2023/05/11 12:29:37 HT.SATO

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1. Scope

This document specifies the steps from crimping the DF63W-series crimped terminals to cables (AWG16 to AWG22) to inserting the terminals to crimping sockets.

2. Connectors △2

■ Crimping cases

DF63W # – ∗ EP – 3.96 C
❶ ❷ ❸ ❹ ❺ ❻

❶ Name: DF63W
❷ Wire seal #=None or A
❸ No. of poles: 2 to 6
❹ Connector types S : Socket EP: In-line plug
❺ Contact pitch: 3.96 mm
❻ Shape of connection C: Crimping case

■ Crimped terminals

DF63(W) – 1618 PCF
❶ ❷ ❸

❶ Name: DF63(W)
❷ Compatible cables 1618: AWG16 to 18 2022: AWG20 to 22
❸ Shape/packing SCF : Socket terminal, reeled SC : Socket terminal, separate PCF : Plug terminal, reeled PC : Plug terminal, separate

	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
△2	3	DIS-H-00014188	HT.SATO	SZ.ONO	20220621

TITLE DF63W Series Cable Assembly Procedure	HIROSE ELECTRIC CO.,LTD.		
	APPROVED	KI.AKIYAMA	20150525
	CHECKED	HK.UMEHARA	20150525
	DESIGNED	TO.HORII	20150525
	WRITTEN	TO.HORII	20150525
TECHICAL SPECIFICATION	ETAD-H0814-00 △2		1 / 6

2023/05/11 12:29:37 HT. SATO

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3. Steps for harnessing

3.1. Cable stripping

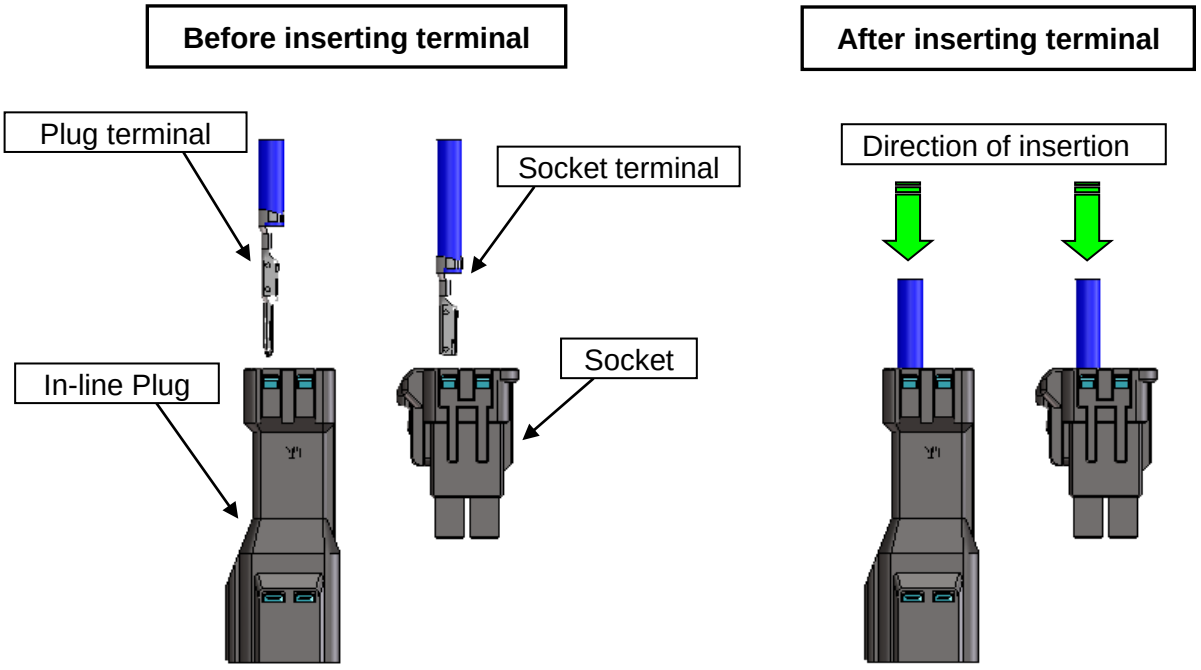
Strip cables in accordance with Crimping Quality Standards (ATAD-H0810/0811).
In so doing, make sure there is no scratch on cable cores.

3.2. Crimping

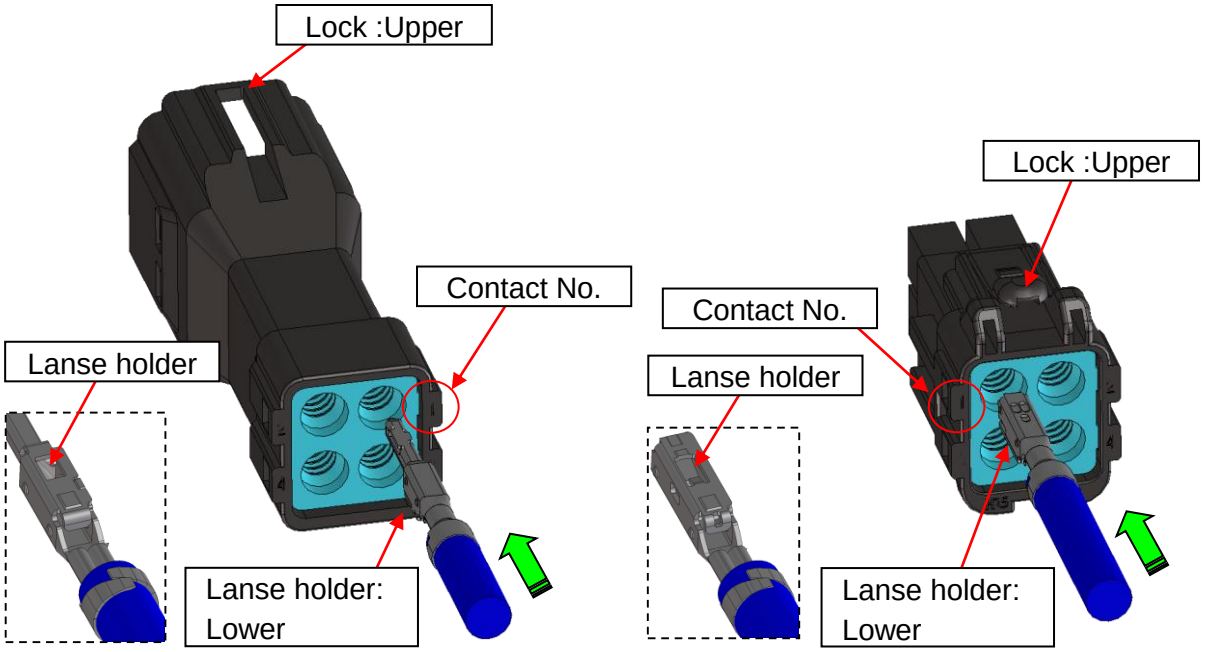
Crimped terminals to cables using an applicator (AP105-DF63-1618-*), and check the crimping height and shape in accordance with the Table of crimping conditions and Crimping Quality Standards (ETAD-H0810/0811).

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 DF63W-4EP-3.96C and DF63W-4S-3.96C.



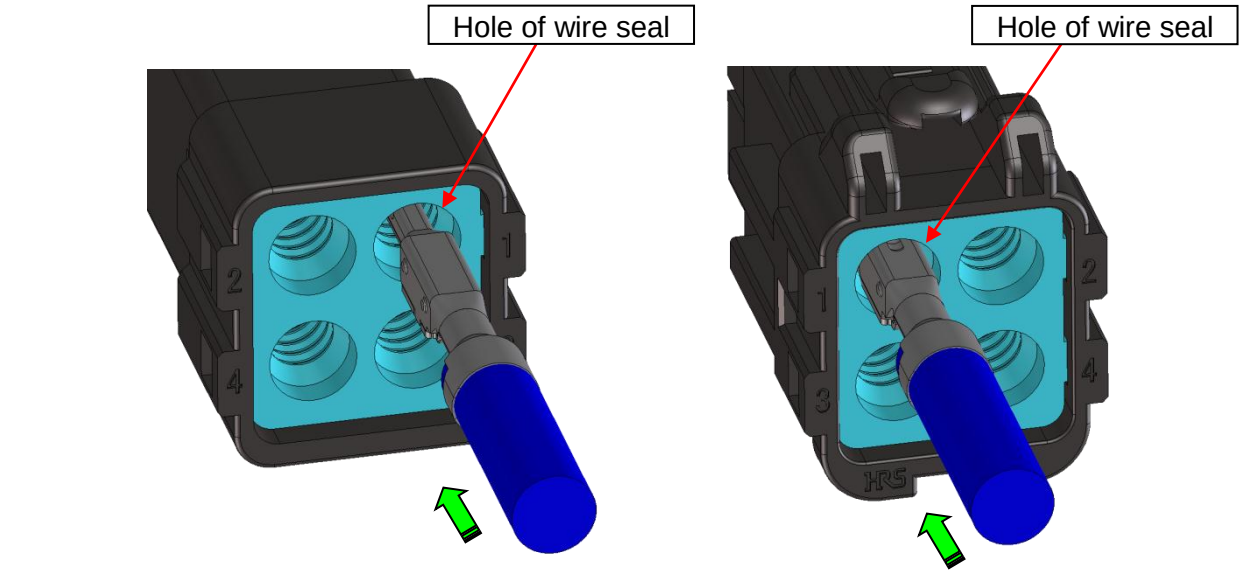
- For insertion, place the crimped terminal and crimping socket lock in the following direction:



2023/05/11 12:29:37 HT. SATO

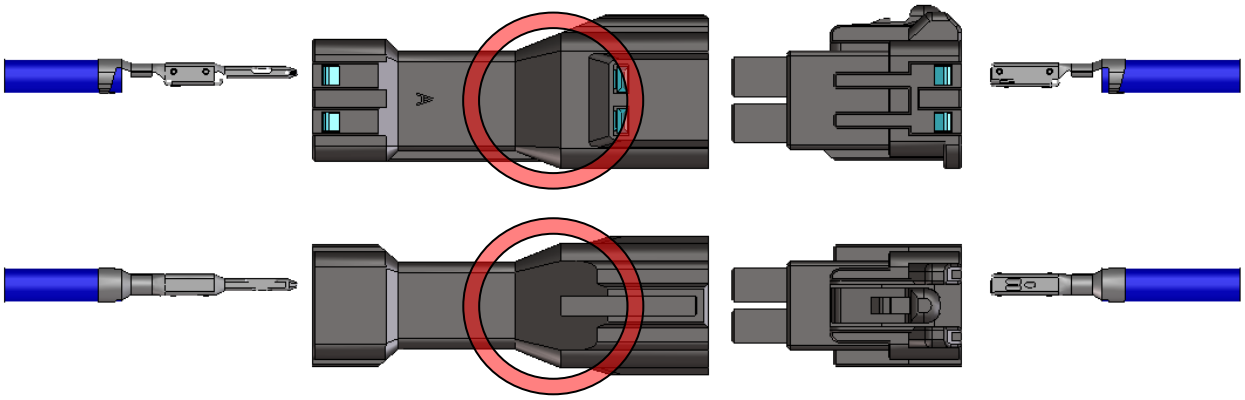
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- Insert the crimped terminal to pass through the hole of wire seal.

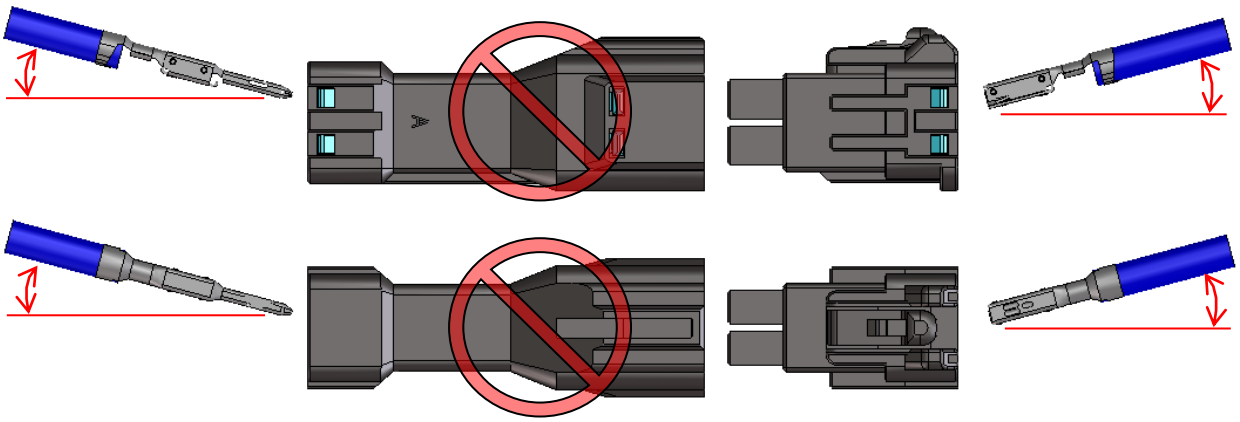


- To maintain performance reliability, do not tilt crimped terminals for insertion.

Horizontal insertion ○



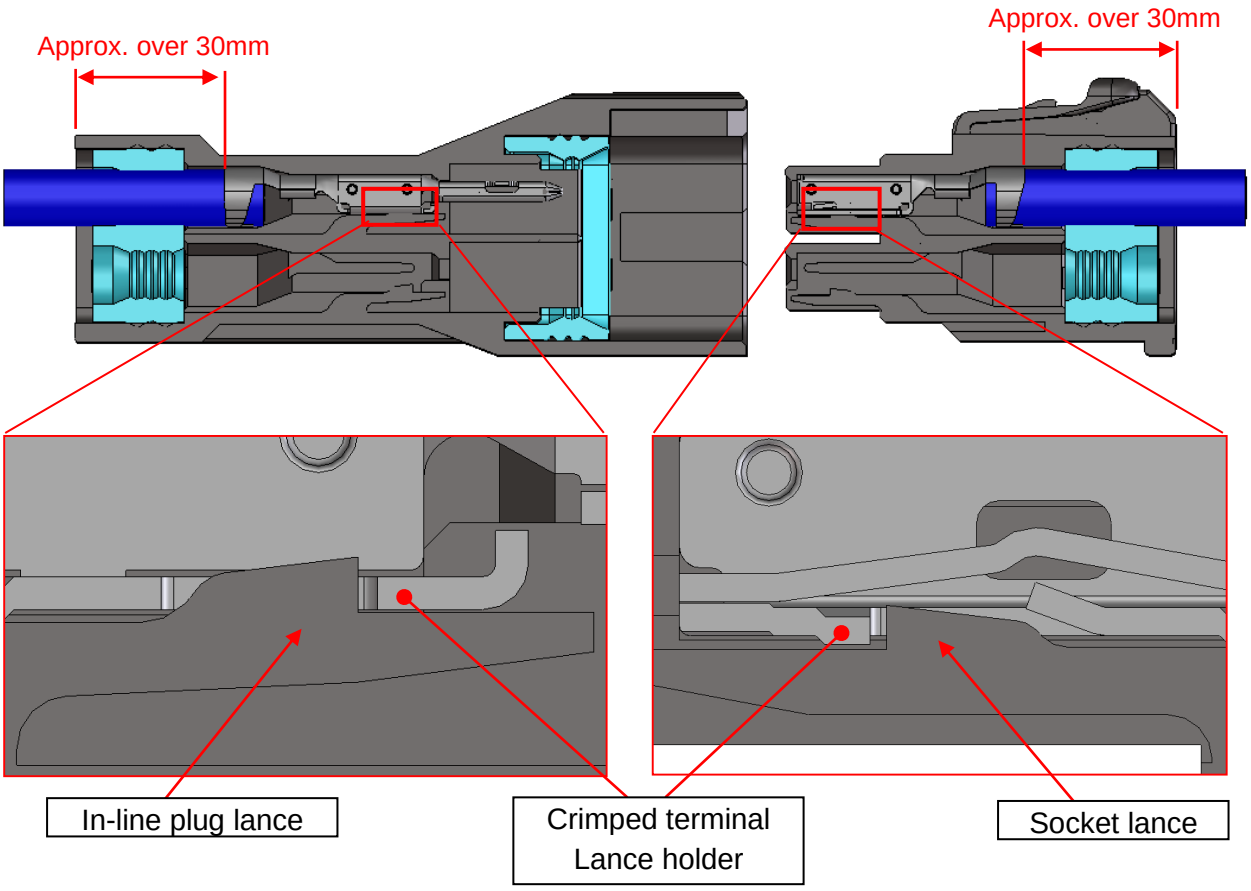
Tilted insertion ×



2023/05/11 12:29:37 HT. SATO

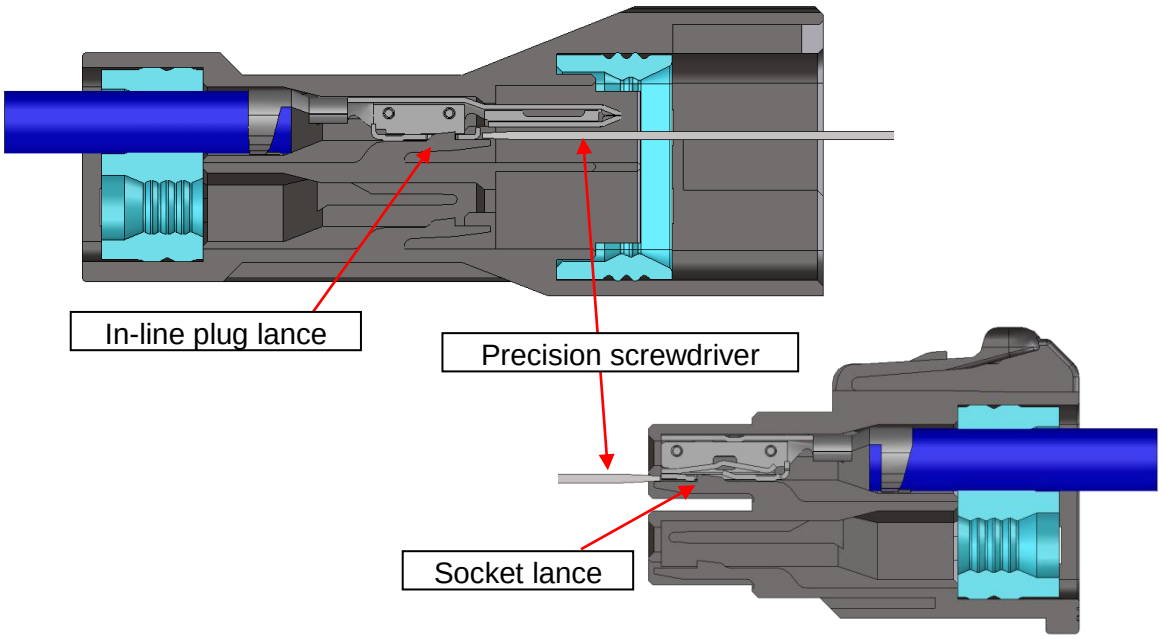
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- Check that the lance of a crimping socket has been caught at the lance holder of a crimped terminal.
  (Slightly pull the terminal to check.)
  *To remove the crimped terminal halfway through insertion, pull the cable while pressing wire seal to prevent coming off.



3.4. Repair of crimped terminal

To remove crimped terminals that have been inserted, pull the cable using the dedicated Precision Screwdriver while pushing up the crimping socket lance.
Using crimping socket after repair could induce decrease of lance strength and / or wire seal damage. Use new socket to avoid such failures.



2023/05/11 12:29:37 HT. SATO

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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 △2

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.

Note) Breaking strength of lock is approx. 50 N when connector is pulled in straight direction. Please avoid excessive force is applied to the connector.

Note) Retention force is approx. 27 N / Pin. Please avoid excessive force is applied to particular cable.

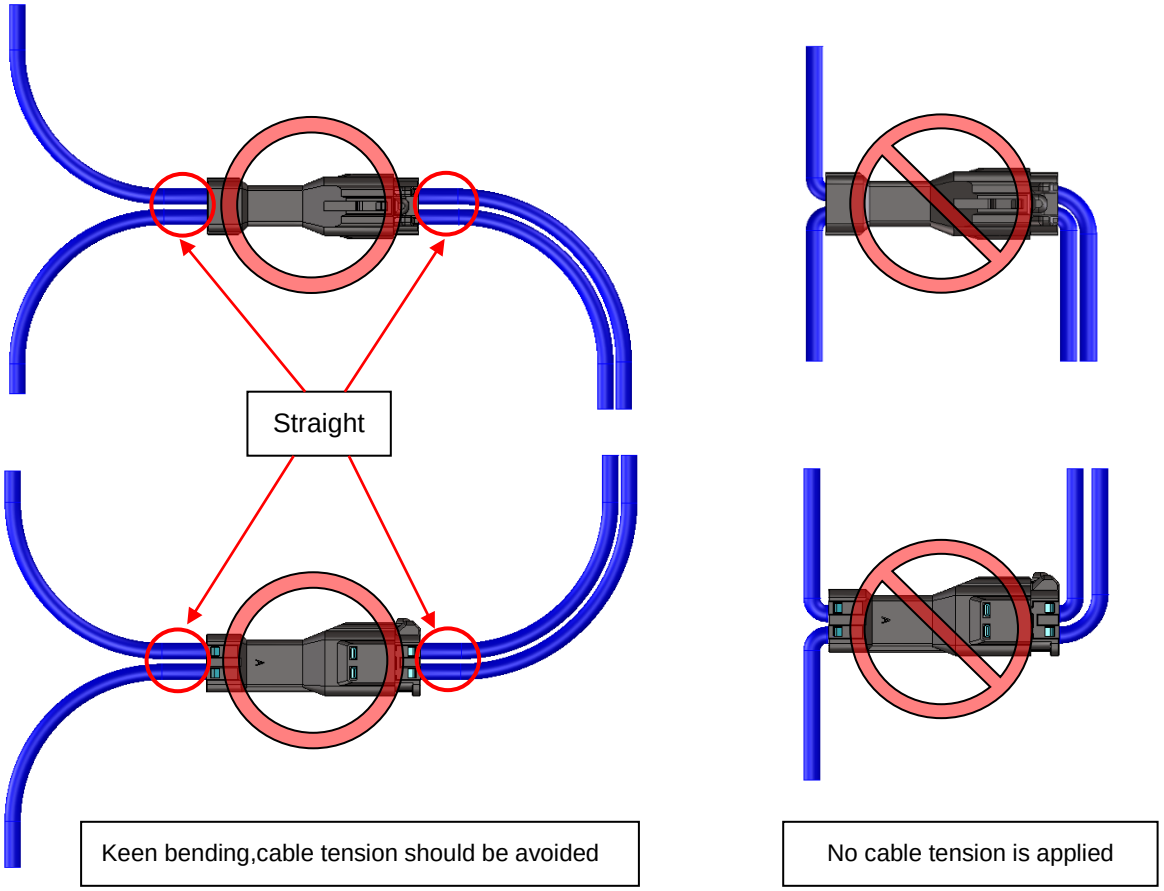
During cable wiring inside the machine, keep sufficient cable length for slack to avoid direct stress is applied to the connector.

4.3. Rubber seal

If the rubber seal is damaged, the connector is deteriorated water resistant performance.
Therefore, do not use the connector whose rubber seal is damaged.

4.4. Wiring cable △2

When bundling cables, prepare a part that is straight from the end face of the connector as shown in the figure below.
Do not bind near the end face of the connector because it will put a load on the terminal contact part and the terminal crimping part and cause contact failure and waterproof failure.



2023/05/11 12:29:37 HT. SATO

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4.5. Binding cable

During cable binding, keep approximately 30mm length from end of connector to binding point.
If the length is short , it could cause loosing the contact by stress.

