



Installation Manual

TEF 9178 190 Cladding Penetration & Entry for Hand Rails

Heat Trace Accessories

Document properties (TUM5302)

Revision	Comment	Revision date	Approved
С	New design	11.03.2022	CKR
D	Added information under "Mounting instructions"	17.01.2023	CKR



Installation and operating manual

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Warnings and risk levels

DANGER

Non-compliance with the instruction results in risk of severe or fatal injuries to persons

WARNING

Non-compliance with the instruction may result in risk of severe or fatal injuries to persons

CAUTION

Non-compliance with the instruction may result in risk of injuries or damage to equipment

NOTICE

Non-compliance with the instruction may result in reduced lifetime of equipment, malfunctions etc.

General information

Ensure that this accessory is suitable for use together with your exact equipment.

Before installation, make sure to read and understand this installation and operating manual.

Observe national assembly and installation regulations.

Always contact the manufacturer if anything is unclear, or if you notice any faults on the product or in this document.

This installation and operating manual shall be available to anyone operating, installing, inspecting, modifying or repairing the equipment.



Marking and intended use

CAUTION

Not intended for use in "these" conditions (Where mud may be present, on helidecks, underground, direct sunlight, heavy vibrations, high risk of impact, harsh cleaning agents, high pressure washer etc.)

This is an accessory, and do not hold its own CE mark. This component is covered by the DoC and CE marking of its associated equipment.

Intended for use together with Stahl Tranberg Junction boxes and Heat Tracing Equipment.



Special conditions for safe use

DANGER

Special conditions for safe use are critical conditions to maintain the safety of the equipment. These shall be adhered to in all cases and under all circumstances.

- Note that changes made to the product and/or installation of components which do not conform to the
 approval, may be a safety violation. The manufacturer will in no circumstance be held responsible for
 such activity. For your health and safety, always use safety gear suited for the task. Be certain to follow
 codes, regulations and/or specific procedures that are related to the installation.
- Use protective gear such as gloves, goggles and footwear to avoid any personnel injuries when mounting these products. Especially during and after drilling holes in a railing, or cutting holes in a cladding, please be observant to sharp edges that could injure personnel or materials.

Product description

Connection Kit for cladding penetration and entry for hand rails to provide water-resistant cable entry. It is very important to protect the heating trace cable with a flexible conduit reaching from the junction box up to the railing, or a pipe with cladding. Stahl Tranberg offers several types of cable entries for use in rough environments designed for such use. This will ensure that there are no sharp edges damaging the heat trace cable. However, if the handrail pipe has sharp objects inside or a weld seam that may damage the heating cable, one should consider additional measures to protect the heating cable.

Transport and storage

- Transport and store the component only in the original packaging
- Store the equipment in a dry and vibration free place
- Do not drop!



Mounting and installation

DANGER

Incorrect mounting and installation may lead to risk for falling objects, risk for electric shock or fire and risk for equipment malfunction. In turn, this can lead to severe damage and/or injuries.

Mounting

The two products covered by this instruction are designed to be fastened by several methods:

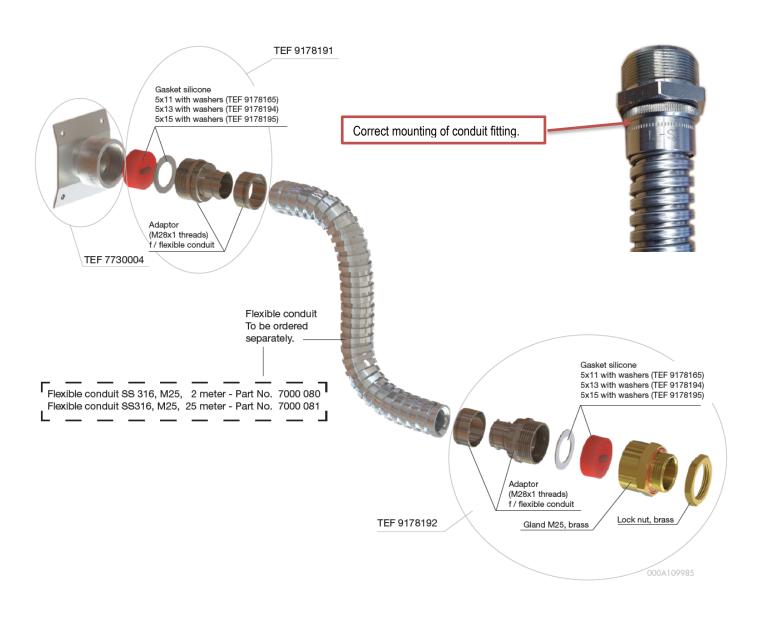
Blind rivets, self-tapping screws or welding. Select which method should be applied, then continue the process.

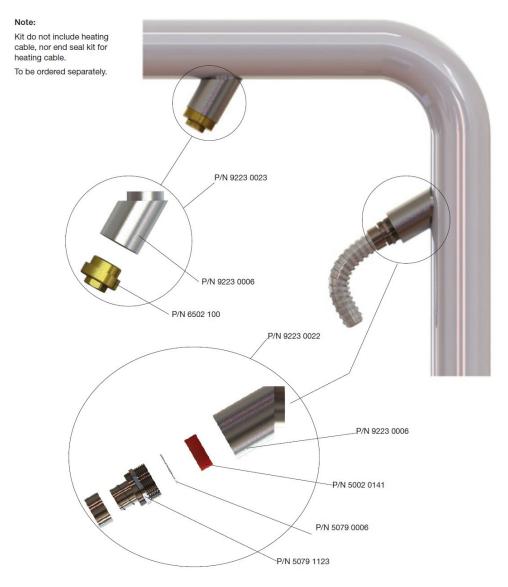
- Depending on which fastening method is applied, a hole should be drilled in the railing or cladding to allow
 the heating cable to be safely brought from the outside to the inside. After the hole is drilled, remove any
 sharp edges in the railing or cladding by means of a file or other tool. Also ensure that there are no sharp
 object inside that may damage the heating cable as the installation work progresses.
- 2. To obtain a watertight entry, use a sealant between the flange and the cladding/handrail. If the product is welded to the surface, the sealant should be applied after the surfaces have cooled down.
- 3. After the product is fastened to the surface, push or pull the heating cable through the cable entry. The selected method will depend on the application, type of heating cable, size and shape of pipe, etc. Always use an end seal on the end of a heating cable, installed in accordance with the instructions provided.
- 4. Use the corresponding grommet set to secure the heating cable to the cladding penetrator/hand rail entry. This will secure the heating cable and also ensure a water tight entry. The flexible conduit is cut to the required length, and secured to the adaptor now located at the cladding protector, likewise at the cable gland at the junction box. This ensures an end-to-end protection of the heating cable.
- 5. Terminate the heating cable at the junction box, following relevant procedures for the electrical work.

The products are made of acid proof stainless steel, but may be painted as required.



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Maintenance and cleaning

- It is recommended to check that the rubber sealings are intact and to check for any water intrusion regularly.
- Clean only with a damp cloth, water and mild detergents. Avoid chemicals with high or low pH, abrasives, high pressure washer, strong detergents, solvents, petroleum- or alcohol based cleaning agents and similar. Avoid any corrosive media.

Disposal

- Observe national and local regulations and statutory regulations regarding disposal
- Separate materials when sending it for recycling
- Ensure environmentally friendly disposal of all components
- No component or packaging shall end up in the ocean during any stage of the product's lifetime

