27MAR 2024 Rev B



## THERMOCOUPLE CONNECTOR CRIMP TYPE

#### 1. SCOPE

#### 1.1. Contents

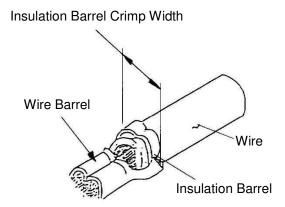
This specification covers the requirements for crimping procedure of Thermocouple Connector Series. Crimp-in Type receptacle and tab contacts.

### 2. APPLICABLE CONTACTS

Contact Type	Name	Contact features	Contact Part No.	Wire Sizes (AWG)
Receptacle Contact	THERMOCOUPLE			AWG#25~AWG#22
	CONNECTOR	Loose Piece	1-2304815-1	
	RECEPTACLE CONTACT	Loose Piece		
	ASSY CHROMEL			
	THERMOCOUPLE		2-2304815-1	AWG#25~AWG#22
	CONNECTOR	Loose Piece		
	RECEPTACLE CONTACT	Loose Piece		
	ASSY ALUMEL			
	THERMOCOUPLE		1-2304777-1	AWG#25~AWG#22
	CONNECTOR	Loose Piece		
Tab Contact	TAB CONTACT ASSY	Loose Fiece		
	CHROMEL			
	THERMOCOUPLE		2-2304777-1	AWG#25~AWG#22
	CONNECTOR	Loose Piece		
	TAB CONTACT ASSY	Loose Piece		
	ALUMEL			



### 3. NOMENCLATURE AND CRIMPING FEATURES



Frictional Contact Area

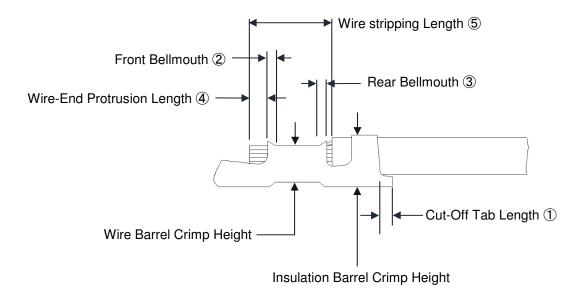


Fig. 1 (Continue)

Rev B 2 of 7



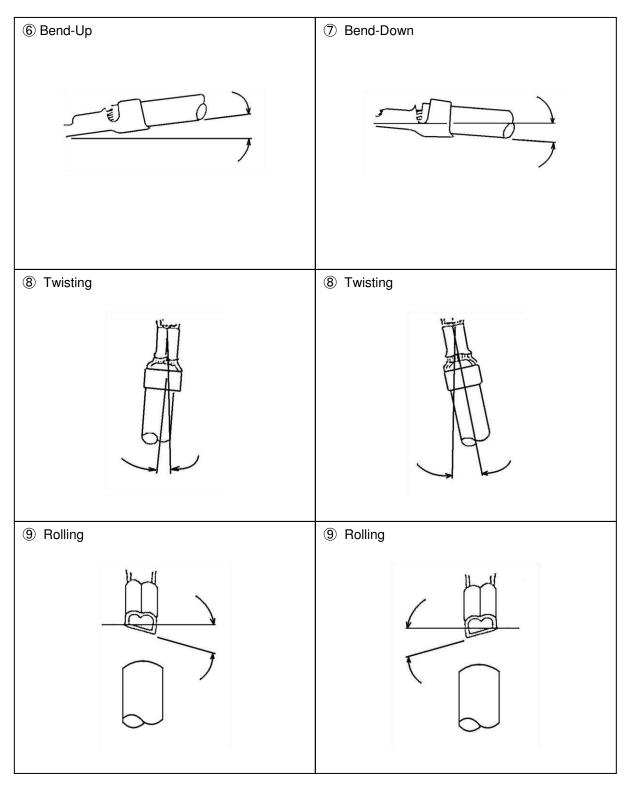


Fig. 1(Continue)

Rev B 3 of 7



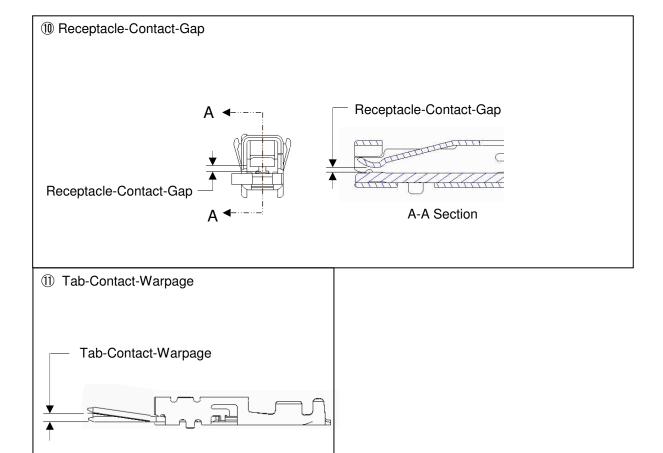


Fig. 1(End)

Rev B 4 of 7



# 4. CRIMPING CONDITIONS AND CRIMP DATA

# 4.1. Crimping Condition

No.	Checking Items		Requirements	Remarks
1		Bend-Up 5°Max.		Fig.1 6
	Allowable Deformation after Crimping	Bend-Down	1°Max.	Fig.1 ⑦
		Twisting	5°Max.	Fig.1 ®
		Rolling	5°Max.	Fig.1 9
2.	Cut-Off Tab Length		0.5mm Max.	Fig.1 ①
3.	Dollar a citla	Front	0~0.35 mm	Fig.1 ②
	Bellmouth	Rear	0.1~0.7 mm	Fig.1 ③
4.	Wire-End Protrusion Length		0.1~1.7 mm	Fig.1 4
5.	Wire Stripping Length		3.5~4.1 mm	Fig.1 ⑤
6.	Receptacle-Contact-Gap		0.3mm Max	Fig.1 10
7.	Tab-Contact-Warpage		0.2mm Max	Fig.1 ①

Rev B **5** of 7



## 4.2. Crimp Data

### 4.2.1. Hand Tool Crimp

Contact Part No (Loose Piece)	Hand Tool No	Wire Size [mm²] 【e】	Insulation Diameter [mm] 【d】	Crimp Height		Tensile
				Wire Barrel	Insulation Barrel(REF) [mm]	Strength [N] Min
1-2304815-1 2-2304815-1	2318602-1	0.178	0.84~1.1	1.09 <sup>±0.03</sup>	1.6	24.5
1-2304777-1 2-2304777-1		0.305	1.1~1.5	1.26 <sup>±0.03</sup>	1.75	44.1

- [a]. Maximum finished insulation diameter of the applicable wire is shown above. (See 5<sup>th</sup> section)

  Do not use cable whose insulation diameter is out of specification. When using the over or under size insulation, retention condition of insulation barrel might be not appropriate.
- **(b)**. Do not use wires which are out of specification. When using the over or under size wire, crimping condition may become over or under crimp.

Rev B **6** of 7



## 5. APPLICABLE WIRES

Wire Size (nominal)	Number of Conductors / Diameter of a conductor	Caluculated crosssectional Area [mm²]	Finished Insulation Diameter [mm]	Wire Specification
0.178 mm <sup>2</sup> (AWG#25)	0.18X7	0.178	0.84~1.1	-
0.305 mm <sup>2</sup> (AWG#22)	0.18X12	0.305	1.1~1.5	-

Note: For the wire with large insulation diameter, tooling marks might be left on the insulation after crimping.

**Rev** B **7** of 7