

# **EVAFLEX® 5-SE-GVT**

Part No.20799-0\*\*E-01

# **Instruction Manual**

2	S20551	November 5, 2020	T.Tanigawa	T.Kurachi	Y.Shimada
1	S19211	March 26, 2019	M.Nakamura	T.Kurachi	H.lkari
0	S18029	January 18, 2018	K.Tsusu	M.Muro	Y.Shimada
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This manual provides the insertion & withdrawal method and cautions to handle EVAFLEX 5-SE-GVT connector properly and safely.

◆Connector

Product Name : EVAFLEX 5-SE-GVT

Part No. : 20799-0\*\*E-01 "\*\*"= Connector position number

[Labelled Diagram of the Connector]

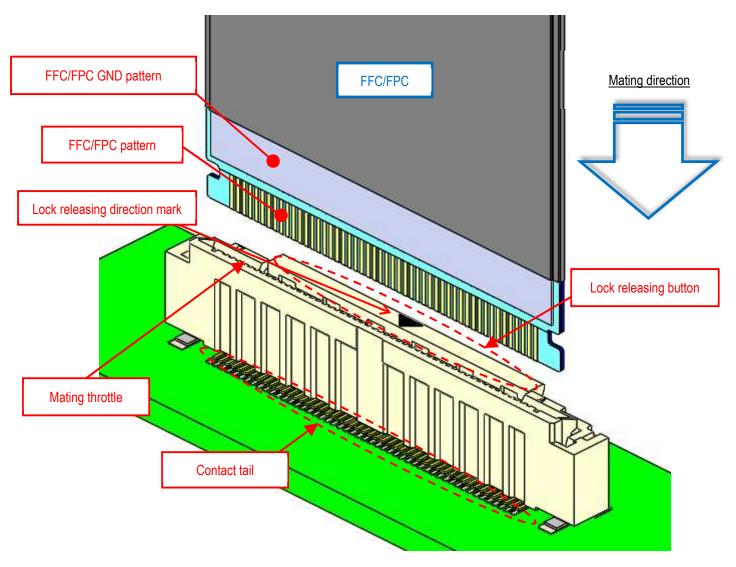


Fig. 1 Labelled diagram of the connector

#### [FFC/FPC Insertion Method]

① Check the orientation of the FFC/FPC.

Set the FFC / FPC so that the FFC/FPC pattern faces the contact tail side. (Fig.2-1)

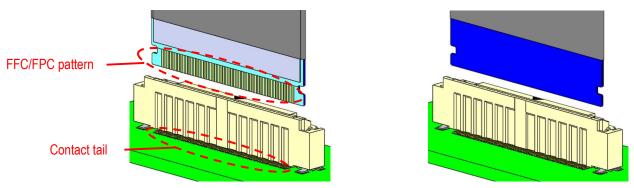


Fig.2-1 FFC/FPC insertion method 1

#### 2 Pre-insert the FFC/FPC into the connector.

The insertion angle in the contact pitch direction is within 10 ° as shown in Fig. 2-2. The insertion angle from the operation side and the anti-operation side should be within 15 ° as shown in Fig. 2-3.

Pre-insert without applying excessive load in the insertion direction until the FFC / FPC is perpendicular to the connector.

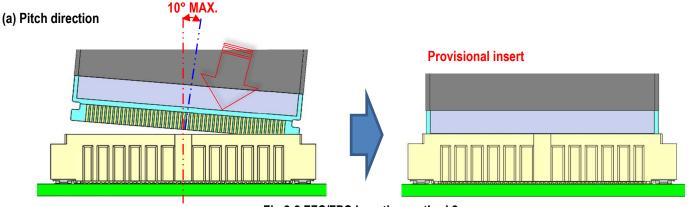


Fig.2-2 FFC/FPC insertion method 2

# (b) Operating and anti-operating direction

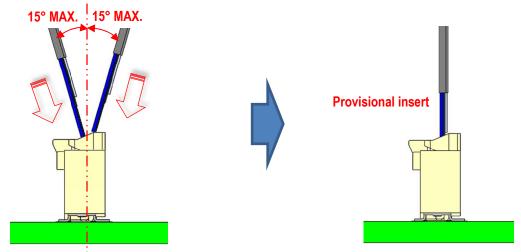


Fig.2-3 FFC/FPC insertion method 3

③ Insert the FFC / FPC completely keeping it perpendicular to the connector as shown in Figure 2-4.
※FFC/FPC will be locked when insertion is completed.

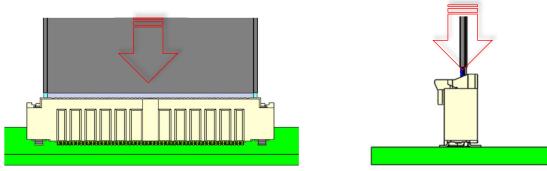


Fig.2-4 FFC/FPC insertion method 4

#### <Caution 1>

If the FFC / FPC is inserted at an angle as shown in Figures 2-5 and 2-6, a locking failure or connector and FFC / FPC damage may occur.

#### (a) Pitch direction

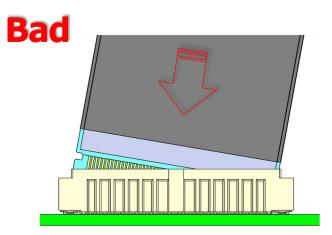
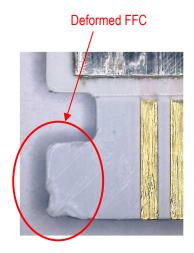


Fig.2-5 Bad FFC/FPC insertion 1



**Photo 2-1 Deformed FFC** 

# (b) Operating and anti-operating direction

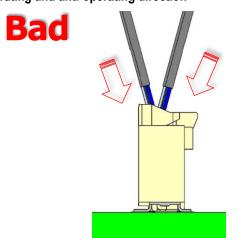


Fig.2-6 Bad FFC/FPC insertion 2



Photo 2-2 Shaved housing

# [FFC/FPC Withdrawal Method]

① Pinching the FFC/FPC and the release button on the connector at the same time as shown as Fig. 3-1.

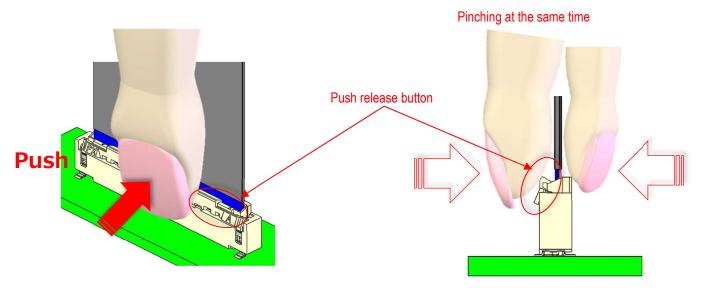
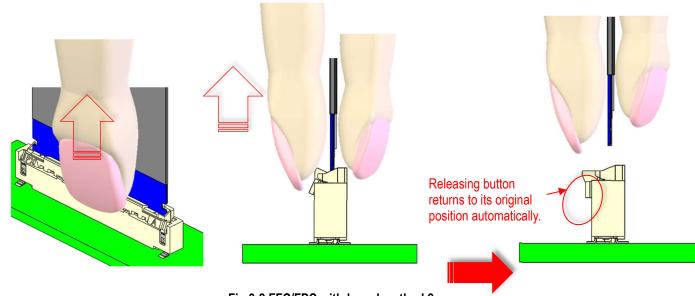


Fig.3-1 FFC/FPC withdrawal method 1

② Withdraw FFC/FPC from the connector vertically while pushing the release button as shown as Fig.3-2.



# Fig.3-2 FFC/FPC withdrawal method 2

# Check!

Withdraw FFC/FPC from connector vertically.

Do not withdraw FFC/FPC with rotation as shown in Fig.3-3. It may damage FFC/FPC pattern.

If you withdrew FFC/FPC with rotation, check that the FFC / FPC pattern is not damaged. (Refer to Photo 3-1)

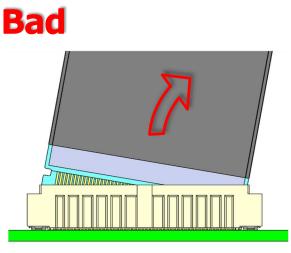


Fig.3-3 BAD FFC/FPC Withdrawing

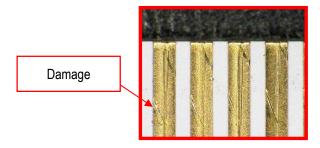


Photo 3-1 (a) Withdrawing with rotation

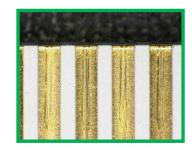


Photo 3-1 (a) Withdrawing FFC/FPC vertically

#### <Caution 2>

Do not push the release button toward anti-operating direction or vertical direction. It may cause button damage.

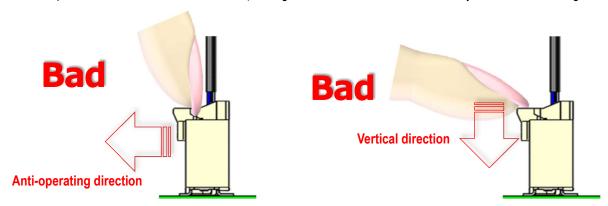


Fig.3-4 Bad Ways to Push Release Button

#### <Caution 3>

Do not push the release button using the nails. It may cause button damage.

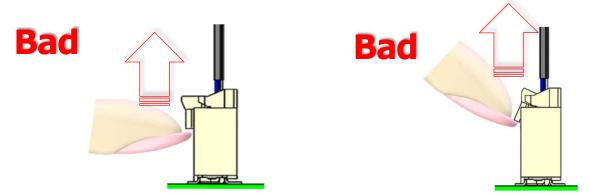


Fig.3-5 Bad Ways to Push Release Button

#### <Caution 4>

Do not forcedly withdraw FFC/FPC without pushing a release button as shown in Fig.3-6.

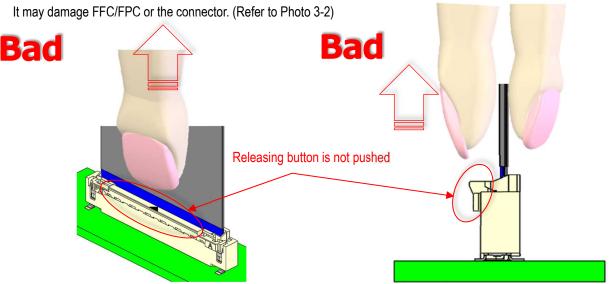


Fig.3-6 Withdrawing FFC/FPC without Pushing Release Button

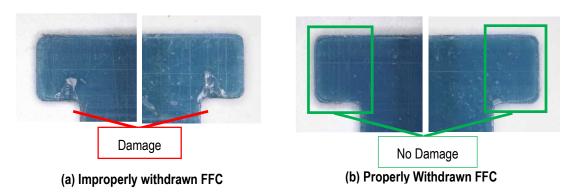


Photo 3-2 Comparing Properly/ Improperly Withdrawn FFC

#### [Cautions in handling the connector]

① Do not pull FFC/FPC toward parallel to PCB. It may damage FFC/FPC or the connector. (Refer to Photo. 4-1)

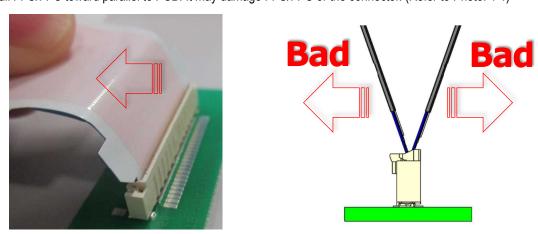


Photo.4-1 Bad Example of Pulling FFC/FPC parallel

- ② Do not apply excessive force to the connector and FFC/FPC. It may cause connector damage or FFC / FPC disconnection.
- ③ Do not route the FFC / FPC so that the connector is continuously stressed. It may cause mating failure and damage to the connector and FFC / FPC.