

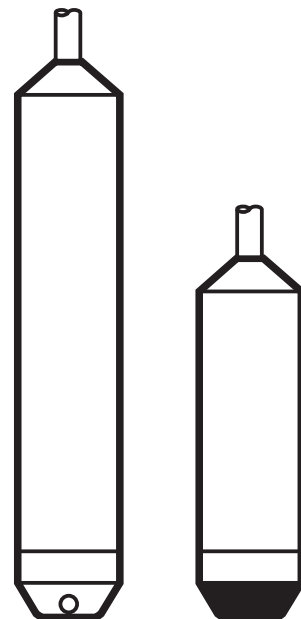
Installation instructions
Submersible pressure transmitter

PS3xxx
PS3xxA
PS4xxx

UK

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1 Preliminary note

1.1 Symbols used

► Instructions

> Reaction, result

→ Cross-reference



Important note

Non-compliance may result in malfunction or interference.



Information

Supplementary note.

2 Safety instructions

- Read this document before setting up the product and keep it during the entire service life.
- Only use the product for its intended purpose (→ Functions and features).
- Only use the product for permissible media (→ Technical data).
- If the operating instructions or the technical data are not adhered to, personal injury and/or damage to property may occur.

- The manufacturer assumes no liability or warranty for any consequences caused by tampering with the product or incorrect use by the operator.
- Installation, electrical connection, set-up, operation and maintenance of the product must be carried out by qualified personnel authorised by the machine operator.
- Protect units and cables against damage.
- Avoid static and dynamic overpressure exceeding the given overload pressure (→ Technical data) by taking appropriate measures.
- The indicated bursting pressure (→ Technical data) must not be exceeded. Even if the bursting pressure is exceeded only for a short time, the unit may be destroyed. CAUTION: risk of injury!
- For submersible pressure transmitters PS3xxA: Adhere to the remarks for safe use in hazardous areas (→ ATEX operating instructions).

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3 Items supplied

For the measuring range and the cable length please refer to the data sheet of the corresponding submersible pressure transmitter.

The submersible pressure transmitters PS3xxA are approved for use in hazardous areas.

The following components are available as accessories (to be ordered separately):

	Order no.
Cable clamp fastener for placing the submersible pressure transmitter in the tank*	E30399
Filter element for fixing on the capillary ventilation*	E30400
Splitter box for electrical connection*	E30401
Additional weight to increase the dead weight of the unit	E30402

*CAUTION: use only outside the hazardous area.

4 Functions and features

The unit detects the hydrostatic pressure and converts it into an analogue output signal. The output signal changes in proportion with the level of the tank.

Applications

- Liquids.
- Tanks, containers, wells, streaming water, drill holes, wastewater plants.

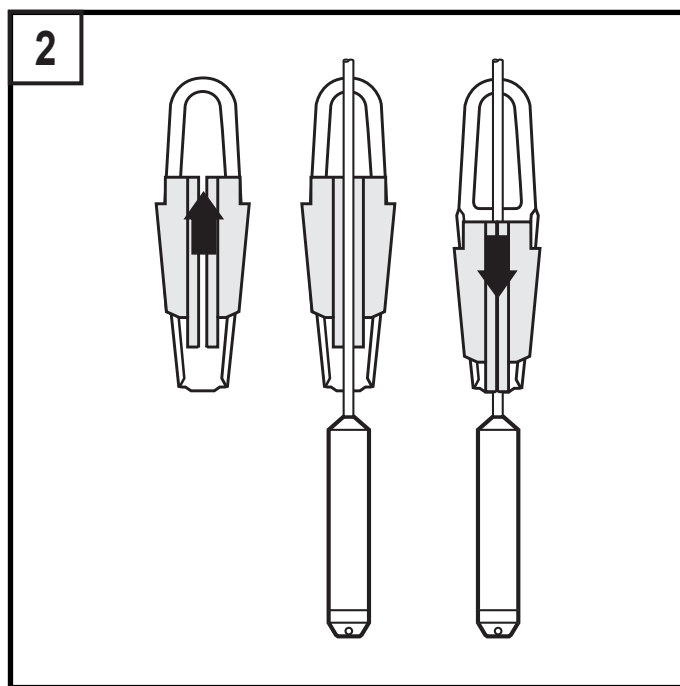
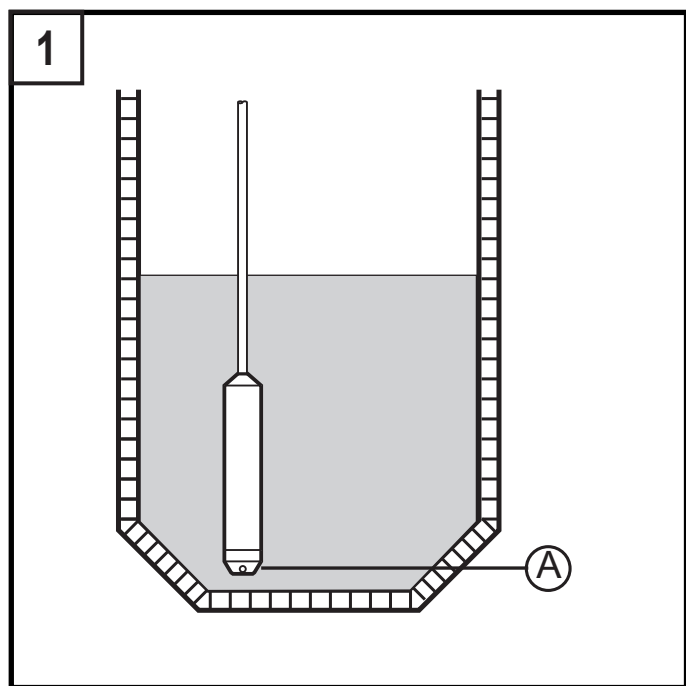


Pressure Equipment Directive (PED):

The units comply with the Pressure Equipment Directive and are designed and manufactured for group 2 fluids in accordance with the sound engineering practice. Use of group 1 fluids on request!

5 Installation

- Place the unit in the tank such that it is as close as possible to the tank bottom (→ Fig. 1). For fixing with cable clamp fastener → Fig. 2.



- For viscous media: unscrew and remove the protective cap (A).
- In order to prevent or reduce oscillating movements of the unit: unscrew the protective cap (A), screw the additional weight (order no. E30402) to the unit.

The unit operates on the principle of relative pressure. A capillary tube ensures pressure compensation. It is inserted through the connection cable.

- Make sure that the capillary tube is not blocked. If necessary, install a filter element (order no. E30400). Or use the splitter box with ventilation (order no. E30401) for the electrical connection.



In wet environments there is the risk that water penetrates into the unit through the capillary tube and causes damage to it. In this case use the filter element or the splitter box with ventilation.



The filter element and the splitter box are only allowed for use outside hazardous areas.

5.1 Requirements for the mounting location (applies to PS3xxA)

Strong electromagnetic fields in the frequency range < 2.7 GHz may lead to increased measurement errors up to 1 % of the span. Do not install the units near strong sources of electromagnetic interference (e.g. transmitters, radio equipment) or, if necessary, use a sheath current filter.

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6 Electrical connection



The unit must be connected by a qualified electrician.

The national and international regulations for the installation of electrical equipment must be adhered to.

Voltage supply to EN 50178, SELV, PELV.

For submersible pressure transmitters PS3xxA: For use in hazardous areas: connection to intrinsically safe supply isolators (Ex ia).

► Disconnect power.

► Connect the unit as follows:

PS3xxA / PS4xxx		PS3xxx	
Core colours		Core colours	
BN	brown	BN	brown
GN	green	WH	white
1: screen (connected to the housing)		GY	grey (screen)

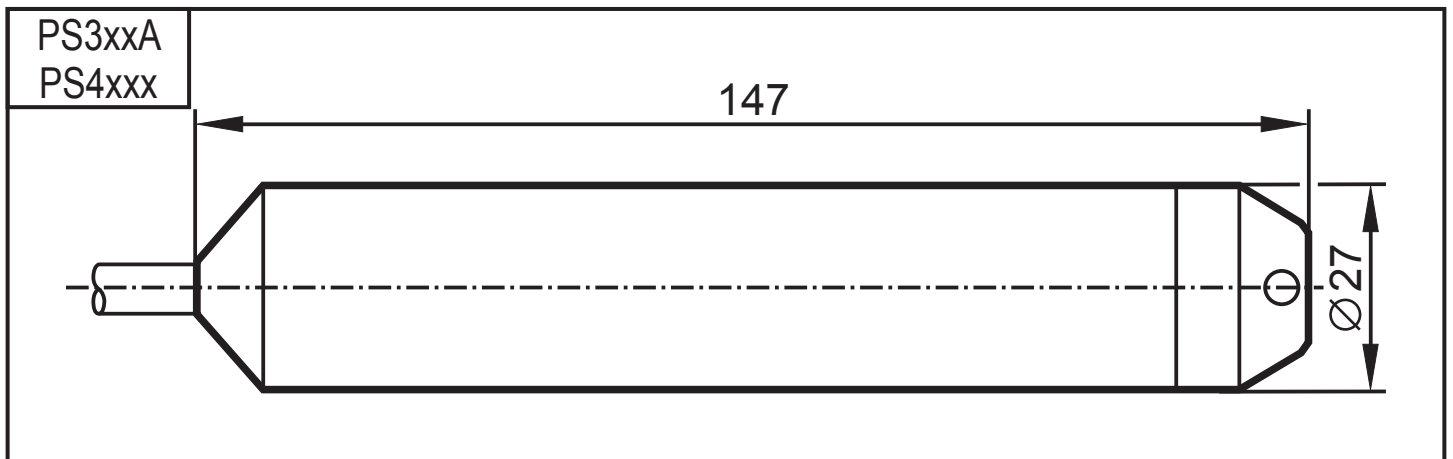
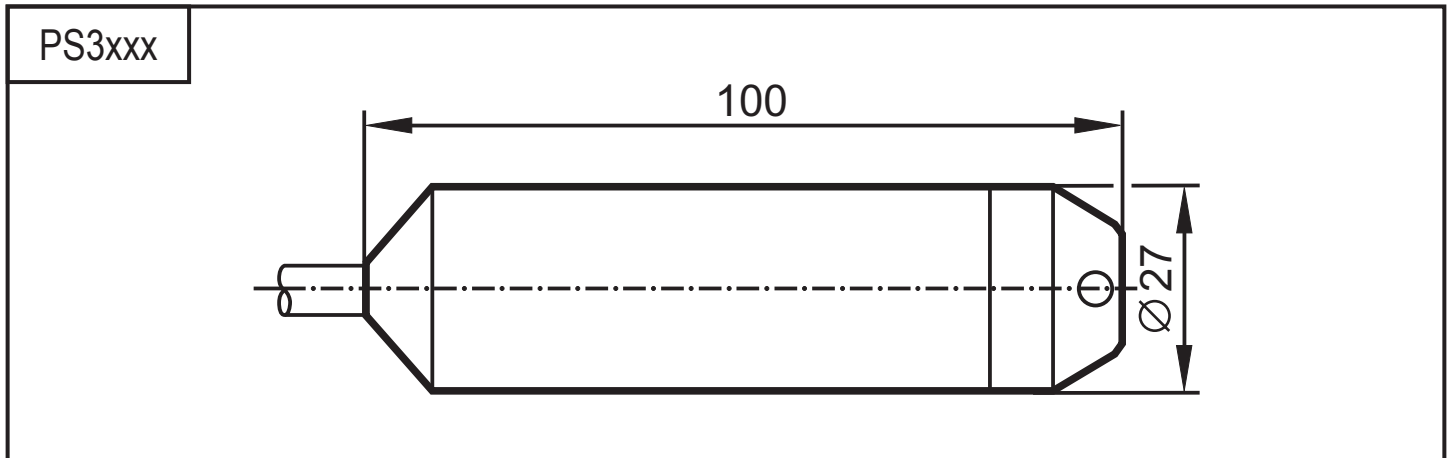
7 Maintenance, repair and disposal

The unit has to be included in the recurrent pressure test of the tank.

Only the manufacturer is allowed to repair the unit.

After use dispose of the unit in an environmentally friendly way in accordance with the applicable national regulations.

8 Scale drawing



9 Technical data

For the measuring range, the permissible overload pressure and the bursting pressure please refer to the data sheet of the corresponding submersible pressure transmitter.

More information at www.ifm.com