

RCY21153W

Manual Crimp Hand Tool
For Minitek Contacts AWG 22-24
User's Manual



Revision : 01
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www.foehrenbach.be

1. Purpose

Crimping of Minitek AWG 22-24 contacts onto dedicated stranded wire.



Attention!

The application of AWG22 wire (and also AWG24) is very critical. As such, the adjustment of the crimp height must be adjusted very accurate in relation with the applied wire. For each wire type, you have to complete relevant tests like cross sections, pull off force measurement, visual inspection, Å

2. Tool description

- Cat. No.: RCY21153W
- Single head crimp tool. The tool crimps one contact per cycle.
- Short set-up times.
- Releasable ratchet ensures the complete crimping process.
- Ergonomically handles for comfortable working.
- Optimal force transmission ratio.
- The hand tool features a terminal guide that accepts Minitek contacts on a regular carrier strip. The terminal guide is equipped with a manual contact feeder. During each crimping cycle, the tool separates the contact in process from the carrier strip.

The tool kit consists of:

- The hand tool
- This user's manual
- A plastic protection case
- A set of two Alan keys
- A crimp height adjustment key



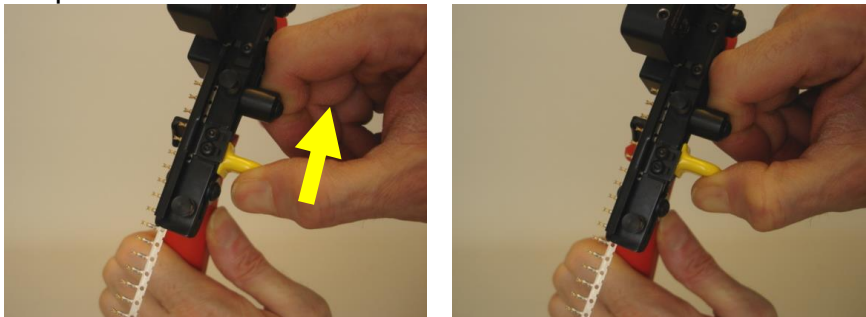
3. The process

Be sure that the tool is open. If not, close the handles until the ratchet releases. Further you must open the handles of the tool.

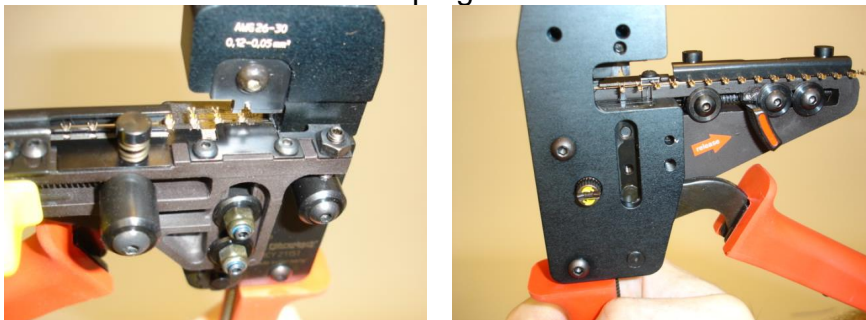
Insert a strip of contacts (cut to the proper length) into the terminal guide of the tool.



Once 50 mm of the contact strip is introduced into the terminal guide, the contacts can be fed one by one towards the crimp area. In order to do so, activate the manual feeder as shown on the pictures.



Feed a terminal into the crimping area of the hand tool.

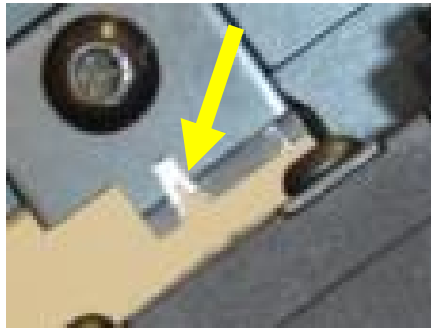


As shown on the picture, insert the strands of a stripped and straightened wire into the slot of the wire positioner. The insulation of the wire should be pouched to the surface of the wire positioner.

Make sure that the stripped length of the wire is in the range of 1.2 to 2.2 mm.

Be careful not to make cuts or nicks in the strands during the stripping operation.

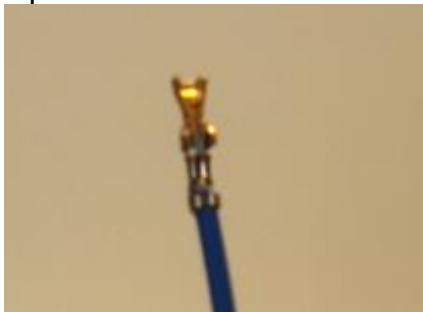
The use of improperly prepared wire may cause insufficient crimp performance obtained.



Whilst keeping carefully the wire in position, close the handles until the ratchet releases.



Open the tool and take the crimped wire.



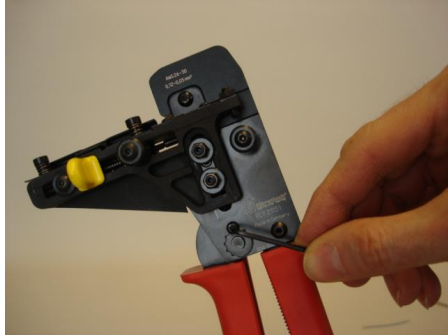
The tool is not cutting the carrier strip. In order to work properly, the operator has to cut the carrier strip on a regular base.

Before making the next crimp, feed terminal by one pitch. And repeat the crimping process.



4. Adjustments

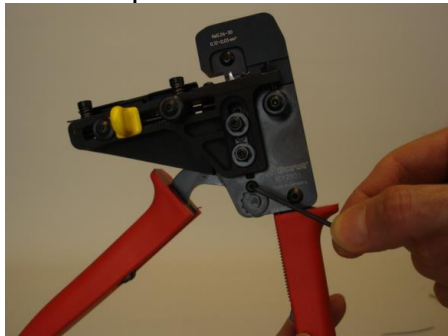
- Depending on the applied wire, it could be possible that you need to adjust the conductor crimping height. In order to do this, remove the locking screw as shown on the picture



Be sure that the tool is open. Adjust the crimping height by means of the crimping height adjustment key. Attention! A miss adjusted crimping height can damage the tool.



After the adjustment, install the locking screw again. Do never crimp without the locking screw in position.



Attention!

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- For any support, please contact Föhrenbach Application Tooling:

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6. General specifications

- Colour : Black metal with red levers.
- Weight (tool) : 0,55 kg
- Weight (tool + box) : 1,45 kg
- Size (protective box) : l: 390 mm x w: 300 mm x h: 100 mm

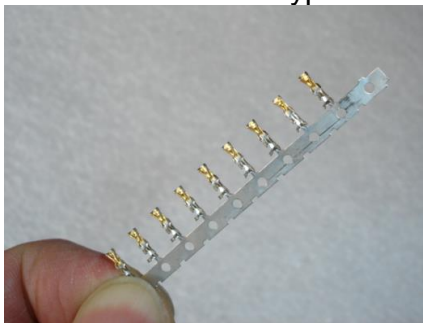
7. Input material and functional requirements

7.1. Wire

- Stranded wire dedicated for the mentioned contacts.

7.2. Components

- Minitex contacts type 10044403-101LF.

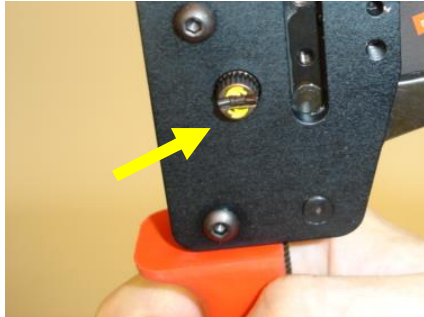


8. Process output

- Due to the manual process, the output capacity is highly depended on the skills of the operator.

9. Safety and ergonomics

- Apply the tool only for the target as mentioned in chapter 1. Purpose.
- For operator safety, it's necessary to apply eye protection.
- Apply the tool only in a dry and clean environment.
- Apply the tool only in a well lighted environment (1000 Lux).
- Only skilful operators who are trained by Föhrenbach Application Tooling engineers are allowed to apply the tool.
- In normal operation, the hand tool can only be opened after a complete closing cycle. In order to open the tool before completing the entire crimp cycle, turn the release handle in the counter clock wise direction.



10. Environmental conditions

10.1. Ambient temperature

The ambient temperature is measured at a height of 1.5 m above the floor.

- | | | |
|----|--|-----------------|
| a. | Normal range | : + 15 to +30°C |
| b. | Average value | : ± 23°C |
| c. | Maximum variation within a 5 min. period | : ± 5°C |

10.2. Humidity

- | | | |
|----|---|------------------|
| a. | Normal range (no condensation) | : 40 to 70% R.H. |
| b. | Range not resulting in constantly reduced operation | : 10 to 90% R.H. |

10.3. Atmospheric pressure

Normal range: 533 - 1060 m bar.

11. Power connections

11.1. Electrical

No electrical supply required.

11.2. Pneumatic

No air supply required.

12. Warranty

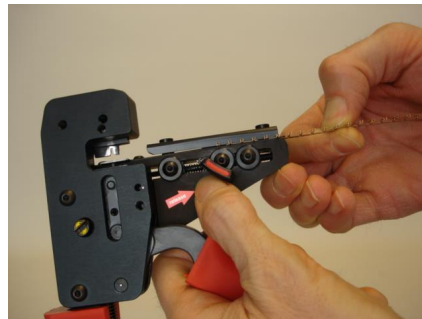
Please refer to our Terms and Conditions of Sale.

13. Spare parts

- Die set : RCY21153WA1

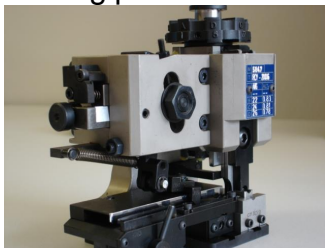
Appendix A: Release the feeding finger

In order to release the feeding finger, push the release lever in the direction as shown by the red arrow on the tool body. With your other hand, you can carefully slide the strip of contacts out of the tool.



Appendix B:

In order to apply the mentioned Minitex contacts, Föhrenbach Application Tooling provides also mini-applicators and other dedicated semi-automatic equipment.



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