



Title of Document:	HANDLING MANUAL	Issue No. CHM-1-162	Rev. 2
Customer:		Issue date: February 16, 1999	
Title subject:	FMZ Connector	Revision date: April 10, 2020	

This manual describes handling method and operation points of FMZ connector for good understanding about the function and the performance of FMZ connector.

C O N T E N T S

	Page
1. Model Number and Part Name.....	2
2. Storage	2
2-1 Connector storage.....	2
2-2 Storage of the crimped contacts	2
3. Applicable Lead	3
4. Applicable PC Board	3
5. Handling Method and Precautions	4
5-1 Inserting FFC in the connector.....	4
5-2 Withdrawing FFC.....	5
5-3 When inserting and withdrawing FFC	5
6. Handling Precautions	5

Prepared by: <i>K. Matsumoto</i>	Checked by: <i>H. Kajii</i>	Reviewed by: —	Approved by: <i>T. Ogura</i>
-------------------------------------	--------------------------------	-------------------	---------------------------------

JST	Title subject: FMZ Connector	No. CHM-1-162
------------	------------------------------	---------------

1. Model Number and Part Name

Part name	Model No.
FMZ connector	**FMZ-BT (LF)(SN)
	**FMZ-ST (LF)(SN)

Note₁: 2-digit figures in asterisks denote the circuit number.

Note₂: "(LF)(SN)" denoting lead-free products is shown on the label.

FMZ connector consists of the contact, the housing and the slider.
Understand each part name and its functions before handling.

① Contact

It connects a PC board and FFC electrically.

② Housing

It insulates electrically and fix the contact.

③ Slider

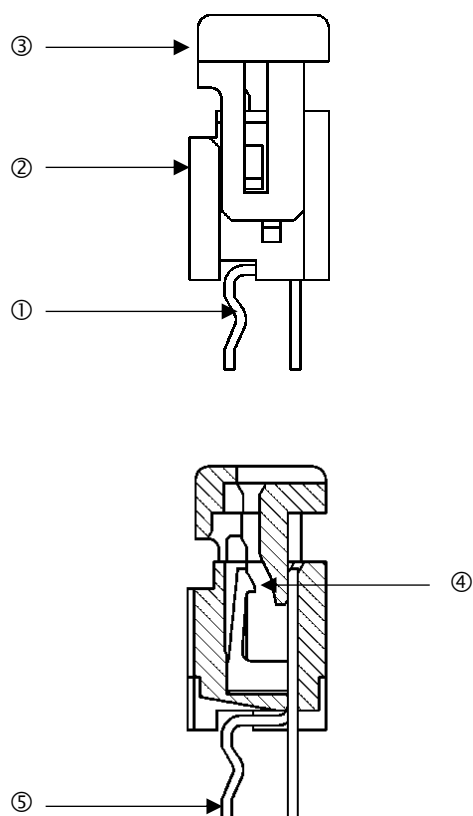
The contact and FFC are connected electrically by operating the slider.

④ Contacting part

The contact and FFC are connected electrically and mechanically.

⑤ Contact solder tail

It is soldered to a PC board and connected with PC board mechanically and electrically.



2. Storage

2-1 Connector storage

Recommended storage condition: Temperature: 5 – 35 °C, Relative humidity 60 % or less
(Under packaging like the state of JST shipment)

Keep off direct sunlight, places exposing to such corrosive gas as industrial gas (generate from a stove and whatnot) and ammonia gas (generate from a toilet and whatnot), dusty place and condensation.

Note that the resin molding part may break due to transportation and handling, such as processing and mating, under dry or low temperature condition.

2-2 Storage of the crimped contacts

Not leaving the crimped contact to stand in a place exposed to high humidity and direct sunshine, and not placing them directly on the ground, keep them in a clean storage room.

JST	Title subject: FMZ Connector	No. CHM-1-162
------------	------------------------------	---------------

3. Applicable Lead

Item	Rating
Applicable lead	Conductor: Tin-plated copper foil
	Conductor pitch: 1.0 mm
	Conductor width: 0.7 mm
	Thickness of contacting part: 0.30 ± 0.05 (Note ₃)

Note₃: The thickness of the contacting part is as follows:

0.25 – 0.35 mm for 20 circuits or less

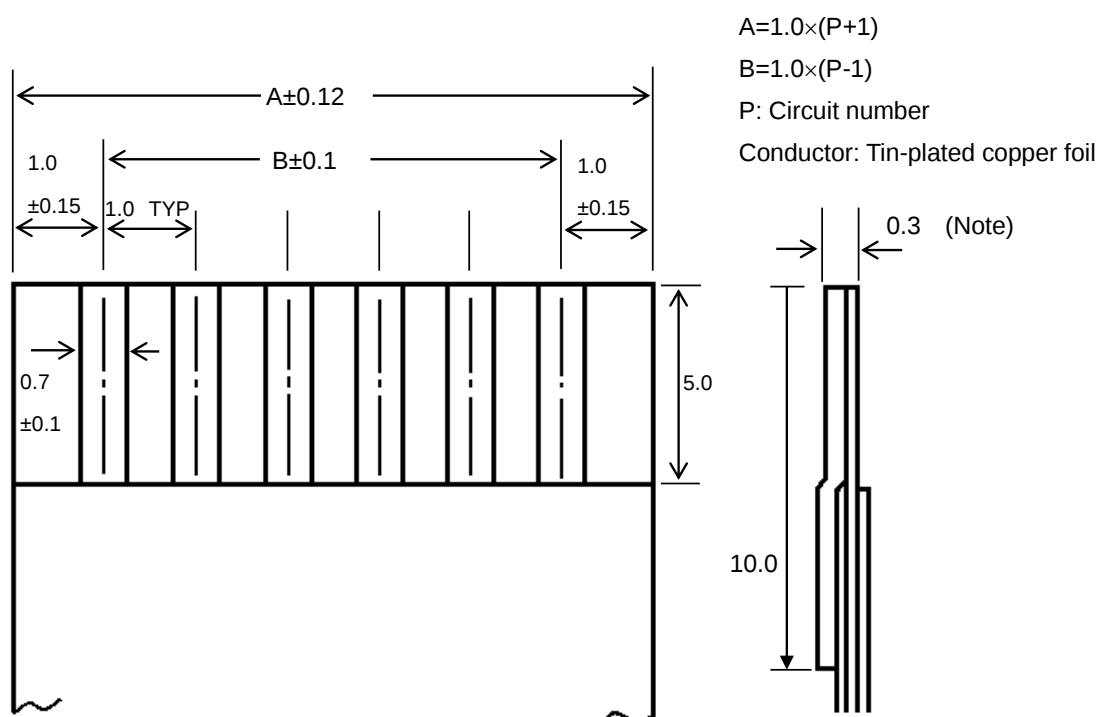
0.30 – 0.35 mm for 22 circuits or more

Note₄: The dimensions of FPC greatly affect the contacting reliability with the connector.

Conform the dimensions of FPC with those of applicable ones described in drawing.

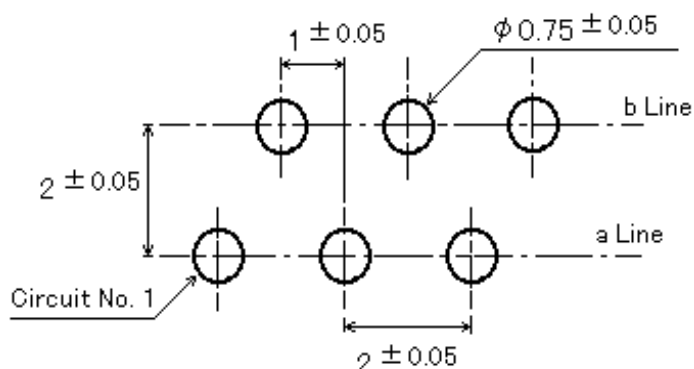
Note₅: Confirm the applicability of the connector with the FPC used, before using.

FPC, which applicability is not confirmed, might not be able to guarantee the performance.



4. Applicable PC Board

PC board hole dimensions

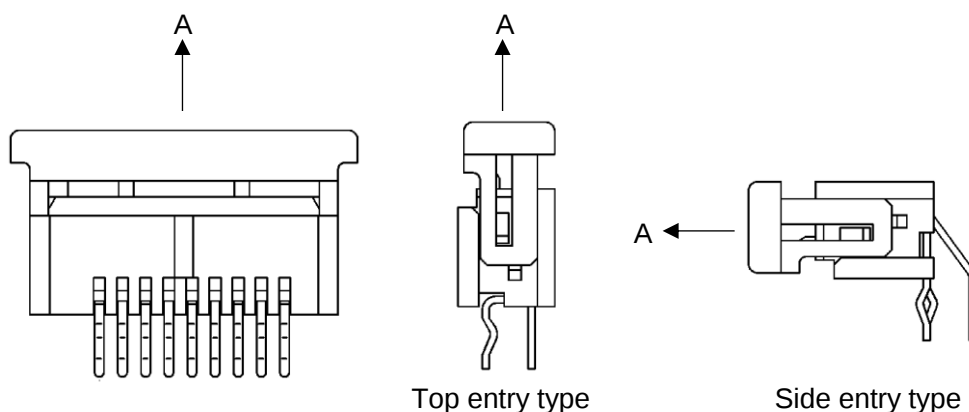


5. Handling method and Precautions

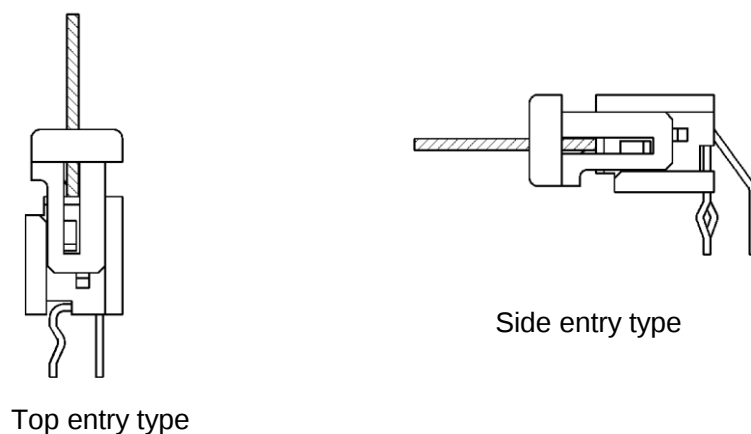
5-1 Inserting FFC in the connector

- ① Holding the both sides of the slider (flange part), pull the slider out in a straight to the (A) direction to release.

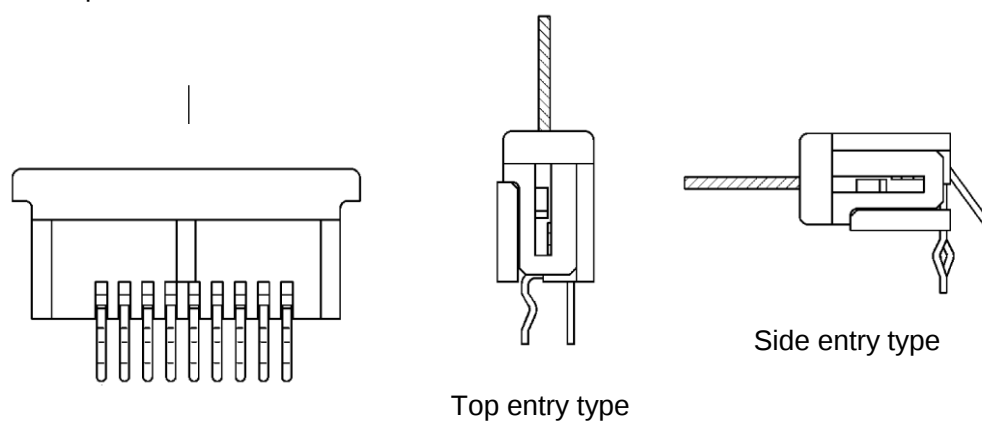
The lock shall be released by pulling the slider about 1.0 mm in the (A) direction.
At that time, do not apply excessive force to the slider or do no pull only one side of the slider.
(The connector may be broken.)



- ② Insert a lead in the slider on the mating axis until stopping.



- ③ Push the top surface of the slider to lock.



JST	Title subject: FMZ Connector	No. CHM-1-162
------------	------------------------------	---------------

5-2 Withdrawing FFC

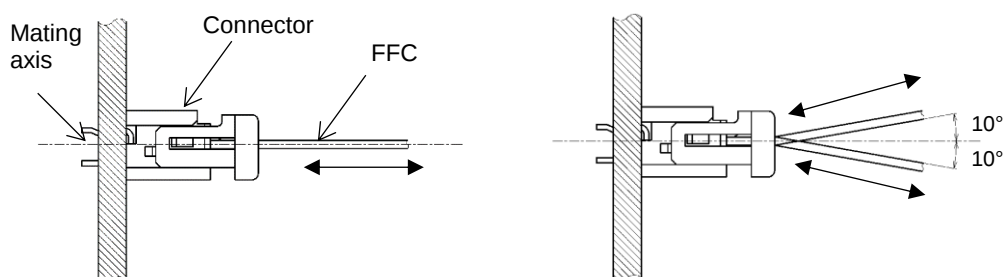
According to item 5-1 ①, withdraw FFC after releasing the slider.

Note₆: Be sure to conduct the inserting and withdrawing operation of the slider with unlocking the slider.
The insertion and withdrawal operation of FFC with the slider locked may damage the contact area between the contact and FFC.

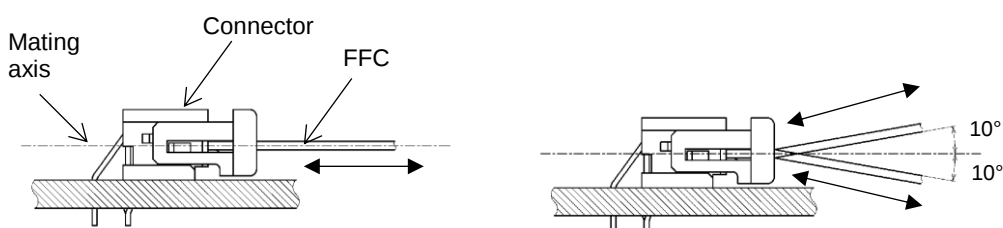
5-3 When inserting and withdrawing FFC

Conduct the insertion and withdrawal operation of FFC on the mating axis.
When the operation on the mating axis is difficult, do it at an angle within 10° against the mating axis.

Top entry type



Side entry type



6. Handling Precautions

- ① Be sure to keep the connector in the box, not leaving the connectors taken out of the carton box, because external factors may bring about the deformation, the discoloration, and adhesion of foreign matters.
- ② Do not stain the connectors with household goods such as oils, detergent, seasoning and fruit juice to avoid electrical discontinuity or poor soldering. If stained, never use the stained connector.
- ③ Never spray fuming insecticide such as earth red and varsan in the place where the connector is stored. Adhesion of such fuming insecticide may lead to electrical discontinuity or poor soldering. (These precautions are specifically written in the handling manual for insecticide.)
Additionally, spraying even non-fuming insecticide directly to the connector may cause same defects.
In case of using insecticide, give attention not to apply it to the connector by taking the connector outdoor or put it in the carton box and a cover such as plastic bags is put on the box.
- ④ Do not disassemble the connector or insert inapplicable wire or other than wires, because electrical discontinuity may be caused.