Installation Instructions **Process seal**

Cerabar PMC51B, PMC71B Cerabar M PMC51, Cerabar S PMC71 Deltabar FMD71

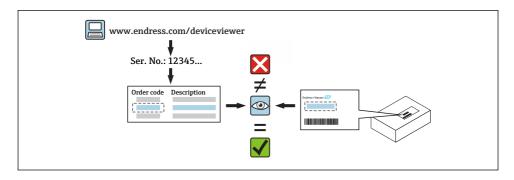


1 Intended use

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



A spare parts overview is located in the interior of some measuring devices. If the spare parts kit is specified on this list, no inspection is required.



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.

Technical staff carrying out work are responsible for ensuring that the work is carried out safely and to the required quality standard. They must also guarantee the safety of the device following repair.

3 Safety instructions

- Comply with national regulations governing mounting, electrical installation, commissioning, maintenance and repair procedures.
- The device is energized! Risk of fatal injury from electric shock. Open the device only when the device is de-energized.
- For devices intended for use in hazardous locations, please observe the guidelines 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. Document the repair procedure.
- Before removing the device: set the process to a safe state and purge the pipe of dangerous process substances.
- Hot surfaces! Risk of injury! 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.
- Follow the Operating Instructions for the device.
- Risk of damaging the 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!
 - Turn the device off before removing internal covers.
- Modifications to the device are not permitted.
- Only open the housing for a brief period. Avoid the penetration 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 plug:
 - Do not connect in explosive atmospheres.
 - Only connect to Endress+Hauser service devices.
- Observe the instructions for transporting and returning the device outlined in the Operating Instructions.

In case of questions, please context the local Endress+Hauser service organization.

4 Symbols

🔀 Forbidden

Procedures, processes or actions that are forbidden.

5 Tools list



For EHEDG/3A applications



6 Mounting instructions

NOTICE

Following the replacement of the process seal, the technical properties may be out of specification and the device then measures with reduced accuracy.

- ► Take the error factors into account
- ► Follow the instructions carefully

6.1 Error factors

The error factor depends on the measuring range:

100 to 400 mbar: Error factor 3

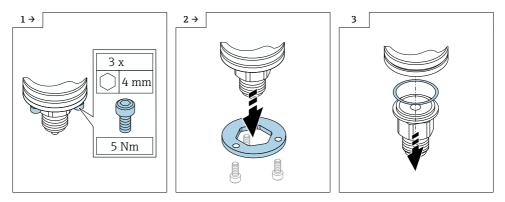
1 to 40 bar: Error factor 2.5

6.2 Additional information for hygienic applications

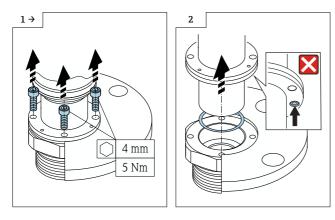
The sensor assembly may only remain exposed for a short time following disassembly from the process connection. Replace the seal quickly (max. 30 minutes).

7 Removing the process seal

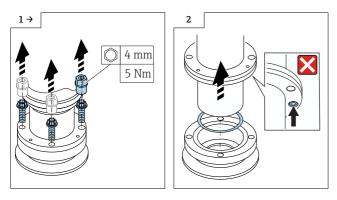
7.1 Membrane, internal



7.2 Membrane, flush mount



7.3 Membrane, flush mount (EHEDG, 3A)



8 Inserting a new process seal

The device is assembled by following the disassembly procedure in the reverse order.

Observe the following:

- 1. Prior to assembly, ensure that the new seal and all sealing surfaces are as clean as possible. The sealing surface must not be damaged.
- 2. Place the seal on the sealing surface of the measuring cell. In the case of oxygen applications, clean all of the process-wetted parts using special cleaning procedures.
- **3.** Place the process connection on the sensor assembly. The process seal must not slip out of place while doing this. Tighten the screws evenly in diagonally opposite sequence.
- **4.** After installing the device, perform position adjustment in accordance with the Operating Instructions.

NOTICE

After changing a process seal, the device cannot be aged like in the manufacturing process.

Deviations may occur in the zero point and span.

• Deviations can be corrected through a readjustment.



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