

HAND CRIMP TOOLS Z80-292 & Z80-293



Z80-292 (open position)

Z80-293 (closed position)

These Hand Crimp Tools have been designed for use with the following Datamate Mix-Tek Coax contacts (Z80-292 must be used with positioner Z80-291):

- M80-305 & 307..... Straight female coax crimp contact
(Used in Mix-Tek female crimp connectors)
- M80-308 & 309 (Z80-293 only)..... 90° female coax solder/crimp contact
(Used in Mix-Tek female crimp connectors)
- M80-315 & 317..... Straight male coax crimp contact
(Used in Mix-Tek male crimp connectors)
- M80-318 & 319 (Z80-293 only)..... 90° male coax solder/crimp contact
(Used in Mix-Tek male crimp connectors)

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GENERAL INFORMATION

The Hand crimp tools Z80-292 & Z80-293 consist of a basic hand tool, which should be used with a positioner or die set.

The contact is correctly crimped when the tool is free to open at the fully closed position, i.e., when the ratchet releases. The tool cannot be opened without completing the cycle.

Table 1

Cable Type	Max. Insulation Diameter	Compatible Contacts
RG 178	Ø2.0mm	M80-305, M80-308, M80-315, M80-318
RG 174	Ø2.7mm	M80-307, M80-309, M80-317, M80-319
RG 179	Ø2.7mm	M80-307, M80-309, M80-317, M80-319
RG 316	Ø2.7mm	M80-307, M80-309, M80-317, M80-319

TOOL PREPARATION

Z80-292

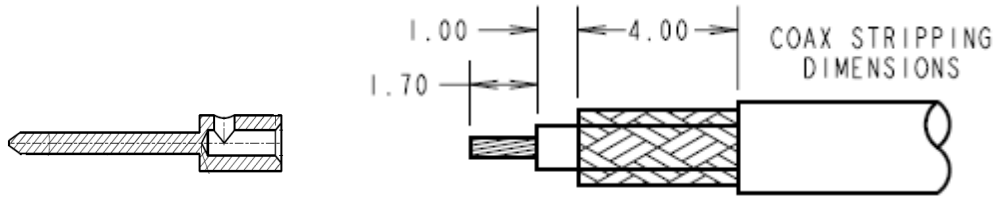
1. Check that the tool is in the open position. Remove the safety clip from the positioner guide (do not discard)
2. Insert the positioner (Z80-291) into the positioner guide and turn it 90° in the direction shown on the tool, until the bayonet pins lock.
3. Install the safety clip back into the positioner guide (optional).
4. Check Table 2 for the correct crimp tool setting of the wire size you wish to crimp.
5. Remove the safety clip from the selector knob (do not discard).
6. Lift and turn the selector knob until the correct crimp tool setting is lined up with the "Sel. No." arrow. Lower the selector knob, ensuring the locating peg lines up with a notch.
7. Install the safety clip back into the selector knob.

Z80-293

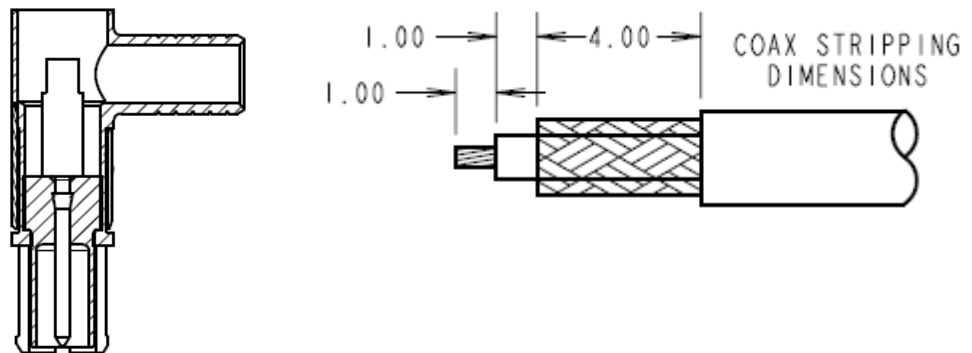
1. Align die rail slots in die halves with the rail in the crimp tool and push shank of dies into holes, dies will snap into place.
2. Close handle to make sure dies are properly seated.
3. The tool is now ready to use.

WIRE STRIPPING DETAILS

Straight coax connector – Fig A



90° coax connector – Fig B



CRIMPING PROCEDURE Z80-292

1. Ensure that the wire to be crimped is within the specified range of sizes for the contact and the crimp tool. Failure to use the specified wire size will result in poor quality crimps and possible tool damage.
2. See Figs. A & B for correct wire stripping dimensions for the appropriate contact. See also drawings M80-305, M80-307, M80-315 & M80-317 for cable diameter and type.
3. Place the prepared wire and contact into the positioner and squeeze the handles of the crimp tool fully together, until the ratchet releases. The handle will return to the open position. Remove the crimped contact and wire. Check that there is no exposed or stray wire, and that the inner insulation is close to the end of the crimp barrel.

Note: The cross hole on the crimp barrel, although not an inspection hole (it is designed to assist with plating processes) may give approximate guidance to the location of the conductor. After crimping the contact, the indent may overlap this hole.

4. For pull off forces for individual contacts see table 2.
5. Refer to component specification C005XX for details of coax assembly methods.

Table 2

Contact	Inner Contact	Crimp Tool Setting (inner contact only)	Min. Pull Off Force (N)
M80-305	M80-393	4	15
M80-307	M80-395	4	44
M80-315	M80-387	4	13
M80-317	M80-389	6	28

HARWIN

CRIMPING PROCEDURE Z80-293

1. Ensure that the wire to be crimped is within the specified range of sizes for the contact and the crimp tool (see table 1). Failure to use the specified wire size will result in poor quality crimps and possible tool damage.
2. See Figs. A & B for correct wire stripping dimensions for the appropriate contact. The straight coax contact (Fig A) will need to be crimped to the wire before insertion into outer contact. For the 90° coax contact (Fig B) the wire is inserted into the coax body and soldered before assembly, see component specification C005XX for further details of coax assembly methods. We recommend that when the wire is stripped, it is clamped or supported close to the stripping area - this will prevent insulation slippage. Suitable wire strippers (such as a PTFE wire stripper) must be used.
3. Check below table 3 to select which of the two hexagon sizes is correct to crimp contact with. Place contact with crimp sleeve in position into the above selected hexagon with the flat against the surface (the side with the manufacturers ID plate on), gently squeeze the handle until it will go no further the crimp is now complete, squeeze handle again to release completed crimp.
4. A correctly crimped contact & sleeve will achieve a pull off force of 30N minimum.

Table 3

Cable Type	Max. Insulation Diameter	Compatible Contacts	Crimp Sleeve Hexagon Size
RG 178	Ø2.0mm	M80-305, M80-308, M80-315, M80-318	Small 0.105" (2.67mm) A/F
RG 174	Ø2.7mm	M80-307, M80-309, M80-317, M80-319	Large 0.128" (3.25mm) A/F
RG 179	Ø2.7mm	M80-307, M80-309, M80-317, M80-319	Large 0.128" (3.25mm) A/F
RG 316	Ø2.7mm	M80-307, M80-309, M80-317, M80-319	Large 0.128" (3.25mm) A/F

CARE OF TOOL

There is virtually no maintenance required for the Z80-292 & Z80-293. However, it is good practice to keep the indenter tips free of residual colour band deposits and other debris. A small wire brush may be used for this purpose.

We strongly recommend that you:

1. **DO NOT** immerse tools in any cleaning solution.
2. **DO NOT** spray oil into tool to lubricate.
3. **DO NOT** attempt to disassemble tool or make repairs

This is a precision crimp tool and should be handled as such.