RSC-T
Ground tap connector with SICON piercing technology

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To protect both people and the environment, any metallic components alongside electrified rail tracks must be grounded. This applies not only to catenary pylons, but also to signaling systems, bridge railings, fences, etc. PFISTERER has now developed the RSC-T – a simple, safe, and reliable solution that saves a great deal of time in comparison with established practice. The RSC-T combines the over 100 years of contact technology experience at PFISTERER with its expertise as a “full-service provider” in the field of rail infrastructure.

**Simple Installation in the Existing system**

The RSC-T ground tap connector comprises several parts and can be mounted directly onto an existing system. The ground cable is laid in place without any preparatory work and enclosed by the connector using a locking bolt. The SICON piercing bolts penetrate the insulation to establish safe and reliable contact with the ground conductor. Any possible damage to the metallic conductor is avoided by means of the proven SICON technology.

**Installation up to 50% faster**

Using insulation piercing technology, main and tap cables are installed without having to strip the insulation. This also applies to double-insulated main cables. With double-insulated tap cables, the outer insulation layer has to be removed.

The compression of grounding and tap cables that was previously used, as well as the restoration of the insulation with a heat-shrink sleeve, is no longer necessary. The plastic enclosure with its seals guarantees electric shock protection in accordance with IP2X.

**Benefits**

- Reliable contact between grounding and tap connector
- No interruption of the main conductor
- Shock-proof in accordance with IP2X
- No open blade for installation
- Saves up to 50% of installation time
- No flame on the track
- Electrically tested in accordance with IEC 61284:1997 class B

**A smart but simple solution to grounding problems. The RSC-T can be integrated into an existing system without any problems, saving up to 50% of installation time.**
### RSC-T

**Simple and Secure Grounding on Railroads**

To protect both people and the environment, any metallic components alongside electrified rail tracks must be grounded. This applies not only to catenary pylons, but also to signaling systems, bridge railings, fences, etc. PFISTERER has now developed the RSC-T – a simple, safe, and reliable solution that saves a great deal of time in comparison with established practice. The RSC-T combines the over 100 years of contact technology experience at PFISTERER with its expertise as a “full-service provider” in the field of rail infrastructure.

### Simple Installation in the Existing System

The RSC-T ground tap connector comprises several parts and can be mounted directly onto the existing system. The ground cable is laid in place without any preparatory work and enclosed by the connector using a locking bolt. The SICON piercing bolts penetrate the insulation to establish safe and reliable contact with the ground conductor. Any possible damage to the metallic conductor is avoided by means of the proven SICON technology.

### Installation up to 50% faster

Using insulation piercing technology, main and top cables can be installed without having to strip the insulation. This also applies to double-insulated top cables. With double-insulated top cables, the outer insulation layer has to be removed. The compression of grounding and tap cables was previously used, as well as the reduction of the insulation with a heat-shrink sleeve, is no longer necessary. The plastic enclosure with its seals guarantees electric shock protection in accordance with IP2X.

### Benefits

- Reliable contact between grounding and top connector
- No interruption of the main conductor
- Shock-proof in accordance with IP2X
- No open blade for installation
- Saves up to 50% of installation time
- No flame on the train
- Electrically tested in accordance with IEC 60268/997: class B

### Patented Contact Technology

The bolts of the RSC-T are based on the proven SICON technology. The preformed shear bolt has a stepless construction and utilizes the full load capacity of the thread at all times. The friction disc at the end of the bolt prevents the metal conductor from being damaged. For the RSC-T, the preformed SICON bolt has been further developed and equipped with a friction disc, which features insulation-piercing technology. This establishes an available contact with optimum contact force. The SICON bolt is installed using a socket wrench S6 and gently shears off on successful installation.

### One connector, three connection options

Different tapping variants can be implemented with the RSC-T ground tap connector. In addition to the typical variant with one ground tap per connector, it is also possible to form two ground taps with one connector; taking the conductor cross-section into account. To do this, all that is required is to change the arrangement of the clamping screws on the tap side.

### Compatibility RSC-T

<table>
<thead>
<tr>
<th>Type</th>
<th>Nominal conductor diameter [mm][kcmil]</th>
<th>Nominal cable diameter [mm²]</th>
<th>Nominal conductor diameter [mm]</th>
<th>Main cable</th>
<th>Tap cable</th>
<th>Nominal cable diameter [mm]</th>
<th>Nominal conductor diameter [mm]</th>
<th>Main cable</th>
<th>Tap cable</th>
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</table>

Other conductor cross-sections and cable types on request.

### RSC-T in Numbers

- Conductor material: copper, aluminum
- Dimensions: 150 × 130 × 60.5 (L × W × H in mm)
- Weight: 0.8 kg
- Conductor class 2 according to EN 60228
- Article number: 332846012

The RSC-T is the safe and reliable grounding solution for new and upgraded sections of track.

A smart but simple solution to grounding problems. The RSC-T Integrates easily into an existing system without any preparatory work, saving up to 50% of installation time.

The RSC-T in use and a reliable grounding solution for new and upgraded sections of track.
In 1921, Karl Pfisterer founded his factory in Stuttgart for special electrical products with the aim of improving the world of power transmission. The PFISTERER Group has pursued this goal of quality and technological leadership for more than 100 years. Today, PFISTERER is one of the world’s leading specialists and system suppliers for energy infrastructure – with a complete range of cable accessories, overhead line technology and components along the entire transmission chain from power generation to consumption. With state-of-the-art manufacturing processes and 1,200 employees at 18 international locations, PFISTERER not only connects the power grids of today and tomorrow, but also makes an important contribution to a sustainable and secure energy supply.