EPIC® CRIMPING TOOL DIGITAL / EPIC® CRIMPING TOOL DIGITAL SMALL

Operating Instructions for 11148001 & 11148004

11148300 11148304 11148302

Important notes for the right handling of the EPIC® Four-indent crimping tool

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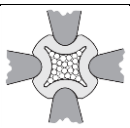
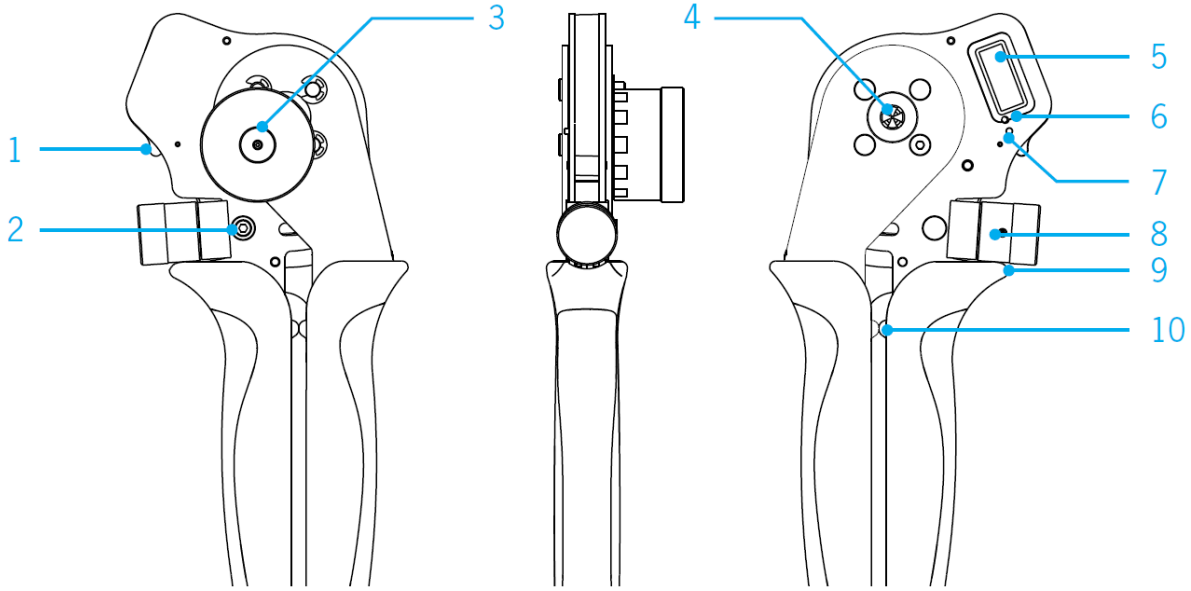
1. General

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	Profil	Capacity [mm²]	Capacity [AWG]	Length [mm]	Weight [g]
11148001	Tool with standard indents in plastic case (without locator)		0,14 – 6,0	26 - 10	230	1190
11148004	Tool with standard indents in plastic case (without locator)		0,08 - 2,5	28 - 13	175	820

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.



1 Type CR 2025 battery compartment
2 Clamping screw for locking the crimper setting
3 Contact bushing with locking screw (locator)
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

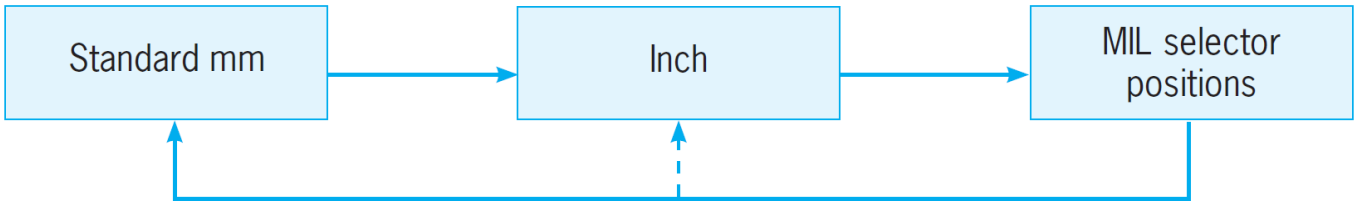
2. Operation

Switching on and off

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

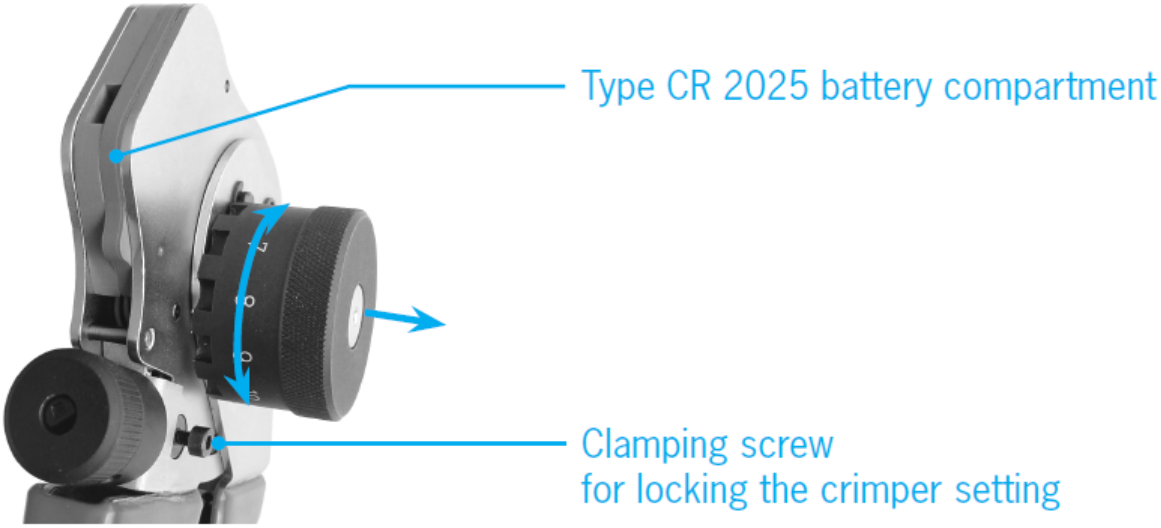
Select the display

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 (not Model 8.76-3).
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:



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.



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

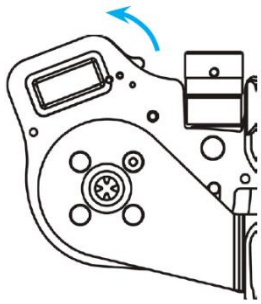
- Feed the prepared cable into the connector
- Lay the contact with the cable into the crimper's crimping point until it will not go any further; the contact bushing will position the contact exactly.
- Close the crimper until unlocking via the catch
- Open the crimper and remove the crimped contact

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.

Info:
Always set your crimper to the lower setting (reference setting) before you insert a new battery.
You will always need to recalibrate your crimper (CAL) after a battery change.
Always dispose of batteries at approved recycling collection points.

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 ifty 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.

8. Recalibrating the crimper (REC)

- 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 ive seconds.
- Release the MODE button (6) after ive 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

- 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 1.0 mm or 2.0 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.

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 irst, 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.	Repeat the procedure (See 9, Calibration after a battery change).
„E1“	The display shows E1 after correct recalibration–Your crimp dies have reached their limit of wear.	The crimper dies are worn out. Send in your crimper for inspections.
„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.

14. Crimp-Settings

LS1 & M23 Contacts: (11148001+11148300)

Contact		Settings			
Type	Art. No.	mm²	AWG	Adjustment wheel	Locator
LS 1 A6 2 mm female hyperboloid contact	44420104 44420105	4,00	12	1,55	
LS 1 A6 2 mm female contat with contactspring	44429370 44429371	0,50	22	1,15	**4**
		0,75	20	1,20	
		1,00	18	1,30	
		1,50	16	1,50	
		2,50	14	1,65	
LS 1 A6 1 mm female contact with slit	74020600 74020601	0,14	26	0,80	**3***
		0,34	24	0,90	
		0,50	22	1,10	
		0,75	20	1,15	
		1,00	18	1,20	
LS 1 1 mm female hyperboloid contact	74034500 74034501	0,14	26	0,80	
		0,34	24	0,90	
		0,50	22	1,10	
		0,75	20	1,15	
		1,00	18	1,15	
LS 1 2 mm male contact	74034100 74034101	0,14	26	1,25	**6**
		0,34	24	1,30	
		0,50	22	1,30	
		0,75	20	1,50	
		1,00	18	1,65	
	44420103	4,00	12	1,55	
LS 1 / M 23 1 mm female contact with slit	74200600 74020601	0,14	26	0,80	**3 ***
		0,34	24	0,90	
		0,50	22	1,10	
		0,75	20	1,15	
		1,00	18	1,20	
LS 1 / M 23 1 mm female contact Hyperboloid	74034500 74034501	0,14	26	0,80	
		0,34	24	0,90	
		0,50	22	1,10	
		0,75	20	1,15	
		1,00	18	1,20	
M 23 2 mm female contact with slit	72401600 72401601	1,00	18	1,45	**8**
		1,50	16	1,50	
		2,50	14	1,65	
M 23 2 mm male contact	72401000 72401001	1,00	18	1,45	**7**
		1,50	16	1,50	
		2,50	14	1,65	
M 23 1 mm male contact	72400000 72400001	0,14	26	0,80	**9**
		0,34	24	0,90	
		0,50	22	1,15	
		0,75	20	1,15	
		1,00	18	1,20	

* Zusatzlocator verwenden

D-Sub contacts (11148004+11148302)

contact		Settings			
Type	Art. No.	mm^2	AWG	Adjustment wheel	Locator
D-Sub 1 mm male contact	44423357	0,25	24	1,00	**3**
		0,34	22	1,05	
		0,50	21	1,10	
		0,75	20	1,15	
		1,00	18	1,20	
D-Sub 1 mm fremale contact	44423356	0,25	24	1,00	**4**
		0,34	22	1,05	
		0,50	21	1,10	
		0,75	20	1,15	
		1,00	18	1,20	

Note on locator 11148302:

If a contact holder is accidentally pressed in, it can be released again:

Simply press in the middle between the contact holders with the enclosed Allen key.

M17 contacts (11148004+11148304)

Setting chart for crimp contacts - 4-indent crimping tool with digital display 44423136

Pn contact	Description	Pin-Ø	Socket-Ø	Wire gauge [mm²]	Overall length [mm]	Conductor insert -Ø [mm]	Stripping length [mm]	Setting Locator	Setting Crimp [mm]
44423133	EPIC M17 SCM 0,6MM 0,06-0,25	0,6		0,06	23,3	0,75	4,4	6	0,48
44423133	EPIC M17 SCM 0,6MM 0,06-0,25	0,6		0,08	23,3	0,75	4,4	6	0,50
44423133	EPIC M17 SCM 0,6MM 0,06-0,25	0,6		0,14	23,3	0,75	4,4	6	0,60
44423133	EPIC M17 SCM 0,6MM 0,06-0,25	0,6		0,25	23,3	0,75	4,4	6	0,70
44423134	EPIC M17 SCM 0,6MM 0,06-0,25	0,6		0,14	23,3	0,9	5,5	6	0,55
44423134	EPIC M17 SCM 0,6MM 0,06-0,25	0,6		0,25	23,3	0,9	5,5	6	0,60
44423134	EPIC M17 SCM 0,6MM 0,06-0,25	0,6		0,34	23,3	0,9	5,5	6	0,65
44423135	EPIC M17 SCM 0,6MM 0,34-0,50	0,6		0,34	23,3	1,1	5,5	6	0,65
44423135	EPIC M17 SCM 0,6MM 0,34-0,50	0,6		0,5	23,3	1,1	5,5	6	0,73
44423125	EPIC M17 BCM 0,6MM 0,06-0,25		0,6	0,06	17,1	0,75	4,4	7**	0,48
44423125	EPIC M17 BCM 0,6MM 0,06-0,25		0,6	0,08	17,1	0,75	4,4	7**	0,50
44423125	EPIC M17 BCM 0,6MM 0,06-0,25		0,6	0,14	17,1	0,75	4,4	7**	0,60
44423125	EPIC M17 BCM 0,6MM 0,06-0,25		0,6	0,25	17,1	0,75	4,4	7**	0,70
44423126	EPIC M17 BCM 0,6MM 0,06-0,25		0,6	0,14	17,1	0,9	5,5	7**	0,55
44423126	EPIC M17 BCM 0,6MM 0,06-0,25		0,6	0,25	17,1	0,9	5,5	7**	0,60
44423126	EPIC M17 BCM 0,6MM 0,06-0,25		0,6	0,34	17,1	0,9	5,5	7**	0,65
44423127	EPIC M17 BCM 0,6MM 0,34-0,50		0,6	0,34	17,1	1,1	5,5	7**	0,65
44423127	EPIC M17 BCM 0,6MM 0,34-0,50		0,6	0,5	17,1	1,1	5,5	7**	0,73
44423130	EPIC M17 SCM 1MM 0,06-0,25	1,0		0,06	19,4	0,75	4,5	1	0,48
44423130	EPIC M17 SCM 1MM 0,06-0,25	1,0		0,08	19,4	0,75	4,5	1	0,50
44423130	EPIC M17 SCM 1MM 0,06-0,25	1,0		0,14	19,4	0,75	4,5	1	0,60
44423130	EPIC M17 SCM 1MM 0,06-0,25	1,0		0,25	19,4	0,75	4,5	1	0,70
44423131	EPIC M17 SCM 1MM 0,34-0,50	1,0		0,34	19,4	1,1	5,5	1	0,80
44423131	EPIC M17 SCM 1MM 0,34-0,50	1,0		0,5	19,4	1,1	5,5	1	0,88
44423132	EPIC M17 SCM 1MM 0,25-1,0	1,0		0,25	19,4	1,5	4,5	1	0,65
44423132	EPIC M17 SCM 1MM 0,25-1,0	1,0		0,34	19,4	1,5	4,5	1	0,70
44423132	EPIC M17 SCM 1MM 0,25-1,0	1,0		0,5	19,4	1,5	4,5	1	0,78
44423132	EPIC M17 SCM 1MM 0,25-1,0	1,0		0,75	19,4	1,5	4,5	1	0,90
44423132	EPIC M17 SCM 1MM 0,25-1,0	1,0		1,0	19,4	1,5	4,5	1	1,00
44423122	EPIC M17 BCM 1MM 0,06-0,25		1,0	0,06	13,1	0,75	4,5	3	0,48
44423122	EPIC M17 BCM 1MM 0,06-0,25		1,0	0,08	13,1	0,75	4,5	3	0,50
44423122	EPIC M17 BCM 1MM 0,06-0,25		1,0	0,14	13,1	0,75	4,5	3	0,60
44423122	EPIC M17 BCM 1MM 0,06-0,25		1,0	0,25	13,1	0,75	4,5	3	0,70
44423123	EPIC M17 BCM 1MM 0,34-0,50		1,0	0,34	13,1	1,1	5,5	3	0,80
44423123	EPIC M17 BCM 1MM 0,34-0,50		1,0	0,5	13,1	1,1	5,5	3	0,88
44423124	EPIC M17 BCM 1MM 0,25-1,0		1,0	0,25	13,1	1,5	4,5	3	0,65
44423124	EPIC M17 BCM 1MM 0,25-1,0		1,0	0,34	13,1	1,5	4,5	3	0,70
44423124	EPIC M17 BCM 1MM 0,25-1,0		1,0	0,5	13,1	1,5	4,5	3	0,78
44423124	EPIC M17 BCM 1MM 0,25-1,0		1,0	0,75	13,1	1,5	4,5	3	0,90
44423124	EPIC M17 BCM 1MM 0,25-1,0		1,0	1,0	13,1	1,5	4,5	3	1,00
44423128	EPIC M17 SCM 2MM 0,25-1,0	2,0		0,34	19,8	1,5	6	5	0,80
44423128	EPIC M17 SCM 2MM 0,25-1,0	2,0		0,5	19,8	1,5	6	5	0,88
44423128	EPIC M17 SCM 2MM 0,25-1,0	2,0		0,75	19,8	1,5	6	5	1,00
44423128	EPIC M17 SCM 2MM 0,25-1,0	2,0		1	19,8	1,5	6	5	1,10
44423129	EPIC M17 SCM 2MM 1,5-2,5	2,0		1,5	19,8	2,3	6	5	1,40
44423129	EPIC M17 SCM 2MM 1,5-2,5	2,0		2,5	19,8	2,3	6	5	1,65
44423120	EPIC M17 BCM 2MM 0,25-1,0		2,0	0,34	15,6	1,5	6	4	0,80
44423120	EPIC M17 BCM 2MM 0,25-1,0		2,0	0,5	15,6	1,5	6	4	0,88
44423120	EPIC M17 BCM 2MM 0,25-1,0		2,0	0,75	15,6	1,5	6	4	1,00
44423120	EPIC M17 BCM 2MM 0,25-1,0		2,0	1	15,6	1,5	6	4	1,10
44423121	EPIC M17 BCM 2MM 1,5-2,5		2,0	1,5	15,6	2,3	6	4	1,40
44423121	EPIC M17 BCM 2MM 1,5-2,5		2,0	2,5	15,6	2,3	6	4	1,65

* * Please use locating pin marked with 1.
Depending on the conductor used. the crimping pliers settings required may differ from the values given in the settings chart.