

## Scope of supply

Included in the delivery are the following parts. Please check if all of these components were supplied. If parts are missing or damaged, please contact your reseller.

- Rail Clip Contact SZ 1103
- Manual

## Order number SZ 1103

- 100182

Version 03/2012

**CE** Signal Concept GmbH confirms the conformity of the device according to the directives given by the European Parliament and Council 2004/108/EC (EMC-Directive), 2006/42/EC (Machinery Directive), 2006/95/EC (Low Voltage Directive), 85/374 EEC (Product Liability Directive), 2002/95/EC (RoHS Directive) and 2002/96/EC (WEEE Directive).

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**Rail Clip Contact**

**SZ 1103**

**Manual**



**Signal**  
Concept

## Safety Instructions

### ! Warning !

To avoid the damage of persons or products, mind the following guidelines:

Consider the valid guidelines for working on railway facilities when operating the Rail Clip Contact SZ 1103.

Do not use a damaged rail clip contact.

Do not use the rail clip contact when it shows a malfunction. The connecting line could be affected. In case of doubt send the tool to the manufacturer or to a company authorized by the manufacturer for checking.

The manufacturer or companies authorized by the manufacturer are the only ones being responsible for repairing.

Be careful in the handling with the contact tips of the rail clip contact since there is danger of clamping.

Qualified professionals only may use the rail clip contact.

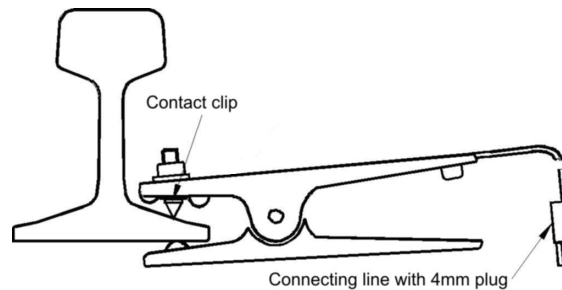
Do not drop or shock the tool.

### Disposal

Electric and electronic devices must not be given to the general rubbish, since they mostly contain noxious elements. Instead dispose them at the collecting points for special waste.

The manual is part of the device. The user has to keep it until the disposal of the device. When handing the device to other users, the manual must be given too.

## Overview



## Working Principle

The Rail Clip Contact SZ 1103 is used to set up a safe electrical connection of measuring and testing devices to exposed rails. Even in case of thick rust the rail clip contact ensures the quick and reliable contact to rail without using additional tools.

The contact is made by means of a specially formed contact tip and a defined contact pressure.

The construction of the rail clip contact enables further train service when the clip is attached to the rail foot.

### Application examples

- Connection of measuring resistors to test axle resistances
- Measuring of track voltages (track circuit currents, electric track bedding etc.)
- Set up of track connections in points and crossings for testing purposes

## Application

### Installation on the rail

The rail clip contact is attached to the rail foot – according to the requirements rail inside or outside – with the sharp tip on top in a roughly right angle. Move the tongs 30° to the right and left side to ensure a reliable contact to the rail.

The connection of measuring devices, test resistors or connecting lines is done via the integrated connecting line with 4mm plug.

### Note!

Because of the given continuous current-carrying capacity of max. 15 A the rail clip contact is not permitted to balance the traction current!

## Technical Data

|  |                             |
|--|-----------------------------|
| Contact resistance<br>rail foot – connecting line/<br>4mm plug | < 9,0 mΩ                    |
| Rail profile   | any exposed rail<br>profile |
| Continuous<br>current-carrying capacity                        | 15 A                        |
| Operating temperature  | -30°C ... 70°C              |
| Length connecting line   | 900 mm                      |
| Weight   | approx. 520 g               |