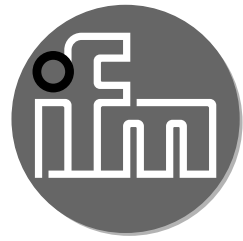


ifm electronic



Installation instructions
Process adapter for units with
G $\frac{1}{2}$ connection

UK

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1 Basic notes



When used in hygienic areas to EHEDG and 3-A:

- ▶ Adhere to the applicable EHEDG and 3-A directives.
- ▶ Assure EHEDG-compliant or 3-A-compliant integration of the adapter in the plant (therefore observe the respective notes in the operating instructions of the sensor to be used).
- ▶ 3-A qualification: Use only adapters with 3-A qualification and marked with the 3-A symbol. The 3-A qualification is only valid in connection with sensors with a PEEK sealing cone (integrated or via separate PEEK seal) → Accessories.



Tanks are often treated after adapters have been welded in (e.g. pickling, sand-blasting or glass bead blasting). If during this process the adapter thread or the sealing edge is also post-treated, this may lead to damage and therefore leakage of the adapter:

- ▶ Therefore make sure that the interior and the sealing edge of the adapter are not post-treated.

2 Functions and features

The process adapter allows hygienic installation of sensors with G1/2 hygienic fitting in tanks or piping systems.



When mounted in restricted spaces: Adhere to the minimum distances as indicated in the operating instructions of the sensor to avoid malfunction and damage to the sensor.

3 Installation



For fitting the sensor and the adapter a lubricating paste is needed. Use the lubricating paste sparingly. Only apply to threaded parts in order to prevent damage. Avoid contact of the seals and sealing areas with the lubricating paste. It must be suitable and approved for the given application and compatible with the elastomers used (e.g. O-ring for LMTxxx). The manufacturer recommends the Klüber paste UH184-201 (USDA-H1 approval).



- ▶ Installation must be carried out by qualified staff.
- ▶ Ensure cleanliness of the sealing areas. Therefore remove protective packaging only just before mounting.
- ▶ If the sealing areas are damaged: replace the adapter.

3.1 Clamp adapter or similar adapter (only internal thread)

- ▶ Screw the sensor into the adapter (→ 4 Installation of a sensor into an adapter).
- ▶ Clamp the sensor and adapter into a clamping device. Tighten the clamping device only slightly so that the adapter does not warp.
- ▶ Tighten the sensor using a spanner (tightening torque: see operating instructions of the sensor used).
- ▶ Remove the unit consisting of sensor and adapter from the clamping device. Then mount the unit in the plant.

3.2 Reducer (with external thread)

- ▶ Lightly grease the thread and sealing areas using a lubricating paste.
- ▶ Screw the adapter into the sensor by hand; do not damage the sealing areas.
- ▶ Tighten the adapter using a spanner until you feel a stop (25 Nm). Attention: Further tightening may affect the sealing effect!

4 Installation of a sensor into an adapter

4.1 Temperature sensor (e.g. TAxxxx)



Observe the notes on installation in the operating instructions of the sensor.

- ▶ Lightly grease the contact areas (metal to metal) between the sensor and the adapter using a lubricating paste. Observe notes → 1.
- ▶ Screw the sensor into the adapter by hand; do not damage the seals and the sealing areas.
- ▶ For 3-A requirements: Use the 3-A accessories E43911.
- ▶ Tighten the sensor using a spanner (tightening torque: see operating instructions of the sensor used).

4.2 Level sensor (e.g. LMxxxx)



Observe the notes on installation in the operating instructions of the sensor.

- ▶ Lightly grease the thread of the sensor using a lubricating paste. Observe notes.
- ▶ Slide the supplied seal, i.e. either the black O-ring (FKM) or the green flat seal (FKM), across the thread onto the sensor.
- ▶ Check the correct position of the seal. The same applies if a thread had been used before.



Only use the O-ring or the flat seal to seal the rear area between the sensor and the adapter. This sealing is not intended as a process seal.

- ▶ In case of 3-A requirements: For 3-A qualified sensors with metal sealing cone use the 3-A accessories E43232.
- ▶ Screw the sensor into the adapter by hand; do not damage the seals or the sealing areas.
- ▶ Tighten the sensor using a spanner (tightening torque: see operating instructions of the sensor used).

5 Operation

- ▶ Before set-up: Check the tank or pipe for ingress resistance.

6 Cleaning and maintenance when used in 3-A applications

- ▶ Check all seals and sealing areas for damage. Replace if damaged.
- ▶ It is recommended to renew all replaceable seals before reassembly.
- ▶ Check contact areas for dirt. Clean all components with a cleaning solution which is suitable for the application and the materials used.
- ▶ It is recommended to use a soft brush for all inner and outer surfaces.
- ▶ Make sure that seals and sealing areas are not damaged during the cleaning process.
- ▶ Check all components for cleanliness before reassembly.

