



Operating Instructions

Four-indent crimping tool DigiCrimp® with digital display and wear monitoring







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KNIPEX-Werk C. Gustav Putsch KG

Oberkamper Str. 13 D-42349 Wuppertal

Tel.: +49 (0)2 02 / 47 94 -0 Fax: +49 (0)2 02 / 47 50 58

E-Mail: info@knipex.de

www.knipex.de

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1. General

Your four-indent crimper with a digital display is a hand-crimping tool manufactured using state-of-the-art technology and recognised safety standards. Only use the crimper if it is in perfect working order. Use the four-indent crimper for crimping machined pin and socket contacts, and only for the intended purpose stated in the user manual.

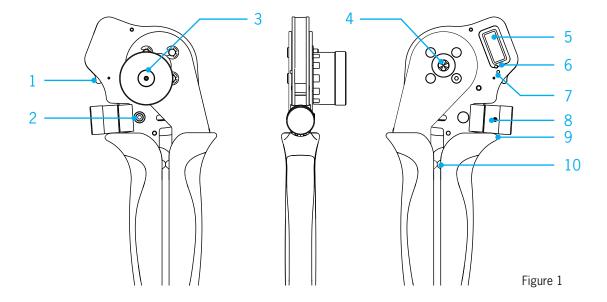
Art. No.	Finish	Profile	Capacity		Length	Weight
			mm²	AWG	mm	g
97 52 63 DG	Tool with standard indents in plastic case	Shell	0,08–2,5	28–13	175	820
97 52 65 DG	(with locator)		0,14–6,0	26–10	230	1190
97 52 65 DG A	Tool with standard indents in plastic case (without locator)	<i>L.</i> .3	0,14–6,0	26–10	230	1190

This tool allows you to check it at testing intervals you set yourself, and recalibrate as necessary.

The crimper features wear monitoring to increase process reliability for the user. This shows you once the crimper has exceeded a certain level of wear.

Apart from that, the tool is equipped with a wear prediction feature. This feature shows you when it is time to recalibrate the crimper depending on how often you have used it and the crimping setting used.

User alteration or improper use of the crimper will invalidate the manufacturer's guarantee for any resulting damage.



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- 1 Type CR 2025 battery compartment
- 2 Clamping screw for locking the crimper setting
- 3 Contact bushing with locking screw
- 4 Crimping point
- 5 Display
- 6 MODE button (recessed)
- 7 ON/OFF button
- 8 Crimp setting adjustment wheel
- 9 Opening to the emergency open lever
- 10 Stop

Pictograms mark the text as follows: Read and observe these notes, and exercise special care in these cases. Pass on all work safety precautions to users and specialist staff.



WARNING

This information indicates a potentially dangerous situation that may lead to serious injury or fatality.



ATTENTION

This information indicates a potentially dangerous situation that may lead to slight or minor injury, or damage to property.



Info

This information refers directly to the description of a function or operating sequence.

2. Operation

Switching on and off

Switch the crimper on or off by pressing the ON/OFF switch (7).

Select the display

Your crimper has a variety of display functions for selection by pressing the recessed MODE switch (6). This allows you to show the crimping stamp setting in mm, inches or the selector positions as given in M22520/7-01.

Briefly press the MODE button (6) with the gauge provided to change the setting. This will show the various display modes in the following order:

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Setting the crimping parameters

- Refer to the adjustment matrix for die settings and contact bushing positions (3) for the contact you intend to crimp.
- Change the crimping die setting (crimping die depth) by turning the adjustment wheel until the digital display shows the desired value.
- Lock the crimper setting using the locking screw (2).
- Lift and turn the contact bushing (3) to the side (see Figure 2) into the setting shown on the adjustment matrix.



Figure 2



NOTE

Always set the crimper depth from a larger value, such as from 1.05 mm to 1.0 mm or from 2.05 mm to 2.0 mm.

3. Crimping procedure

- Feed the prepared cable into the connector
- Lay the contact with the cable into the crimper's crimping point until it will not go any further; the contact bushing will position the contact exactly.
- Close the crimper until unlocking via the catch
- Open the crimper and remove the crimped contact

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NOTE

Do not crimp the gauge or other similar objects as this may damage the crimper. Always avoid crimping solid materials such as steel at hardness levels above 35 HRC.

4. Changing the contact bushing

- Unscrew the central socket-head screw on the mounted contact bushing (3) using an SW 2.5 mm Allen key, using another Allen key on the other side for countering as necessary.
- Remove the contact bushing (3).
- Fasten the optional contact bushing (3) by the same sequence in reverse.

5. Changing the battery

A type 2025 battery for the digital display will last around a year depending on how often you use the crimper. You will need to change the battery after this period. Open the battery compartment upwards in the direction of the arrow for easy battery removal and replacement.

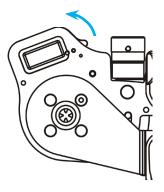


Figure 3



Info

Always set your crimper to the lower setting (reference setting) before you insert a new battery.



Info

You will always need to recalibrate your crimper (CAL) after a battery change.

See 9. Calibration after a battery change, for how to proceed. Always dispose of batteries at approved recycling collection points.

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6. Work process safety

All crimping tools are subject to mechanical wear that will affect your crimper's lifespan differently depending on load (cable gauge, materials...)

There is a certain amount of tolerance for this wear, and you can compensate for it by recalibrating your crimper. Your crimper will reach its wear limit between fifty and two hundred thousand uses depending on how heavily you use it.

The crimper display (5) will show you when to calibrate or recalibrate your crimper as follows:

- After a battery change (CAL)
 Recalibration is essential in order to restore the crimper to working order.
- After your crimper has reached a certain number of crimps (REC)

If the crimper display (5) shows E1 after several recalibration attempts, then the dies in your crimper are worn to the limit; you will need to have your crimper inspected.

7. Testing calibration to 1.0 mm or 2.0 mm using the gauge

Check the default setting of your crimper (1.0 mm or 2.0 mm crimp) before use.

- Switch on your crimper by pressing the ON/OFF switch (7).
- Set to the default setting (1.0 mm or 2 mm) using the adjustment wheel (8). Make sure that the gauge measurement is always taken from a larger value, such as from 1.05 mm down to 1.0 mm or 2.05 mm down to 2.00 mm.
- Close the crimper and place the 1.0 mm or 2.0 mm gauge between the dies. Make sure:
 - That you can move the gauge between the dies without play. If there is no deviation in measurement, you can use the crimper immediately.
 - If you can move the gauge between the dies with play, or you cannot insert the gauge into the crimper, you have a deviation in measurement and will need to recalibrate the crimper.

The following plug gauges are to be used:

Art. No.	Plug Gauge Size
97 52 63 DG	1 mm
97 52 65 DG	2 mm
97 52 65 DG A	2 mm

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8. Recalibrating the crimper (REC)



NOTE

Always have authorised personnel calibrate your crimper; improper calibration will lead to bad crimps.

- Set the display to mm using the MODE button (6) (see 2. Operation).
- Set the crimper die using the adjustment wheel (8) until gauge supplied with the crimper touches the dies and you can move it without play.
- Make sure that the gauge measurement to be set is always taken from a larger value, such as from 1.05 mm down to 1.0 mm or from 2.05 mm down to 2.0 mm gauge.
- Keep the ON/OFF switch (7) pressed and press the MODE button (6) using the gauge. Keep the MODE button (6) pressed for at least five seconds.
- Release the MODE button (6) after five seconds, and then release the ON/OFF switch (7).
- The digital display will automatically show a gauge value of 1.0 mm or 2.0 mm.
- Your crimper is recalibrated and ready for crimp parameter setting.

9. Calibrating your tool (CAL) after changing the battery



Info

Mechanical contact at the lower setting gives the reference value for calculating the current state of wear. This value is permanently stored in the tool's memory, and cannot be altered. You will need to calibrate the tool against this reference value every time you change the battery. Keep to the sequence given below.

- Open the battery compartment (1) upwards.
- Remove the used battery.
- Turn the adjustment wheel down to the lower setting (minus sign turning direction) and leave it there.
- Insert the new battery. The display (5) will show CAL as a calibration request.
- Set the crimper to 1 mm or 2 mm using the gauge turn the adjustment wheel (8) until you can move the gauge between the dies without play as shown in 7.
- Keep the ON/OFF button (7) pressed, and press the MODE button (6) with the gauge.
- Make sure that the gauge measurement is always taken from a larger value, such as from 1.05 mm down to 1.0 mm or from 2.05 mm down to 2.0 mm. This means, that at the beginning of the adjustment the gauge can be inserted with having some play.
- Keep the MODE button pressed for at least five seconds. Release the MODE button after five seconds, and then release the ON/OFF switch.
- The digital display will automatically show a gauge value of 1.0 mm or 2.0 mm.
- Your crimper is calibrated and ready for crimp parameter setting.

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NOTE

An E... error message instead of the default setting of 1.0 mm or 2.0 mm shown in the display after calibration means that the lower reference value has not been set correctly. You will need to repeat calibration.

10. E1 message after calibration or recalibration

If the crimper display shows an E1 message after several calibration or recalibration attempts (the message will be shown in sequence at first, then permanently as E1), then the dies in your four-indent crimper are so worn that the wear can no longer be compensated for. Send your crimper to the manufacturer or an authorised repair shop for inspections.

11. Monitoring wear - General

Any tool is subject to a certain amount of wear, even if used properly. Press the MODE button (6) for ten seconds – range: 8 to 15s – for your crimper's current condition with numerical data on the crimper display (5).

The following information will be shown in sequence:

- Serial number (eight digits in sequence)
- Remaining lifetime in percent (remaining service life)
- Reference value lower setting as specified by the manufacturer
- Number of calibrations so far

12. Troubleshooting and remedy

Display	Cause	Solution
E1	The crimper was not turned down to its lower (reference) setting using the adjustment wheel after changing the battery.	

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Display	Cause	Solution
E1	The display shows E1 after correct recalibration-Your crimp dies have reached their limit of wear.	
E2	Calibration or recalibration at a higher adjustment value than on initial factory calibration (too much play between the punch and gauge).	Repeat calibration or recalibration with the gauge supplied (see 8 or 9).

13. Servicing and maintenance

Make sure that your hand crimper is in a clean and proper state before use. Remove any crimping residues from between the crimping jaws and contact bushing. Lubricate the joints regularly with machine lubricant, and protect them from soiling. Make sure that all of the pins are secured by retaining rings. Always have the crimper manufacturer or an authorised repair shop repair your four-indent crimper.

CE-tested according to EMC

EN 55014-1:2006,EN 55014-2:1997+A1:2001, Cat. III

Test conducted by: CE-LAB GmbH [DAT-P-209/05-00] Am Hammergrund 1 98693 Ilmenau, Germany

FCC testing

FCC 47 CFR Part 15 Subpart B Class B

Test conducted by: Herberg Service Plus GmbH [Reg. No. 96997] European Compliance Laboratory (ECL) Nordostpark 51, 90411 Nürnberg, Germany

Repairs / Service



KNIPEX-Werk
C. Gustav Putsch KG
Oberkamper Straße 13
42349 Wuppertal - Germany
Tel.: +49 2 02 / 47 94 0
Fax: +49 2 02 / 47 50 58
Web: www.knipex.de
email: info@knipex.de

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