

Mess-, Regel- und
Überwachungsgeräte
für Haustechnik,
Industrie und Umweltschutz



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Instruction Manual

Pressure instrument S2600

-  Read manual before use!
-  Observe all safety information!
-  Keep manual for future use!

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1 About this instruction manual

This instruction manual is part of the product.

- ▶ Read this manual before using the product.
- ▶ Keep this manual during the entire service life of the product and always have it readily available for reference.
- ▶ Always hand this manual over to future owners or users of the product.

1.1 Structure of warning

WARNING TERM The type and source of danger is shown here.



- ▶ Precautions to take in order to avoid the danger are shown here.

There are three different levels of warning:

Warning term	Meaning
DANGER	Imminent danger! Failure to observe the information will result in death or serious injuries.
WARNING	Possible imminent danger! Failure to observe the information may result in death or serious injuries.
CAUTION	Dangerous situation! Failure to observe the information may result in minor or serious injuries as well as damage to property.

1.2 Explanation of symbols and typeface

Symbol	Meaning
<input checked="" type="checkbox"/>	Prerequisite for an activity
▶	Activity consisting of a single step
1.	Activity consisting of several steps
↪	Result of an activity
•	Bulleted list
Text	Indication on a display
Highlighting	Highlighting



2 Safety

2.1 Intended use

The pressure instrument S2600 is exclusively suitable for measurement of low pressure, excess pressure, differential pressure and relative pressure of gaseous media in areas not in danger of explosions (non-hazardous areas).

Any use other than the use explicitly stated in this instruction manual is not permitted.

2.2 Predictable incorrect application

The pressure instrument S2600 must never be used in the following:

- Hazardous areas (ex)
If the device is operated in hazardous areas, sparks may cause deflagrations, fires or explosions
- Applications involving persons or animals

2.3 Safe handling

This product represents state-of-the-art technology and is manufactured in accordance with the pertinent safety regulations. Each unit is subjected to a function and safety test prior to despatch.

- ▶ Operate the product only when it is in perfect condition. Always observe the instruction manual, all pertinent local and national directives and guidelines as well as health and safety regulations and directives regarding the prevention of accidents.

External environmental conditions may impede the functioning of the product.

- ▶ Product to be protected from shocks.
- ▶ Product to be used only in indoor areas.
- ▶ Product to be protected from moisture.

2.4 Qualification of personnel

The product may only be installed, commissioned, operated, maintained, shut down and disposed of by qualified, specially trained personnel.

Electrical work may only be carried out by qualified electricians in accordance with local and national regulations.

2.5 Modifications to the product

Changes or modifications made to the product by unauthorised persons may lead to malfunctions and are prohibited for safety reasons.

2.6 Use of spare parts and accessories

Use of unsuitable spare parts and accessories may cause damage to the product.

- ▶ Use only the manufacturer's genuine spare parts and accessories (refer to chapter 10, page 12).

2.7 Liability information

The manufacturer shall not be liable for any direct or consequential damage resulting from failure to observe the technical instructions, guidelines and recommendations.

The manufacturer and the sales company shall not be liable for costs or damages incurred by the user or by third parties in the use or application of this device, particularly in case of improper use of the device, misuse or malfunction of the connection, malfunction of the device or of connected devices. The manufacturer or the sales company shall not be liable for damages resulting from any use other than the use explicitly stated in this instruction manual.

The manufacturer shall not be liable for misprints.

3 Product description

3.1 Scope of delivery

The scope of delivery includes: Measurement device (incl. batteries) and protective case with magnet

3.2 Properties and functions

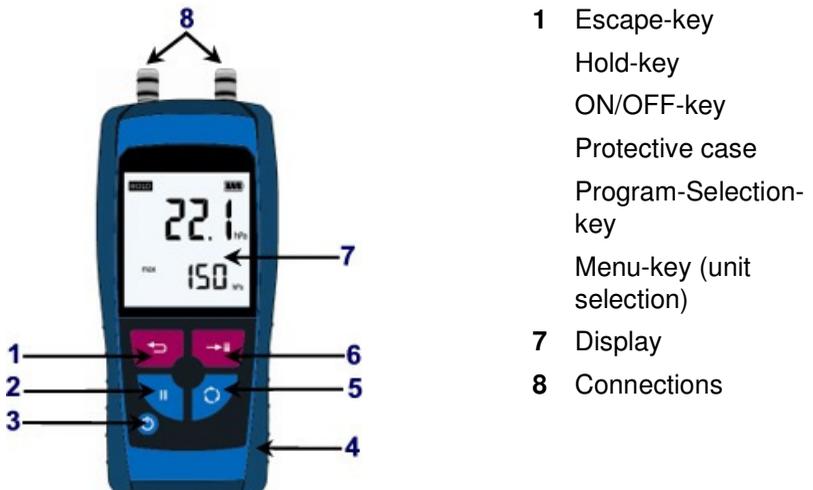


Fig. 1: Frontal view



4 Specifications

Table 1: Specifications

Parameter	Value
General	
Case measurements incl. protective case (B x H x W)	66 x 37 x 143 mm
Weight	Approx. 250 g
Case material	Plastics
Response delay	T 90 < 10 s
Pressure connection	2 x 8 mm / 2 x Festo (3 mm)
Operating temperature range	
Ambient	0 °C to +40 °C / +32 °F to +104 °F
Medium	0 °C to +40 °C / +32 °F to +104 °F
Storage	-20 °C to +50 °C / -4 °F to +122 °F
Power supply	
Nominal voltage	Through mains adaptor (USB)
Electrical safety	
Protection	IP 40 EN 60529
Electromagnetic compatibility (EMC)	
Noise suppression	EN 55011 (VDE 0875-11)
Noise immunity	EN 61000 (VDE 0847-4-2)
ESD	EN 61000-4-2

Table 2: Product specifications (Basis-Version)

	S2601 (FZM30)	S2610 (DMG15)	S2650 (DMG25)	S2680
Measurement range [mbar]				
- nominal	150	1.000	5.000	8.000
- maximal	180	1.500	7.000	9.999
Max. excess pressure [bar]	1.35	3.0	10	10.5



	S2601 (FZM30)	S2610 (DMG15)	S2650 (DMG25)	S2680
Resolution [mbar]	0.01 (<19.99) 0.1 (> 20.0)	0.1 (<199.9) 1 (>200)	1 (<1999) 10 (>2000)	0.1 (< 1999) 1 (> 2000)
Accuracy [% of reading]	1.0 ± 1 digit (<130.0 mbar) 1.5 ± 1 digit (>130.0 mbar)	1.0 ± 1 digit (<1000 mbar) 1.5 ± 1 digit (>1000 mbar)	1.0 ± 1 digit (<5000 mbar) 1.5 ± 1 digit (>5000 mbar)	1.0 ± 1 Digit (<8000 mbar) 1.5 ± 1 Digit (>8000 mbar)
Mechanical con- nections	2 x standard (Ø 8 mm)	2 x standard (Ø 8 mm)	2 x Festo (Ø 3 mm)	2 x Festo (Ø 3 mm)

4.1 Approvals, tests and conformities

The pressure measuring device S2600 is approved according to 1. BImSchV and EN 50379-2 and is TÜV-certified. It conforms to the EMC Directive (2004/108/EG).

5 Transportation and storage

CAUTION Damage to the device due to improper transportation.



- ▶ Do not throw or drop the device.

CAUTION Damage to the device due to improper storage.

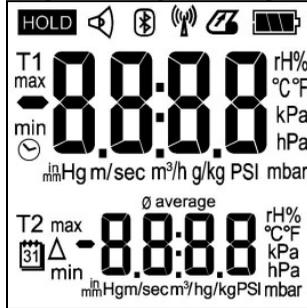


- ▶ Protect the device against shock when storing it.
 - ▶ Store device in a clean and dry environment.
 - ▶ Store device only within its permissible temperature range.
-



6 Operation

1. Connect battery.
2. Switch on device: Press ON/OFF-key  for approx. 1 second.
3. Segment test
All available display segments are shown for approx. 2 seconds.
For control purposes, the display of all segments can be prolonged through holding the ON/OFF-key .



4. Serial No. and Firmware-Version
This screen displays the serial no. (e.g. 123) of the device as well as the firmware version (e.g. V1.0.12).



5. Device type and measuring mode

It follows the display of the device type (e.g. S2601) and of the measurement range (e.g. 150 hPa).



6.1 Measuring mode

Depending on the measurement range several measuring modes (submenus) are available. The operating modes "ZERO" (zero-point adjustment) and "UNIT" (unit selection) are available for all device types. The operating mode "AUTO" (auto-range) is available depend-

ing on the measurement range. The Program-Selection-key  is used to change between the different measuring modes. The Es-

cape-key  closes the current program and switches back to the measuring mode „ZERO“.

Measuring mode „ZERO“

In the measuring mode „ZERO“, the zero-point can be adjusted at will and anytime.

► Press Menu-key .





Measuring mode „UNIT“

Depending on the measuring mode the measuring units can be selected with the menu key .

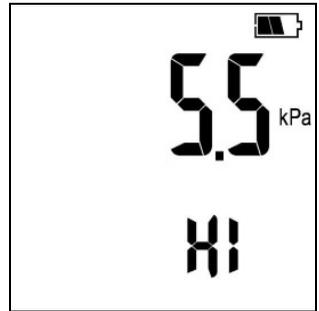


Measuring mode „AUTO“

In the measuring mode “AUTO” (Auto-Range) the best possible display of the reading is pre-selected. Thereby, the resolution will be adjusted or reduced as the measured variable increases.

Additionally, the desired reading display can be preset manually

through the Menu-key , so that for instance irrelevant digits behind the comma are not shown.

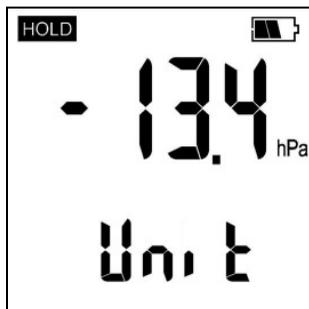


- Auto:** automatic selection of the measurement
- Lo (Low):** low measurement range (high resolution)
- HI (High):** high measurement range (low resolution)



Hold-function

The reading can be secured with the Hold-key  in all measuring modes. Press the same key again to release the reading.



6.2 Display light

The display light can be switched on or off with the ON/OFF-key . Thereby, pressing the key shortly is sufficient.

6.3 Device shut-down

- ▶ Press the ON/OFF-key  for approx. 2 seconds. A time-dependent auto shut-down function is currently not implemented.

7 Maintenance

7.1 Maintenance intervals

Table 3: Maintenance intervals

When	Activity
If required	<ul style="list-style-type: none"> ▶ Batteries replacement. ▶ Device cleaning.

7.2 Maintenance activities

Replacing the battery

1. Take out old battery and connect new battery (refer to chapter 6, page 8).
2. Batteries may **not** be disposed of together with unsorted household waste. Return empty batteries to a collection point or to your dealer for environmentally compatible disposal.





8 Troubleshooting

Repair work may only be carried out by qualified, specially trained personnel.

Table 4: Troubleshooting

Problem	Possible reason	Remedy
Device doesn't switch on.	Empty batteries.	▶ Replace batteries.
No pressure displayed.	Sensor defective.	▶ Send device to manufacturer.
Other errors.	–	▶ Send device to manufacturer.

9 Entsorgung



1. Remove batteries.
2. To protect the environment, this device must **not** be disposed of together with the normal household waste. Dispose of the device according to local directives or council guidelines.

This device consists of materials that can be reused by recycling firms. The electronic inserts can be removed easily and are constructed from recyclable materials.

If you do not have the opportunity to dispose of the old device in accordance with environmental regulations, please contact us for possibilities to dispose of it or to return it.

10 Spare parts and accessories

Part	Part No.
Anschlussgarnitur für S2600	69691

11 Warranty

The manufacturer's warranty for this product is 24 months from date of purchase. This warranty applies to all countries in which this product is sold by the manufacturer or its authorised representatives.

12 Copyright

The manufacturer holds the copyright to this manual. This manual may only be reprinted, translated, copied in part or in whole with the prior written consent of the manufacturer.

We reserve the right to modify any specifications or alter any illustrations in this manual without prior notice.



13 Customer satisfaction

Customer satisfaction is our prime objective. Please get in touch with us if you have any questions, suggestions or problems regarding your product.

14 Addresses

The addresses of our worldwide representatives can be found on the Internet at www.afriso.de.