

# **Application Specification**

114-61085

Rev. A4

## .020K Recep. Terminal



#### 1. SCOPE

This specification contains the guidelines for the application of contact system 020K.

It applies primarily to the full- or semi-automatic application of the contacts

#### 2. REFERENCED DOCUMENTS

#### 2.1 Customer Drawings

The dimensions and materials of the contacts are shown in the TE customer drawings.

In the case of a conflict between this document and the customer drawing, the customer drawing takes precedence.

## 2.2 Product Specification

The Product Specification 108-61263 describes the characteristics of these contacts, together with the electrical and mechanical requirements.

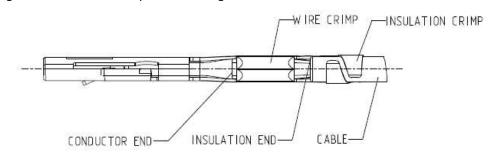
## 2.3 Application Specification

The crimp quality must also comply with the general guidelines laid down in the application specification 114-18022.



## 3. DESCRIPTION OF NOMENCLATURE

The following terms are used in the specification. Fig.1



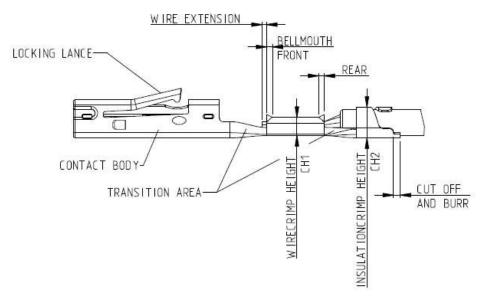


Fig. 1

## 4. REQUIREMENTS

## 4.1 Wire

Only single termination is permitted.

#### 4.2 Cut off Tab

The cut off tab is still visible and may be 0.2mm Max long.

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#### 4.3 Wire Crimp

### A. Wire position

After crimping the end of the wire must extend 0 to 0.4mm beyond the front edge of the wire crimp.

No upcoming strands. In no case may the end of the insulation be crimped under the wire crimp.

#### B. Crimping data

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

Crimp height measurement: see 114-18022.

#### C. Burr on base of crimp

Any burr on the base of the crimp may not exceed 0.1mm

#### D. Bellmouth

The rear bellmouth must be 0.25<sup>±0.15</sup> according to Spec. 114-18022.

The front bellmouth should be absent or can be 0.15mm Max.

#### 4.4 Transition

A bulging of contact material to the outside at the transitions of wire crimp to body and wire crimp to insulation crimp is not allowed.

### 4.5 Insulation Crimp

The shape and width are shown in Table 1.

The crimp height is set according the bending or winding test as described in Spec 114-18022.

To ensure loading it is important to keep the crimper width test dimension CP2 in tolerance.

This dimension must also kept in the transition-areas.

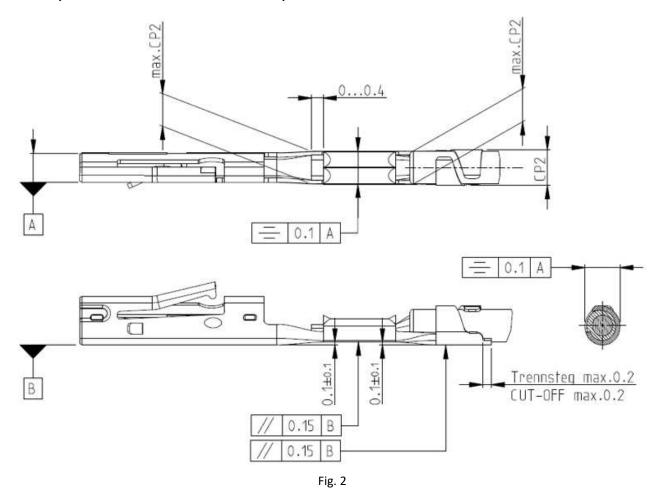
#### 4.6 Contact Area

Neither the locking lance nor the contact body may be bent or deformed.

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# 4.7 Shape and Positional Tolerances of the Crimped Contact



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# 5. CRIMP DATA

Table 1: 020K Application Crimp											
				Wire Barrel Crimp			Insulation Barrel Crimp				
Contact P/N	Wire Range (mm²)	Insulation Range Ø (mm)	Strip Length (mm)	Width(CB <sub>1</sub> ) (mm)	Height (CH <sub>1</sub> ) (mm)	Crimper Width Test Dimension CP <sub>1</sub> (mm)	Width(CB <sub>2</sub> ) (mm)	Height(CH <sub>2</sub> ) (mm)	Crimper Width Test Dimension CP <sub>2</sub> (mm)		
2219299-1 2351499-1 2459353-1	0.22 0.3 0.35	0.95-1.2 1.4-1.5 1.2-1.4	3.65 ± 0.15	1.07 "F"	0.65 ± 0.02 0.66 ± 0.02	1.07 +0.15	1.27 "O" Wrap	1.6 Max	1.5 Max		



## 6. APPLICABLE WIRE RANGE

Nominal	Number of Strands / Diameter of Strand	Calculated Cross Section	Overall outside Diameter (mm)		
Wire Size	(mm)	Area (mm²)	Normal	Maximum	
0.22	7 / Compressed	0.2425	0.95	1.2	
0.3	7 / 0.26	0.3717	1.4	1.5	
0.35	12 / 0.21	0.4156	1.2	1.4	

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