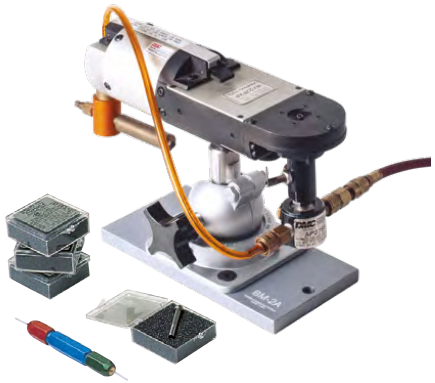
Tools and accessories for crimp contacts

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

pneumatic crimping tool with automatic positioner inserts - gauge



insertion tool - removal tools replacement tip

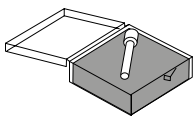
CCPR RN

description	part No.	part No.
crimping tool with automatic positioner model DANIELS WA27FAP (inserts excluded)	**CCPZPA**	
positioner inserts (see note) male contacts **10A** (CDM series) female contacts **10A** (CDF series) male contacts **16A** (CCM series) female contacts **16A** (CCF series)	 **CCTPADM** **CCTPADF** **CCTPACM** **CCTPACF**	
"go / no go" control gauge to verify indenter closure (see note)	**CCPNP**	
insertion tool for insertion of the contacts into the inserts for crimped contacts up to 0,75 mm²		**CCINA**
removal tools for the extraction of contacts from the inserts for **10A** (CD) contacts [1] for **16A** (CX) contacts [2]		 **CCES** **CQES**
replacement tip for CCES removal tool		**CCPR RN**

[1] for CQ, CD, CDD, CX inserts (10A auxiliary contacts) and MIXO module (10A)
[2] 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.

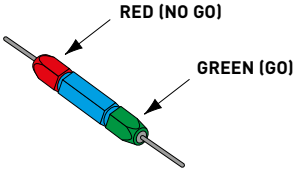
Notes:
Positioner inserts
- Interchangeable and indispensable accessories of the CCPZPA crimping tool precisely position the contact where crimping is performed.
  Each contact requires its own positioner insert selected according to the type of contact (10A or 16A) and the kind (male or female).

CCTPADM and CCTPADF
CCTPACM and CCTPACF



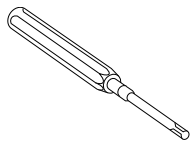
"go / no go" control gauge
conforms with international standard MIL-C-22520/3
- A tool used to periodically check that the crimping tool meets standard requirements.

CCPNP

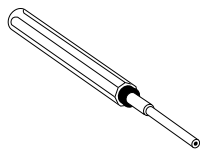


CCPZPA

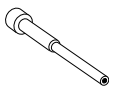
CCINA



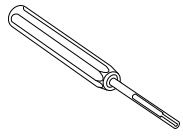
CCES



CCPR RN



CQES



CRIMPING TOOLS

Use and maintenance instructions

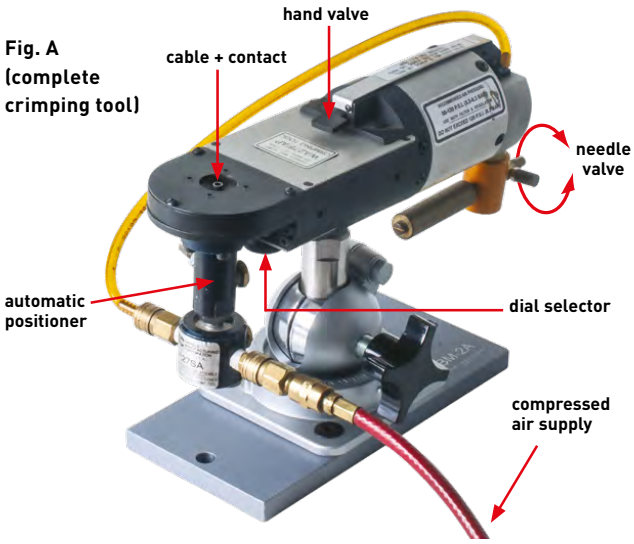
1. General specifications

This is the pneumatic version of the manual crimping tool. Crimping is performed with 8 pressure points. The tool is equipped with a geared mechanism to control the complete crimping cycle. Thanks to the automatic positioner it is possible to crimp simply by inserting the uncrimped contact + wire into the tool crimping cavity. **It is also necessary to order the interchangeable positioner inserts relative to the series of contacts to be crimped.**
The tool operating pressure is 5,5 - 8,3 bar. It is recommended to utilise an adjustment and air filtering unit.

1.1 Crimping range

Conductor cross-sectional area range: from 0,12 mm² (26 AWG) to 4 mm² (12 AWG).

Fig. A (complete crimping tool)



2. Installation or replacement of a positioner insert

1 Disconnect the workshop compressed air source.
2 Disconnect the air hoses from the automatic positioner (rapid connectors).
3 Remove the connection screws, using the 3,5 mm Allen wrench (supplied with the kit), to separate the automatic positioner from the crimping tool.
The indenters will not reach the fully closed position and the contact will be internally blocked if the geared mechanism is operating correctly.
4 Unscrew the positioner closing housing.
5 Install or replace the proper positioner insert in the positioner housing, replacing the underlying spring.
6 Reverse the operations, as described from point 4 to point 1.

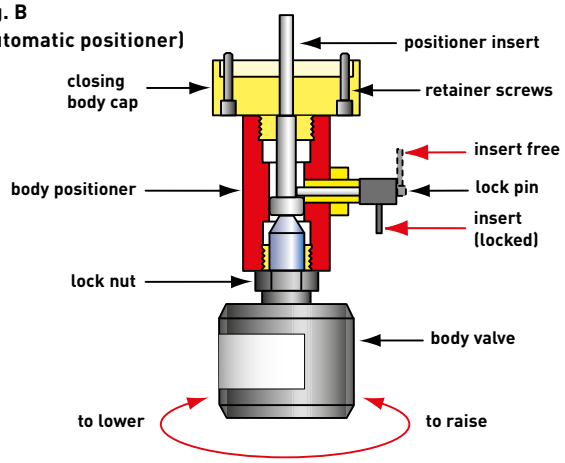
3. Crimping position adjustment (Fig. B)

1 Release the automatic positioner from the crimping tool body (see points 1 and 2 "Installation replacement of a positioner insert").
2 While holding the body positioner in position using a 19 mm wrench, loosen the lock nut with a 14 mm wrench.
3 Push the positioner insert toward the bottom and lock it using the lock pin.
The indenters will not reach the fully closed position and the contact will be internally blocked if the geared mechanism is operating correctly.
4 If the pin doesn't lock, unscrew the body valve toward the bottom.
5 With the pin locked, tighten the body valve toward the top until it strikes against the positioner insert.
6 While maintaining that position, tighten the lock nut.
7 Replace and connect the positioner on the crimping tool.
8 Release the lock pin in the "free" position.

4. Checking the crimping complete cycle control mechanism

Correct operation can be checked based on the following procedure:
1 Reduce the pressure to 1 bar.
2 Using a contact that corresponds to the installed positioner, with size 0,5 and a wire with section 0,5 mm², use the crimping tool, referring to the crimping instructions. The indenters will not reach the fully closed position and the contact will be internally blocked if the geared mechanism is operating correctly.
3 To release the partially crimped contact, increase the air pressure of the line to 5,5 - 8,3 bar and again use the crimping tool. It will then complete the crimping, allowing the indenters to return to the fully open position.
The indenters will not reach the fully closed position and the contact will be internally blocked if the geared mechanism is operating correctly.

Fig. B (automatic positioner)



5. Crimping instructions

1 To obtain the suitable selector number, refer to the data plate located on the cover of the positioner insert case, and adjust the dial selector as specified.
2 Insert the contact and the prepared conductor through the opening of the indenter in the crimping tool casing **(Fig. A)**.
3 Exert slight pressure until the crimping tool automatically crimps the contact.
CAUTION: Wire sections less than 0,34 mm² (24 AWG) up to 0,08 mm² (28 AWG) or equivalent are not sufficiently rigid, so that it may be rather difficult to push the contact + wire.
4 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.

6. 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.

6.1 Calibration check

1 Disconnect the compressed air.
2 Push the positioner insert toward the bottom and lock it using the lock pin.
3 Reconnect the compressed air.
4 Turn the needle valve counterclockwise to open the air supply **(Fig. A)**.
5 The indenters will extend and remain in the extracted position until the valve is closed.
6 Check using the gauge, referring to the "go / no go" instructions reported below.
7 When the calibration check has been completed, close the needle valve turning it clockwise **(Fig. A)**.
8 Put the lock pin in the "free" 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.

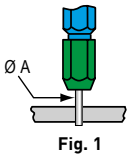


Fig. 1

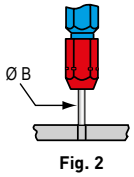


Fig. 2

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)	1,118 (mm)
		0,0390 (in)	0,0440 (in)

7. 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 crimping tool and must be used as such.