

TRANBERG JUNCTION BOX

TEF 1058 Junction Box for Heat Tracing, Pipe- and Wall Mounted

Zone 1, Zone 2 & Safe Area



Document properties (TUM4689)

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Installation and operating manual Index

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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

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.

Safety precautions

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 circumstances 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.

Only qualified personnel are allowed to perform installation and maintenance tasks to this equipment.

The junction box is equipped for termination of heat tracing and is ready for installation when leaving the production facilities of R. Stahl Tranberg AS. Changes made to the product, which do not confirm to the approvals of this equipment, is a safety violation. The manufacturer is under no circumstances responsible for personal injuries, death or any other damage caused by such activities. Any damage done to the equipment during transportation is not the responsibility of R. Stahl Tranberg AS. If the content is not complete, file a claim to the producer immediately.


Marking and intended use**DANGER**

Not for use in Zone 0

CE-marking: CE 0470

ATEX Certificate: Presafe 14ATEX4124

IECEX Certificate: IECEX PRE14.0001

Ex Protection marking:  II 2 G Ex eb IIC Gb T6, T5, T4

For use in Explosive Atmospheres Zone 1, Zone 2 & Safe Area

For use in marine/industrial/onshore/offshore/ /helideck. areas.

Special conditions for safe use

DANGER

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

- Do not open when energized
- According to this manual
- Observe IEC/EN 60079-30-2 and the manufacturer's instructions when used for direct connection of heat tracing cables

Technical data

Property	Value
Type designation:	1058
Explosion protection:	Ex II 2 G Ex eb IIC Gb T6, T5, T4
Certificates:	Presafe 14ATEX4124 IECEx PRE14.0001
Ambient temperature:	Silicone gasket: -50°C...+50°C EPDM gasket: -20°C...+40°C
Ingress protection:	IP66 (IP 67 if drain plug is replaced with IP67 stopping plug)
Material housing:	AISI 316L / EN 1.4404
Voltage:	According to marking plate/label
Finish:	Bright chemical dip Electro polished
Area of use:	Zone 1, Zone 2 and Safe area

Product description

TEF 1058 heat tracing junction box is used for connections of heating cables in various environments such as hazardous areas, chemical and petrochemical industries, and industrial plants (for frost protection or temperature maintenance).. It can be mounted outdoor or indoor and is suitable for use in hazardous areas Zone 1, Zone 2 and Safe Area. It has a high ingress protection IP66/67 (IP67 without drain plug). It has a maximum strength and corrosion resistance, low maintenance costs and high operational reliability.

Content in box

- The product is fully assembled, and ready for installation.

Mounting and installation

DANGER

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

Mounting

Before installing the component, ensure that:

- The power is disconnected.
- Servicing the junction box is done by checking the integrity of the junction box, gasket and glands. If necessary, lubricate the lid bolt threads with grease type Renolit Unitemp 2 from Fuchs.
- Maintenance according to national regulations and company practice.
- If repair or overhaul is necessary, this may only be done with Tranberg spare parts.
- Modification of the JB or change of design are not permitted, except for installing additional glands and terminals according to the approval of the JB.

Installation

Assembly of wall mounted JB (Typical installation, fig 01)

1. Mount the junction box by at least 2 pcs. M6 bolts placed diagonally on a wall or a proper supported rack.
2. Remove dust protection or stopping plugs and install required glands. Holes not in use must be closed with stopping plugs. Only certified cable glands and blinds may be used. Glands has to be chosen according to cable diameter used.
3. Strap the transition unit to pipe with pipe straps.
4. Assembly the flexible conduit according to fig. 03.

Note: For vertical installation, drain plug should be relocated to the lowest side.

Assembly of pipe mounted JB (Typical installation, fig 02)

1. Mount the junction box either standing or hanging to the pipe by pipe-strap.
2. Remove dust protection or stopping plugs and install required glands. Holes not in use must be closed with stopping plugs. Only certified cable glands and blinds may be used. Glands has to be chosen according to cable diameter used.

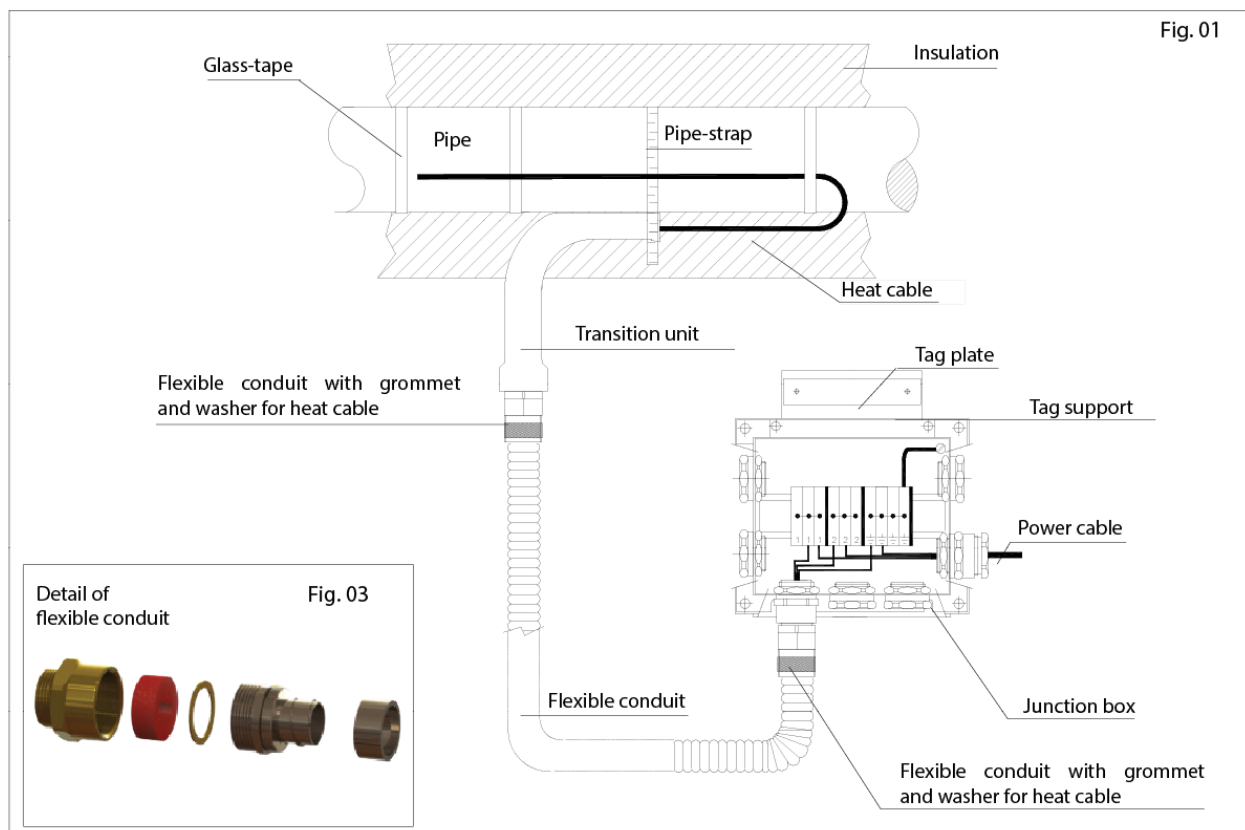
Note: For vertical installations, drain plug should be relocated to the lowest side.

Termination

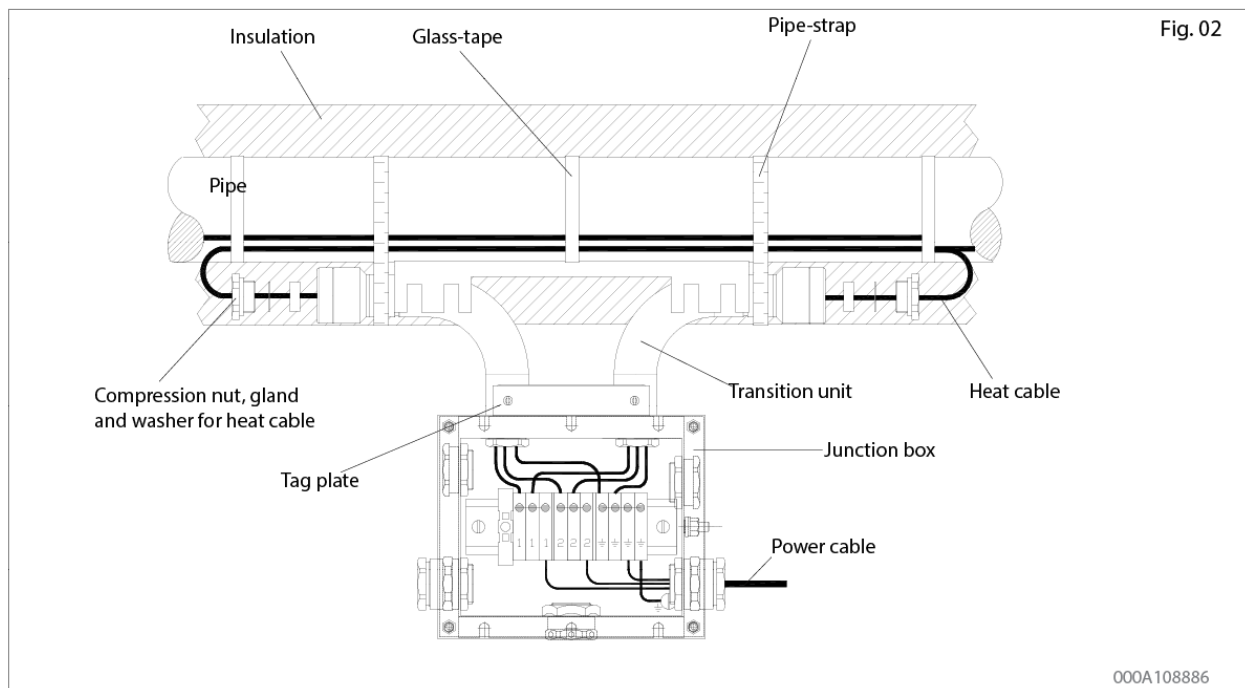
In order to maintain the mode of protection, the conductors will have to be connected with special care. The insulation must reach up to the terminal and the conductor must not be damaged. Termination of heat cable must be according to cable specification given by supplier of these. All screws on the terminals, also those remaining vacant, must be tightened down.

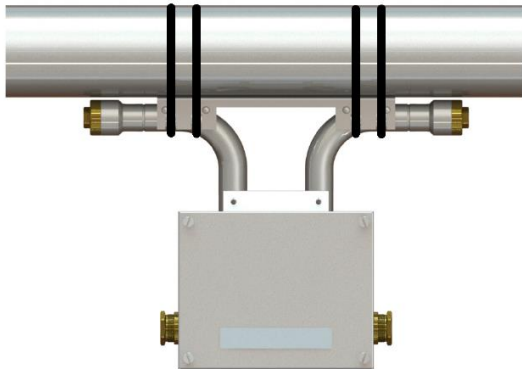
Reinstall lid and tighten bolts firmly with suitable tool by hand force. Over-tightening may impair the protection category.

Illustrations

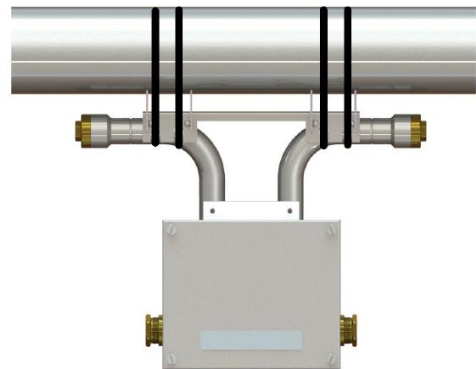


Drainplug to be mounted at the lowest point





Junction box is delivered with fixing bracket as shown in picture



At high emperature on the pipe, use elevator part.no. 6071 as a stand-off to the pipe

Maintenance and cleaning

The product should be inspected according to company routines and/or relevant to national regulations for your country.

CAUTION

This equipment or part of this equipment is considered EE-Waste, and shall be handled accordingly

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.

Compliance with:

- EN 60079-0:2018
- EN 60079-7:2015/A1:2018
- IEC 60079-0:2017
- IEC 60079-7:2015/A1:2017