Installation Instructions Main electronics Digital communication

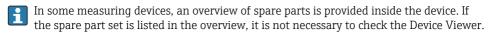
Cerabar, Deltabar

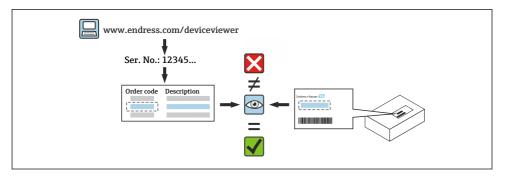




1 Intended use

- A defective unit can only be replaced with a functioning unit of the same type.
- Use only original parts from Endress+Hauser.
- Check in the W@M Device Viewer if the spare part is suitable for the existing measuring device





2 Personnel authorized to carry out repairs

Technical staff must comply with the following requirements for repair, mounting, electrical installation and commissioning of the measuring devices:

- Specialized technical staff must be trained in instrument safety.
- They must be familiar with the individual operating conditions of the devices.
- In the case of Ex-certified measuring devices, they must also be trained in explosion protection.



3 Safety instructions

- Comply with national regulations governing mounting, electrical installation, commissioning, maintenance and repair procedures.
- Device is live! Risk of fatal injury from electric shock. Open the device only when the device is deenergized.
- For devices intended for use in hazardous locations, please observe the instructions in the Ex documentation (XA).
- In the case of devices in safety-related applications in accordance with IEC 61508 or IEC 61511: Commission in accordance with Operating Instructions after repair.

- Before removing the device: set the process to a safe state and purge the pipe of dangerous process substances.
- Risk of burns from hot surfaces! Before commencing work: allow the system and device to cool down to a touchable temperature.
- In the case of devices in custody transfer, the custody transfer status no longer applies once the seal has been removed.
- Observe the Operating Instructions for the device.
- Risk of damage to electronic components! Ensure you have a working environment protected from electrostatic discharge.
- After removing the electronics compartment cover: risk of electrical shock due to missing touch protection! Switch the device off before removing internal covers.
- Modifications to the device are not permitted.
- Only open the housing for short periods. Avoid ingress of foreign bodies, moisture or contaminants.
- Replace defective seals only with original seals from Endress+Hauser.
- If threads are damaged or defective, the device must be repaired.
- Do not lubricate threads (e.g. of electronics compartment cover or connection compartment cover).
- If spacing is reduced or the dielectric strength of the device is not guaranteed during repair work, perform a test on completion of the work (e.g. high-voltage test in accordance with the manufacturer's instructions).
- Service connector:
 - Do not connect in potentially explosive atmospheres.
 - Only connect to Endress+Hauser service devices.
- Observe the instructions for transporting and returning the device outlined in the Operating Instructions.
- Contact Endress+Hauser Service if you have questions: www.addresses.endress.com

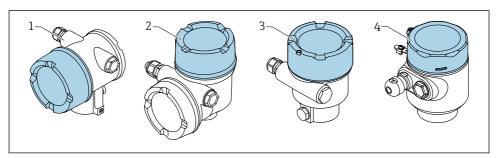
Tools list 4







5 Housing version

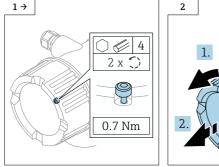


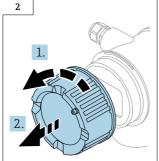
- 1 Dual compartment housing
- 2 Dual compartment housing, L-form
- 3 Single-compartment housing
- 4 Single-compartment housing, 316L hygiene

6 Removal

6.1 Dual-compartment housing (not L-form)

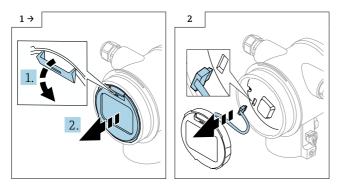
6.1.1 Removing the cover



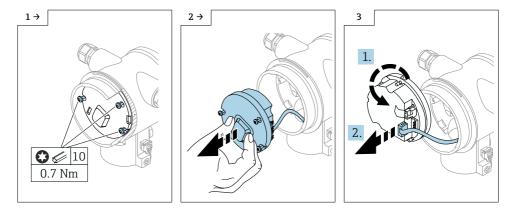


lacksquare Optional: cover lock

6.1.2 Optional: removing the display



6.1.3 Removing the electronics



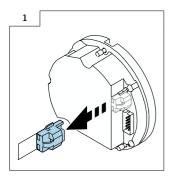
6.1.4 Removing the HistoROM

The electronics module contains a plug-in HistoROM, in which all device and measuring point data are stored.

NOTICE

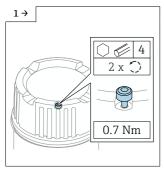
The device cannot be operated without the HistoROM.

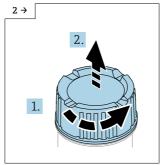
- ▶ Use the original HistoROM: Store the HistoROM in a safe place until it is installed in the new electronics module. After the electronics module has been installed, the device can be operated immediately.
- ▶ If the original HistoROM is not available, use the enclosed HistoROM: The HistoROM is blank. Reconfigure the device after installing the electronics module. The device serial number, order code, activation code and wizard for Heartbeat, SIL and WHG are no longer available.

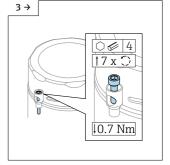


6.2 Single-compartment housing and L-form dual-compartment housing

6.2.1 Removing the cover

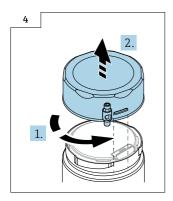




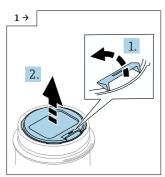


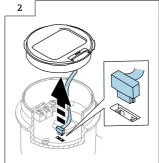
► Optional: cover lock

 Optional: cover lock on singlecompartment housing, 316L hygiene



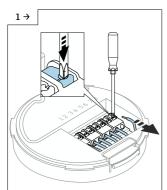
6.2.2 Optional: removing the display

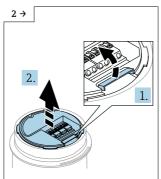


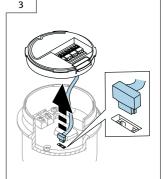


6.2.3 Optional: removing the transmitter VU140

- For customer wiring: step 1, 2, 3
- For M12: step 2, 3

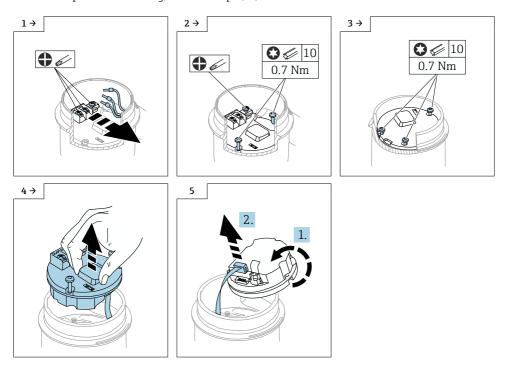






6.2.4 Removing the main electronics

- Single-compartment housing: step 1, 2, 4, 5
- Dual compartment housing, L-form: step 3, 4, 5



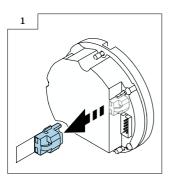
6.2.5 Removing the HistoROM

The electronics module contains a plug-in HistoROM, in which all device and measuring point data are stored.

NOTICE

The device cannot be operated without the HistoROM.

- ▶ Use the original HistoROM: Store the HistoROM in a safe place until it is installed in the new electronics module. After the electronics module has been installed, the device can be operated immediately.
- ▶ If the original HistoROM is not available, use the enclosed HistoROM: The HistoROM is blank. Reconfigure the device after installing the electronics module. The device serial number, order code, activation code and wizard for Heartbeat, SIL and WHG are no longer available.



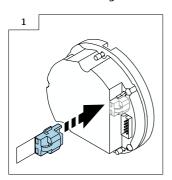
7 Installation

7.1 General installation instructions

Installation is performed by following the removal procedure in reverse order.

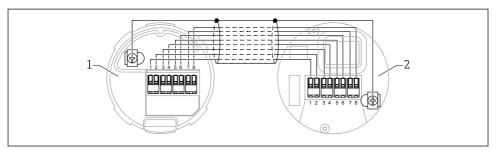
7.2 Special installation instructions

7.2.1 Mounting the HistoRom



7.2.2 For remote display FHX50B: pay attention to terminal assignment

The terminal assignments at transmitter VU140 and receiver VU141 must match (all terminals (1 to 8)). Connect the cable shield to the ground terminals on both sides.



- 1 Transmitter VU140
- 2 Receiver VU141

7.2.3 Cover lock

In the case of devices with a cover lock, the securing screw must not protrude over the lower edge of the cover. Note the position of the securing screw before and while screwing the cover on.

8 Parameter configuration

8.1 Parameter configuration with the original HistoROM

If the original HistoROM was used, the device can be operated immediately after the electronics module has been installed.

8.2 Parameter configuration with the enclosed HistoROM

If the original HistoROM has been replaced by the enclosed blank HistoROM, you must reconfigure the required device settings, e.g. LRV, URV and TAG measuring range settings.

Parameter configuration is carried out using the following optionally available interfaces: HART, Bluetooth or display with buttons.

After configuration, the device is ready for operation again.

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After replacement, the device serial number, order code, activation code and wizard for Heartbeat, SIL and WHG are no longer available.

Restoring the device parameters:

- If the device parameters were uploaded prior to replacing the HistoROM, the status from the time of the upload can be restored via Fieldcare with the device serial number. Important!
 - When downloading the data, the following option must be selected: Guidance \rightarrow Import / Export \rightarrow Electronic module replaced "YES".
- Alternatively, you can restore the device configuration to the delivery state. To do this, contact Endress+Hauser Service.

9 Disposal



If required by the Directive 2012/19/EU on waste electrical and electronic equipment (WEEE), the product is marked with the depicted symbol in order to minimize the disposal of WEEE as unsorted municipal waste. Do not dispose of products bearing this marking as unsorted municipal waste. Instead, return them to the manufacturer for disposal under the applicable conditions.



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