

Crimping for D8000 High Current Connector

1. Scope

This application covers the crimping requirements for DYNAMIC D8000 Series contacts.

2. Referenced Document

2.1. Applicable contact part numbers below shown for this specification.

Contact Type	Contact features	Contact Base /Part No.	Wire Sizes (AWG)
D8000 Contact	Reel Strip	2373747-5	25mm ² (AWG#3)
		2351982-5	
	Loose piece	2373747-6	
		2351982-6	

TABLE 1

2.2. Application Specification

The general guidelines laid down in Application Specifications 114-18022 also apply to the crimp quality.

3. Description of Nomenclature

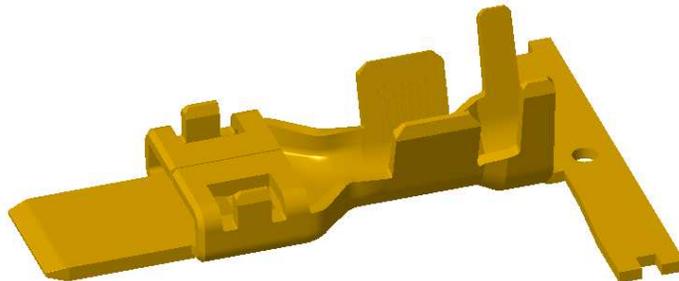
The terms shown below are used in the specification.

3.1. Contact

TAB Contact

2351982-5 (Strip)

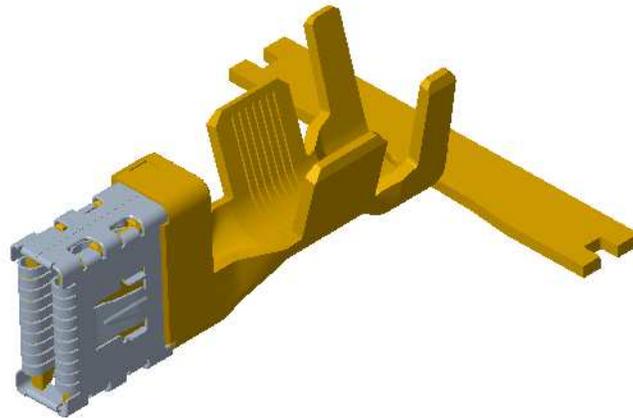
2351982-5 (Loose piece)



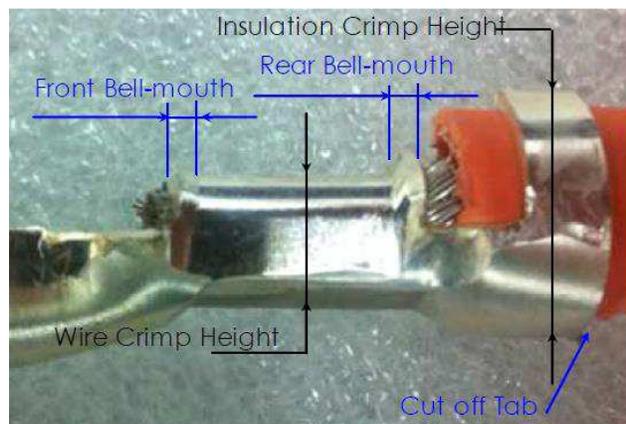
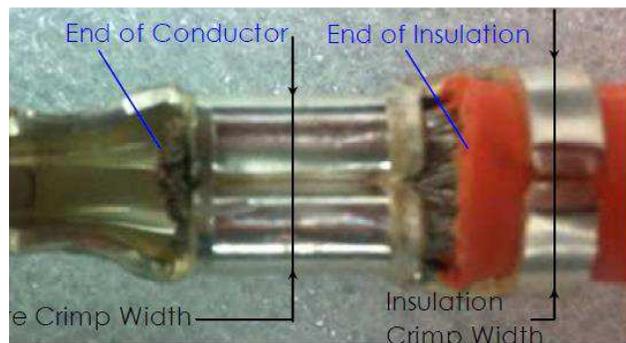
Receptacle Contact

2373747-5 (strip)

2373747-6 (Loose piece)



3.2. Contact with overlapping crimp



4. Requirements

4.1. Wire

4.1.1. Selection

The contact and wire seal are designed for 25mm² wire.

Other wires require the approval of the Engineering Department. Single termination is preferred.

4.1.2. Preparation

The wire must be stripped to the lengths shown in Table 2.

Take care that the individual strands of the wire are not be bent or cut off.

For wire sealing, care must be taken that the insulation of the wire in the sealing area is not damaged, compressed or deformed. The insulation must be clean and free of contamination.

4.2. Cutoff and Burr

The cutoff must be visible after crimping.

The maximum length of the cutoff is 0.3mm.

Burrs at the shearing point max. 0.03mm. cutoff not bent downwards.

4.3. Wire crimp

4.3.1. Wire positions

After crimping, the end of the wire must extend 0.1~3.5mm beyond the front end of the wire crimp.

4.3.2. Crimping data

The shape, height, width of the crimp and the wire range are shown in Table 2.

4.3.3. Extraction forces

The crimp extraction forces must fulfill the requirement of 38.8 Kgf (380 N) min for 25mm².

4.3.4. Crimp bellmouth

The size of the rear bellmouth permits 1.0~2.0mm and front permits to 2.0mm for 25mm².

4.4. Insulation crimp

4.4.1. Position of the end of insulation

The end of insulation must be visible in the transition between wire crimp and insulation crimp.

Insulation can't be crimped in wire crimp; conversely, insulation must extend at least to front edge of insulation crimp.

4.4.2. Crimping data for contact with insulation crimp

The shape, width of the crimp and insulation diameter are shown in Table 2.

4.5. Contact area

After crimping, the contact may not be bent or deformed.

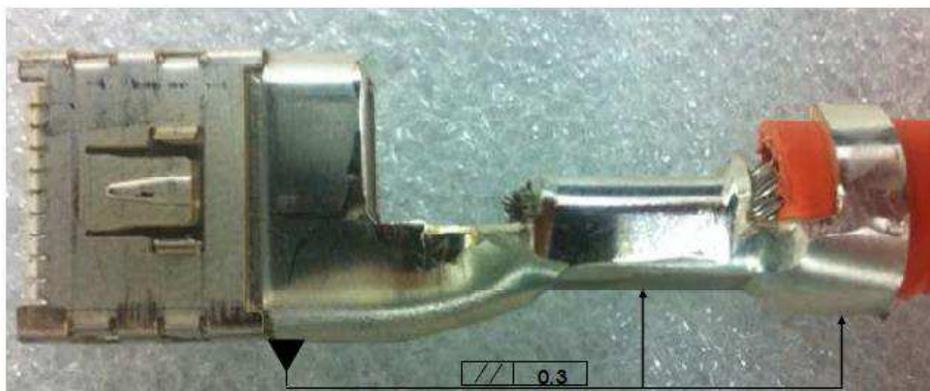
4.6. Shape and position tolerances

4.6.1. Symmetry

The width of insulation crimp must be symmetrical with contact body, with a tolerance of 0.3mm.

4.6.2. Parallelism

The bottom of the wire crimp or of insulation crimp must be parallel with contact body, with a tolerance of 0.3mm.



5. Auxiliary Tool

2376202-1 for 2373747-5 REC contact

2376202-2 for 2351982-5 TAB contact

6. Crimping Data

6.1. Application Crimp

Contact Part No.	Crimping Tool	Wire Size	AWG	Insulation Range	Strip length mm	Wire barrel Crimp (mm)		Insulation Barrel Crimp (mm)	
		(mm ²)		Ø (mm)		Width	Height	Width	Type
						(mm)	(mm)	(mm)	
2373747-5	2372716-1	25	#3	9.5(Ref.)	12.5±1.0	8.2	6.3±0.1	12 (Ref.)	O
2351982-5									
2373747-6	2463630-1 (Die)					"F"			
2351982-6	2155363-2 (Compression tool)								

Table 2

Note:

Crimp Width dimension are not the product width after crimping, but given by the width of crimper slot for reference.