

DISTRICT HEATING EXPANSION JOINT INSTALLATION GUIDE



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1. COMPANY

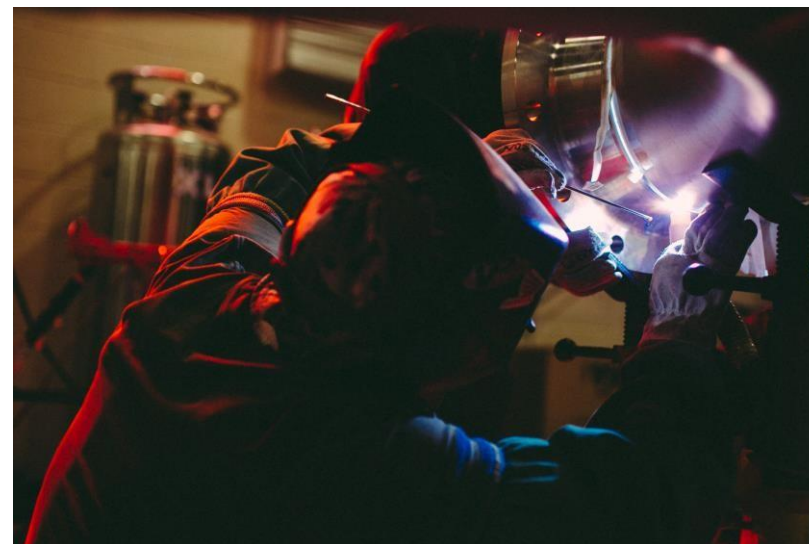
Tcomp is a family-owned company, founded in 1986 as a sister company to Tjæreborg Industry. We have developed many innovative technologies, design and manufactured to almost all industries.

Most of our products that are produced, is customized solutions from our customer's requirements. In addition to this, we have a wide range of standard products in our inventory. See www.tcomp.dk

Nearly every of our expansions joints in calculated to 3.000 Cycles instead of the more normal 1.000 cycles. This secures you a long-lasting product.

Tcomp values:

- | | | |
|--|--|---|
|  Our know-how |  Best Cooperation |  Flexibility |
|  Quality |  Long-Lasting product |  Fast Delivery |



2. DISTRICT HEATING

District Heating expansion joints are used to absorb the thermal expansion parallel to the axis of the straight pipelines. Long piping systems are divided into shorter expanding sections, and isolated by main anchors.

Please read more about our different solutions to your pipeline.

Identification Sticker is attached to all District Heating Expansion Joints for Technical Data and traceability. The sticker is heat and water resistant.

ONE TIME COMPENSATOR

TECHNICAL DATA:

NOMINAL SIZE:	DN100
PIPE SIZE	Ø114,3 x 3,6 mm
NOMINAL PRESSURE:	PN25
PIPE MATERIAL:	P235GH (EN 1.0345)
BELLOW MATERIAL:	AISI 321 (EN 1.4541)
STANDARD:	EN448
AXIAL MOVEMENT:	-100mm
ITEM NUMBER:	ODH25-125
MAX. AXIAL FORCES:	265N/mm ²
COMPR/TENSILE:	163N/mm ²
TEMPERATURE DIFFERENCE:	130°C



MATERIAL CERT:

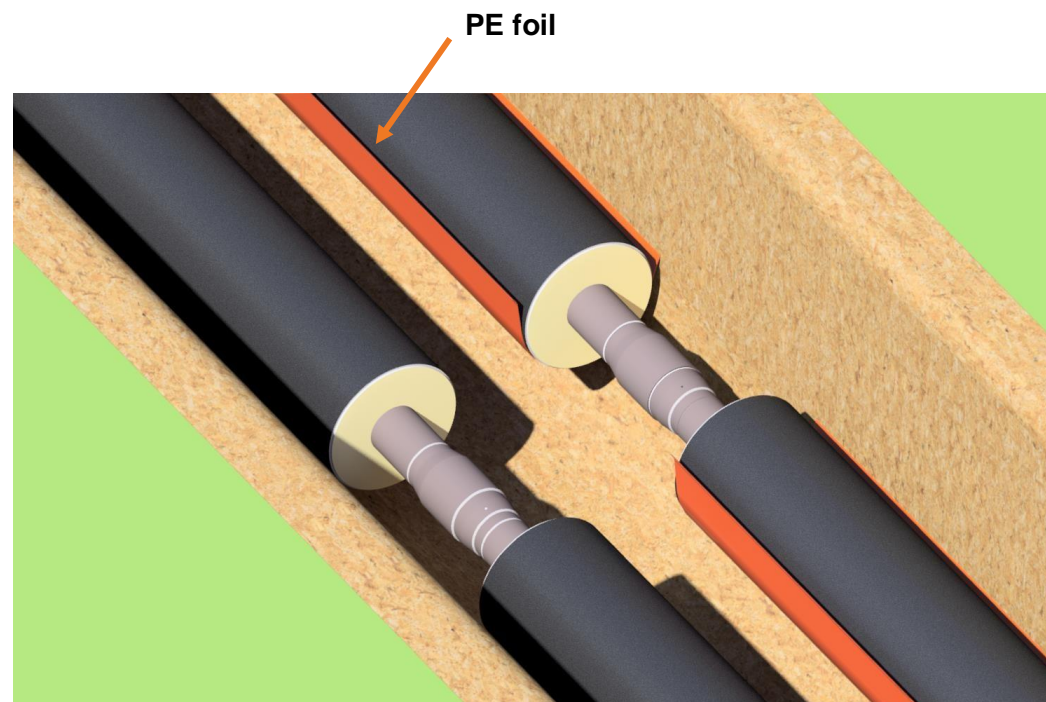
BELLOW/1:	RP18-01
PIPES/2:	S.Nr5760
OUTER SHROUD/3:	S.Nr5712
INNER SHROUD/4:	S.Nr5711



3. GENERAL INSTALLATION

General Installation guide in District Heating for both One-Time Expansion joints and Drift. For the 2 types there are some small differences in how they are installed. Use these instructions and useful advices when installing our District Heating Expansions Joints.

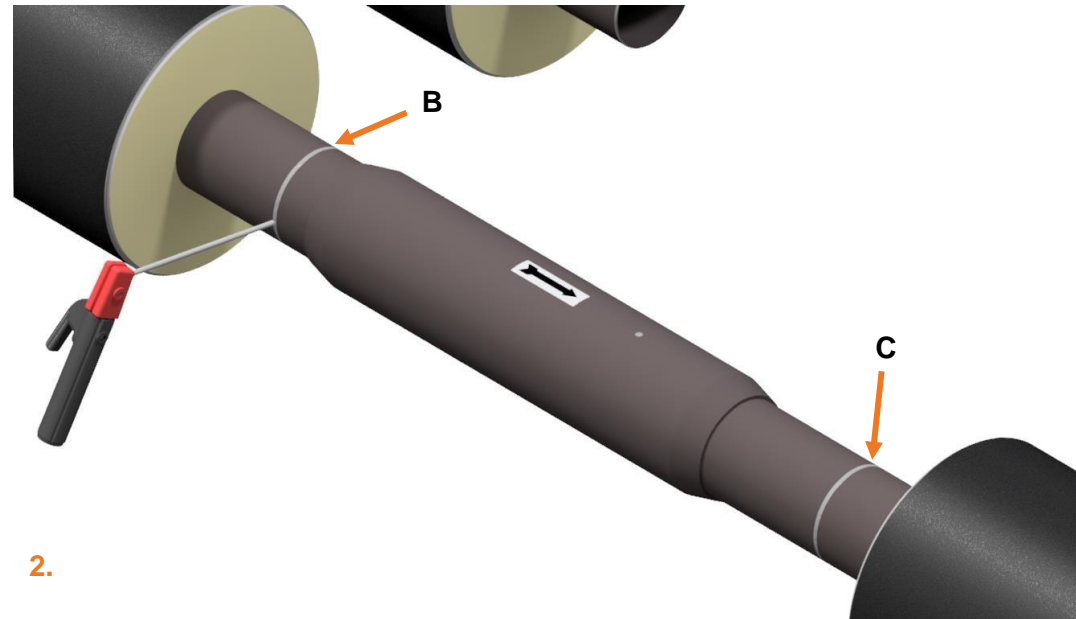
1. When receiving the District Heating solution, please check the sticker, to ensure if it match what you have ordered. And look for damages.
2. Check for installation direction. Look for the flow arrow.
3. Wrap the isolated pipes with PE foil, to ensure a minimum friction and tension in the pipeline.
4. Ensure the pipeline has no changes in direction. District Heating can not be exposed to any bends.
5. All weldings must be categorized to grade 3.
6. Maximum pressure testing is 1,43 x design pressure.



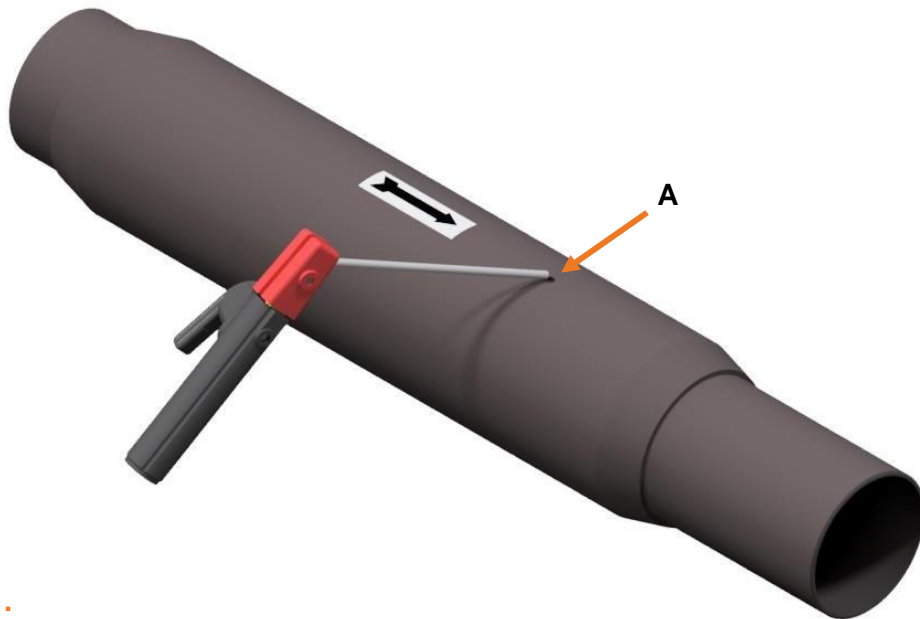
3.1 DRIFT INSTALLATION

The One-Time quick installation.

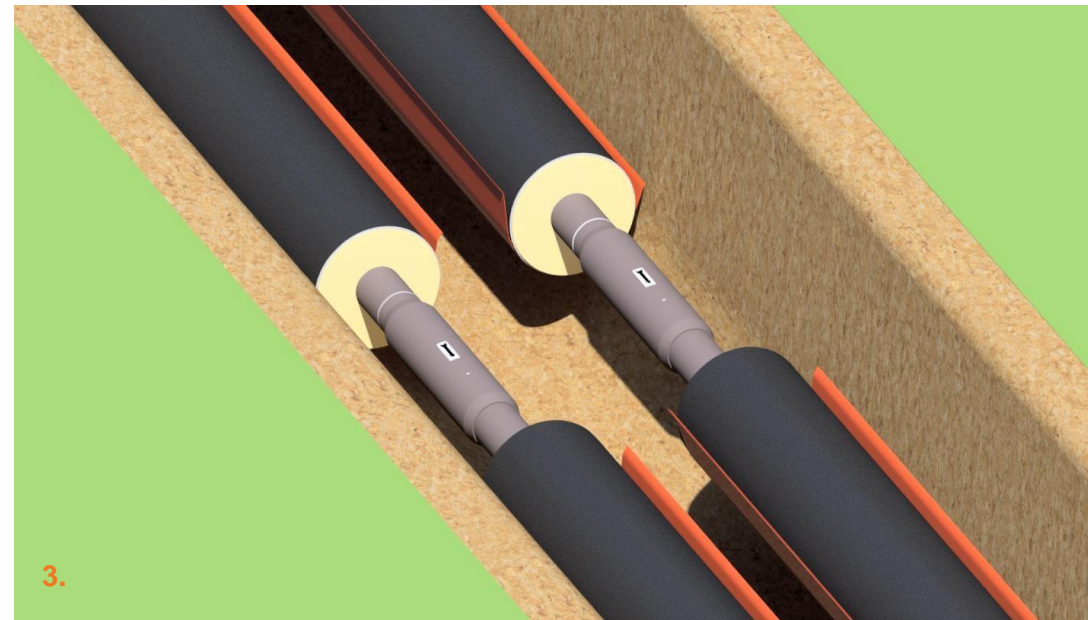
1. Check that the direction arrow and flow in pipeline system matches.
2. The DRIFT/OPERATION Expansion Joint is normally delivered in its fully preset condition, with 2x activation weldings (A) on the shroud. Unless otherwise agreed.
3. Be aware of torsion, when applying the Expansion Joint. It only designed for the torsion when it's going to be activated.
4. The ONE-TIME is installed on the pipeline's connection ends with welding B & C.
5. When the system is in operation the tack welding (A) will activate. And the Expansion Joint will take stress and movements from the pipeline system.
6. Its ready to be insulated.



2.



1.



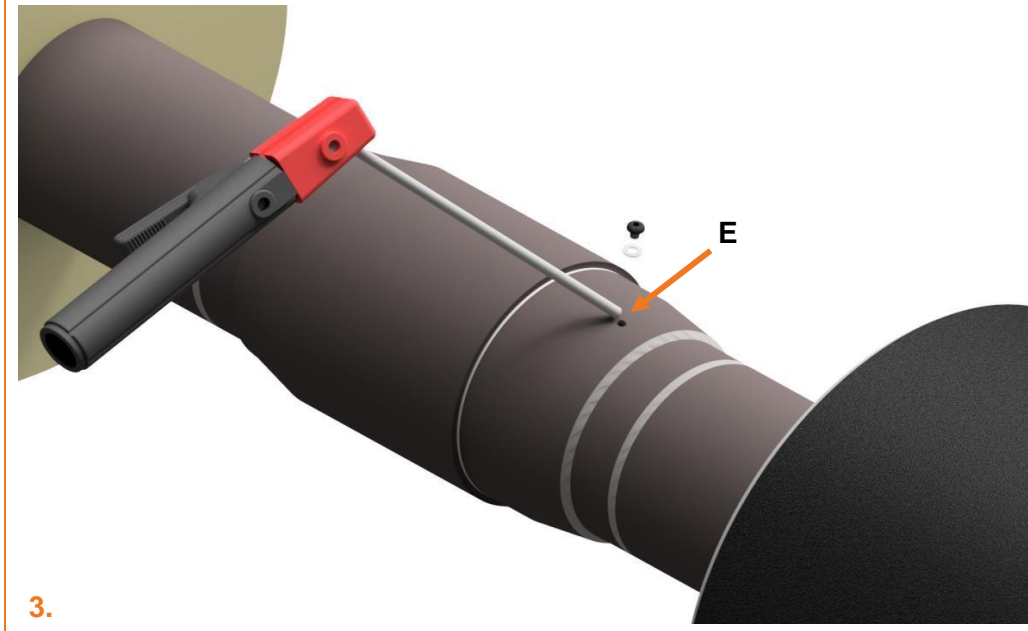
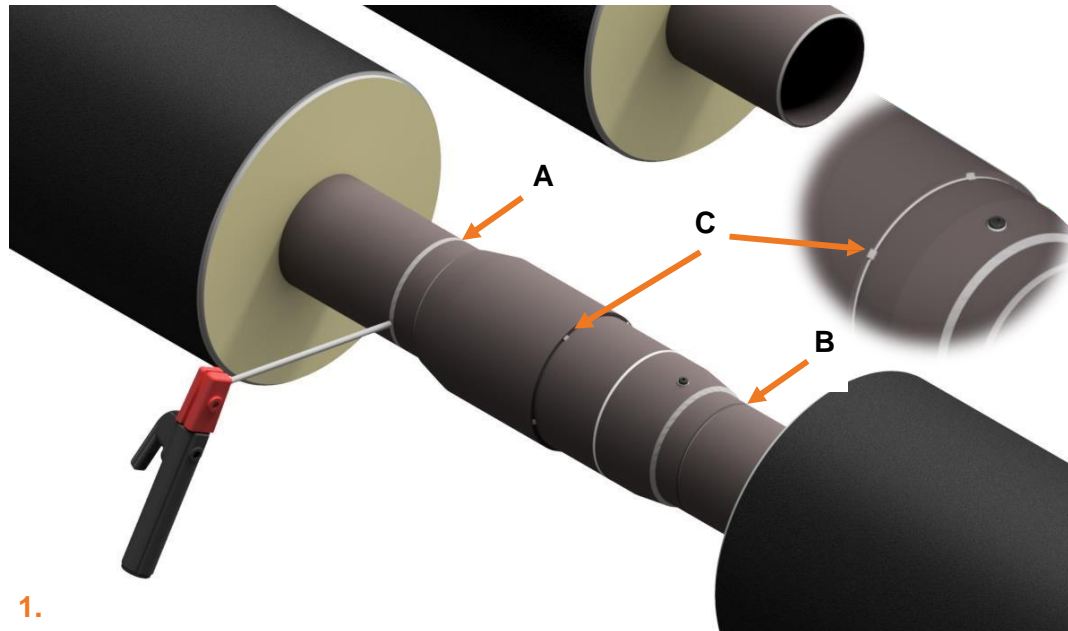
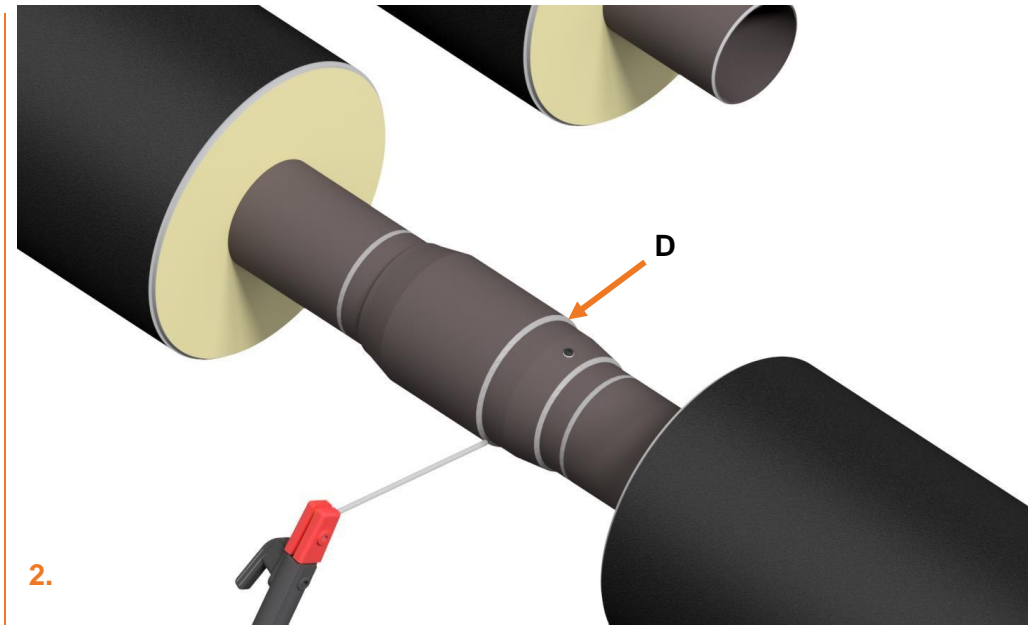
3.



3.2 ONE-TIME INSTALLATION

The One-Time quick installation.

1. The ONE-TIME Expansion Joint is normally delivered in its fully preset condition. Unless otherwise agreed.
It's also possible to preset it yourself to your preferred measurement, (Max, to Marking) on site with a threaded rod and clamps.
2. The ONE-TIME is installed on the pipeline's connection ends with welding **A & B**.
3. After installation, the tack weldings **C**, are removed. And it's now ready to absorb movements from preheat.
4. After it have absorbed the movements lock the ONE-TIME with a fillet weld **D**. So, it's going to function like an ordinary pipeline.
5. Unscrew the screw for pressure test or to relieve pressure from shroud.
6. Weld screw hole **E**.
7. Its ready to be insulated.



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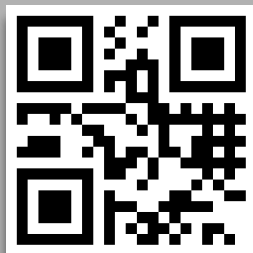
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You are welcome to contact us if you have any technical, pricing, inventory questions.

We look forward to receiving your inquiries. Precisely describe your requirements, the easier it is to help.

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