1. SCOPE

1.1 Content
This specification covers the requirements for application of AMPMODU* Mod.I Receptacle Contacts. These requirements are applicable to hand or automatic machine crimping tools. For specific wire and insulation ranges relative to the products covered in this specification see Figure 5.

1.2 Reference Specification
For applicable performance requirements, see AMP Specification 108-20026.

2. NOMENCLATURE
3. **CRIMP AND DIMENSIONAL REQUIREMENTS**

3.1 **Wire preparation**

   A. **Strip Length**
      Insulation shall be stripped as indicated in Figure 5.

   B. **Workmanship**
      Reasonable care shall be taken not to nick, scrape or cut any strands or the solid wire during the stripping operation.

3.2 **Carrier cutoff tab and burr**

   A. **Cutoff tab**
      Cutoff tab shall not exceed .010

   B. **Burr**
      Burr on cutoff tab shall not exceed .003

3.3 **Wire barrel crimp**

   A. **Crimp dimensions and type**
      Crimp height, width and type shall be as shown in Figure 5.

   B. **Effective crimp length**
      Effective crimp length shall be .090 minimum, and is defined as that portion of the barrel, excluding bellmouth, fully formed by the crimping tool.

   C. **Wire barrel flash**
      Wire barrel flash shall not exceed .008 as shown in Figure 2.

   ![Figure 2](image)

   **FIGURE 2**

   D. **Wire barrel seam**
      Wire barrel seam shall be completely closed and there shall be no evidence of loose wire strands or wire strands visible in the seam.

   E. **Bellmouth**
      Rear bellmouth length shall be .006 min.

   F. **Conductor location**
      1. End of the wire shall be flush with the front end of the wire barrel or extend .032 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 width and type shall be as shown in Figure 5.

B. Workmanship
Reasonable care shall be taken not to cut or break the insulation during the crimping operation.

3.5 Locking lance
Locking lance shall not be deformed.

3.6 Alignment

A. Straightness
1. The contact, including the cutoff tab and burr shall not be bent below the datum line or more than .020 above the datum line, as shown in Figure 3.

![FIGURE 3](image)

2. The side to side bending of the contact shall not exceed the limits specified in Figure 4.

![FIGURE 4](image)

B. Twist or roll
There shall be no twist or roll in crimped portion that will impair usage of the contact.
# AUTOMATIC MACHINE: WIRE CRIMP DIMENSIONS

<table>
<thead>
<tr>
<th>PART N° STRIP FORM</th>
<th>WIRE FORM Q.TY</th>
<th>SIZE AWG (SQ.mm)</th>
<th>INSULATION DIAMETER (INCH)</th>
<th>STRIP LENGTH (INCH)</th>
<th>WIRE BARREL CRIMP WIDT H (INCH)</th>
<th>HEIGHT (INCH)</th>
<th>TYPE</th>
<th>INSULATION BARREL CRIMP WIDT H (INCH)</th>
<th>HEIGHT (INCH)</th>
<th>TYPE</th>
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<tr>
<td>281423</td>
<td>1</td>
<td>17 (1.0) 18 (0.75) 20 (0.5)</td>
<td>.086 ± .110</td>
<td>.132 ± .164</td>
<td>.070</td>
<td>.048 ± .001</td>
<td>.046 ± .001</td>
<td>.040 ± .001</td>
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<td>.095</td>
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<td>.073 ± .090</td>
<td>.132 ± .164</td>
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<td>22 24 26</td>
<td>.042 ± .073</td>
<td>.132 ± .164</td>
<td>.055</td>
<td>.034 ± .001</td>
<td>.029 ± .001</td>
<td>.029 ± .001</td>
<td>F</td>
<td>.090</td>
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</tbody>
</table>

# HAND TOOL: WIRE CRIMP DIMENSIONS

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<tr>
<th>PART N° LOOSE PIECE</th>
<th>PART N° HAND TOOL</th>
<th>WIRE FORM Q.TY</th>
<th>SIZE AWG (SQ.mm)</th>
<th>INSULATION DIAMETER (INCH)</th>
<th>STRIP LENGTH (INCH)</th>
<th>WIRE BARREL CRIMP WIDT H (INCH)</th>
<th>HEIGHT (INCH)</th>
<th>TYPE</th>
<th>INSULATION BARREL CRIMP WIDT H (INCH)</th>
<th>HEIGHT (INCH)</th>
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<td>.068 ± .006</td>
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**FIGURE 5**