

ESCC Detail Specification No. 3401/040

PAGE 12 ISSUE 3

4.3 MECHANICAL REQUIREMENTS

4.3.1 Dimension Check

The dimensions of the contacts specified herein shall be verified in accordance with the requirements set out in Para, 9.11 of ESCC Generic Specification No. 3401 and shall conform to those shown in Figure 2.

4.3.2 Weight

The maximum weight of the contacts specified herein shall be as specified in Table 1(a).

4.3.3 Crimp Tensile Strength or Pull Test

4.3.3.1 Crimp Tensile Strength (Variants 07 to 12)

The contacts shall be crimped to stranded wire of the appropriate size as shown below. The contact and the wire shall be separated from each other, using a tensile strength machine. The values of the force at separation of the contact and wire and the method of failure shall be recorded and shall be in accordance with the following values:

Variant	Wire Size (AWG)	Minimum Value of Tensile Strength (daN)
07/08	8	>50
09/10	10	>50
11/12	12 - 14	>30

i.e. "pull-out", "break in crimp", "break in wire".

4.3.3.2 Pull Test (Variants 01 to 06)

The contacts shall be soldered to stranded wire of the appropriate size shown in Table 1(a) of this specification. The wire shall break before the solder. If the solder breaks before the wire, examine the solder pot for incomplete covering.

4.3.4 Gold Plate Thickness

The thickness of the gold plate deposited on the contacts specified herein shall be checked and meet the requirements of Subpara. 4.4.1. Measurements shall be performed on active parts as specified in Figure 2.

4.3.5 Contact Insertion and Withdrawal Forces ((Variants 02, 04, 06, 08, 10, 12, 14, 16)

The contact insertion and withdrawal forces of the female contacts shall be as specified hereunder.

Maximum Diameter	Minimum Diameter
Test Pin	Test Pin
3.532(+0-0.0025) mm	3.581(+0.0025-0) mm

