

# Crimping tools

## Tools and accessories for crimp contacts

| for contacts of inserts series: |           | page:     |
|---------------------------------|-----------|-----------|
| CD                              | (10A)     | 66 - 74   |
| CDD                             | (10A)     | 76 - 83   |
| CDC                             | (16A)     | 104 - 106 |
| CCE                             | (16A)     | 130 - 135 |
| CMCE                            | (16A)     | 137 - 145 |
| CQE                             | (16A)     | 168 - 173 |
| CQEE                            | (16A)     | 176 - 177 |
| CQ                              | (10A/16A) | 186 - 193 |
| CX 8/24                         | (16A/10A) | 194       |
| CX 6/36 *                       | (10A)     | 198       |
| CX 12/2 *                       | (10A)     | 199       |
| CX 6/6 *                        | (16A)     | 206       |
| MIXO                            | (10A/16A) | 271 - 306 |

\* the underlined polarities indicate those contacts that require the tools shown in this page

### manual crimping tool positioner - gauge



### insertion tool - removal tools replacement tip



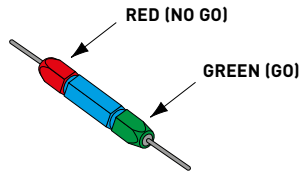
| description                                                                                                                                         | part No.                         | part No.                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|----------------------------|
| crimping tool for <b>10A</b> and <b>16A</b> contacts DANIELS AF8 model (turret excluded)                                                            | <b>CCPZ MIL</b>                  |                            |
| positioner inserts (see note) for <b>10A</b> contacts (CDF and CDM series) for <b>16A</b> contacts (CCF and CCM series)                             | <b>CCTP 10</b><br><b>CCTP 16</b> |                            |
| "go / no go" control gauge to verify indenter closure (see note)                                                                                    | <b>CCPNP</b>                     |                            |
| insertion tool for insertion of the contacts into the inserts for crimped contacts up to 0,75 mm <sup>2</sup>                                       |                                  | <b>CCINA</b>               |
| removal tools for the extraction of contacts from the inserts for <b>10A</b> contacts (CD) <sup>1)</sup> for <b>16A</b> contacts (CC) <sup>2)</sup> |                                  | <b>CCES</b><br><b>CQES</b> |
| replacement tip for CCES removal tool                                                                                                               |                                  | <b>CCPR RN</b>             |

<sup>1)</sup> for CQ, CD, CDD, CX inserts (10A auxiliary contacts) and MIXO module (10A)  
<sup>2)</sup> for CQ, CQE, CQEE, CCE, CMCE inserts (excluded 16+2), MIXO module (16A), CX6/6 (16A) and CDC. For CMCE (16+2), CX inserts (contacts 16A insert CX 8/24) using a flat 3 mm screwdriver.

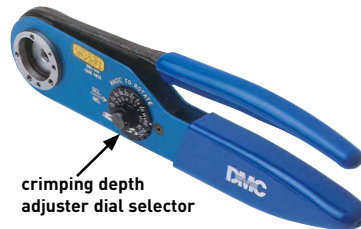
**Notes:**  
**Positioner / Head turret**  
 conforms to international standard MIL-C-22520/1  
 - An interchangeable and indispensable accessory of the CCPZ MIL crimping tool, it precisely positions the contact where crimping is performed. Each series of contacts requires its own turret.

**"go / no go" control gauge**  
 conforms with international standard MIL-C-22520/3  
 - A tool used to periodically check that the crimping tool meets standard requirements.

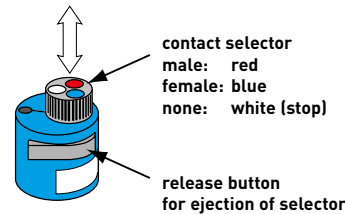
#### CCPNP



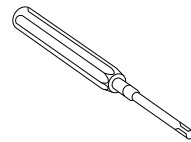
#### CCPZ MIL



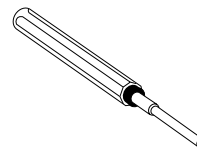
#### CCTP



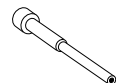
#### CCINA



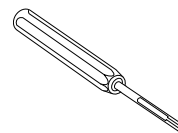
#### CCES



#### CCPR RN



#### CQES



#### 16A - CONTACT HEAD TURRET / POSITIONER

| CCMA - CCFA<br>CCMD - CCFD |        | 0,14<br>mm <sup>2</sup> | 0,25<br>mm <sup>2</sup> | 0,34<br>mm <sup>2</sup> | 0,5<br>mm <sup>2</sup> | 0,75<br>mm <sup>2</sup> | 1,0<br>mm <sup>2</sup> | 1,5<br>mm <sup>2</sup> | 2,5<br>mm <sup>2</sup> | 3,0<br>mm <sup>2</sup> | 4,0<br>mm <sup>2</sup> | conductor<br>section |
|----------------------------|--------|-------------------------|-------------------------|-------------------------|------------------------|-------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|----------------------|
| red                        | blue   |                         |                         |                         |                        |                         |                        |                        |                        |                        |                        |                      |
| male                       | female | 26                      | 24                      | 22                      | 20                     | 18                      | 17                     | 16                     | 14                     | 12                     | 12                     | AWG                  |
| 0,3                        | 0,3    | 5                       | 5                       | 6                       |                        |                         |                        |                        |                        |                        |                        |                      |
| 0,5                        | 0,5    |                         | 6                       | 6                       | 7                      |                         |                        |                        |                        |                        |                        |                      |
| 0,7                        | 0,7    |                         |                         | 6                       | 6                      | 7                       |                        |                        |                        |                        |                        |                      |
| 1,0                        | 1,0    |                         |                         | 6                       | 6                      | 7                       | 7                      |                        |                        |                        |                        |                      |
| 1,5                        | 1,5    |                         |                         |                         | 6                      | 7                       | 7                      | 8                      |                        |                        |                        |                      |
| 2,5                        | 2,5    |                         |                         |                         |                        | 6                       | 6                      | 7                      | 7                      |                        |                        |                      |
| 3,0                        | 3,0    |                         |                         |                         |                        |                         | 6                      | 7                      | 7                      | 7                      |                        |                      |
| 4,0                        | 4,0    |                         |                         |                         |                        |                         |                        |                        | 7                      | 8                      |                        |                      |

#### 10A - CONTACT HEAD TURRET / POSITIONER

| CDMA - CDFA<br>CDMD - CDFD |        | 0,14<br>mm <sup>2</sup> | 0,25<br>mm <sup>2</sup> | 0,34<br>mm <sup>2</sup> | 0,5<br>mm <sup>2</sup> | 0,75<br>mm <sup>2</sup> | 1,0<br>mm <sup>2</sup> | 1,5<br>mm <sup>2</sup> | 2,5<br>mm <sup>2</sup> | conductor<br>section |
|----------------------------|--------|-------------------------|-------------------------|-------------------------|------------------------|-------------------------|------------------------|------------------------|------------------------|----------------------|
| red                        | blue   |                         |                         |                         |                        |                         |                        |                        |                        |                      |
| male                       | female | 26                      | 24                      | 22                      | 20                     | 18                      | 17                     | 16                     | 14                     | AWG                  |
| 0,3                        | 0,3    | 5                       | 5                       | 6                       |                        |                         |                        |                        |                        |                      |
| 0,5                        | 0,5    |                         |                         |                         | 6                      |                         |                        |                        |                        |                      |
| 0,7                        | 0,7    |                         |                         |                         |                        | 6                       |                        |                        |                        |                      |
| 1,0                        | 1,0    |                         |                         |                         |                        |                         | 6                      |                        |                        |                      |
| 1,5                        | 1,5    |                         |                         |                         |                        |                         |                        | 7                      |                        |                      |
| 2,5                        | 2,5    |                         |                         |                         |                        |                         |                        |                        | 7                      |                      |

## Use and maintenance instructions

## 1. General specifications

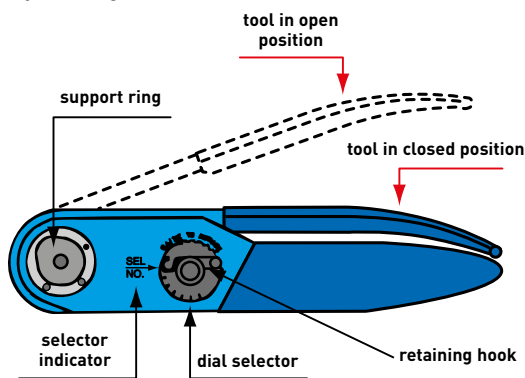
The **CCPZ MIL crimping tool** conforms to the international standard MIL-C-22520/1. Crimping is performed with 8 pressure points. The tool is equipped with a geared mechanism to control the complete crimping cycle. **The tool must be equipped with an interchangeable positioner (CCTP) according to the series of contacts to be crimped.**

## 1.1 Crimping range

Conductor cross-sectional area range:  
from 0,14 mm<sup>2</sup> (26 AWG) to 4 mm<sup>2</sup> (12 AWG) for positioner 16A,  
from 0,14 mm<sup>2</sup> (26 AWG) to 2,5 mm<sup>2</sup> (14 AWG) for positioner 10A

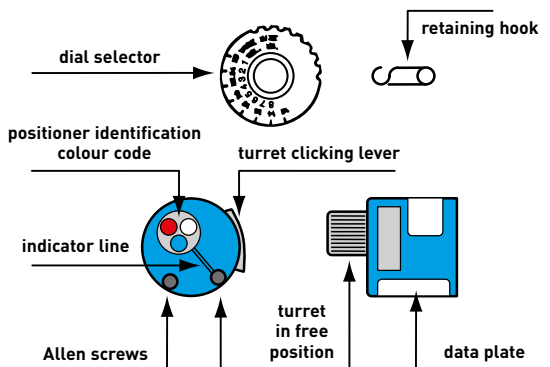
**Caution!**

**The handle of the tool must be in the open position when the turret is installed, disassembled or opened. If not, the turret and the crimping tool may be damaged.**



## 2. CCTP positioner installation

- 1 The crimping tool must be in the open position.
- 2 Press the clicking lever that releases the positioner in the adjustment position.
- 3 Position the previously selected CCTP positioner on the support ring located on the crimping tool (matching the special pin on the base of the turret with the corresponding hole on the support ring), aligning the tapped holes with the socket head screws.
- 4 With the CCTP positioner positioned against the support ring, tighten the socket head screws with the 3,5 mm Allen wrench (supplied with the kit).
- 5 Refer to the data plate on the CCTP positioner. From the colour code column, select the colour of the positioner that corresponds to the appropriate code and dimension of the contact to be crimped.
- 6 With the CCTP positioner in the adjustment position, turn the turret until the colour-coded positioner is aligned with the indicator line. Press the turret until it clicks into the connected position.
- 7 Refer to the data plate on the CCTP positioner. From the column indicating the proper conductor section, determine the number that corresponds to the contact being used.
- 8 Remove the retaining hook from the crimping tool dial selector. Lift the dial selector and turn it until the selector number is aligned with the indicator (SEL. NO.). Replace the retaining hook (if necessary).



## 3. Crimping instructions

- 1 Insert the contact and the prepared conductor through the opening of the indenter in the turret positioner.
- 2 Tighten the crimping tool handle until the stop gear is released. The tool will return to the open position.
- 3 Check the position of the crimping on the contact crimping foot. Ideally, the crimping should be between the inspection hole and the top edge of the crimping foot. The head of the contact should not be squared and the inspection hole should be intact.

## 4. Removing the CCTP positioner

With the crimping tool in the open position, to disassemble the positioner, loosen the socket head screws using the 3,5 mm Allen key wrench (supplied with the kit). After the threads are released from the support ring, pull off the positioner with a straight movement.

## 5. Instructions to check calibration

The operations to check the crimping tool must be carried out with the dial selector in position 4 and the CCPNP gauge.

**ATTENTION! Do not crimp the gauge.**

## 5.1 Calibration check

Put the crimping tool in the completely closed position.

**“GO”** - Insert the end (green) of the gauge as shown (Fig. 1).

The gauge must pass freely between the indenter tips.

**“NO GO”** - Insert the end (red) of the gauge as shown (Fig. 2).

The gauge should not pass through the opening.

| Gauge | tool selector pos. No. | Ø A ± 0,00254 mm (GO) green | Ø B ± 0,00254 mm (NO GO) red |
|-------|------------------------|-----------------------------|------------------------------|
| CCPNP | 4                      | 0,991 (mm)<br>0,0390 (in)   | 1,118 (mm)<br>0,0440 (in)    |

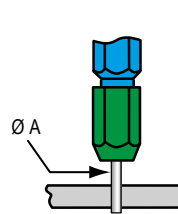


Fig. 1

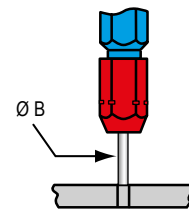


Fig. 2

## 6. Crimping tool maintenance

No maintenance is required.

However, it is good practice to keep the indenter tips free from residual deposits of the coloured band (some types of crimp contacts as per MIL standards are identified by coloured bands in the crimping area) and any other debris.

A metal brush may be used for this purpose.

The following is strongly recommended:

- 1 DO NOT immerse the tools in a solution to clean them.
- 2 DO NOT brush oil in the tools to lubricate them.
- 3 DO NOT try to disassemble the tool or repair it.

This is a high-precision manual crimping tool and must be used as such.

For automatic crimping operations refer to the CCPZP and/or CCPZPA crimping tool models.