### 1. Scope

This document specifies the steps from crimping the DF11-series crimped terminals to cables (AWG22 - AWG30) to inserting the terminals to crimping sockets the DF51-series.

## 2. Connectors

■ Crimping cases

DF51 -\* S-2 C

- (1)
- (2) (3) (4)(5)
- 1 Name: DF51
- 2 No. of contacts:

Single-row :  $2-7 \stackrel{1}{2}$ Double-row : 4-30

3 Connector types

S : Single-row socketDS : Double-row socketEP : Single-row in-line plugDEP : Double-row in-line plug

- 4 Contact pitch: 2 mm
- Shape of connection/terminal

C: Crimping case

■ Crimped terminals

# **DF11-EP 2428 PCF A**

- 1
- 2
- (3)
- **(4) (5)**
- ① Name: DF11
- ② Connector types EP: In-line plug
- 3 Compatible cables

22 : AWG 22 2428 : AWG 24 - 28

30 : AWG 30

4 Shape/packing

SCF : Socket terminal, reeledSC : Socket terminal, separatePCF : Plug terminal, reeledPC : Plug terminal, separate

5 Plating

Blank: Tin plating
A: Gold plating

	COUNT	DESCRIPTION OF REVISIONS	DESIGNED		CHECKED			DATE
$oldsymbol{\Lambda}$	1	DIS-H-00014544	KI. SUGAWARA			TT. OHSAKO		20220713
TI	TLE		HIROSE ELECTRIC CO., LTD.					
DF51 Series Cable Assembly Procedure				APPROVED		HS. OKAWA		20180704
				CHECKED		SZ. ONO		20180704
				DESIGNED		TS. MIYAKI		20180704
				WRITTEN		TS. MIYAKI		20180704
	TECHICAL SPECIFICATION				ETAD-H0923-00		Λ	1/6

## 3. Steps for harnessing

#### 3.1. Cable stripping

Strip cables in accordance with Crimping Quality Standards (ATAD-H0773/ATAD-H0935). In so doing, make sure there is no scratch on cable cores.

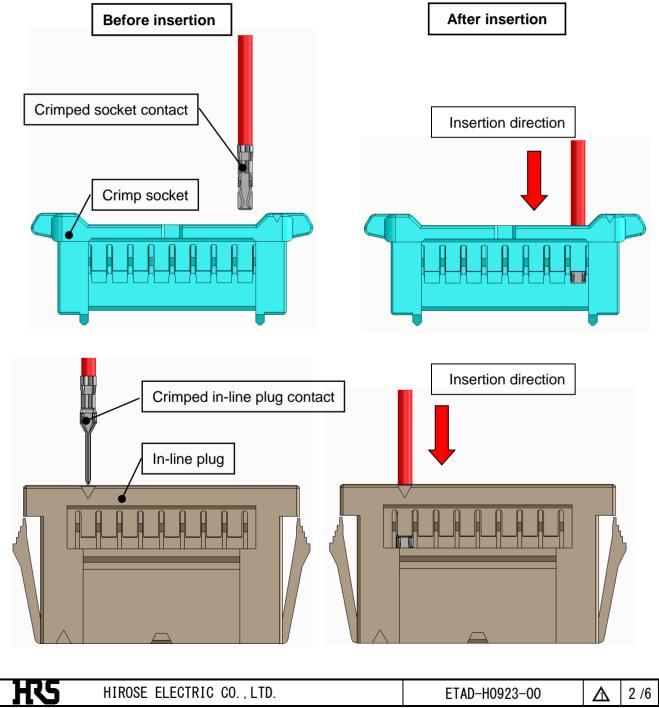
### 3.2. Crimping

Crimped terminals to cables using an applicator (AP105-DF11-\*\*\*\*\*), and check the crimping height and shape in accordance with the Table of crimping conditions and Crimping Quality Standards (ATAD-H0773/ATAD-H0935).

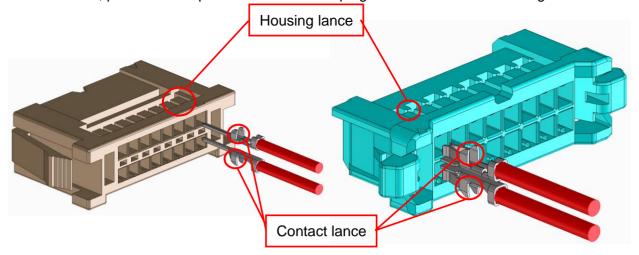
## 3.3. Insertion to crimping terminal sockets

Hold the cable of a crimped terminal, and insert it to each terminal hole of crimping sockets. (Insert the terminal in the direction of arrows below.)

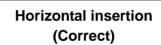
\*The figures show insertion to DF51-16DS-2C and DF51-16DEP-2C.

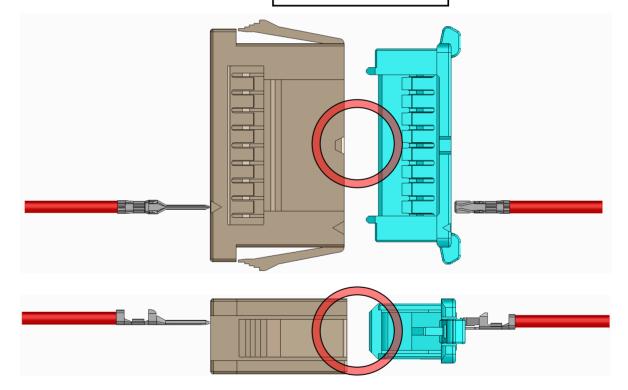


• For insertion, place the crimped terminal and crimping socket lock in the following direction:



• To maintain performance reliability, do not tilt crimped terminals for insertion.



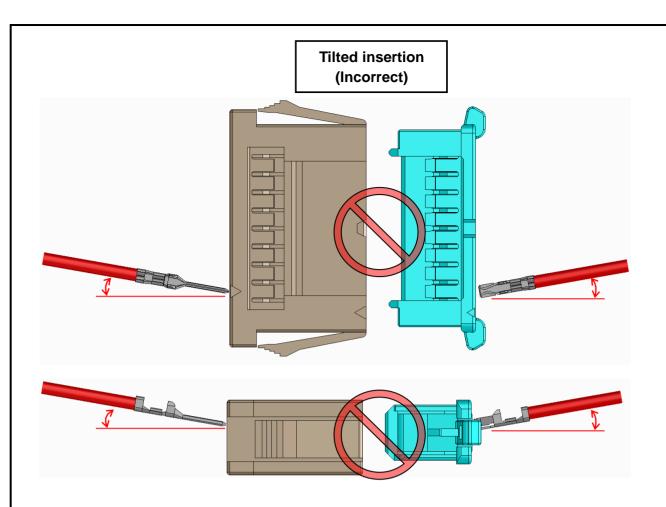


H

HIROSE ELECTRIC CO., LTD.

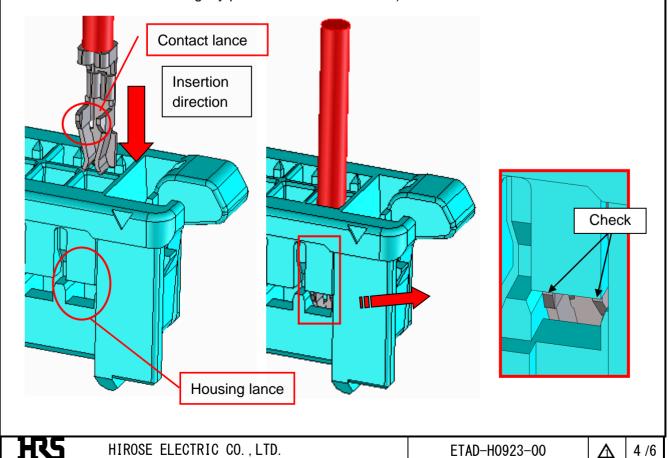
ETAD-H0923-00

.



# **Confirmation of inserted contact conditions**

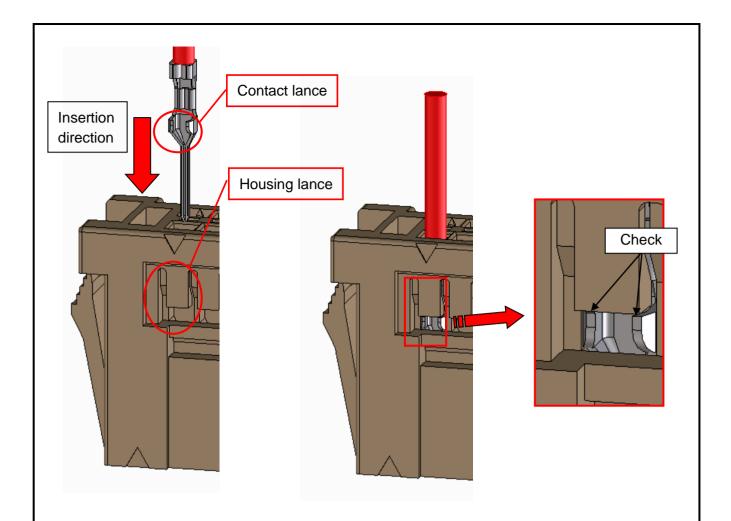
Make sure that the contact lance is caught by the housing lance of the crimp socket. (Visual check or Slightly pull the terminal to check.)



4 /6

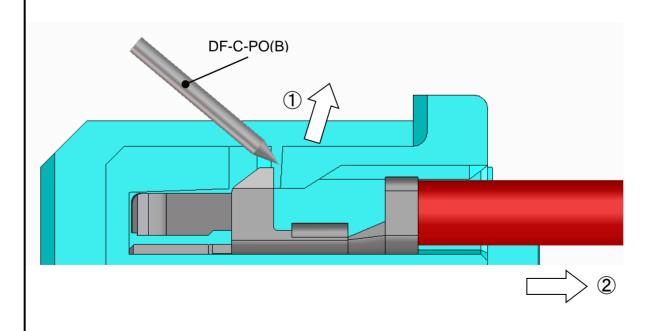
Δ

ETAD-H0923-00



### NOTE: Repairing the crimp contact

For removing the inserted contact form socket, lift up the housing lance by using DF-C-PO(B) or a pointed needle, and pull out the cable simultaneously. The repair operation could make the lance strength lower, therefore, please do not reuse the repaired crimp socket and replace it to a new one.



HIROSE ELECTRIC CO., LTD.

ETAD-H0923-00

## 4. Precautions for handling

## 4.1. Packing and storage

To pack or store assemblies, make sure overlapped connectors will not apply extreme load to the lack section.

If load is applied to the lock section under high temperature and humidity for a long period of time, the lock section will be deformed which could lead poor fitting.

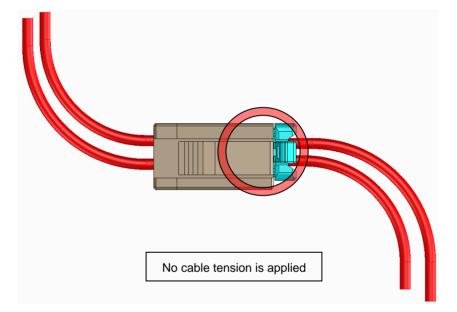
### 4.2. Loading to a connector

To pack or store assemblies, make sure overlapped connectors will not apply extreme load to excessive external force applied to connectors could cause failure or damage. Therefore, avoid forced insertion or removal, dropping impact, cable wiring (pull, twist) and such.

#### 4.3. Wiring cable

During cable wiring inside the machine, keep sufficient cable length for slack to avoid direct stress is applied to the connector.

Forcible wiring such as bending the cable near the connector and straining the cable, could cause contact failure and / or waterproof defect.



HRS

Δ