 (compound battery type: 6LR61)
Internal operating voltage [VDC]	15
Green LED	Operating voltage indicator
Yellow LED	Function display
Red LED	Battery change signal
Connection options	Inductive, capacitive and optoelectronic sensors (3-conductor DC, 2-conductor DC and NAMUR)

The switching function is also signaled acoustically.

The sensor tester automatically switches off after approx. 30 seconds if it is not used.

Further technical data can be found in the catalog data sheet. The most recent version applies.

6 Assembly and installation

6.1 Assembly

The Sensor tester SST can be fastened by means of the lateral through-bores if necessary.

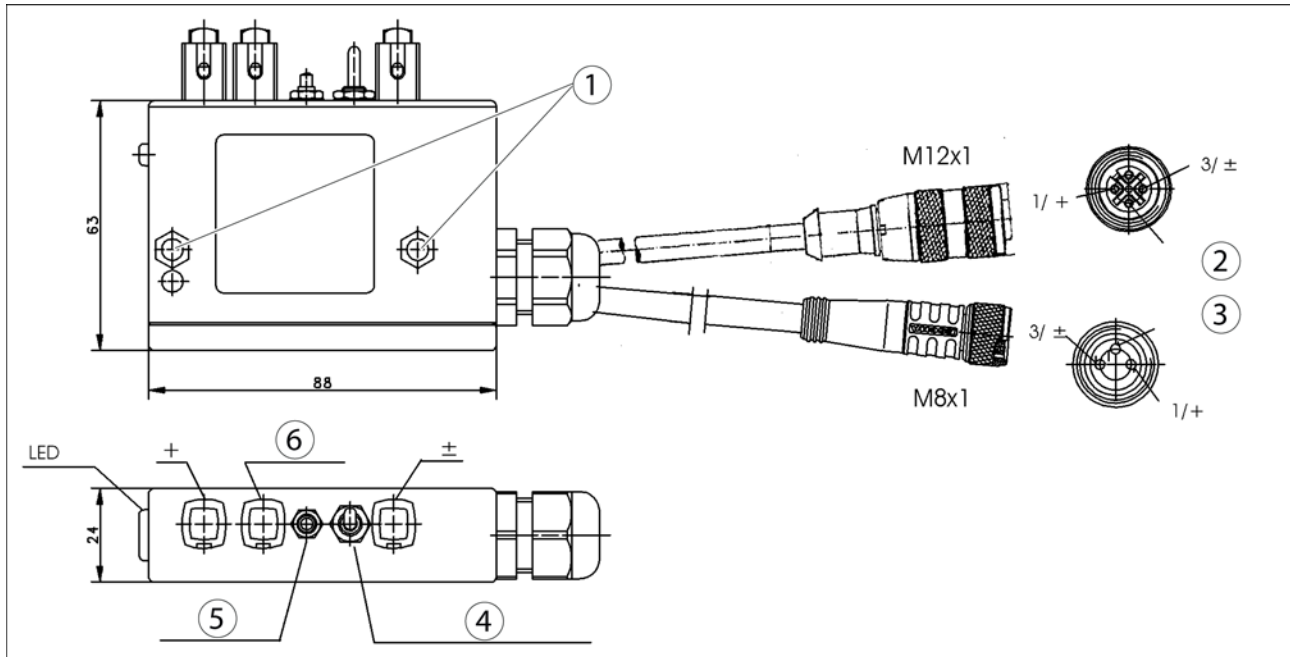


Fig. 1

1	Through-bores	4	PNP / NPN ± switching device
2	4/ output	5	ON ± button
3	2/ output	6	Output

6.2 Installation of a sensor on the sensor tester

6.2.1 Connection of a sensor with M8 connecting plug

NOTE

PNP sensors are usually used in Europe. The switch must point towards the adhesive label.

- 1 Plug the M8 plug of the sensor into the M8 socket of the SST.
- 2 Tighten the knurled nut.
- 3 Adjust the 'NPN / PNP' switching device according to your sensor.
- 4 For NPN sensors, actuate the switch in the other direction.
- 5 Actuate the On button.

6.2.2 Connection of a sensor with M12 connecting plug

NOTE

PNP sensors are usually used in Europe. The switch must point towards the adhesive label.

- 1 Plug the M12 plug of the sensor into the M12 socket of the SST.
- 2 Tighten the knurled nut.
- 3 Adjust the 'NPN / PNP' switching device according to your sensor.
- 4 For NPN sensors, actuate the switch in the other direction.
- 5 Actuate the On button.

6.2.3 Connection of a sensor with an open wire strand

- 1 First check whether the wire colors on the sensor correspond to the meanings in the table.

Wires	Spring-type terminal on SST	Meaning
Brown	+ PLUS	Supply voltage of the sensor + VDC
Black / white	A	Sensor signal output
Blue	- MINUS	Supply voltage of the GND sensor

NOTE

PNP sensors are usually used in Europe. The switch must point towards the adhesive label.

- 1 Connect the wires accordingly.
- 2 Adjust the 'NPN / PNP' switching device according to your sensor.
- 3 For NPN sensors, actuate the switch in the other direction.
- 4 Actuate the On button.

6.3 Operation of the SST with a sensor

After switching on the sensor tester, it remains active for 30 seconds. If the condition of the connected sensor changes, the SST remains switched on for another 30 seconds.

The switched on condition can be identified by the green LED. If this LED lights up in red after switching on the SST, the battery should be changed.

If the connected sensor is dampened, the SST peeps once and the orange LED lights up. If the condition of the connected sensor switches from dampened to undampened, the SST peeps again and the orange LED goes out.

7 Battery change

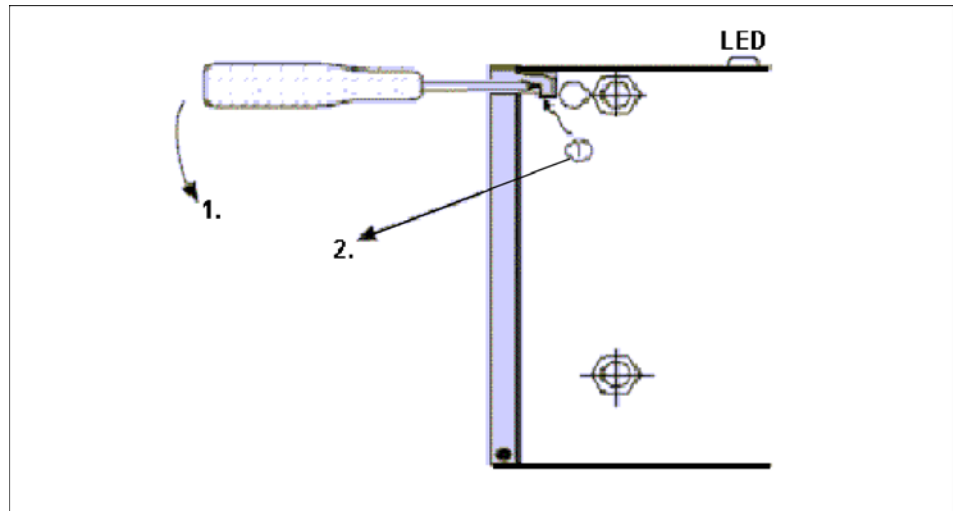


Fig. 2 Battery change

- 1 Open the snap-on cover with a screwdriver.
- 2 Remove the old battery and replace it with a new one.
- 3 Push the snap-on cover back into the housing.

8 Maintenance and care

The Sensor tester SST is maintenance-free.

9 Troubleshooting

Possible cause	Corrective action
No LED lights up.	The battery is empty or no battery is inserted.
A red LED lights up.	The battery is more or less empty. Change the battery.
The orange LED is always lit up.	The PNP / NPN switching device is in the incorrect position.

