

108-5229

NUMBER:

Customer Release

SECURITY CLASSIFICATION:

**114 - 5229**  
**Application Specification**  
**110 Series Positive Lock EX-III Contact**

1. Scope :

This specification covers the requirements for crimping 110 Series Positive Lock EX-III Contact.

2. Applicable Contacts :

| Contact Features | Contact Part Nos. | Wire Sizes<br>mm <sup>2</sup> (AWG) | Insulation Dia.<br>φmm |
|------------------|-------------------|-------------------------------------|------------------------|
| Strip Contact    | 353249-X          | 0.14~0.34<br>(AWG#26~#22)           | 1.3~2.0                |
|                  | 353250-X          | 0.51~1.38<br>(AWG#20~#16)           | 1.8~3.1                |

|     |                       |                    |      |           |                                      |                                                 |                                                    |          |                 |           |
|-----|-----------------------|--------------------|------|-----------|--------------------------------------|-------------------------------------------------|----------------------------------------------------|----------|-----------------|-----------|
|     |                       |                    |      |           | DR. 26 SEP 97                        | SHEET<br>1<br>OF<br>6                           | <b>AMP</b><br>AMP (Japan), Ltd.<br>Kawasaki, Japan |          |                 | REV.<br>C |
|     |                       |                    |      |           | CHK. <i>[Signature]</i><br>26 SEP 97 |                                                 | LOC<br>J                                           | LOC<br>A | NO.<br>114-5229 |           |
|     |                       |                    |      |           | APP. <i>[Signature]</i><br>26 SEP 97 | NAME<br>110 Series Positive Lock EX-III Contact |                                                    |          |                 |           |
| C   | Released FJ00-1158-97 | <i>[Signature]</i> | M.S. | 26 SEP 97 |                                      |                                                 |                                                    |          |                 |           |
| LTR | REVISION RECORD       | DR                 | CHK  | DATE      | <i>[Signature]</i>                   |                                                 |                                                    |          |                 |           |

PRINT DIST.

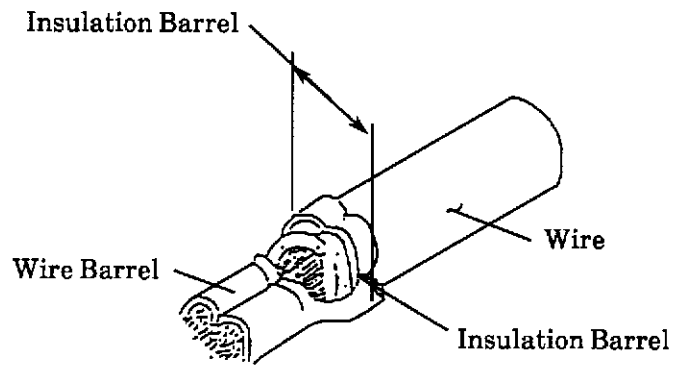
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3. Nomenclature and Crimping Features :



Frictional Contact Area

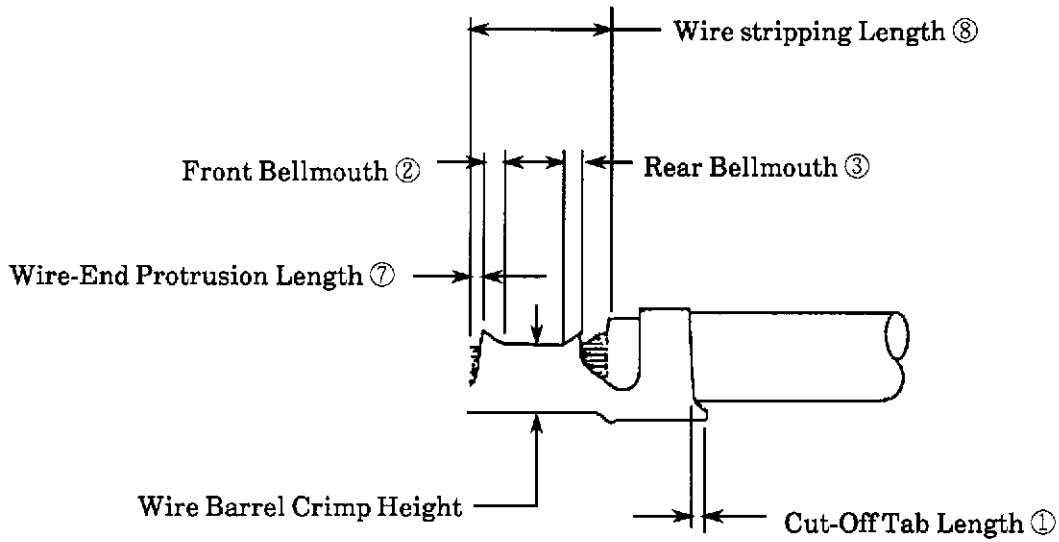
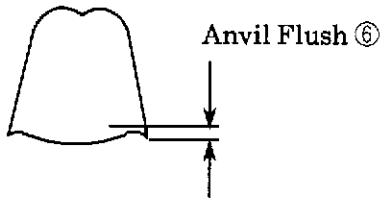


Fig. 1

|                                                 |            |          |                                      |           |
|-------------------------------------------------|------------|----------|--------------------------------------|-----------|
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## 4. Crimping Conditions and Crimp Data :

## 4.1 Crimping Conditions :

| No. | Checking Items                     |                | Requirements                                                                              | Remarks  |
|-----|------------------------------------|----------------|-------------------------------------------------------------------------------------------|----------|
| 1   | Allowable Deviation after Crimping | Bend-up        | 5° Max.                                                                                   | Fig. 2 ① |
|     |                                    | Bend-down      | 5° Max.                                                                                   | Fig. 3 ② |
|     |                                    | Twisting       | 5° Max.                                                                                   | Fig. 4 ③ |
|     |                                    | Rolling        | 10° Max.                                                                                  | Fig. 5 ④ |
| 2   | Cut-Off-Tab Length                 |                | 0.5 mm Max.                                                                               | Fig. 1 ① |
| 3   | Bellmouth                          | Front          | $\nabla$ mm Max.                                                                          | Fig. 1 ② |
|     |                                    | Rear           | 0.1~0.8 mm                                                                                | Fig. 1 ③ |
| 5   | Anvil Flush                        |                | 0.3 mm Max.                                                                               | Fig. 1 ⑥ |
| 6   | Wire-End Protrusion Length         |                | Wire-end must protrude beyond the front edge of wire barrel, but shall not exceed 1.5 mm. | Fig. 1 ⑦ |
| 7   | Insulation Stripping Length        | One-Wire Crimp | $3.5 \pm 0.5$ mm                                                                          | Fig.1 ⑧  |

SHEET

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① Bend-up

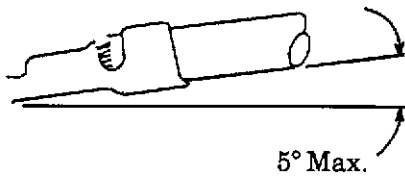


Fig. 2

② Bend-down

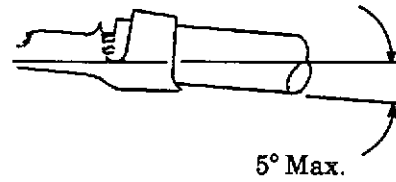


Fig. 3

③ Twisting

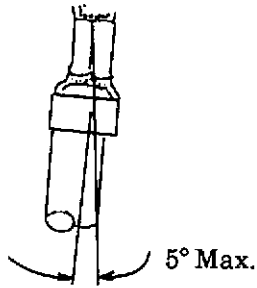


Fig. 4-1

③ Twisting

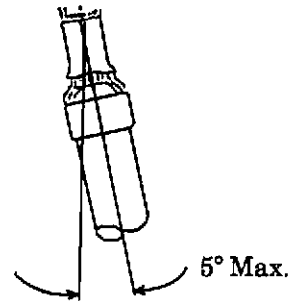


Fig. 4-2

④ Rolling

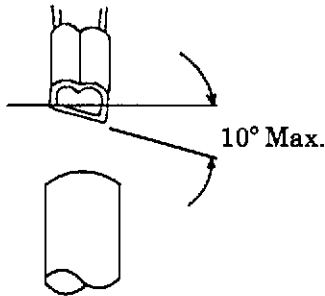


Fig. 5-1

④ Rolling

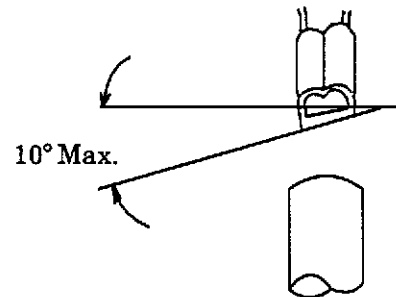


Fig. 5-2

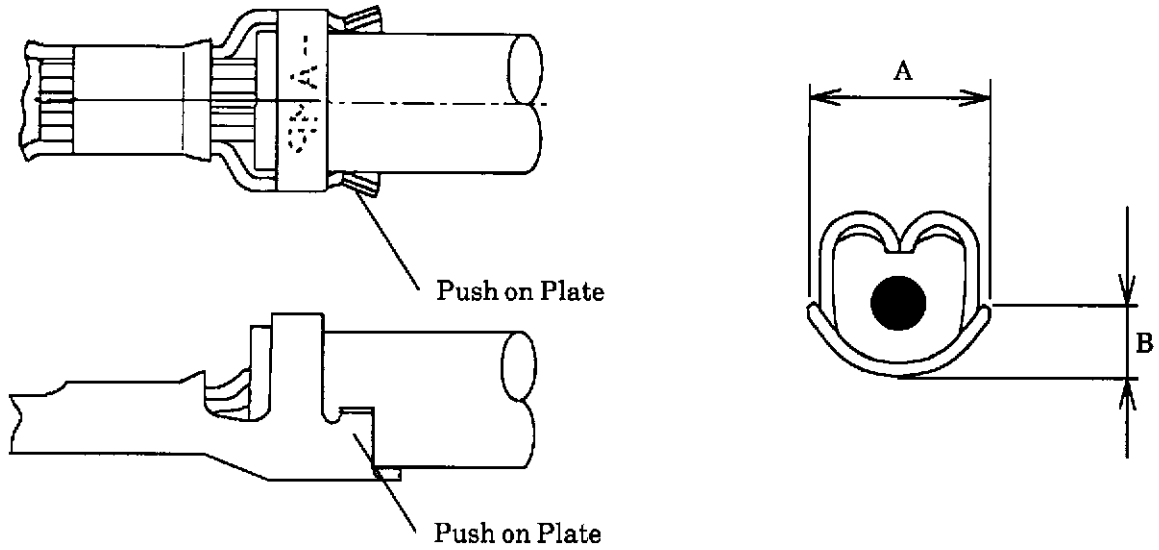
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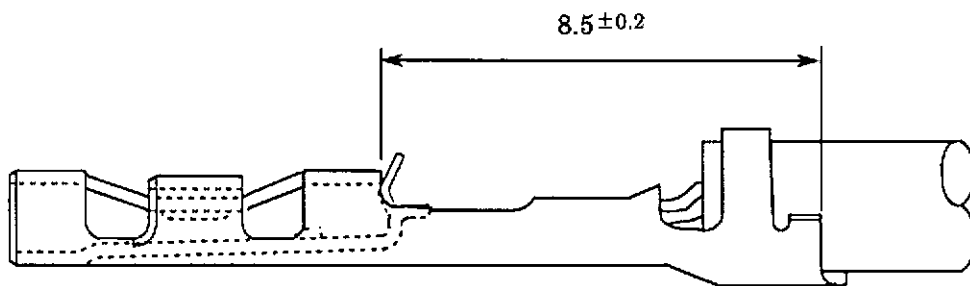
2. Crimping Requirements (Continued)

2.1 Push on Plate of Part.



| Contact Size    | B        | A       |
|-----------------|----------|---------|
| #26~#22 Contact | 1.3 Ref. | 3.8~3.0 |
| #20~#16 Contact | 1.3 Ref. | 3.8~3.0 |

2.2 Measurement of Contact Length after Crimping



|                                                 |            |          |                                      |           |
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**Crimp Data**  
Application Crimp

| Contact Part No. (Strip Form) | Applicator Number | Wire Size    |                       | Insulation Stripping Length $\pm 0.5$ (mm) | Wire Barrel Crimp |                                 |             | Insulation Barrel Crimp Width (mm) | Finished Insulation Diameter (mm) | Crimp Tensile Strength (kg) (min.) |
|-------------------------------|-------------------|--------------|-----------------------|--------------------------------------------|-------------------|---------------------------------|-------------|------------------------------------|-----------------------------------|------------------------------------|
|                               |                   | No. of Wires | mm <sup>2</sup> (AWG) |                                            | Width (mm)        | Crimp Height (mm) $\pm 0.05$ mm | Disc Letter |                                    |                                   |                                    |
| 353249-X                      | 409564-2 (2)      | 1            | 0.14 (#26)            | 3.5                                        | 1.4 "F"           | 0.80                            | C           | 2.75 "F"                           | 1.3~2.0                           | 2                                  |
|                               |                   | 1            | 0.22 (#24)            |                                            |                   | 0.85                            | B           |                                    |                                   | 3                                  |
|                               |                   | 1            | 0.31 (#22)            |                                            |                   | 0.89                            | A           |                                    |                                   | 4.5                                |
| 353250-X                      | 409565-2 (2)      | 1            | 0.51 (#20)            | 3.5                                        | 2.03 "F"          | 1.05                            | C           | 3.3 "F"                            | 1.8~3.1                           | 6                                  |
|                               |                   | 1            | 0.76 (#18)            |                                            |                   | 1.15                            | B           |                                    |                                   | 7                                  |
|                               |                   | 1            | 1.27 (#16)            |                                            |                   | 1.29                            | A           |                                    |                                   | 8                                  |

- (1) for AMP-O-MATOR Lead Maker
- (2) for AMP-O-ELECTRIC Automachine

|                                                 |            |  |                                      |          |
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