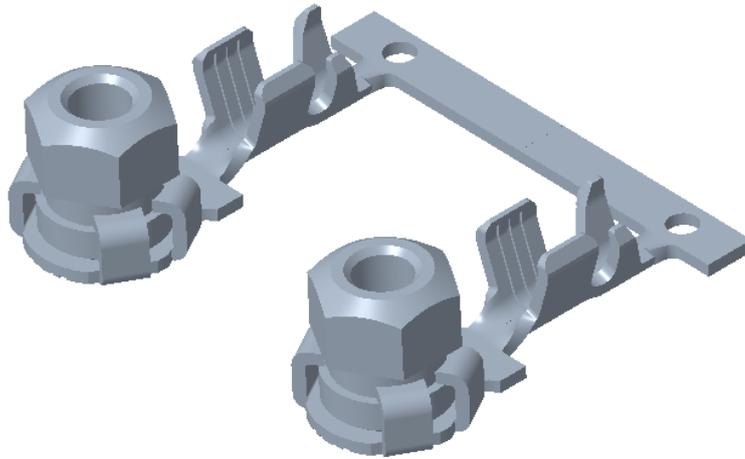




Ring Tongue Terminal, M4 Application Specification
螺母端子 应用规范



				DRW: Leal Gao DATE: 05DEC2022	TE Connectivity		
				CHK: Charles Wan DATE: 06DEC2022			
A3	Crimp data updated	Z. Z	29NOV2024	APVD: Zhaowen Zhou DATE: 06DEC2022	NO 114-160480	REV A3	LOC ES
A2	Tooling Information Added	Z. Z	06JAN2023				
A1	Typo Correction	Z. Z	12DEC2022				
A	Initial Release	Z. Z	06DEC2022				
REV	REVISION RECORD	APVD	DATE	PAGE 1 OF 15	Title Ring Tongue Terminal, M4 Application Specification		



CONTENT

目录

1. General	3
1. 综述	3
1.1 Purpose	3
1.1 目的	3
1.2 Customer Drawing	3
1.2 客户图纸	3
1.3 Product Specification	3
1.3 产品规范	3
2. Product Description	4
2.1 产品描述	4
2.2 Requirements	4
2.2 要求	4
2.2.1 Wire	4
2.2.1 电缆	4
2.2.2 Cut off and Burrs	4
2.2.2 切断及毛刺	4
2.2.3 Wire Crimp	4
2.2.3 导体压接	4
2.2.4 Insulation Crimp	5
2.2.4 绝缘压接	5
2.2.5 Contact Area	5
2.2.5 接触区域	5
3. Crimp Data	6
3. 压接参数	6
4. Tooling	6
4. 压接治具	6



1. General

1. 综述

1.1 Purpose

1.1 目的

This specification includes the crimping data and applicable wire ranges of ring tongue terminal.
本规范包括螺母端子的压接参数及适配的电缆范围。

1.2 Customer Drawing

1.2 客户图纸

For part number, dimensions, materials etc. see the current customer drawing 2419960.
有关料号，尺寸，材料等，请参见当前的客户图纸，图号 2419960。

1.3 Product Specification

1.3 产品规范

This application specification is valid for products specified in product specification 108-101142, which provides a description of the electrical and mechanical properties of the terminal.

该应用规范对产品规范 108-101142 中指定的产品有效，该规范提供了该端子的电气和机械性能的描述。

2. Product Description

2.1 产品描述

The terms shown below are used in the specification.
如图 2.1.1 所示为本规范中用到的术语说明。

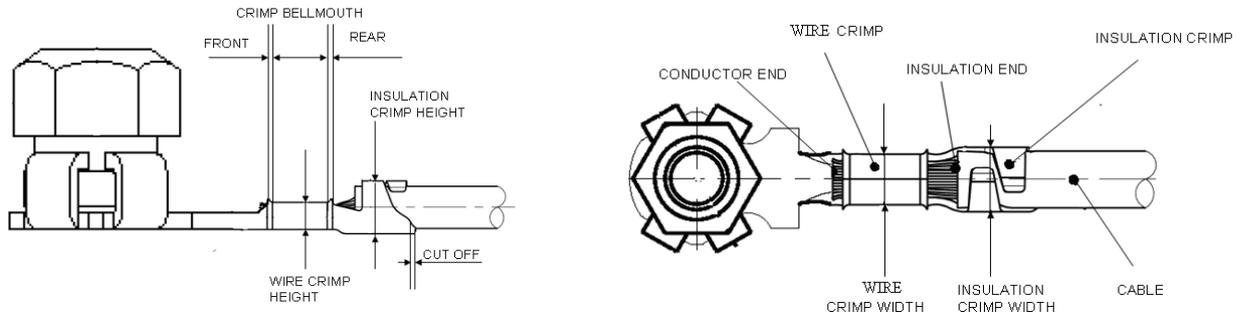


Figure 2.1.1 Terms Description
图 2.1 术语说明

2.2 Requirements

2.2 要求

2.2.1 Wire

2.2.1 电缆

A. Selection

The contacts are primarily designed for RAYCHEM 55E series or FLR cables. Other wires require the approval of the Engineering Department. Single termination is preferred and has been validated.

A. 选择

端子主要适用于 RAYCHEM 55E 导线或 FLR 导线。其他电缆的应用需要得到工程部门的批准。单线压接是优选并得到验证的。

B. Preparation

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

B. 准备

电缆需按照表 3.1 中指定的长度进行剥线，注意避免弯曲或切断铜丝。

2.2.2 Cut off and Burrs

2.2.2 切断及毛刺

The cut-off must be visible after crimping. The maximum length of the cut-off is 0.5mm. Any burrs at the cutting area may not exceed 0.08mm.

压接之后切断需可见。最大切断长度为 0.5mm。切断位置的毛刺不可超过 0.08mm。

2.2.3 Wire Crimp

2.2.3 导体压接

A. Conductor Position

After crimping, the conductor end must extend 0.1 ... 1mm beyond the front end of the wire crimp. In no case may the end of the insulation be crimped in the wire crimp.

A. 导体位置

压接后，导体末端必须相对压接翼前端伸出 0.1~1mm。在任何情况下绝缘皮都不可压入导体压接区。

B. Wire Crimp Data

The shape, height and width of the crimp and the wire range are shown in Table 3.1.

B. 导体压接参数

压接形状、高度及宽度和线径范围如表 3.1 所示。

C. Tensile strength of crimp connection

The tensile strength of crimp connection must comply with the requirements of 108-101142. Measuring of the tensile strength should be without insulation crimp.

C. 压接拉伸强度

压接拉伸强度须符合 108-101142 的要求。应该在绝缘部分没有压接的情况下进行导体压接拉伸强度的测量。

D. Crimp bellmouth

The size of the rear bellmouth:1mm Max. A missing of front bellmouth is permissible.

D. 喇叭口

后喇叭口最大 1mm，没有前喇叭口是允许的。

2.2.4 Insulation Crimp

2.2.4 绝缘压接

A. Position of the insulation end

The insulation end must be visible in the transition between the wire crimp and the insulation crimp. In no case may the insulation be crimped on the wire crimp.

A. 绝缘末端位置

绝缘末端必须在导体压接和绝缘压接之间的过渡中可见。在任何情况下绝缘都不能在导体压接处压接。

B. Crimp data for insulation crimp

The shape, width and height of the crimp and the insulation diameter are shown in Table 3.1. Due to the large tolerances of the insulation diameters and change of insulation material, sometimes the crimp height needs to be adjusted slightly in practice. No all the upper limit or lower limit of the defined crimp height are applicable.

B. 绝缘压接参数

绝缘压接形状、宽度及高度和线径范围如表 3.1 所示。由于绝缘直径较大的公差范围及绝缘材料的差异，实际中需对压接高度微调。并不是所定义压接高度的上限及下限都适用。

2.2.5 Contact Area

2.2.5 接触区域

After crimping, neither the nut nor the contact body is deformed.

压接后螺母和端子本体都不允许变形。

3. Crimp Data

3. 压接参数

CRIMP DATA FOR RING TONGUE TERMINAL, M4									
P/N	WIRE SIZE (mm ²)	INSUL. Dia. (mm)	STRIPPED LENGTH (mm)	WIRE CRIMP			INSULATION CRIMP		
				CRIMP WIDTH / (mm)	CRIMP HEIGHT / CH1 (mm)	SHAPE	CRIMP WIDTH (mm)	CRIMP HEIGHT (mm)	SHAPE
2419960-X	0.75	1.70~1.90	5.5±0.3	CB1=3.56±0.05 CB2=3.56-3.92	F	(3.94)		(3.30)	WRAP
	1.0	1.57~1.67						(3.05)	
	1.0	1.90-2.10						(3.40)	
	1.5	1.82~1.95						(3.40)	
	1.5	2.20-2.40						(4.00)	

NOTE: X MEANS 1,2,3

Table 3.1 Crimp Data

表 3.1 压接参数

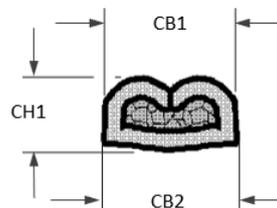


Figure 3.1 Wire Crimp

图 3.1 导体压接



Figure 3.2 Insulation Crimp Type (Wrap)

图 3.2 绝缘压接类型（包裹型）

4. Tooling

4. 压接治具

P/N	Wire Size / mm ²	Insulation Range / mm	OCEAN Applicator
2419960-X	0.75-1.5	1.57-2.4	2423512-2

NOTE: X MEANS 1,2,3