## 1. SCOPE

This specification covers the requirements for application of contact P/N 281827, 281828, 281829, 282158, 282162, 282553, AMP POSITIVE LOCK MKI REC. with latching device. These requirements are applicable to AMP contacts when crimped with AMP crimping tools and machines. For wire and insulation ranges requirements relative to the products covered in this specification see Fig. 5.

## 2. NOMENCLATURE



Fig. 1

## 3. CRIMP AND DIMENSIONAL REQUIREMENTS



### 3.1 Wire preparation.

A. Strip length: Insulation shall be stripped as indicated in Fig. 5.
B. Workmanship: reasonable care shall be taken not to nick, scrape or cut any strands during the stripping operation.

### 3.2 Carrier cut off tab and burr.

A. Cut off tab: shall not exceed 0.30 mm .
B. Burr: burr on cut off shall not exceed 0.15 mm .

### 3.3 Wire barrel crimp.

A. Crimp dimension and type: Height, width and type shall be as shown in Fig. 5.
B. Wire barrel flash: Shall not exceed 0.15 mm .
C. Wire barrel seam: Shall be completely closed and there shall be no evidence of loose wire strands or wire strands visible in the seam.
D. Bellmouth.
(1) Rear bellmouth length shall be $0.63 \mathrm{~mm} \times 45^{\circ}$ max.
(2) Front bellmouth length shall be $0.38 \mathrm{~mm} \times 45^{\circ}$ max.
E. Conductor location.
(1) End of the wire shall be flush with the front end of the wire barrel or extend 0.76 mm maximum after crimping.
(2) Both insulation and conductor shall be visible between the insulation barrel and wire barrel. Care shall be taken not to allow insulation to be crimped in the wire barrel.

### 3.4 Insulation barrel crimp.

A. Crimp dimensions and type: Crimp height, width and type shall be as shown in Fig. 5.
B. Workmanship: Reasonable care shall be taken not to cut, to break, to deform etc. the insulation wire during the crimping operation.

### 3.5 Alignment

A. Straightness
(1) The contact, including the cut off tab and burr, after crimping shall not be bent above or below the datum line more than the amount shown in Fig. 2.


Fig. 2
(2) The side to side bending of the contact, after crimping, shall not exceed the limits specified on Fig. 3.


Fig. 3
B. Twist or roll: Twist or roll of the crimped contact shall not exceed the limits specified in Fig. 4.


Fig. 4

| PART. NO. | WIRE SIZE <br> (mm2) | INSULATION DIA. | STRIP LENGHT APPROX | WIRE BARREL CRIMP |  |  | INSUL. BARREL CRIMP |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{gathered} \text { WIDTH } \\ +0.1 \\ -0 \end{gathered}$ | $\begin{aligned} & \text { HEIGHT } \\ & +/-0.03 \end{aligned}$ | TYPE | $\begin{aligned} & \text { WIDTH } \\ & +0.15 \\ & -0 \end{aligned}$ | $\begin{aligned} & \text { HEIGHT } \\ & \text { REF. } \end{aligned}$ | TYPE |
| $\begin{aligned} & 281827 \\ & 282158 \end{aligned}$ | 0.50 | 2.30-3.30 | 6.00 | 2.29 | 1.45 | "F" | 3.56 | 2.90 | "F" |
|  | 0.75 |  |  |  | 1.50 |  | 3.56 | - | "F" |
|  | 0.75 |  |  |  | 1.50 |  | 3.30 | - | "O.V." |
|  | 1.00 |  |  |  | 1.60 |  | 3.56 | 3.00 | "F" |
|  | 1.50 |  |  |  | 1.65 |  | 3.56 | 3.30 | "F" |
| 281828 | 2.50 | 3.60-4.30 | 6.00 | 3.30 | 2.03 | "F" | 5.59 | 3.40 | "F" |
|  | 3.00 |  |  |  | 2.13 |  |  | 3.60 |  |
|  | 4.00 |  |  |  | 2.36 |  |  | 4.10 |  |
| 281829 | 4.00 | 3.40-5.10 | 6.00 | 4.06 | 2.16 | "F" | 5.33 | 4.30 | "F" |
|  | 6.00 |  |  |  | 2.62 |  |  | 4.70 |  |
| $\begin{aligned} & 282162 \\ & 282553 \end{aligned}$ | 0.50 | 1.50-2.40 | 6.00 | 2.29 | 1.45 | "F" | 3.30 | 2.35 | "F" |
|  | 0.75 |  |  |  | 1.50 |  |  | 2.45 |  |
|  | 1.00 |  |  |  | 1.60 |  |  | 2.55 |  |
|  | 1.50 |  |  |  | 1.65 |  |  | 2.60 |  |

Dimensions are in mm.
Automatic machine wire crimp dimensions.
Fig. 5

