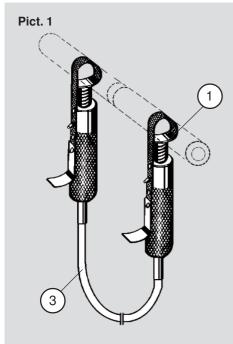


One-polar jumper device for compensating currents and induced currents on pipelines



0 3 2 Device for pipelines (Ø 89-324 mm)

Device for pipelines (Ø 13.5-89 mm)

1. General:

This instruction for use applies to establishing and removing an electric jumper, required for safety reasons in certain work procedures on metallic gas and water pipelines.



2.

Warning: An electric jumper is required to prevent electric touch voltages with the following dangerous electric shock, and sparking on electrically conductive through-going pipelines.

Safety hints:

- Read this instruction for use completely before use of the product!
- Work with the device is to be carried out by electricians or trained personnel only!
- This device is no earthing and short-circuiting device following IEC 61230 or EN 50110-1. It only serves as jumper device for potential differences on pipelines!
- This device is not short-circuit proof and must not be used as secondary earth in electric networks!
- Regulations for use as in EN 50110-1 are to be observed in particular!
- Connection or disconnection of pipelines can result in current flow with ignitable sparking!
- Cutting of pipelines can result in dangerous voltages between pipe ends, towards earth or other electrically conductive installation parts, such as supports, bridges, pipelines (foreign conductive parts)!

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3. Storage, maintenance, and inspection

The device serves for your protection and safety. For this reason it is to be treated with care. Store it in dry and clean premises. Examine the device in regular intervals for its flawless condition. Frequency and nature of these inspections depend on the specific conditions of use and storage. A guideline for such inspections can also be found in section 4 "Prior to each use".

4. Prior to each use (see picture 1)

Examine the device before each use for its flawless condition. Particular attention is to be paid to the following: Visual inspection: Check

- that the device is complete
- all connection parts(1) for damages
- that contact areas of the connection parts(1) are clean
- the copper cable (3) for corrosion or broken strands
- the lead insulation of the copper cable (3) for fissures
- the chains (2) for mechanical damages and corrosion

Manual examination: Check

- all movable parts are smooth-running
- all detachable connections are firmly tightened

Caution: If you detect any faults during one or more of these checks, for the moment remove the device from further use.



Making of an electric bridging

Caution: For all connections a good metallic contact is to be secured. Therefore contact areas on the pipelines and on the contact parts are to be thoroughly made metallic bare before connecting the device. Sufficient contact pressure is required to produce a connection with good electric conductivity. It is prohibited to add metal foil between the contacts areas!

5.1 on pipelines (Ø 13.5-89 mm) (see pict. 2)

- a.) Mark the cut-off points and leave sufficient space on both sides of the marking to be able to attach the handles (1).
- b.) Grasp one handle and press the prism (2) against the pipeline. In this process the spiral spring (3) inside the handle will tense.
- c.) Take the flat band (4) with the other hand, position it around the pipeline and hook it to the button stop (6) at the handle using the nearest eye.

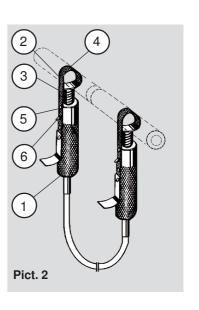
(5). The handle is correctly connected when it is prestressed against the pipeline with half up to three quarter of the length of the spring deflexion.

- d.) Connect the second handle in the same procedure to the other side of the cut-off point.
- e.) Now the electric jumper is connected and the pipeline may be sawed through.

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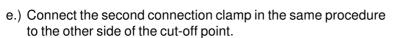


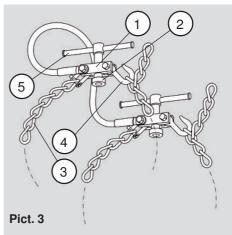


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- 5.2 on pipelines (Ø 89-324 mm) (see pict. 3)
 - a.) Mark the cut-off points and leave sufficient space on both sides of the marking to be able to attach the handles (1).
 - b.) Take one connection clamp (1) and set its contact part (2) onto the pipeline. Before make sure that the contact part has contact to the clamp body (i.e. is the spindle is completely retracted).
 - c.) With the second hand position the chain (3) tightly around the pipeline. Hook the chain with the nearest chain link to the hook (4) on the connection clamp.
 - d.) Tighten the connection clamp (1) down by turning the cross bar clockwise (5) (recommended torque 40 Nm).





f.) Now the electric jumper is connected and the pipeline may be sawed through.

Removal of the electric jumper 6.

Caution: The electric jumper needs to remain connected during the working period and may only be removed when the pipeline has complete metallic through connection again!

When gas pipelines are cut for permanent separation, the jumper may only be removed under the condition that ignitable gas/air mixtures with certainty will not occur any more.

- 6.1 On pipelines (Ø 13.5-89 mm) (see pict.2) Press the handle (1) against the pipeline, remove the eye (5) of the flat band (4) from the button stop (6) to remove the complete flat band.
- 6.2 On pipelines (Ø 89-324 mm) (see pict.3) Remove the connection clamp (1) by turning the cross bar counter-clockwise (5) and open the chain (3) by unhooking it (4).

7. Disposal

Dispose of the device according to local regulations. For inappropriate disposal ARCUS Schiffmann does not take responsibility.

In case of uncertainty about the materials used, ARCUS Schiffmann will be pleased to provide information.

8. Product liability and guarantee

This instruction for use was written with greatest care and examined before publication.

Precondition for guarantee is the proven observation of the instruction for use with respect to usage, care and maintenance.

Valid are the General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry.

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