Assembly and operating manual

SST

Sensor tester

Original operating manual

Hand in hand for tomorrow

Imprint

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

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Dear Customer,

Thank you for trusting our products and our family-owned company, the leading technology supplier of robots and production machines.

Our team is always available to answer any questions on this product and other solutions. Ask us questions and challenge us. We will find a solution!

Best regards,

Your SCHUNK team

Customer Management

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Please read the operating manual in full and keep it close to the product.

Table of Contents

1 General

1.1 About this manual

This manual contains important information for a safe and appropriate use of the product.

This manual is an integral part of the product and must be kept accessible for the personnel at all times.

Before starting work, the personnel must have read and understood this operating manual. Prerequisite for safe working is the observance of all safety instructions in this manual.

1.1.1 Applicable documents

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

The documents labeled with an asterisk (*) can be downloaded from **schunk.com/downloads**.

1.2 Warranty

If the product is used as intended, the warranty is valid for 24 months from the ex-works delivery date under the following conditions:

- Observe the ambient conditions and operating conditions

Parts touching the workpiece and wear parts are not included in the warranty.

1.3 Scope of delivery

The scope of delivery includes

- Sensor tester SST
- Safety information (product-specific instructions available online)

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 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.

- The product may only be used within the scope of its technical data, ▸ 3 [🗋 6].

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 Constructional changes

Implementation of structural changes

Modifications, changes or reworking, e.g. additional threads, holes, or safety devices, can damage the product or impair its functionality or safety.

- Structural changes should only be made with the written approval of SCHUNK.

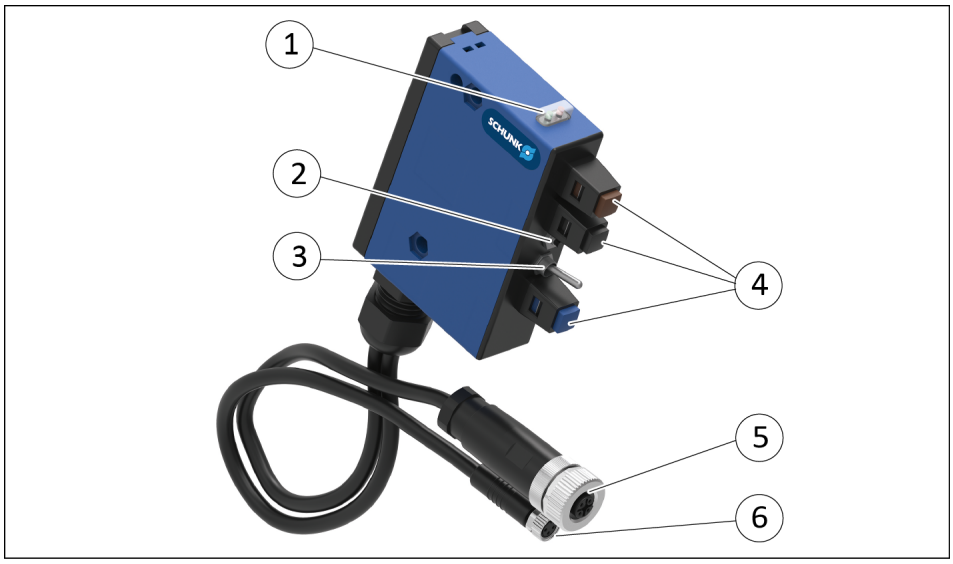
3 Technical data

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
Measurement operating voltage [VDC]	9 (compound battery 6LR61) (not included in the scope of delivery)
Internal operating voltage [VDC]	15
Connection options	Inductive, capacitive and optoelectronic sensors (3-conductor DC, 2-conductor DC and NAMUR)

More technical data is included in the catalog data sheet. Whichever is the latest version.

4 Design and description

4.1 Design



1	Green/red LED	green: operating voltage indicator red: battery change signal

	Orange LED	Function display
2	ON button	
3	PNP/NPN switch	
4	Connections for sensors with open wire strands	
5	Connection for sensor with M12 connecting plug	
6	Connection for sensor with M8 connecting plug	

4.2 Description

The SST sensor tester enables the rapid testing and adjustment of inductive sensors, magnetic switches and reed contacts.

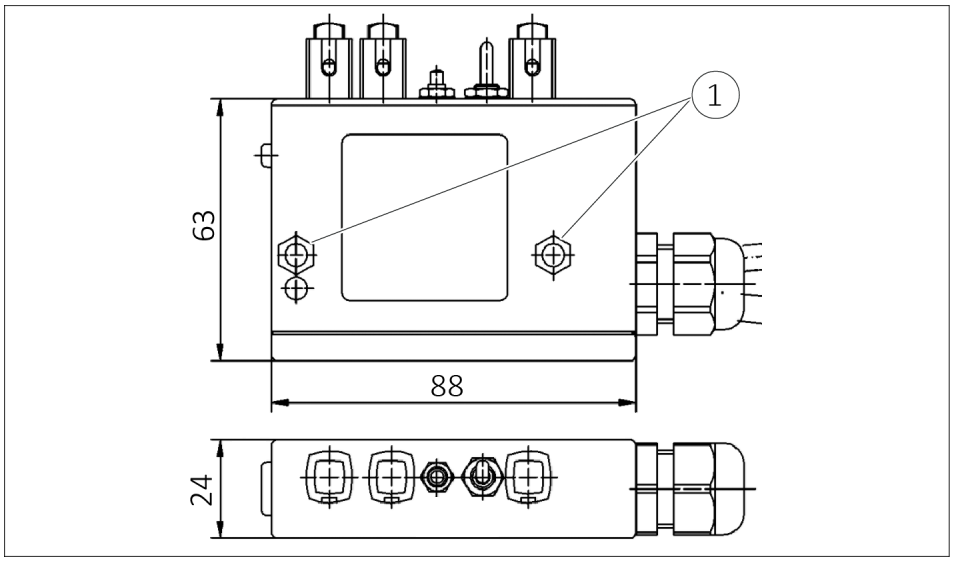
The switching function is signaled by an LED and an additional acoustic signal.

When not in use, the sensor tester automatically switches itself off after approx. 30 seconds.

The necessary power is supplied by a 9 V compound battery

5 Assembly

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



1 Through-bores Ø 5.5

5.1 Insert battery

1. Using a screwdriver, press against the lock on the cover of the battery compartment and open the battery compartment cover.
2. Insert battery.
   Battery type: **9V compound battery 6LR61** (not included in the scope of delivery)
3. Close the battery compartment cover and snap the lock in place.

6 Operation

6.1 Installation of a sensor on the sensor tester

6.1.1 Connection of a sensor with connection plug

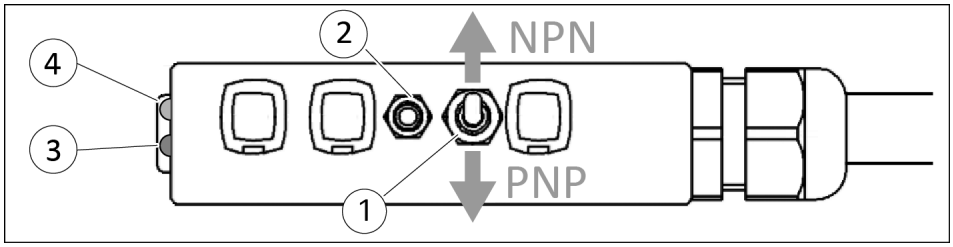
1. Plug the M8 or the M12 plug of the sensor into the according socket of the SST.
2. Tighten the knurled nut.

6.1.2 Connection of a sensor with an open wire strand

Wire colors for the sensor	Color of SST spring-type terminal	Description
Brown	Brown (+ PLUS)	Supply voltage of the sensor + VDC
Black / White	Black (A)	Sensor signal output
Blue	Blue (– MINUS)	Supply voltage of the GND sensor

1. Check whether the wire colors of the sensor correspond to the descriptions in the table.
2. Connect wires to the spring-type terminals.

6.2 Operation of the SST with a sensor



- The sensor to be tested is connected.

1. Adjust PNP/NPN switch (1) according to the sensor type.
2. Actuate the ON button (2).
   - ⇨ LED (3) lights up green.
   - ⇨ If the LED (3) lights up in red, the battery needs to be changed.
3. If the sensor is damped, the SST emits a signal and the LED (4) lights up in orange.
4. If the status of the sensor changes from damped to undamped, the SST emits a signal again and the LED (4) goes off.

NOTE

After switching on, the SST remains active for 30 seconds. Every change of state of the sensor extends the activation duration another 30 seconds.

7 Maintenance and care

7.1 Maintenance

This product does not require maintenance.

7.2 Battery change

1. Using a screwdriver, press against the lock on the cover of the battery compartment and open the battery compartment cover.
2. Remove old batteries and dispose of them properly.
3. Insert new battery.
   Battery type: **9V compound battery 6LR61** (not included in the scope of delivery)
4. Close the battery compartment cover and snap the lock in place.

8 Troubleshooting

Error	Possible cause / Corrective action
No LED lights up.	The battery is empty or does not have contact.
The red LED lights up.	The battery is almost empty. Change the battery.
Orange LED lights up continuously.	PNP/NPN switch is set incorrectly.

9 Translation of the original declaration of conformity

Manufacturer/ Distributor	SCHUNK SE & Co. KG Spanntechnik | Greiftechnik | Automatisierungstechnik Bahnhofstr. 106 – 134 D-74348 Lauffen/Neckar
Product designation:	Sensor tester SST
ID number	0301400

We hereby declare on our sole authority that the product meets the requirements of the following directives at the time of the declaration.
The declaration is rendered invalid if modifications are made to the product.

- **Low Voltage Directive 2014/35/EU**

Applied harmonized standards, especially:

EN 60947-5-1:2004 + Cor.:2005 +A1:2009	Low-voltage switchgear and controlgear - Part 5-1: Control circuit devices and switching elements - Electromechanical control circuit devices (IEC 60947-5-1:2003 + A1:2009)
EN 62246-1:2015	Reed switches - Part 1: Generic specification (IEC 62246-1:2015)

Signed for and on behalf of: SCHUNK SE & Co. KG

Lauffen/Neckar, October 2024

i.V. Nico Peper;
Director Software and Electronics;
Technology & Innovation

10 UKCA Declaration of Conformity

Manufacturer/ Distributor	SCHUNK Intec Limited Clamping and gripping technology 3 Drakes Mews, Crownhill MK8 0ER Milton Keynes
Product designation:	Sensor tester SST
ID number	0301400

We hereby declare that the product complies with all relevant harmonization legislation of the following directives at the time of declaration.
The declaration is rendered invalid if modifications are made to the product.

Electrical Equipment (Safety) Regulations 2016

Applied harmonized standards, especially:

EN 60947-5-1:2004 + Cor.:2005 +A1:2009	Low-voltage switchgear and controlgear - Part 5-1: Control circuit devices and switching elements - Electromechanical control circuit devices (IEC 60947-5-1:2003 + A1:2009)
EN 62246-1:2015	Reed switches - Part 1: Generic specification (IEC 62246-1:2015)

Person authorized to compile the technical documentation:
Marcel Machado, address: refer to manufacturer's address

Signed for and on behalf of: SCHUNK SE & Co. KG

Lauffen/Neckar, October 2024

i.V. Nico Peper;
Director Software and Electronics;
Technology & Innovation

11 Information on the RoHS Directive, REACH Regulation and Substances of Very High Concern (SVHC)

RoHS Directive

SCHUNK products are classified as "large-scale stationary installations" or as "large-scale stationary industrial tools" within the meaning of Directive 2011/65/EU and its extension 2015/863/EU "on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)", or fulfill their intended function only as part of one. Therefore products from SCHUNK do not fall within the scope of the directive at this time.

REACH Regulation

Products from SCHUNK fully comply with the regulations of Regulation (EC) No. 1907/2006 "concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)" and its amendment 2022/477. SCHUNK attaches great importance to completely avoiding chemicals of concern to humans and the environment wherever possible.

Only in rare exceptional cases do SCHUNK products contain SVHC substances on the candidate list with a mass content above 0.1%. In accordance with Article. 33 (1) of Regulation (EC) No. 1907/2006, SCHUNK complies with its duty to "communicate information on substances in articles" and lists the components concerned and the substances used in an overview that can be viewed at **schunk.com\SVHC**.

Signature: see original declaration

Lauffen/Neckar, October 2024

Dr.-Ing. Manuel Baumeister,
Head of Systems Engineering,
Technology & Innovation

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10-2024

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