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REM Mono 1.2 Terminal System (Clean Body)

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## 1 GENERAL

### 1 综述

This specification contains the guidelines for the application of REM Mono 1.2 Terminal System (Clean Body). These requirements are applicable to the fully or semi-automatic machine crimping tools.

本规范阐述了 REM Mono 1.2 Terminal System (Clean Body)的应用要求。这些要求适用于自动压接机械。

The contacts are listed by their use, the wire size ranges and the crimping data in section 5.

端子的线径范围与压接参数在本规范的第五部分。

Note: Only the TE crimp tool specified in section 5 may be used for application of the contacts. Any exceptions to this rule are defined by customer-specific documents.

备注：本规范中第五部分的压接参数仅适用于 TE 压接工具。任何本规范所涉及例外情况需由客户自行定义。

## 2 REFERENCE DOCUMENTS

### 2 参考文件

#### 2.1 Customer Drawing

##### 2.1 客户图纸

This application specification is based on the latest valid customer drawings. The dimension and materials of the contacts are shown in the TE customer drawings.

本规范基于以下有效客户图纸的最新版本。端子的尺寸和选用的材料于 TE 的客户图中所定义。

C2294463 MALE TERMINAL, TIN PLATED, REM MONO 1.2 CLEAN BODY

C2296537 FEMALE TERMINAL, TIN PLATED, REM MONO 1.2 CLEAN BODY

#### 2.2 Product Specification

##### 2.2 产品规范

Latest valid production specification

最新有效产品测试规范

108-101426 Product Specification for REM Mono 1.2 Terminal System (Clean Body)

REM Mono 1.2 Terminal System (Clean Body) 产品规范

#### 2.3 Application Specifications

##### 2.3 应用规范

The crimp quality must also comply with the general guidelines laid down in the application specification 114-18022. If this is not available, it must be ordered separately.

压接品质也必须符合压接规范 114-18022 中所阐述的通用的压接指导方针。如果本产品应用规范尚未可用，则必须参考文件 114-18022。

#### 2.4 Information Sheets

##### 2.4 信息表

IS 7424 explains how to measure the crimp height.

IS 7424 说明了如何测量压接高度。

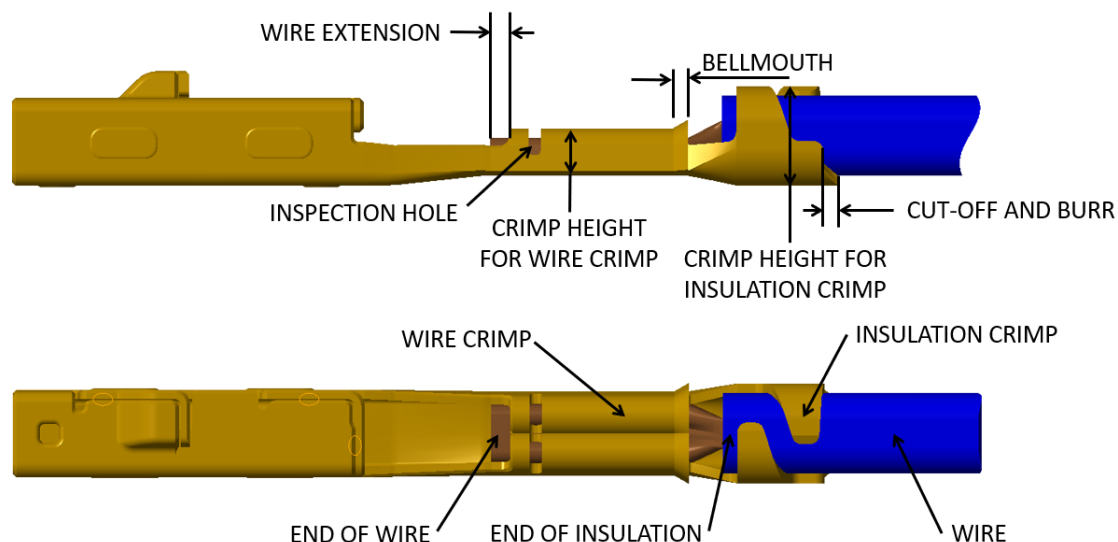
### 3 DESCRIPTION

#### 3 描述

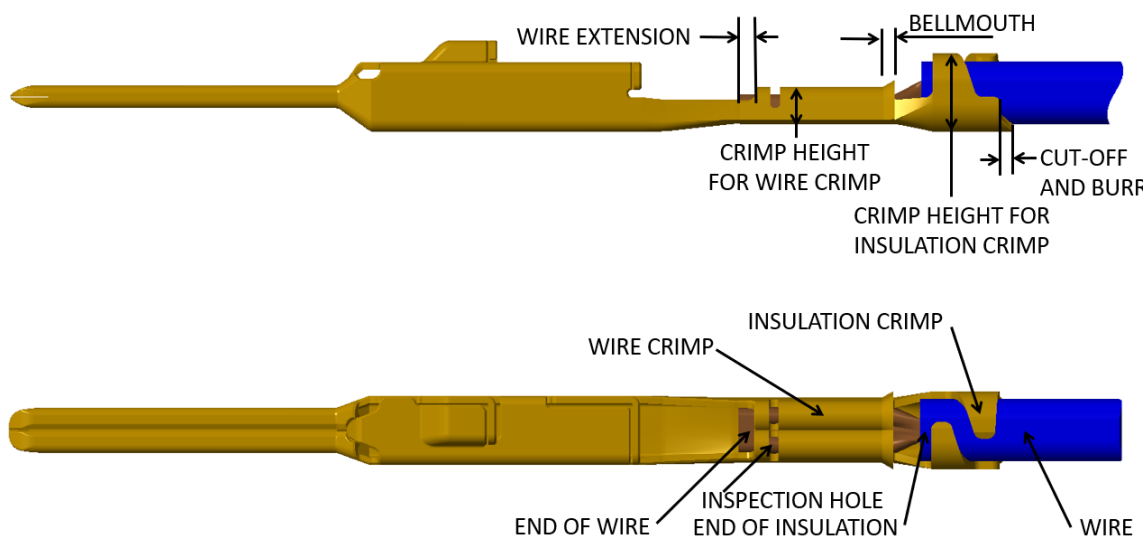
The following terms are used in this specification. 下图中的术语被应用于本规范中。

Fig.1 (图1)

#### RECEPTACLE TERMINAL



#### TAB TERMINAL



## 4 REQUIRMENTS

### 4 要求

#### 4.1 WIRE

##### 4.1 导线

###### A Selection (选择)

Only wires in accordance with DIN 72551-FLR Parts 5 which comply with the conditions specified in Table 1 of this specification may be used. Other wires require approval from the development department. Only single termination is permitted.

只可使用遵循DIN 72551-FLR 第五部分且满足本规范中表1所定义的条件导线。其它导线的使用需要得到产品开发部门的认可。

###### B Preparation (准备)

The wire must be stripped to the length specified in Table 1, taking care that the individual strands are neither bent nor cut off.

压线前需要按照表1所定义的规格对导线进行剥线作业，并注意不要折弯及裁断导线。

#### 4.2 Cut-off and Burrs

##### 4.2 裁切及毛边

The cut off must not extend 0.1mm beyond the front edge of wire crimping. The burr at the cut-off point may not exceed 0.03mm.

切断不可超出压接区域杯口 0.1mm，且切断处的毛边长度不可超过 0.03mm。

#### 4.3 Wire Crimp

##### 4.3 导线压接

###### A Wire position (导线位置)

After crimping, the end of the wire must not extend 0.1 mm beyond the front edge of the wire crimp. The mating and locking, sealing function of the contact must not be affected by the wire extension of single strands. In no case may the end of the insulation be crimped under the wire crimp.

压接后，导体前端不可超过压接区域前杯口 0.1mm。端子的互配及锁扣以及防水功能不可受到导体伸出长度影响。导线绝缘层不可压接在导线压接区域。

###### B Crimping data (压接参数)

The shape, height and width of the crimp, and the wire range, are shown in Table 1.

表1列出了端子压接线径范围，压接后的外形，高度及宽度尺寸。

**Note:** Measure the crimp height in accordance with operating instructions IS 7424 with a crimp height micrometer, TE Order No. 675836-0. The crimp width is a tool-related dimension and is defined as the distance between the two tangential points of the rolling radii and the edges of the crimp. It is not possible to measure the crimp width for production monitoring purposes.

备注：依照作业指导IS 7424，使用千分尺测量压接高度，千分尺的TE采购料号675836-0。导线区域压接宽度取决于压接工具，该尺寸是压接区域底部两个滚动半径与直边相切区域之间的距离。无需在生产过程中监测压接区域的宽度。

###### C Extraction forces (导线拔出力)

The crimp extraction forces must comply with the requirements of DIN EN 60352-2.

导线拔出力必须满足DIN EN 60352-2的要求。

###### D Crimp bellmouth (压接杯口)

The size of the bellmouth is 0.25±0.15mm for 0.22~0.35 mm<sup>2</sup> FLR wire, 0.30±0.15mm for 0.5~0.75 mm<sup>2</sup> FLR wire and 0.40±0.15mm for 1.0~1.5 mm<sup>2</sup> FLR wire.

导线压接区域的杯口尺寸规格：0.22~0.35mm<sup>2</sup>的FLR导线为0.25+/-0.15mm，0.5~0.75mm<sup>2</sup>的FLR导线为0.30+/-0.15mm，1.0~1.5mm<sup>2</sup>的FLR导线为0.40+/-0.15mm。

*E Burr on base of crimp (压接区域底部毛边)*

According to Spec. 114-18022.

依据规范114-18022。

#### 4.4 Insulation Crimp

##### 4.4 绝缘层压接

*A Position of the insulation crimp (绝缘层压接位置)*

The end of the insulation must be visible in the transition between the wire crimp and the insulation crimp. In no case may the end of the insulation be crimped in the wire crimp; conversely, the insulation must extend at least to the front edge of the insulation crimp.

在导线压接和绝缘层压接过渡区域必须可以观察到绝缘层。绝缘层不可以进入导线压接区域；相反地，绝缘层必须超出绝缘层压接区域的前端。

*B Crimping data for insulation crimp (绝缘层压接参数)*

The shape, width and height of the crimp are shown in Table 1. The crimp height is set after the bending test to former DIN 41611 Part 3 or the winding test to DIN IEC 352 Part 2.

于表1可查询绝缘层压接的外形，宽度及高度。在根据DIN 41611 Part 3进行完折弯测试，或者根据DIN IEC 352 Part 2进行完圈绕测试后，定义压接高度。

#### 4.5 Contact Area

##### 4.5 接触区域

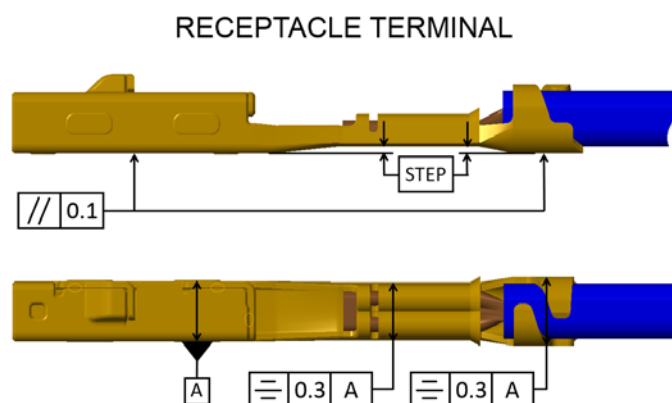
After crimping, the contact body with collar for primary and secondary retention may not be bent or deformed.

压接后，端子主体上的一次锁及二次锁结构都不可以被弯折或者变形。

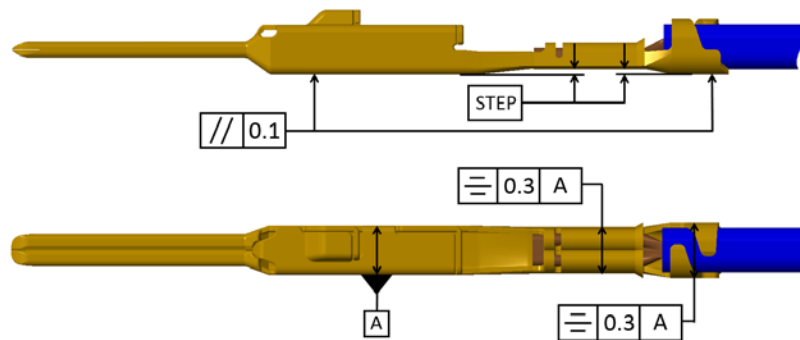
#### 4.6 Shape and Positional Tolerance of the Crimped Contact

##### 4.6 压接端子外形及位置公差

Fig.2 (图2)



### TAB TERMINAL



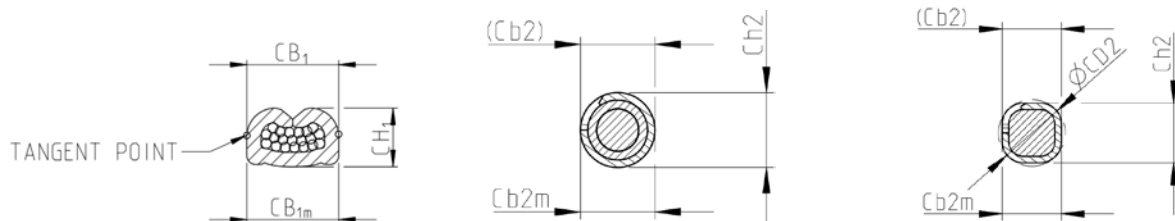
### 5 CRIMP DATA FOR REM MONO 1.2 TERMINAL SYSTEM (CLEAN BODY)

### 5 REM MONO 1.2 TERMINAL SYSTEM (CLEAN BODY) 压接参数

Table1

For Wire Range: 0.22~0.35mm<sup>2</sup>

For Wire Range: 0.50~0.75 and 1.0~1.5mm<sup>2</sup>



| Table 1 Receptacle and Tab Terminal |           |             |                                  |                              |                   |                       |                    |       |                   |                      |                              |                    |       |            |                 |
|-------------------------------------|-----------|-------------|----------------------------------|------------------------------|-------------------|-----------------------|--------------------|-------|-------------------|----------------------|------------------------------|--------------------|-------|------------|-----------------|
| Order No                            |           | Wire Crimp  |                                  |                              |                   | Insulation Crimp      |                    |       |                   |                      |                              |                    |       |            |                 |
| Terminal                            | Strip     | Loose Piece | Wire Size [mm <sup>2</sup> ] FLR | Strip Length $\pm 0.15$ [mm] | Width $CB_1$ [mm] | Width $CB_{1m}$ [mm]  | Height $CH_1$ [mm] | Shape | Width $CB_2$ [mm] | Width $CB_{2m}$ [mm] | Circle Dia. $\phi CD_2$ [mm] | Height $CH_2$ [mm] | Shape | Crimp Tool | Hand Crimp Tool |
| Tab                                 | 2294463-1 |             | 0.22 <sup>*)</sup>               | 4.0                          | 1.27              | 1.27 <sup>+0.13</sup> | 0.72 $\pm 0.03$    | F     | 1.83              | 1.83 <sup>+0.2</sup> |                              | 1.4 MAX.           | WRAP  | 2836436    |                 |
|                                     |           |             | 0.35 <sup>*)</sup>               |                              |                   |                       | 0.80 $\pm 0.03$    |       |                   |                      |                              | 1.5 MAX.           |       |            |                 |
|                                     | 2294463-2 |             | 0.50 <sup>*)</sup>               | 4.2                          | 1.57              | 1.57 <sup>+0.16</sup> | 0.82 $\pm 0.03$    | F     | 1.83              | 2.05 MAX.            | 2.05 MAX.                    | 2.05 MAX.          | WRAP  | 2836437    |                 |
|                                     |           |             | 0.75                             |                              |                   |                       | 0.93 $\pm 0.03$    |       |                   |                      |                              | 2.50 MAX.          |       |            |                 |
|                                     | 2294463-3 |             | 1.00 <sup>*)</sup>               | 4.4                          | 1.78              | 1.78 <sup>+0.12</sup> | 1.06 $\pm 0.05$    | F     | 2.29              | 2.45 MAX.            | 2.45 MAX.                    | 2.50 MAX.          | WRAP  | 2836438    |                 |
|                                     |           |             | 1.50                             |                              |                   |                       | 1.25 $\pm 0.05$    |       |                   |                      |                              | 2.62MAX.           |       |            |                 |
| Receptacle                          | 2296537-1 |             | 0.22 <sup>*)</sup>               | 4.0                          | 1.27              | 1.27 <sup>+0.13</sup> | 0.72 $\pm 0.03$    | F     | 1.83              | 1.83 <sup>+0.2</sup> |                              | 1.4 MAX.           | WRAP  | 2836436    |                 |
|                                     |           |             | 0.35 <sup>*)</sup>               |                              |                   |                       | 0.80 $\pm 0.03$    |       |                   |                      |                              | 1.5 MAX.           |       |            |                 |
|                                     | 2296537-2 |             | 0.50 <sup>*)</sup>               | 4.2                          | 1.57              | 1.57 <sup>+0.16</sup> | 0.82 $\pm 0.03$    | F     | 1.83              | 2.05 MAX.            | 2.05 MAX.                    | 2.05 MAX.          | WRAP  | 2836437    |                 |
|                                     |           |             | 0.75                             |                              |                   |                       | 0.93 $\pm 0.03$    |       |                   |                      |                              | 2.50 MAX.          |       |            |                 |
|                                     | 2296537-3 |             | 1.00 <sup>*)</sup>               | 4.4                          | 1.78              | 1.78 <sup>+0.12</sup> | 1.06 $\pm 0.05$    | F     | 2.29              | 2.45 MAX.            | 2.45 MAX.                    | 2.50 MAX.          | WRAP  | 2836438    |                 |
|                                     |           |             | 1.50                             |                              |                   |                       | 1.25 $\pm 0.05$    |       |                   |                      |                              | 2.62MAX.           |       |            |                 |

\*): meet USCAR-21 Rev.3 11-2014 requirement/压接满足USCAR-21 Rev.3 11-2014标准