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1. Scope

This document specifies the steps to insert or remove the DF63W series.

It contains general guidelines and precautions for the safe use of the product. The use of the product in a way not as specified in the document could result in unexpected troubles such as damage to connectors. Please make sure to thoroughly read and understand the document prior to the use of the product.

2. Connectors △1

○Connectors

DF63W #－＊ EP－3.96 C
❶ ❷ ❸ ❹ ❺ ❻

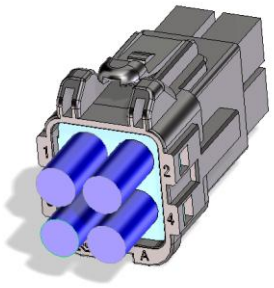
❶	Series：DF63W
❷	Wire seal #= None or A
❸	No. of poles：2 to 6
❹	Connector types S ：Socket EP：In-line plug
❺	Terminal pitch：3.96mm
❻	Shape of connection C ：Crimping case

○Terminals

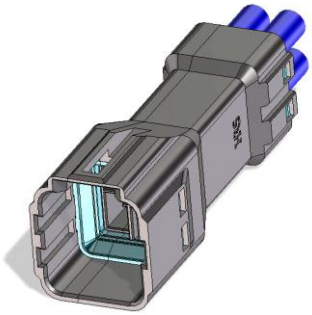
DF63(W) – 1618 PCF
❶ ❷ ❸

❶	Series：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

Applicable terminal
Socket terminal･･･DF63W-****SC(F)
(****=1618、2022)
In-line plug terminal･･･DF63-****PC(F)
(****=1618、2022)



（**E.g.**）DF63W-4S-3.96C
+DF63W-1618SCF(Cables attached)



（**E.g.**）DF63W-4EP-3.96C
+DF63-1618PCF(Cables attached)

Fig.1 DF63W connector

	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
△1	2	DIS-H-00014188	HT.SATO	SZ.ONO	20220621

TITLE

DF63W Series Mating and Unmating Operation Instruction Manual

HIROSE ELECTRIC CO.,LTD.

APPROVED	HS.OKAWA	20180123
CHECKED	TS.FUKUSHIMA	20180123
DESIGNED	TO.KUROMATSU	20180123
WRITTEN	TO.KUROMATSU	20180123

TECHNICAL SPECIFICATION | ETAD-H0926-00 △1 | 1 / 5

FORM HC0011-9-1

3. Operation procedure

3-1. Insertion

3-1-a. Positioning for insertion:

Adjust the position for insertion according to the locks of the socket and In-line plug.

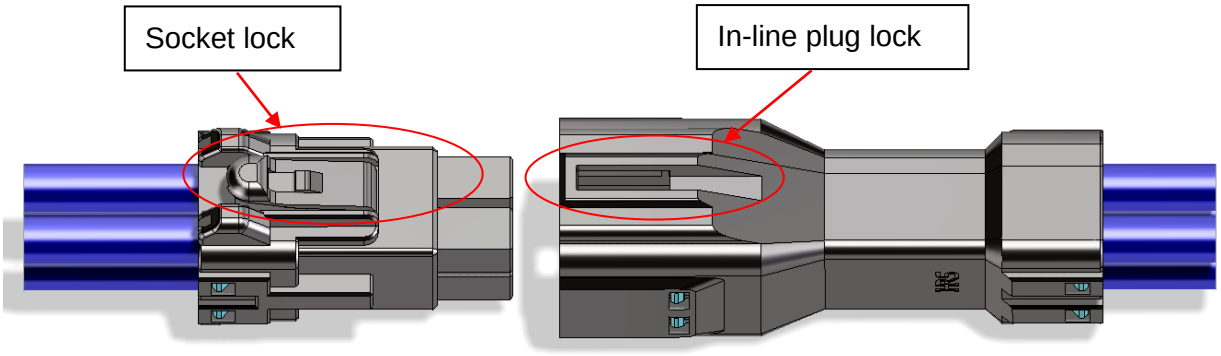


Fig.2 Positioning for insertion

3-1-b. Insertion:

Insert the socket till it clicks while retaining the adjusted position.

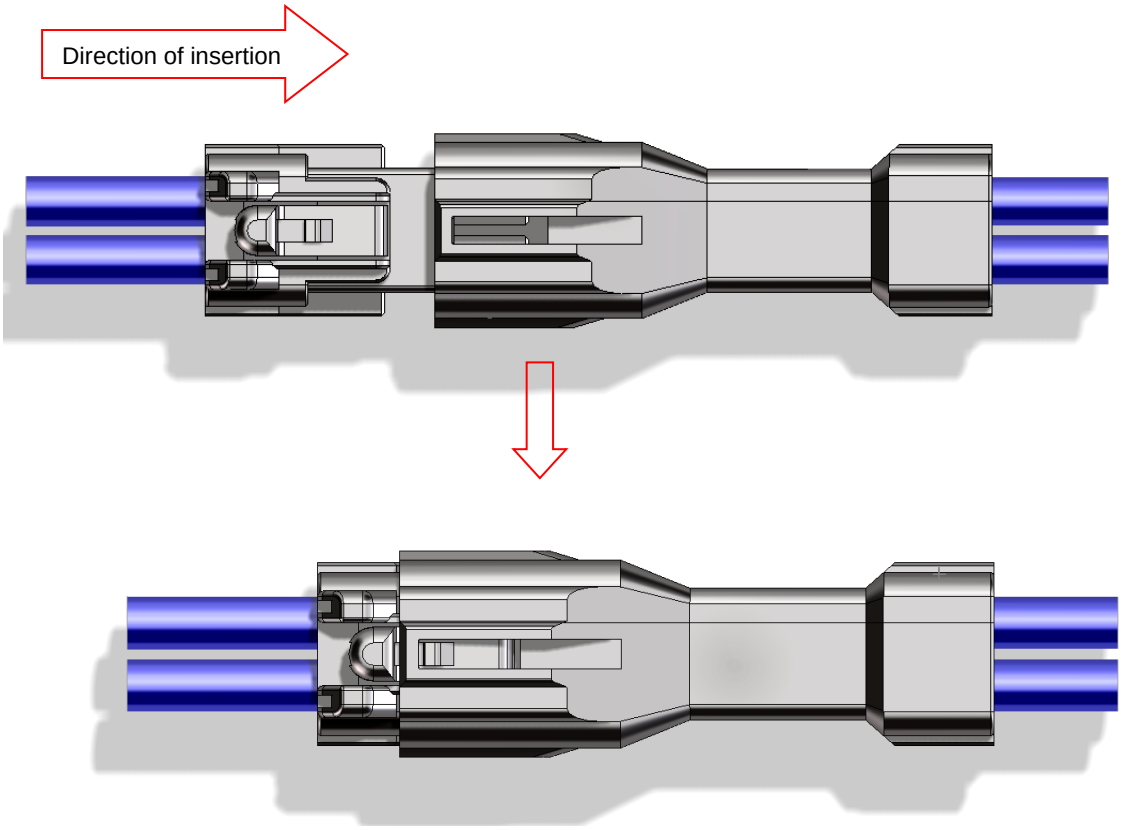


Fig.3 Insertion

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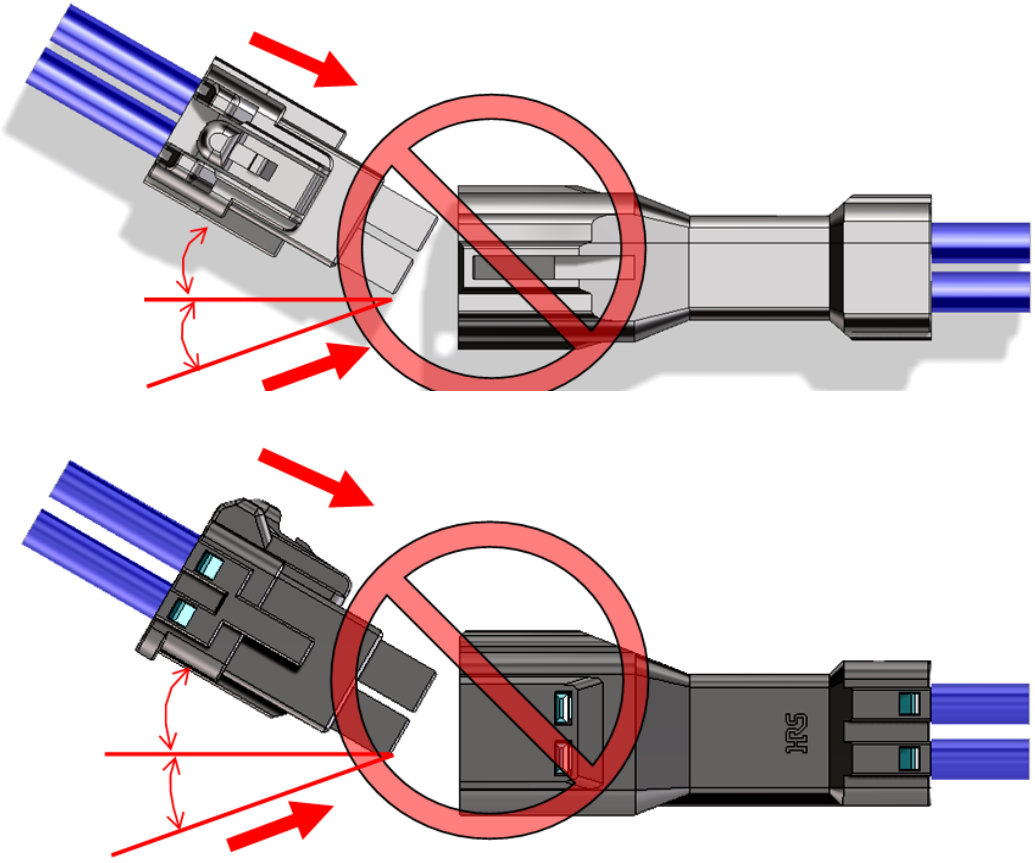

Fig.4 Prohibited insertion

To avoid degraded quality, do not tilt the socket for insertion as shown in the figure above.

3-1-c. Check fitting:

Make sure the socket has been firmly fit with the In-line plug.
(Check that the socket lock has been caught at the In-line plug lock either visually or by slightly pulling a cable by hand.)
To remove the socket, see 3-2. Socket removal.

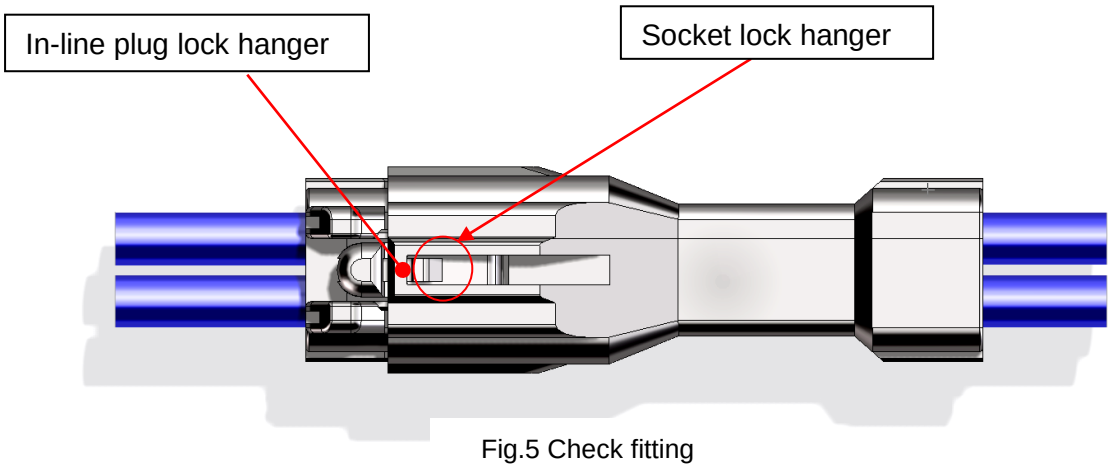

Fig.5 Check fitting

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3-2. Socket removal

3-2-a. Removal:

Remove the socket while pressing with a finger the lock spring on the socket to unlock.

Note: To prevent the lock hanger from being damaged or the cables from being disconnected, do not remove the socket when it is locked.

* Breaking strength of lock is approx. 50 N when connector is pulled in straight direction. Please avoid excessive force is applied to the connector.
* Retention force is approx. 27 N / Pin. Please avoid excessive force is applied to particular cable.

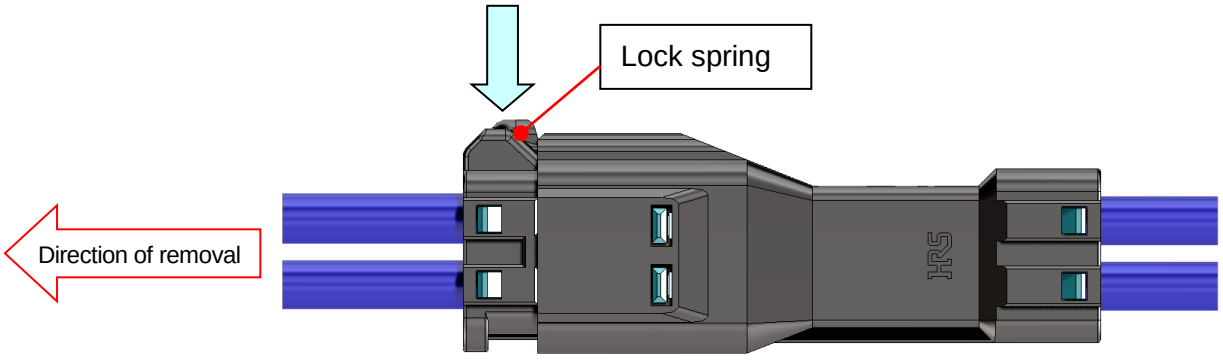

Fig.6 Socket removal

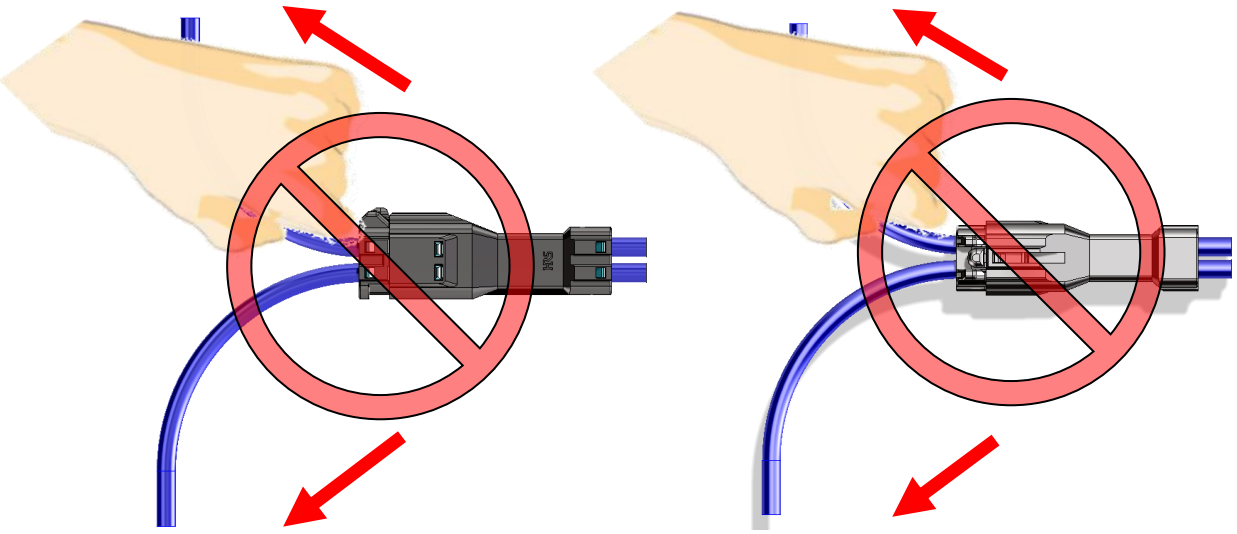

Fig.7 Prohibited removal

To avoid degraded quality, do not tilt the socket for removal as shown in the figure above.

4. Precautions ⚠1

- Do not insert or remove the socket while electrifying.
- 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.
- 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.

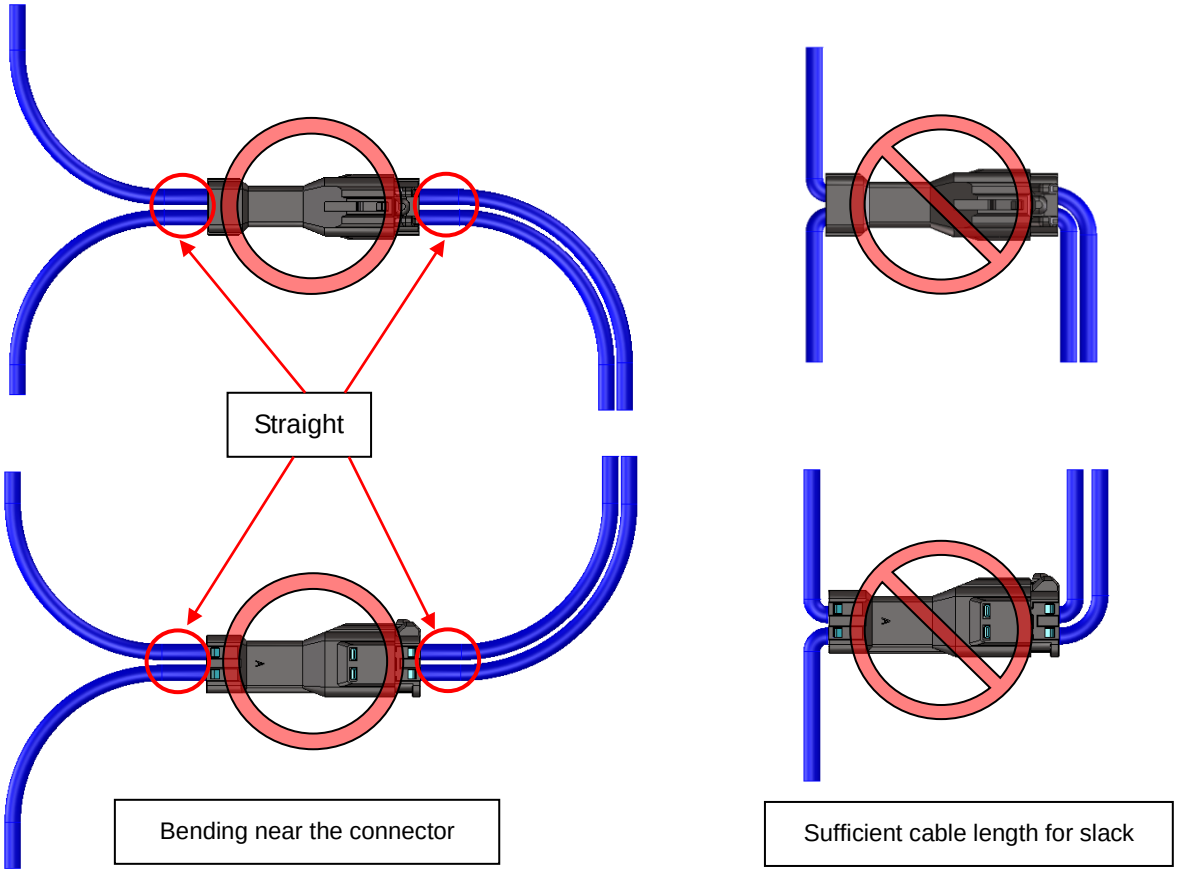

Fig.8 Image of wiring

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