Mounting instructions

Battery compartment for VEGAPULS Air 41, 42

Contents

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1   For your safety

1.1   Authorised personnel

All operations described in this instruction manual must be carried out only by trained qualified personnel authorised by the plant operator.

During work on and with the device, the required personal protective equipment must always be worn.

1.2   Appropriate use

The battery compartment is an accessory or retrofit component for the sensors VEGAPULS Air 41 and VEGAPULS Air 42.

1.3   General safety instructions

The safety information in the operating instructions manual of the respective device must be noted.

1.4   Safety instructions for Ex areas

Take note of the Ex specific safety instructions for Ex applications. These instructions are attached as documents to each instrument with Ex approval and are part of the operating instructions.

2   Product description

2.1   Configuration

Scope of delivery

The scope of delivery encompasses:

* Battery compartment
* Foam pad as vibration protection
* Battery (optional)

* Documentation
    – These mounting instructions

2.2   Application area

Retrofitting

The battery compartment is a retrofit component for the sensors VEGAPULS Air 41 and VEGAPULS Air 42.

VEGAPULS Air 41 and VEGAPULS Air 42 series sensors were equipped with five LS 17500 cells (manufacturer: Saft) up to hardware version 2.1.0. By using a single larger battery LS 33600 (manufacturer: Saft), the voltage supply of the sensors is improved and thus also the battery life.

To be able to operate the sensors with the larger battery, it is necessary to change the battery compartment.

Note:
Sensors from hardware version 2.2.0 are already equipped with this battery compartment at the factory. Retrofitting is not necessary for these sensors.

Replacement

The battery compartment can be replaced in case of a defect.

3   Mounting

3.1   Mounting preparations

Tools

You will need the following tools to replace the battery compartment:

● Screwdriver Torx T10
● Slot screwdriver

3.2   Installation procedure

Proceed as follows:

1. Unscrew the housing lid
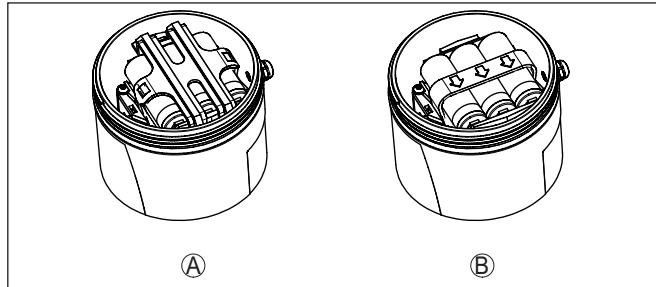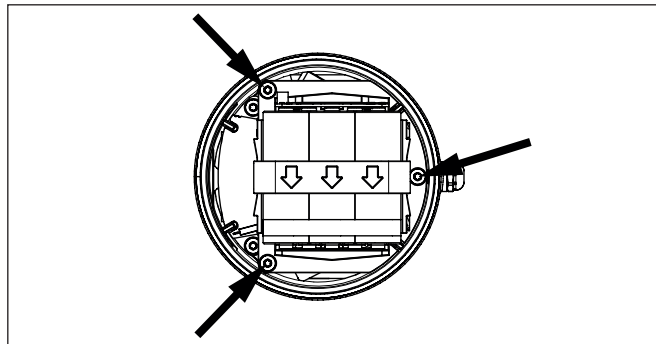
2. Unlock and remove the cell retaining bracket


Fig. 1: Two retaining bracket versions

A   Unlock with slotted screwdriver
B   Push in direction of arrow to unlock

3. Loosen three Torx T10 safety screws and carefully remove the old battery compartment

4. Separate the electrical connection on the battery compartment

5. Insert the plug in the new battery compartment

6. Insert the new battery compartment and secure it with the three Torx T10 safety screws
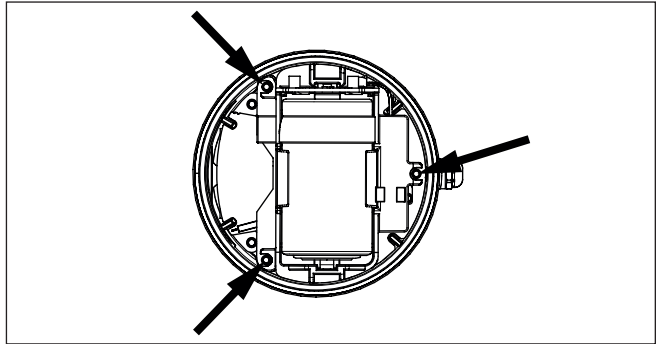
Note:
When inserting the battery compartment, take care not to bend the cable.

7. Insert the new battery LS 33600 (manufacturer: Saft)

8. Stick foam pad in the centre of the lid

9. Screw on housing cover

10. Reset internal clock with the operating tool

This completes the cell replacement, the capacity is reset automatically to 100 % for operating app and DTM.

Note:
All user settings in the operator menu are retained, i.e. an activated sensor remains activated.

Note:
The old battery compartment, the old batteries and the retaining bracket are no longer needed and can be disposed of properly.

4 Supplement

4.1 Technical data

General data

Material	Plastic (PPE)

Ambient conditions

Ambient temperature	-20 … +60 °C (-4 … +140 °F)
Storage and transport temperature	-20 … +60 °C (-4 … +140 °F)

Battery

Type	LS 33600 (Saft), Mono (D), Lithium metal (Li/SOCL2), not rechargeable
Number of batteries	1
Voltage	3.6 V
Capacitance	17.0 Ah
Energy content	61.2 Wh
Lithium concentration	approx. 4.5 g
Weight	90 g
Self-discharge	< 1 % after 1 year at 20 °C
Running time	

The battery runtime depends on many factors: Reception quality, measurement conditions, temperature fluctuations, radio standard, network provider, …

Typical measurement tasks under average conditions deliver battery runtimes of over eight years.

The battery runtime calculator provides a detailed calculation with adjustable measurement conditions: www.vega.com/en-de/products/product-catalog/level/radar/vegapuls-air-runtime-calculation

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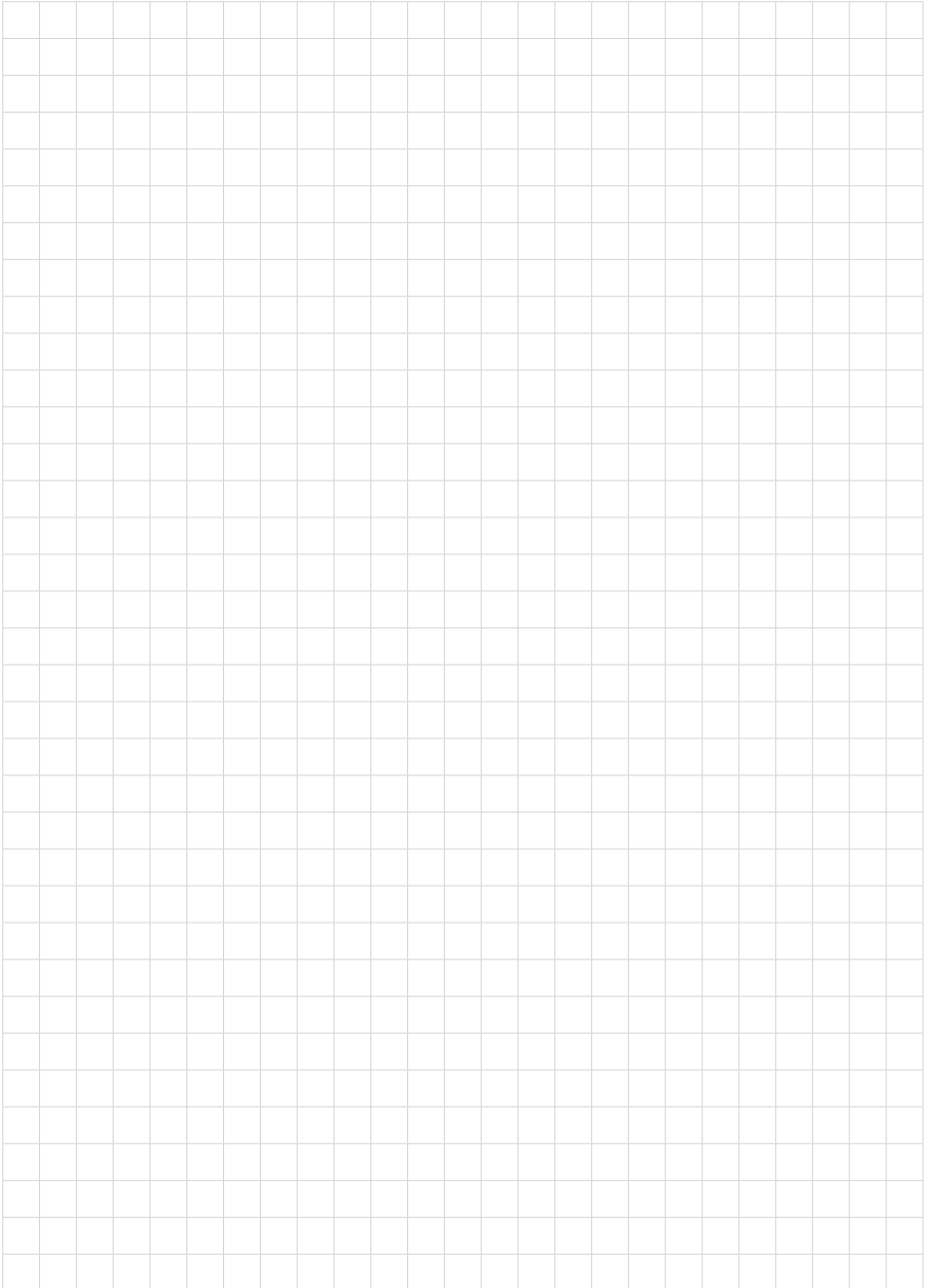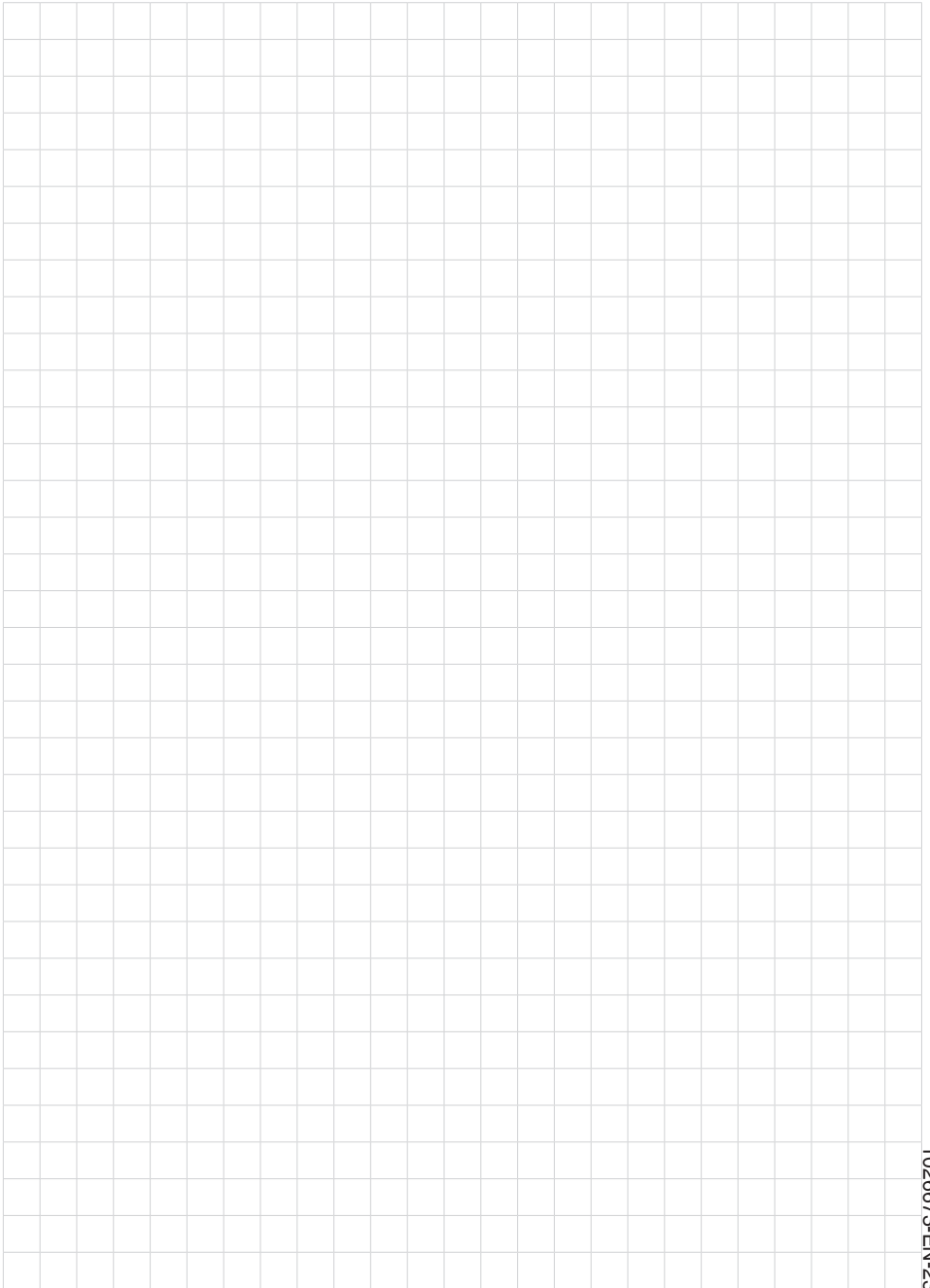进一步信息请参见网站< www.vega.com。

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