# Installation Instructions Fork protection Marine application

Liquiphant





# 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.

In some measuring devices, an overview of spare parts is provided inside the device. If the spare part set is listed in the overview, it is not necessary to check the Device Viewer.



# 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.
- 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 injury from hot surfaces! Before commencing work: allow the system and device to cool down to a touchable temperature.
- Observe the Operating Instructions for the device.
- Risk of damage to electronic components! Ensure that the working environment is protected against electrostatic discharge.
- Modifications to the device are not permitted.
- 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

### 4 Tools list



### 5 Removal

#### 5.1 Information on fork protection

- The fork protection is suitable for the following devices: Liquiphant FTL50, FTL51, FTL51B, FTL64, FTL70, FTL71
- Threaded fork protection version: Part number 71639787
- Threaded fork protection version, slitted: Part number 71639788





 This version is only suitable for pipe extensions. The fork protection must be parallel to the pipe extension. Tighten the screws with the required torque.

### 5.3 Threaded fork protection version, slitted



 This version is only suitable for compact versions.

# 6 Installation

### 6.1 General installation instructions

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

### 6.2 Special installation instructions

#### 6.2.1 For Ex zones or areas with vibration

#### **WARNING**

The threaded fork protection version can come loose as a result of vibration. Sparks may form if the fork protection falls off. This can cause a plant explosion in Ex zones.

- ► Only welded versions are permitted for use in areas with vibration.
- Only welded versions are permitted for use in potentially explosive areas.
- ▶ Welded versions are only available on request.

#### 6.2.2 WHG approval

- Approved for water-polluting substances in line with the German Water Resources Act (WHG).
- Minimum process temperature: -20 °C

#### 6.2.3 SIL applications

Use in safety systems requiring functional safety (SIL) is not permitted.



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