

**0.2 mm/  
0.25 mm  
pitch**

Contents PART 1

Tools for Inspecting  
Flexible Printed Circuits

# Clip Connector Lineup

## Just Fit Clip (CCJF Series)

See **P5** for more information.

**0.2 mm pitch**



### No. of pins

**17 to 101 pins** (No. of pins can be selected as desired.)

### Features

Ultra-compact clip connectors allow machining of widths to suit the number of pins; allows efficient installation when locations are obstructed by adjacent flexible printed circuits or by other objects.

### Wiring method

■ Flexible wiring with flexible connector  
0.2 mm pitch flexible connectors can be mounted.

## CCSE Series

See **P6** for more information.

**0.25 mm pitch**



Note: To improve the visibility of the FPC and guide during operation, we will gradually transition the guide color from orange to blue.

### No. of pins

**17 to 40 pins** (No. of pins can be selected as desired.)

### Features

Low-cost clip connectors also suitable for use with nonstandard-shaped flexible printed circuits (after requisitemachining).

### Wiring method

■ Flexible wiring with flexible connector  
0.25 mm pitch flexible connectors can be mounted.

### ■ FRC connector wiring

( If an unmounted FRC connector is specified, it is possible to provide discrete wiring in the throughhole for the FRC connector. )

## Just Fit Clip (CCJF Series)

See **P7** for more information.

**0.25 mm pitch**



### No. of pins

**41 to 79 pins** (No. of pins can be selected as desired.)

### Features

Ultra-compact clip connectors allow machining of widths to suit the number of pins; allows efficient installation when locations are obstructed by adjacent flexible printed circuits or by other objects.

### Wiring method

■ Flexible wiring with flexible connector  
0.25 mm pitch flexible connectors can be mounted.

### ■ FRC connector wiring

( If an unmounted FRC connector is specified, it is possible to provide discrete wiring in the throughhole for the FRC connector. )



0.2/0.25 mm pitch

0.3 mm pitch

0.4 mm pitch

0.5 mm pitch

0.8 mm pitch

1.0 mm pitch

1.25 mm pitch

Standard Clip  
CCMF Series with  
individually machined  
guide sections

Option details  
Optional open/close  
retaining function

**0.2**  
mm pitch

Tools for Inspecting Flexible Printed Circuits

Flexible Cable Wiring Type

Pin number specified, individually guide processed,  
width processed series

## CCJF Series

Product no.: CCJF-020M-(number of pins)

Range of available pin number (17 to 101 pins)



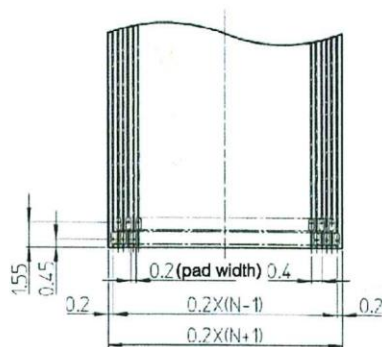
### Product Overview

- Clip connector for 0.2 mm pitch flexible cables.
- Compatible with zigzag configurations.
- Uses the Just Fit Series body, for compactness in size and layout flexibility

### Items included in this product set

- Clip connector main body
- Flexible cable holding board (for rear surface)
- \* The Flexible cable holding board (for front surface) is fitted to the main body before delivery.

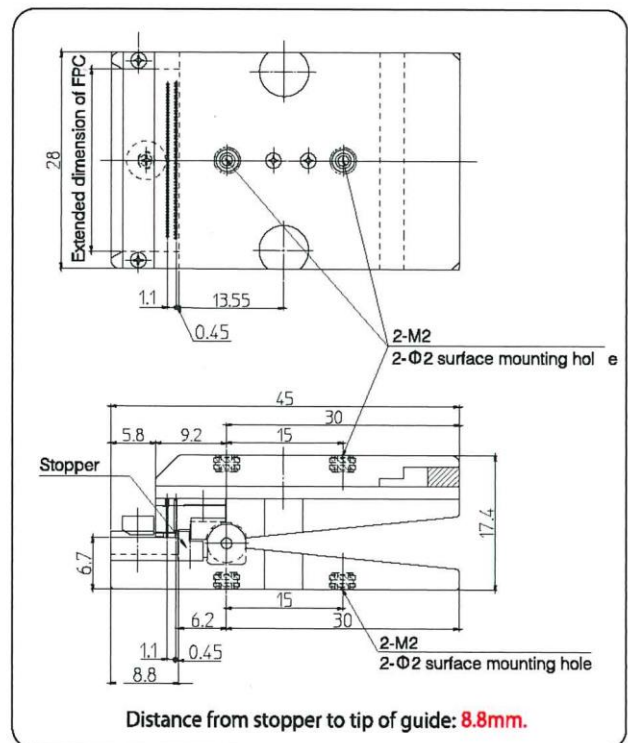
### Dimensional diagram for matching FPC/FFC terminals



Compatible with flexible printed circuits recommended for JST Connectors: FVX and FVXS connectors.

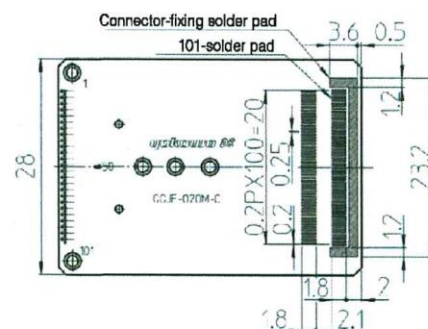
\*The probe and guide configuration is designed to suit the specified number of pins, with the center serving as the reference point.

\*No 0.2 mm pitch flexible connector provided for wiring.



\* Orders for the 0.2 mm pitch CCJF series are not width-processed.

### Dimension of conforming FPC/FFC terminal



\* Used exclusively for flexible cable wiring.

**0.25**  
mm pitch

Tools for Inspecting Flexible Printed Circuits

Flexible wiring type/FRC connector type

Pin number specified, individually guide processed series

Note: To improve the visibility of the FPC and guide during operation, we will gradually transition the guide color from orange to blue.

## CCSE Series

**CCSE-025S-(number of pins)/CCSE-025S-(number of pins)-FRC**

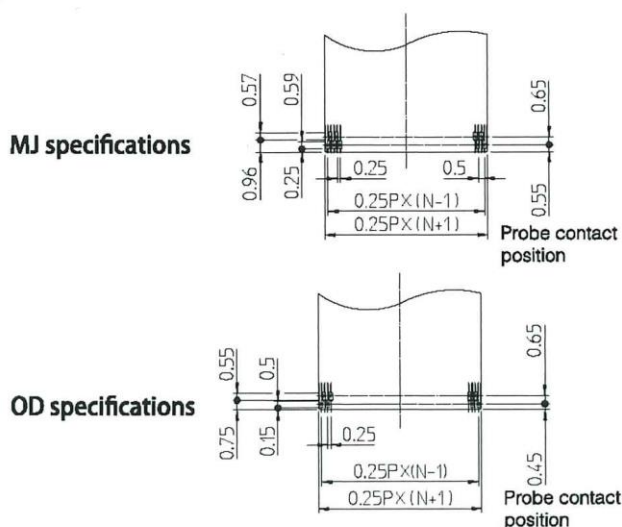
Range of available pin number (17 to 40 pins)



### Product Overview

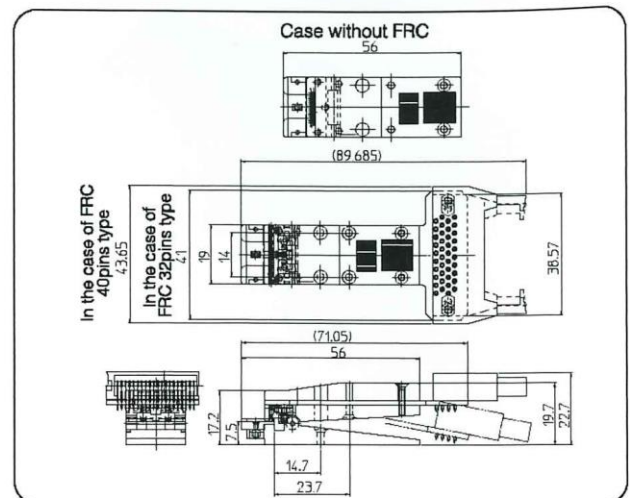
- Clip connector compatible with 0.25-mm pitch flexible printed circuits.

### Dimensional diagram for matching FPC/FFC terminals



\*The probe and guide configuration is designed to suit the specified number of pins, with the center serving as the reference point.

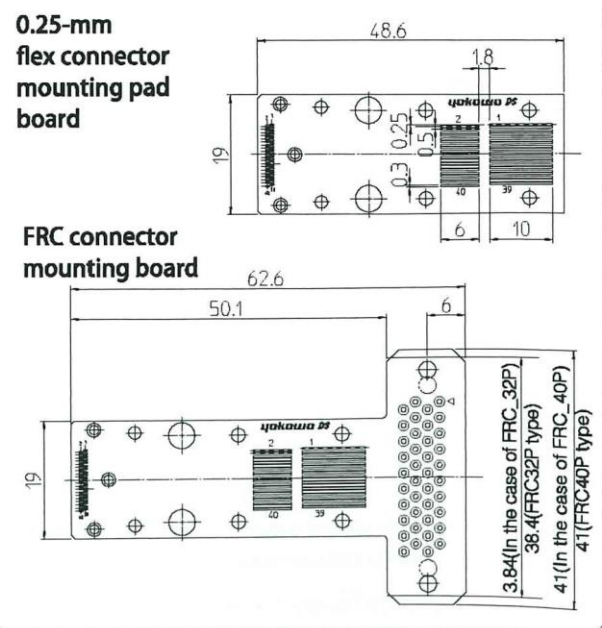
\*No 0.25 mm pitch flexible connector provided for wiring.



### Items included in this product set

- Clip connector main body
- Flexible cable holding board (for rear surface)
- \* The Flexible cable holding board (for front surface) is fitted to the main body before delivery.

### Basic wiring dimensional diagram





0.2/0.25 mm  
pitch

0.3 mm  
pitch

0.4 mm  
pitch

0.5 mm  
pitch

0.8 mm  
pitch

1.0 mm  
pitch

1.25 mm  
pitch

Standard Clip  
CCJF Series with  
individually machined  
guide sections

Option details  
Optional open/close  
retaining function

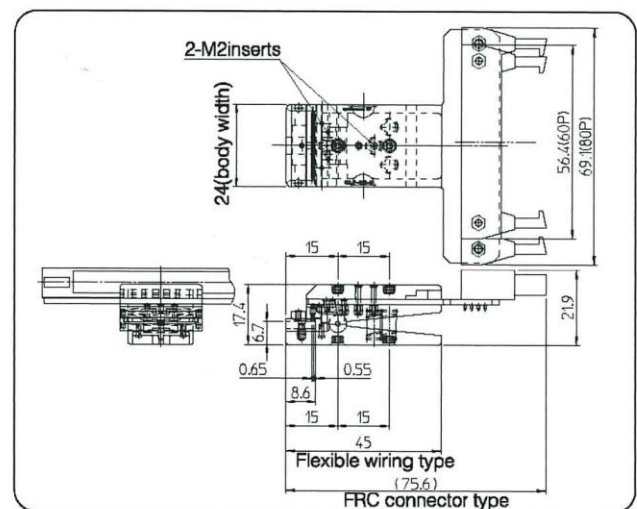
## Tools for Inspecting Flexible Printed Circuits

## Flexible wiring type/FRC connector type

Pin number specified, individually guide processed,  
width processed series

### CCJF Series

**CCJF-025M-(number of pins)/CCJF-025M-(number of pins)-FRC**  
Range of available pin number (41 to 79 pins)



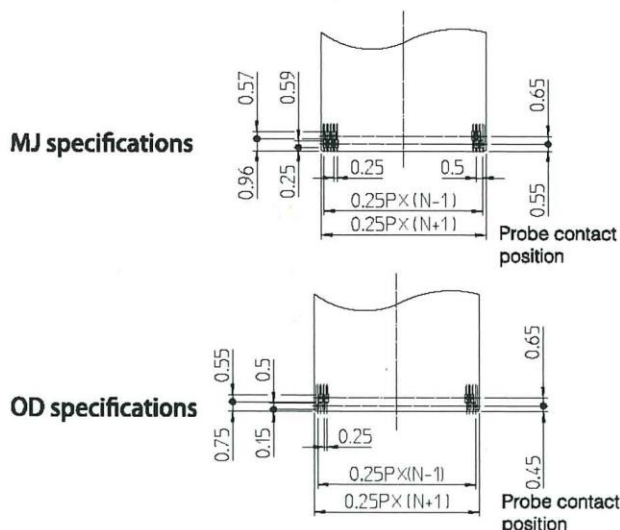
#### Product Overview

- Clip connector compatible with 0.25-mm pitch flexible printed circuits.
- Uses the compact Just Fit Series body for layout versatility.

#### Items included in this product set

- Clip connector main body
- Flexible cable holding board (for rear surface)
- \* The Flexible cable holding board (for front surface) is fitted to the main body before delivery.

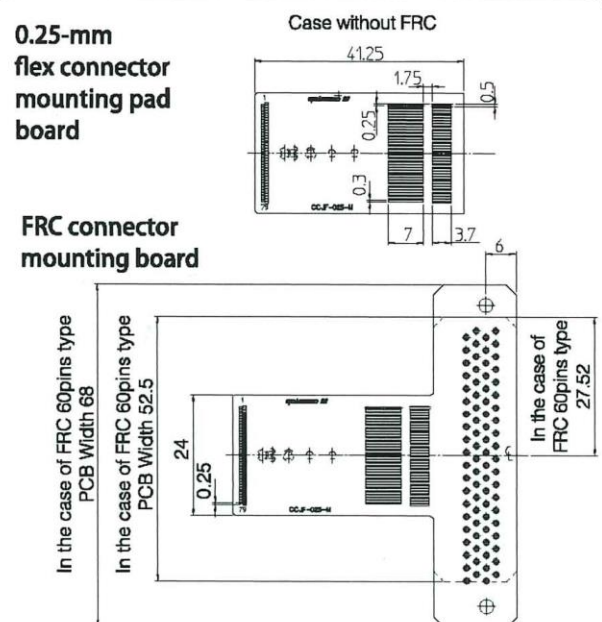
#### Dimensional diagram for matching FPC/FFC terminals



\*The probe and guide configuration is designed to suit the specified number of pins, with the center serving as the reference point.

\*No 0.25 mm pitch flexible connector provided for wiring.

#### Basic wiring dimensional diagram





**0.3 mm  
pitch**

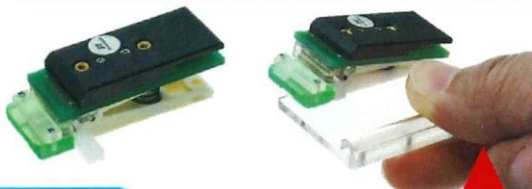
Contents PART 1

Tools for Inspecting  
Flexible Printed Circuits

# Clip Connector Lineup

## Auto Close Clip (CCAC Series)

See **P10** for more information.



**No. of pins**

**6 to 39 pins**

(Specify the number of pins to suit requirements.)

**Features**

A convenient holder is provided for use when holding the Auto Close Clip.

Product set contents · Holder · M2 x 5 countersunk screws (x2)

Clip connector that closes automatically (making pin contact) when a flexible printed circuit is inserted. The clip is open by default for ease of use when handling test items that must be held with both hands. The width is machined to dimensions suitable for the number of pins to allow use with flexible printed circuits arranged side by side or in confined spaces. The locking mechanism is designed to withstand approximately 50,000 open/close cycles. (This is a guideline figure, not a guarantee.)

## Wiring method

### ■Flexible wiring with flexible connector

Allows mounting of 0.3 mm pitch flexible connectors.

### ■Discrete wiring

- Lead wires can be soldered by the customer or by Yokowo.

### ●Yokowo discrete wiring soldering

10-color discrete wiring with core diameter of 0.24 mm, external insulation diameter of 0.54 mm, wire length of 300 mm from board edge, and ends stripped to a length of 3 mm.

## Short Size Clip (CCSS Series)

See **P11** for more information.



**No. of pins**

**6 to 39 pins**

(Specify the number of pins to suit requirements.)

**Features**

Clip connector suitable for use on inspection devices—for example, when length must be minimized or the flexible printed circuit must be inserted from above.

## Wiring method

### ■Flexible wiring with flexible connector

Allows mounting of 0.3 mm pitch flexible connectors.

## Just Fit Clip (CCJF Series)

See **P12** for more information.



### No. of pins

**6 to 91 pins** (Specify the number of pins to suit requirements.)

### Features

Ultra-compact clip connectors allow machining of widths to suit the number of pins; allows efficient installation when locations are obstructed by adjacent flexible printed circuits or by other objects.

### Wiring method

#### Flexible wiring with flexible connector

Allows mounting of 0.3-mm pitch flexible connectors.

#### Discrete wiring

- Lead wires can be soldered by the customer or by Yokowo.

\* Excluding CCJF-030M-\*\*

#### Yokowo discrete wiring soldering

10-color discrete wiring with core diameter of 0.24 mm, external insulation diameter of 0.54 mm, wire length of 300 mm from board edge, and ends stripped to a length of 3 mm.

\* Excluding CCJF-030M-\*\*

## CCSE Series

See **P14** for more information.



Note: To improve the visibility of the FPC and guide during operation, we will gradually transition the guide color from orange to blue.

### No. of pins

**11 to 101 pins** (Specify the number of pins to suit requirements.)

### Features

Low-cost clip connectors also suitable for use with nonstandard-shaped flexible printed circuits (after requisite machining).

### Wiring method

#### Flexible wiring with flexible connector

Available as boards on which 0.3 mm and 0.5-mm pitch flexible connectors can be mounted.

#### Discrete wiring

- Lead wires can be soldered by the customer or by Yokowo.

#### Yokowo discrete wiring soldering

10-color discrete wiring with core diameter of 0.24 mm, external insulation diameter of 0.54 mm, wire length of 300 mm from board edge, and ends stripped to a length of 3 mm.

#### FRC connector wiring

Used with Hirose FRC connectors  
HIF6-32, 40, 60, 80, 100PA-1.27DS



# 0.3

## Tools for Inspecting Flexible Printed Circuits

### Flexible cable and discrete wiring type

## Auto closing, variable pin number, machinable guide, machinable width series

## CCAC Series

The locking mechanism is designed for approximately 50,000 open/close cycles (in tests performed by Yokowo), assuming one open/close cycle per second. (Please note that this is guideline figure, not a guarantee. Actual performance will depend on usage conditions.)

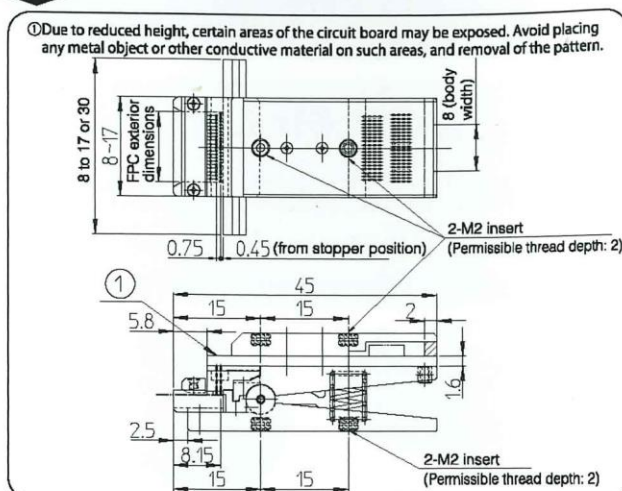
**CCAC-030-(number of pins) Board code** \* Re  
**Range of available pin number (6 to 39 pins)**


\* Refer to **this page** for information on different product codes.

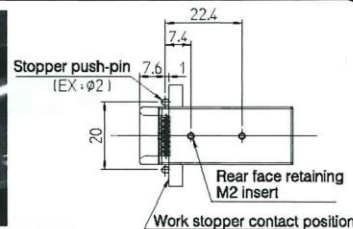
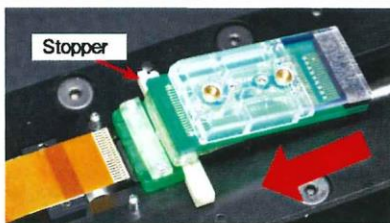


### Items included in this product set

- Ultra-compact clip connector main body
  - Flexible cable holding board (for rear surface)
  - \* The Flexible cable holding board (for front surface) is fitted to the main body before delivery.
  - \* A convenient holder is provided for hand-held use of CCAC Series.
- See **P8** for more information.



 This product cannot be closed with only a flexible printed circuit if the flexible printed circuit to be inspected is weakened by incorrect dimensions or lacks a reinforcing plate. Use by inserting pins into the set positions on a retaining plate. For cases in which the stopper extends sideways, as shown in the diagram on the right, specify by selecting "Stopper 30" on the Inquiry Sheet on **P80**. If this is unspecified, the product supplied will have dimensions equal to body width.

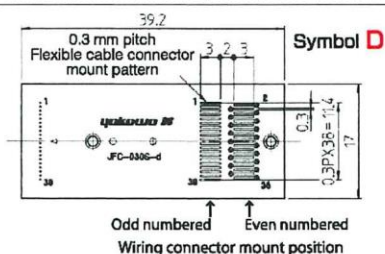


\*The probe and guide configuration for this product is designed to suit the specified number of pins with the center serving as the reference point.  
\*No 0.3-mm pitch flexible connector provided for wiring.

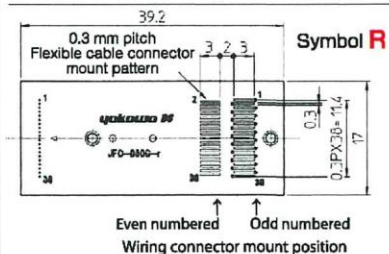
### Product codes for different circuit boards

Please specify the desired board type on the Clip Connector Inquiry Sheet on **P80**

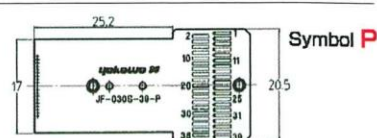
Circuit board for connectors on which pins on the odd-numbered side are positioned at the front:



Circuit board for connectors on which pins on the even-numbered side are positioned at the front:



Circuit board for discrete wiring:



Orders may also specify discrete wires soldered by Yokowo for the maximum number of pins for each body width.

Board with discrete wiring: Symbol **H**

- Three types of circuit boards are available: one for connectors on which pins on the odd-numbered side are positioned at the front, one for connectors on which pins on the even-numbered side are positioned at the front, and one for discrete wiring. Referring to the examples below, append the corresponding circuit board symbol to the name of the product you are ordering.

[Example] Specify symbol D if the odd-numbered side is at the front (left in the above diagram)

**CCAC-030-25D**  
**CCAC-030-39D-ZZ**

Specify symbol R if the even-numbered side is at the front (middle in the above diagram)

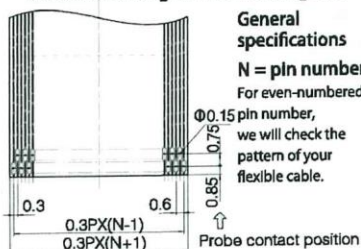
**CCAC-030-31R**  
**CCAC-030-6R**

Specify symbol P for discrete wiring  
(right in the above diagram)  
**CCAC-030-23P**  
**CCAC-030-29P-ZZ**

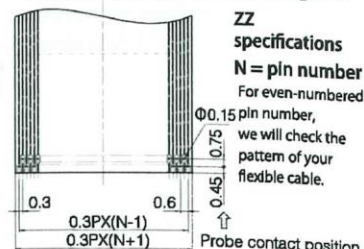
Specify symbol H for boards with discrete wiring (Wiring provided and soldered by Yokowo).  
**CCAC-030-25H**  
**CCAC-030-31H**

### Dimensional diagram for matching FPC/FFC terminals

### Dimensional diagram for matching FPC



### Dimensional diagram for matching FPC





0.2/0.25 mm pitch	<b>0.3 mm pitch</b>	0.4 mm pitch	0.5 mm pitch	0.8 mm pitch	1.0 mm pitch	1.25 mm pitch	Standard Clip CCSS02 series with individually machined brass pins and clips	Option details Optional stainless steel retaining function
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## Tools for Inspecting Flexible Printed Circuits

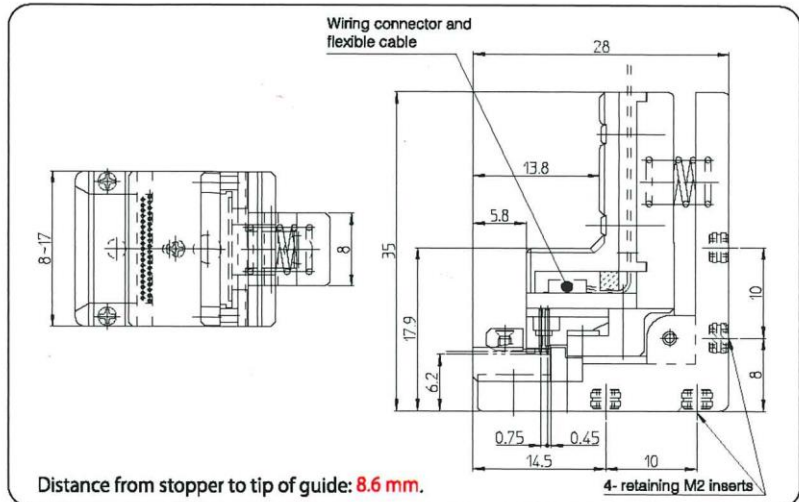
## Flexible Wiring Type

# Reduced length, variable pin number, machinable guide, machinable width series

## CCSS Series

**CCSS-030-(number of pins) Board code**  
**Range of available pin number (6 to 39 pins)**

\* Refer to **this page** for information on different product codes.



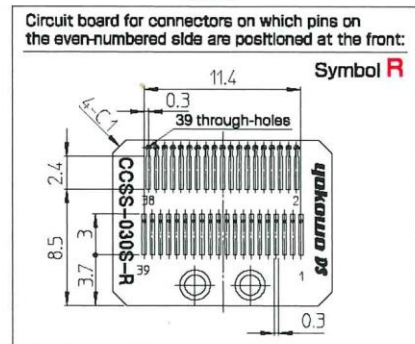
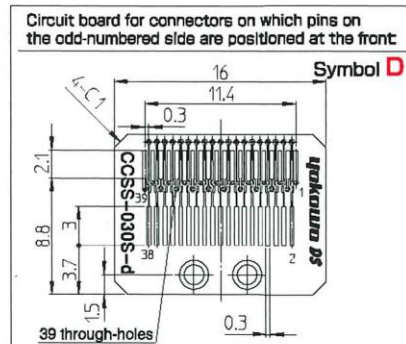
\*The probe and guide configuration for this product is designed to suit the specified number of pins with the center serving as the reference point.  
\*No 0.3-mm pitch flexible connector provided for wiring.

### Items included in this product set

- Ultra-compact clip connector main body
- \* The Flexible cable holding board (for front surface) is fitted to the main body before delivery.

### Product codes for different circuit boards

Please specify the desired board type on the Clip Connector Inquiry Sheet on **P80**.



- Two types of circuit boards are available: one for connectors on which pins on the odd-numbered side are positioned at the front and one for connectors on which pins on the even-numbered side are positioned at the front.

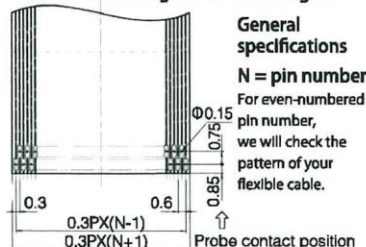
Referring to the examples below, append the corresponding circuit board symbol to the name of the product you are ordering.

[Example] Specify symbol D if the odd-numbered side is at the front (left in the above diagram)  
CCSS-030-25D  
CCSS-030-39D-ZZ

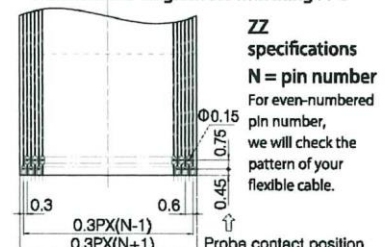
Specify symbol R if the even-numbered side is at the front (middle in the above diagram)  
CCSS-030-31R-ZZ  
CCSS-030-6 R

### Dimensional diagram for matching FPC/FFC terminals

#### Dimensional diagram for matching FPC



#### Dimensional diagram for matching FPC



### Recommended for the following applications

When space is at a premium (in the axis of length)



When space is at a premium (in the axis of height)





**0.3**  
mm pitch

## Tools for Inspecting Flexible Printed Circuits

### Flexible cable and discrete wiring type

**Pin number specified, individually guide processed, width processed series** **In response to demand, we now accommodate**

**In response to demand, we now accommodate FRC connector wiring.**

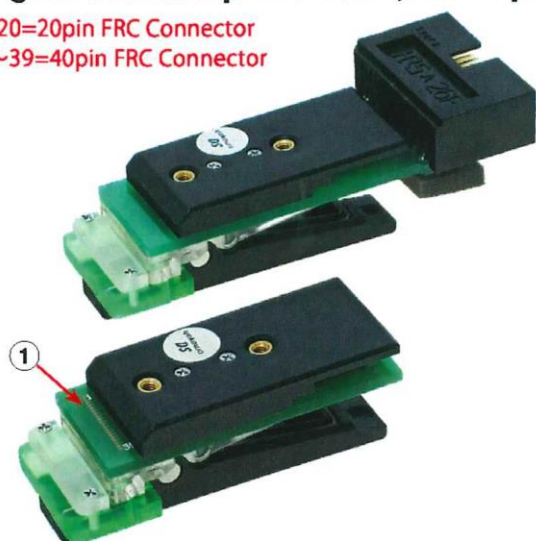
## CCJF Series

**CCJF-030-(number of pins) Board code** \* Refer  
**Range of available pin number (6 to 39 pins)**

\* Refer to **this page** for information on different product codes.

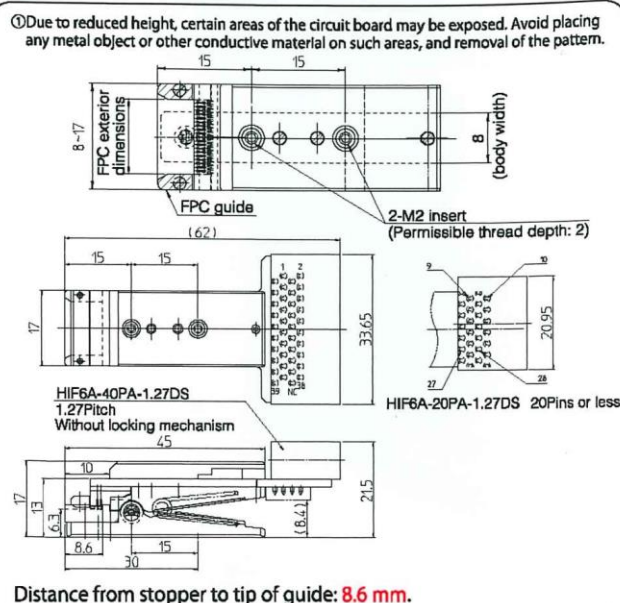
6~20=20pin FRC Connector

21~39=40pin FRC Connector



### Items included in this product set

- Ultra-compact clip connector main body
  - Flexible cable holding board (for rear surface)
- \* The Flexible cable holding board (for front surface) is fitted to the main body before delivery.



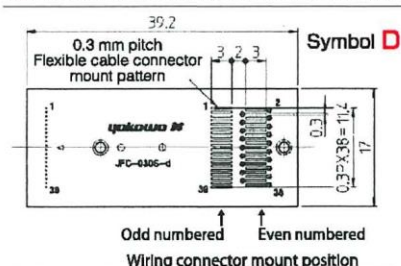
\*The probe and guide configuration for this product is designed to suit the specified number of pins with the center serving as the reference point.

\*No 0.3 mm pitch flexible connector provided for wiring.

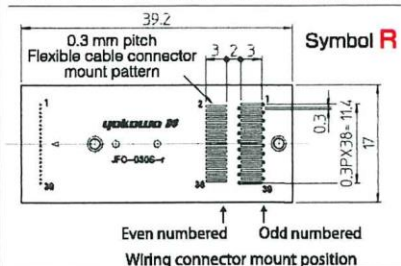
### Product codes for different circuit boards

Please specify the desired board type on the Clip Connector Inquiry Sheet on **P80**

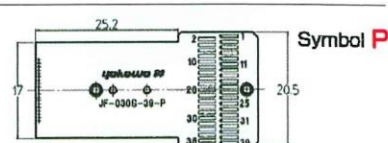
Circuit board for connectors on which pins on the odd-numbered side are positioned at the front:



Circuit board for connectors on which pins on the even-numbered side are positioned at the front:



Circuit board for discrete wiring:



Orders may also specify discrete wires soldered by Yokowo for the maximum number of pins for each body width.

Board with discrete wiring: Symbol **H**

- Three types of circuit boards are available: one for connectors on which pins on the odd-numbered side are positioned at the front, one for connectors on which pins on the even-numbered side are positioned at the front, and one for discrete wiring. Referring to the examples below, append the corresponding circuit board symbol to the name of the product you are ordering.

[Example] Specify symbol D if the odd-numbered side is at the front (left in the above diagram).

CCJF-030-25D  
CCJF-030-39D-ZZ

Specify symbol P for boards with discrete wiring  
(on the right in the above diagram)  
(wiring soldered by customer).

CCJF-030-23P  
CCJF-030-29P-ZZ

Specify symbol R if the even-numbered side is at the front (middle in the above diagram)

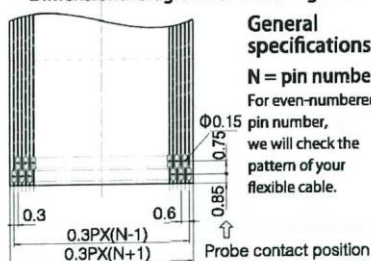
CCJF-030-31R  
CCJF-030-6R

Specify symbol H for boards with discrete wiring (wiring provided and soldered by Yokowo).

CCJF-030-25H  
CCJF-030-31H

### Dimensional diagram for matching FPC/FFC terminals

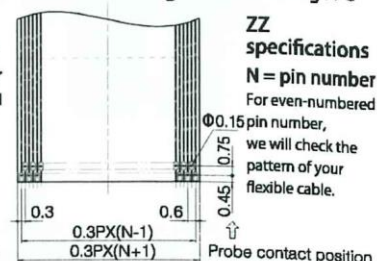
### Dimensional diagram for matching FPC



### Dimensional diagram for matching FPC

## ZZ specifications

**N = pin number**  
For even-numbered  
15 pin number,  
we will check the  
pattern of your  
flexible cable.





0.2/0.25 mm pitch	0.3 mm pitch	0.4 mm pitch	0.5 mm pitch	0.8 mm pitch	1.0 mm pitch	1.25 mm pitch	Standard Clip CCJF Series with individually maintained 0.3mm pitch	Option details Optional operation relaxing function
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## Tools for Inspecting Flexible Printed Circuits

## Flexible Cable Wiring Type

Pin number specified, individually guide processed,  
width processed series

In response to demand, we now accommodate  
FRC connector wiring.

### CCJF Series (Multi-pin Version)

Product no.: CCJF-030M-pin number circuit board symbol  
Range of available pin number (40 to 91 pins)

40~60=60pin FRC Connector  
61~91=100pin FRC Connector



#### Product Overview

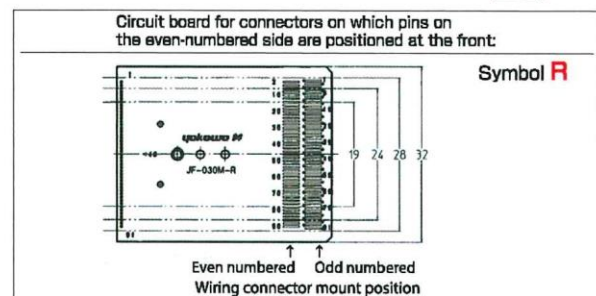
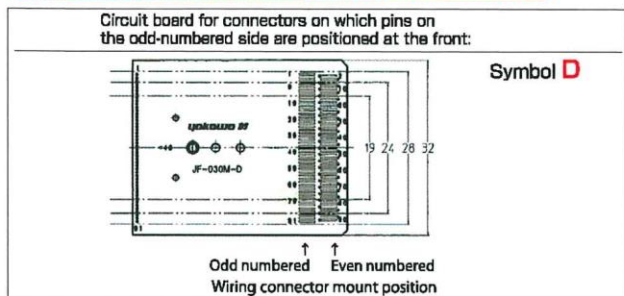
- New multi-pin version of the Just Fit Clip for inspecting flexible circuit boards in confined spaces or with adjacent boards.
- Use in conjunction with previous products to expand the range of inspection in confined spaces.
- The front end can be cut to reduce the length of the flexible circuit board.

#### Items included in this product set

- Ultra-compact clip connector main body
- Flexible cable holding board (for rear surface)
- \* The Flexible cable holding board (for front surface) is fitted to the main body before delivery.

#### Product codes for different circuit boards

Please specify the desired board type on the Clip Connector Inquiry Sheet on **P80**.



#### \*Used exclusively for flexible cable wiring.

- Two types of circuit boards are available: one for connectors on which pins on the odd-numbered side are positioned at the front and one for connectors on which pins on the even-numbered side are positioned at the front.

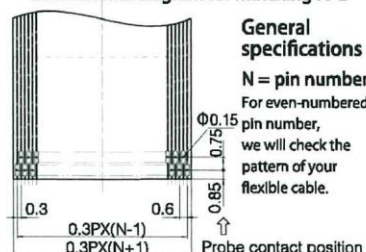
Referring to the examples below, append the corresponding circuit board symbol to the name of the product you are ordering.

[Example] Specify symbol D if the odd-numbered side is at the front (left in the above diagram)  
CCJF-030M-41D  
CCJF-030M-83D-ZZ

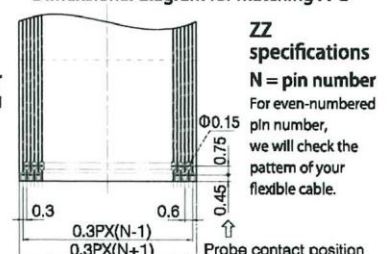
Specify symbol R if the even-numbered side is at the front (middle in the above diagram)  
CCJF-030M-51R-ZZ  
CCJF-030M-75R

#### Dimensional diagram for matching FPC/FFC terminals

##### Dimensional diagram for matching FPC



##### Dimensional diagram for matching FPC





**0.3**  
mm pitch

Tools for Inspecting Flexible Printed Circuits

Discrete and flexible cable wiring type

## Pin number specified, individually guide processed series

Note: To improve the visibility of the FPC and guide during operation, we will gradually transition the guide color from orange to blue.

### CCSE Series

#### Product Overview

- es are produced from a 19, 24, 33, or 44 mm wide clip mother body, with pin number ranging from 11 to 101 pins configured as specified by the customer.
- As in the past, pin number from 11 and over are available even for the 24 mm wide clip.

- The guide is processed individually to match the pin number and configuration specified by the customer.
- For products in this series, probes are configured and guides are fabricated with respect to the center of the connector to suit the specified pin number.

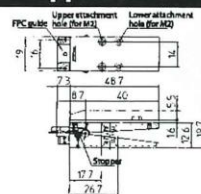
Clip width **19mm**

#### CCSE-030S-pin number (0.3 mm pitch)

Range of available pin number 11 to 29 pins

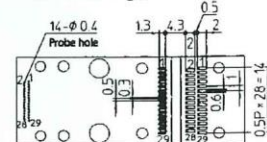


#### Appearance



#### Basic wiring pattern

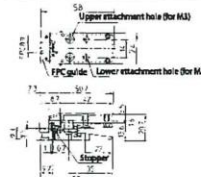
Provided for mounting a 0.5 mm pitch FFC connector



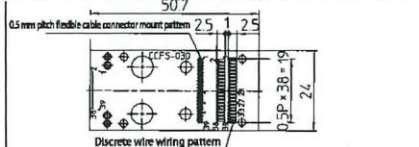
Clip width **24mm**

#### CCSE-030M-pin number (0.3 mm pitch)

Range of available pin number 11 to 39 pins



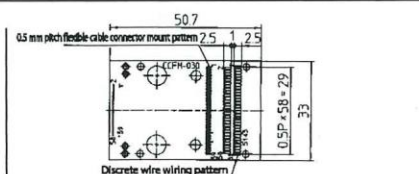
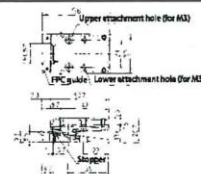
Provided for mounting a 0.5 mm pitch FFC connector



Clip width **33mm**

#### CCSE-030L-pin number (0.3 mm pitch)

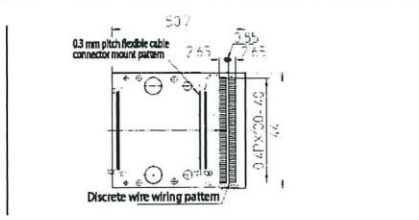
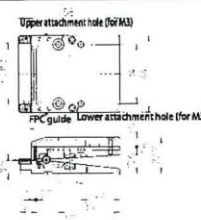
Range of available pin number 40 to 59 pins



Clip width **44mm**

#### CCSE-030X-pin number (0.3 mm pitch)

Range of available pin number 60 to 101 pins



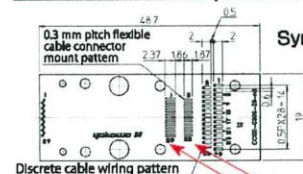
#### Product codes for different circuit boards

For cases involving mounting a connector for 0.3 pitch FFC (See the diagram below.)

- There are two types of circuit boards: ones for connectors on which pins on the odd-numbered side are positioned at the front and ones for connectors on which pins on the even-numbered side are positioned at the front. Referring to the example below, append the corresponding circuit board symbol to the name of the product you are ordering.

Example: Specify symbol D if the odd-numbered side is at the front (to the left in the diagram below)  
**CCSE-030S-25D**

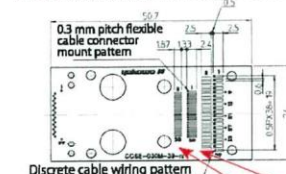
Circuit board for connectors on which pins on the odd-numbered side are positioned at the front:



The example shown above is for the 19 mm wide clip. Odd numbered Even numbered Wiring connector mount position

Specify symbol R if the even-numbered side is at the front (to the right in the diagram below)  
**CCSE-030S-31R-ZZ**

Circuit board for connectors on which pins on the even-numbered side are positioned at the front:



The example shown above is for the 24 mm wide clip. Even numbered Odd numbered Wiring connector mount position

0.2/0.25 mm pitch	<b>0.3 mm pitch</b>	0.4 mm pitch	0.5 mm pitch	0.8 mm pitch	1.0 mm pitch	1.25 mm pitch	Standard Clip GSD Series with industry standard	Option details Optional open base resisting function
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### Items included in this product set

- Wiring can be attached to this product by
  - Soldering a discrete wire
  - Connecting cable wiring to a 0.3 or 0.5 mm flexible on-board cable connector

■ Items included in this product set

Contains the three items listed below:

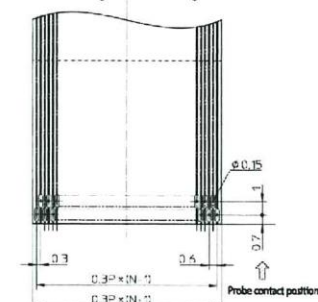
- Clip connector main body (equipped with a guide manufactured to the customer-specified pin number)
- Guide and Flexible cable holding board lock screw x 2 pcs.
- Flexible cable holding board set (for back and front surfaces)

### Matching FPC terminal and guide to distinguishing the difference between products made to general and ZZ specifications

■ Clip made to general specification

- Transparent pin bloc
- Orange stopper

### Dimensional diagram of matching FPC



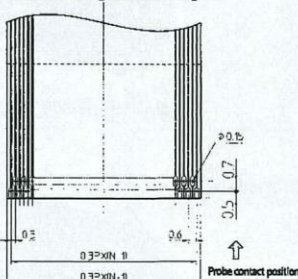
N = pin number

For even-numbered pin number, we will check the pattern of your flexible cable to confirm.

■ Clip with narrow pitch made to ZZ specifications

- Blue pin block
- Blue stopper

### Dimensional diagram of matching FPC



N = pin number

For even-numbered pin number, we will check the pattern of your flexible cable to confirm.

\*For products made to ZZ specifications,  
be sure to append -ZZ to the Product no.

**Example:**

CCSE-030S-29-ZZ  
CCSE-030S-21-FRC-ZZ

**Notice**

The circuit board for **any clip width** in this series is available as a conventional 0.5 pitch flexible cable connector mountable board or as a 0.3 pitch connector mountable board. Keep in mind that the 0.5 pitch flexible cable connector may not be compatible with **flexible cable connectors** outside a certain range of widths.

For the 19 mm wide clip connector, the maximum outside width of the FFC connector is **16 mm**.

For the 24 mm wide clip connector, the maximum outside width of the FFC connector is **21 mm**.

**For cases involving discrete wiring or mounting a connector for 0.5 pitch FFC.**

- No circuit board symbol needs to be specified.  
Please order using the conventional product no.

**Example: CCSE-030S-25**

For specifications in that discrete wiring is soldered by Yokowo for the maximum number of pins for each body width

- Add the board code "H" to the end of the product code when ordering.

Example: CCSE-030S-25H

(Wired with discrete wiring for 29 pins)

**CCSE-030M-31H**

(Wired with discrete wiring for 39 pins)

10-color discrete wiring with core diameter of 0.24 mm, external insulation diameter of 0.54 mm, wire length of 300 mm from board edge, and ends stripped to a length of 3 mm.



**0.3**  
mm pitch

Tools for Inspecting Flexible Printed Circuits

**FRC connector type**

**Pin number specified, individually guide processed series**

Note: To improve the visibility of the FPC and guide during operation, we will gradually transition the guide color from orange to blue.

## CCSE Series

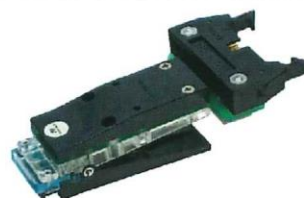
### Product Overview

- The products in this series are provided with an FRC connector for wiring use.
- The FRC connector included here is of the 1.27 mm pitch type.
- Products in this series are produced from a 19, 24, 33, or 44 mm wide clip mother body, with pin number ranging from 11 to 100 pins configured as specified by the customer.
- Pin number from 11 and over are available for even the 24 mm wide clip.
- Guides are individually processed to suit the configuration of the customer's flexible cable.
- For products in this series, probes are configured and guides are fabricated with respect to the center of the connector to suit the specified pin number.

**Clip width 19mm**

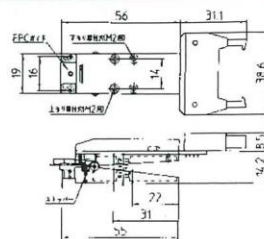
### CCSE-030S-pin number-FRC (0.3 mm pitch)

Range of available pin number  
11 to 29 pins



With 32-pin FRC connector

### Appearance



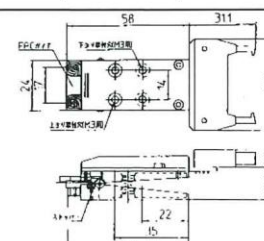
**Clip width 24mm**

### CCSE-030M-pin number-FRC (0.3 mm pitch)

Range of available pin number  
11 to 39 pins



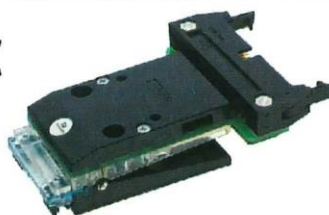
With 40-pin FRC connector



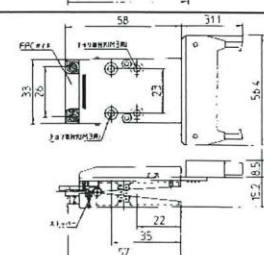
**Clip width 33mm**

### CCSE-030L-pin number-FRC (0.3 mm pitch)

Range of available pin number  
40 to 59 pins



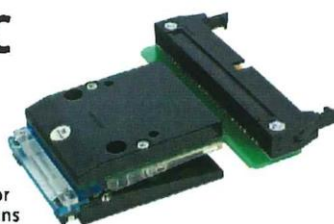
With 60-pin FRC connector



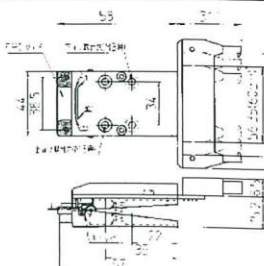
**Clip width 44mm**

### CCSE-030X-pin number-FRC (0.3 mm pitch)

Range of available pin number  
60 to 100 pins



60 flexible pins = 60-pin FRC connector  
61 to 80 pins = 80 pins  
81 to 100 pins = 100 pins



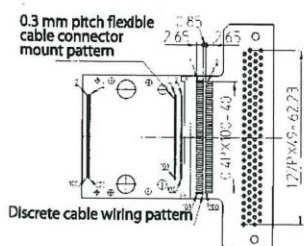
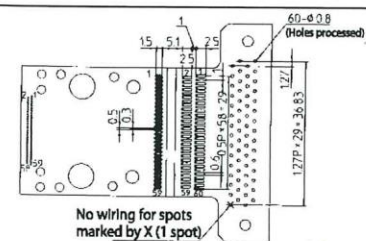
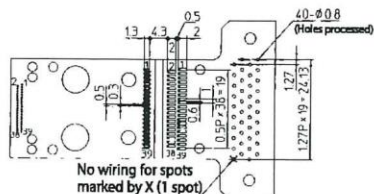
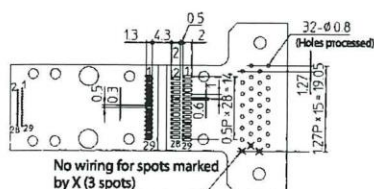
0.2/0.25 mm pitch	<b>0.3 mm pitch</b>	0.4 mm pitch	0.5 mm pitch	0.8 mm pitch	1.0 mm pitch	1.25 mm pitch	Standard Clip COAO series with internally milled and beveled	Option details Optional to enable retaining function
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### Items included in this product set

- Wiring to the products in this series is accomplished using Hirose HIF6-series (2-piece, 1.27 pitch) connectors 32D, 40D, 60D, 80D, and 100D, respectively.
- Items included in this product set Contains the three items listed below:
  - FRC connector-fitted clip connector main body (equipped with a guide manufactured to the customer-specified pin number)
  - Guide and Flexible cable holding board lock screw x 2 pcs.
  - Flexible cable holding board set (for back and front surfaces)
- Note that the FRC connector used in this product is the HIF6-32, 40, 60, 80, or 100PA-1.27DS connectors made by Hirose Electric.

## Basic wiring pattern

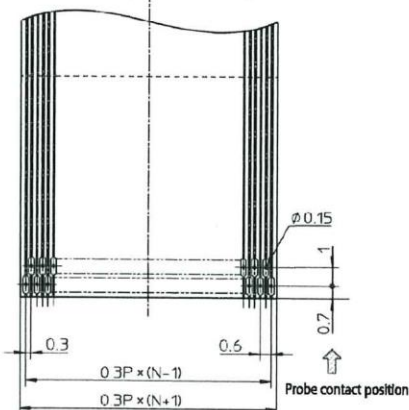
### Matching FPC terminal and guide to distinguishing the difference between products made to general and ZZ specifications



■ Clip made to general specification

- Transparent pin bloc
- Orange stopper

### Dimensional diagram of matching FPC

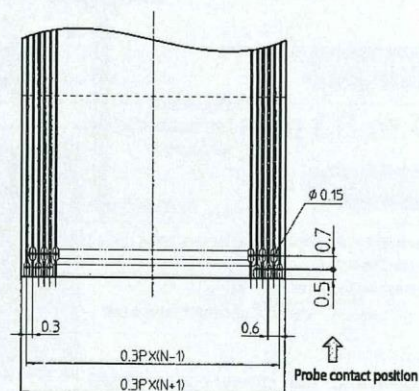


N = pin number

For even-numbered pin number, we will check the pattern of your flexible cable to confirm.

■ Clip with narrow pitch made to ZZ specifications

- Blue pin block
- Blue stopper



N = pin number

For even-numbered pin number, we will check the pattern of your flexible cable to confirm.

\*For products made to ZZ specifications,  
be sure to append -ZZ to the Product no.

**Example:**

CCSE-030S-29-ZZ  
CCSE-030S-21-FRC-ZZ



**0.4 mm  
pitch**

Contents PART 1

Tools for Inspecting  
Flexible Printed Circuits

# Clip Connector Lineup

## Auto Close Clip (CCAC Series)

See **P19** for more information.



### No. of pins

**4 to 33 pins** (No. of pins can be selected as desired.)

### Features

A convenient holder is provided for use when holding the Auto Close Clip.

Product set contents: Holder,  
M2 x 5 countersunk screws (x2)

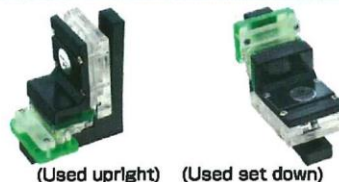
Clip connector that closes automatically (making pin contact) when a flexible printed circuit is inserted. The clip is open by default for ease of use when handling test items that need to be held with both hands. The locking mechanism is designed for approximately 50,000 open/close cycles. (Figures are guidelines, not guarantees.)

### Wiring method

- **Flexible wiring with flexible connector**  
0.4-mm pitch flexible connectors can be mounted.
- **Discrete wiring**  
Lead wires can be soldered by the customer.

## Short Size Clip (CCSS Series)

See **P20** for more information.



### No. of pins

**4 to 33 pins** (No. of pins can be selected as desired.)

### Features

Clip connector suitable for use on inspection devices, for example when length must be minimized or the flexible printed circuit must be inserted from above.

### Wiring method

- **Flexible wiring with flexible connector**

## Just Fit Clip (CCJF Series)

See **P21** for more information.



### No. of pins

**4 to 33 pins** (No. of pins can be selected as desired.)

### Features

Because it uses a compact body, this ultra-compact series is ideal when interfering objects are present near or around the flexible wiring.

### Wiring method

- **Flexible wiring with flexible connector**  
0.4-mm pitch flexible connectors can be mounted.
- **Discrete wiring**  
Lead wires can be soldered by the customer.

■ **FRC connector wiring**  
used with Hirose FRC connectors  
HIF6-40PA-1.27DS.

**0.4**  
mm pitch

Tools for Inspecting Flexible Printed Circuits

Flexible cable and discrete wiring type

Auto closing, variable pin number,  
machinable guide, machinable width series

## CCAC Series

The locking mechanism is designed for approximately 50,000 open/close cycles (in tests performed by Yokowo), assuming one open/close cycle per second. (Please note that this is guideline figure, not a guarantee. Actual performance will depend on usage conditions.)

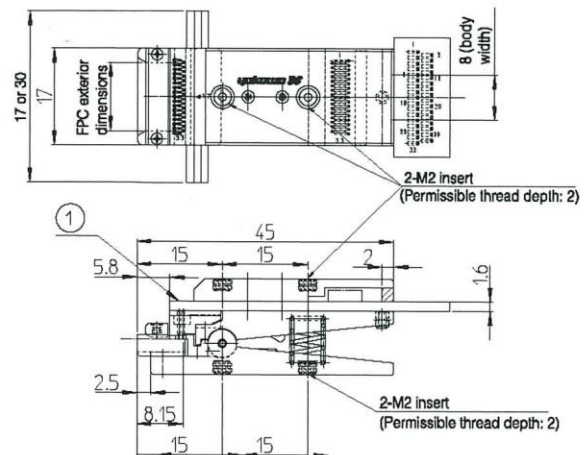
**CCAC-040-(number of pins)**  
Range of available pin number (4 to 33 pins)



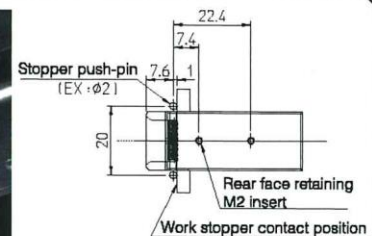
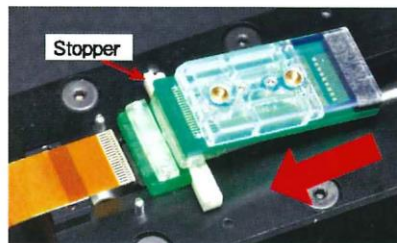
### Items included in this product set

- Ultra-compact clip connector main body
  - Flexible cable holding board (for rear surface)
  - \* The Flexible cable holding board (for front surface) is fitted to the main body before delivery.
  - \* A convenient holder is provided for hand-held use of CCAC Series.
- See **P18** for more information.

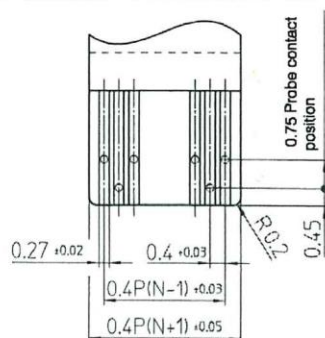
① Due to reduced height, certain areas of the circuit board may be exposed. Avoid placing any metal object or other conductive material on such areas, and removal of the pattern.



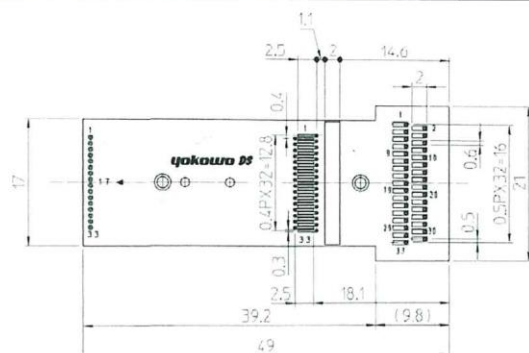
This product cannot be closed with only a flexible printed circuit if the flexible printed circuit to be inspected is weakened by incorrect dimensions or lacks a reinforcing plate. Use by inserting pins into the set positions on a retaining plate. For cases in which the stopper extends sideways, as shown in the diagram on the right, specify by selecting "Stopper 30" on the Inquiry Sheet on **P80**. If this is unspecified, the product supplied will have dimensions equal to body width.



### Dimensional diagram for matching FPC/FFC terminals



### Basic wiring dimensional diagram



- \* Wiring can be attached to this product by
  - Soldering a discrete wire
  - Connecting cable wiring to a flexible on-board cable connector

\*The probe and guide configuration for this product is designed to suit the specified number of pins with the center serving as the reference point.

\*No 0.4-mm pitch flexible connector provided for wiring.



**0.4**  
mm pitch

## Tools for Inspecting Flexible Printed Circuits

**Flexible Wiring Type**

**Reduced length, variable pin number, machinable guide, machinable width series**

### CCSS Series

**CCSS-040-(number of pins)**

**Range of available pin number (4 to 33 pins)**



#### Items included in this product set

- Ultra-compact clip connector main body
- \* The Flexible cable holding board (for front surface) is fitted to the main body before delivery.

#### Recommended for the following applications

When space is at a premium  
(in the axis of length)

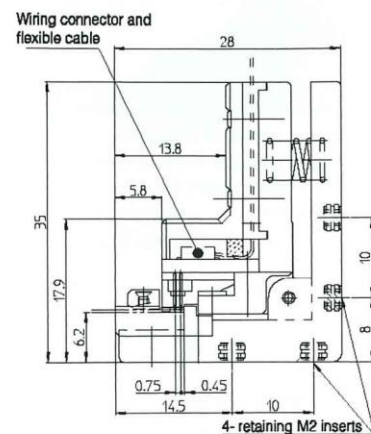
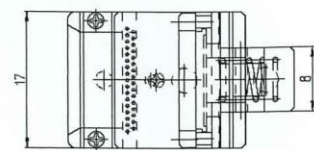
CCJF

CCSS

When space is at a premium  
(in the axis of height)

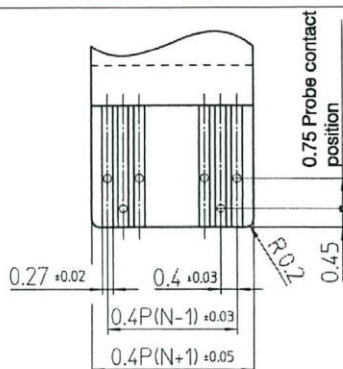
CCSS

CCJF

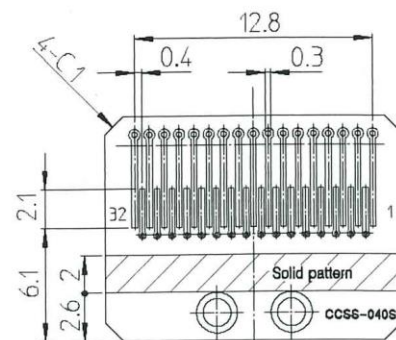


Distance from stopper to tip of guide: **8.6 mm.**

#### Dimensional diagram for matching FPC/FFC terminals



#### Basic wiring dimensional diagram



\* This product can be wired using flexible wiring by mounting a flexible connector.

\*The probe and guide configuration for this product is designed to suit the specified number of pins with the center serving as the reference point.

\*No 0.4-mm pitch flexible connector provided for wiring.



0.2/0.25 mm pitch	0.3 mm pitch	<b>0.4 mm pitch</b>	0.5 mm pitch	0.8 mm pitch	1.0 mm pitch	1.25 mm pitch	Standard Clip CCMD Series with individually machined	Option details Optional open/cable retaining function
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## Tools for Inspecting Flexible Printed Circuits

### Flexible cable and discrete wiring type

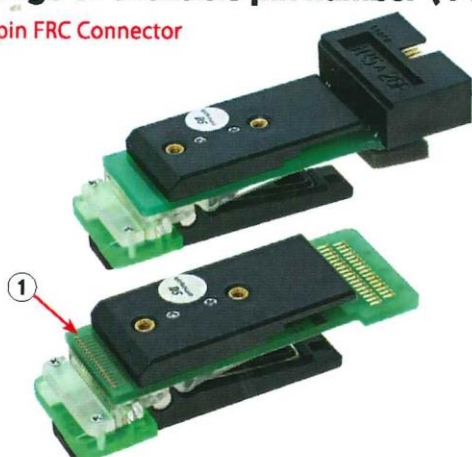
**Pin number specified, individually guide processed,  
width specified series**

**In response to demand, we now accommodate FRC connector wiring.**

## CCJF Series

**CCJF-040-(number of pins)**  
**Range of available pin number (4 to 33 pins)**

### 40pin FRC Connector

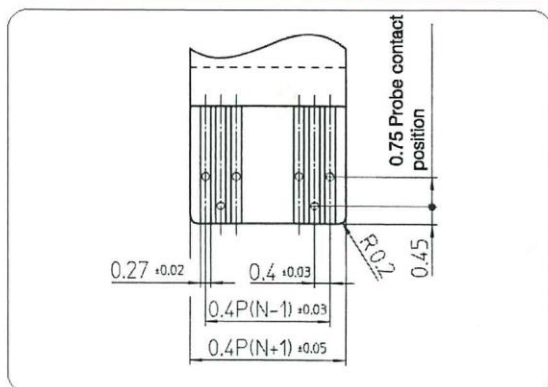


①Due to reduced height, certain areas of the circuit board may be exposed. Avoid placing any metal object or other conductive material on such areas, and removal of the pattern

### Items included in this product set

- Ultra-compact clip connector main body
  - Flexible cable holding board (for rear surface)
- \* The Flexible cable holding board (for front surface) is fitted to the main body before delivery.

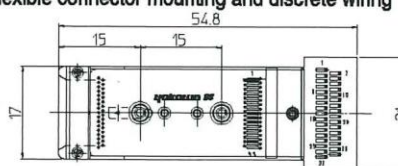
### Dimensional diagram for matching FPC/FFC terminals



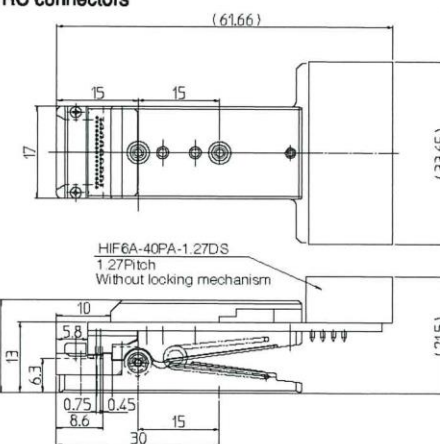
\*The probe and guide configuration for this product is designed to suit the specified number of pins with the center serving as the reference point.

\*No 0.4-mm pitch flexible connector provided for wiring.

For flexible connector mounting and discrete wiring



**For FRC connectors**

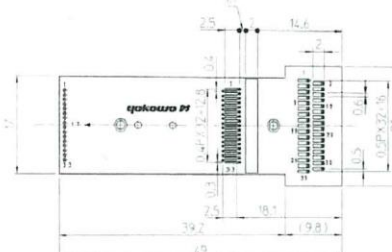


Distance from stopper to tip of guide: **8.6 mm.**

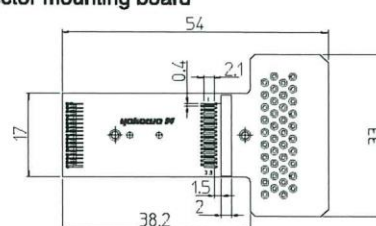
\* Orders for the 0.4 mm pitch CCJF series are not width-processed.  
Please contact us if you are interested in the 0.4 mm pitch CCJF series  
connectors that are width-processed each time.

### Basic wiring dimensional diagram

**Pad board for flexible connector mounting and discrete wiring**



### FRC connector mounting board





**0.5 mm  
pitch**

Contents PART 1

Tools for Inspecting  
Flexible Printed Circuits

# Clip Connector Lineup

## Auto Close Clip (CCAC Series)

See **P24** for more information.



### No. of pins

4 to 24 pins

### Features

A convenient holder is provided for use when holding the Auto Close Clip.  
Product set contents: Holder,  
M2 x 5 countersunk screws (x2)

Clip connector that closes automatically (making pin contact) when a flexible printed circuit is inserted. The clip is open by default for ease of use when handling test items that need to be held with both hands. The locking mechanism is designed for approximately 50,000 open/close cycles. (Figures are guidelines, not guarantees.)

### Wiring method

- **Flexible wiring with flexible connector**  
0.5 mm pitch flexible connectors can be mounted.
- **Discrete wiring**  
Lead wires can be soldered by the customer.

## Short Size Clip (CCSS Series)

See **P25** for more information.



### No. of pins

4 to 24 pins

### Features

Clip connector suitable for use on inspection devices, for example when length must be minimized or the flexible printed circuit must be inserted from above.

### Wiring method

- **Flexible wiring with flexible connector**  
0.5 mm pitch flexible connectors can be mounted.

## Just Fit Clip (CCJF Series)

See **P26** for more information.



### No. of pins

4 to 54 pins

### Features

Ultra-compact clip connectors allow machining of widths to suit the number of pins; allows efficient installation when locations are obstructed by adjacent flexible printed circuits or by other objects.

### Wiring method

- **Flexible wiring with flexible connector**  
0.5 mm pitch flexible connectors can be mounted.
- **Discrete wiring**  
Lead wires can be soldered by the customer.  
\* Excluding CCJF-050M.\*\*

## Standard Series

See **P28** for more information.



### No. of pins

3 to 47 pins

### Features

Low-cost clip connectors that can be shipped same-day.

### Wiring method

#### ■ Flexible wiring with flexible connector

Available as boards on which 0.5 mm and 1 mm pitch flexible connectors can be mounted.

#### ■ Discrete wiring

Lead wires can be soldered by the customer.

#### ■ FRC connector wiring

These use Hirose FRC connectors HIF3BA-14, 26, 40PA-2.54DS, or HIF6-60PA-1.27DS.

## CCSE Series

See **P32** for more information.



### No. of pins

48 to 69 pins

### Features

Low-cost clip connectors clip connectors that can be used with multi-pin and also onstandard-shaped flexible printed circuits (after requisite machining).

### Wiring method

#### ■ Flexible wiring with flexible connector

Available as boards on which 0.5 mm pitch flexible connectors can be mounted.

#### ■ Discrete wiring

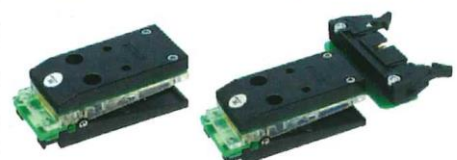
Lead wires can be soldered by the customer.

#### ■ FRC connector wiring

These use Hirose FRC connectors HIF6-60PA-1.27DS, over 61 pins HIF6-80PA-1.27DS.

## CCMO Series

See **P42** for more information.



### No. of pins

3 to 47 pins

### Features

Low-cost clip connectors also suitable for use with nonstandard-shaped flexible printed circuits (after requisite machining).

### Wiring method

#### ■ Flexible wiring with flexible connector

Available as boards on which 0.5 mm and 1-mm pitch flexible connectors can be mounted.

#### ■ Discrete wiring

Lead wires can be soldered by the customer.

#### ■ FRC connector wiring

These use Hirose FRC connectors HIF6-60PA-1.27DS.



**0.5**  
mm pitch

Tools for Inspecting Flexible Printed Circuits

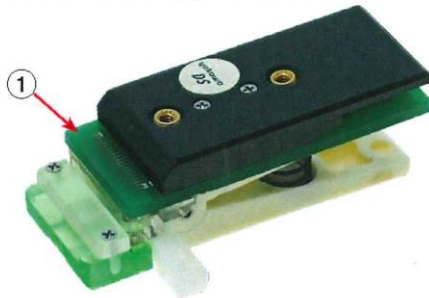
Flexible cable and discrete wiring type

Auto closing, variable pin number, machinable guide,  
machinable width series

## CCAC Series

The locking mechanism is designed for approximately 50,000 open/close cycles (in tests performed by Yokowo), assuming one open/close cycle per second. (Please note that this is guideline figure, not a guarantee. Actual performance will depend on usage conditions.)

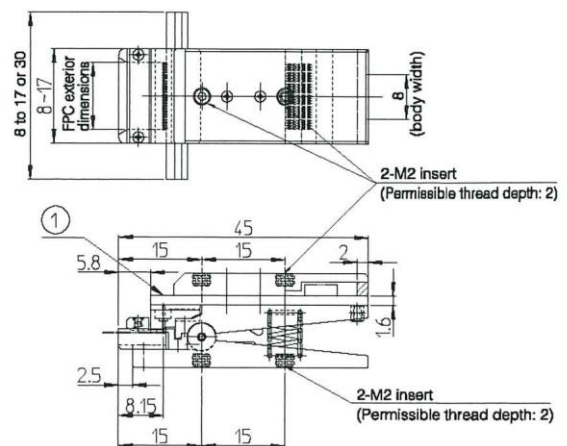
**CCAC-050-(number of pins) Board code**  
**Range of available pin number (4 to 24 pins)**



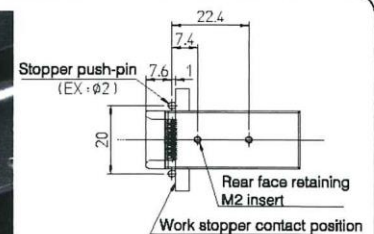
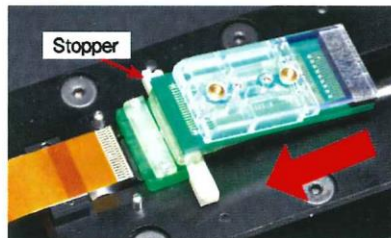
### Items included in this product set

- Ultra-compact clip connector main body
  - Flexible cable holding board (for rear surface)
  - \* The Flexible cable holding board (for front surface) is fitted to the main body before delivery.
  - \* A convenient holder is provided for hand-held use of CCAC Series.
- See **P22** for more information.

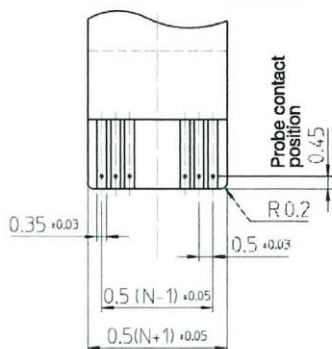
① Due to reduced height, certain areas of the circuit board may be exposed. Avoid placing any metal object or other conductive material on such areas, and removal of the pattern.



This product cannot be closed with only a flexible printed circuit if the flexible printed circuit to be inspected is weakened by incorrect dimensions or lacks a reinforcing plate. Use by inserting pins into the set positions on a retaining plate. For cases in which the stopper extends sideways, as shown in the diagram on the right, specify by selecting "Stopper 30" on the Inquiry Sheet on **P80**. If this is unspecified, the product supplied will have dimensions equal to body width.

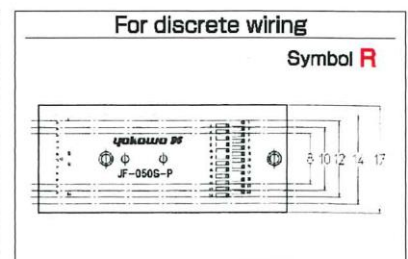
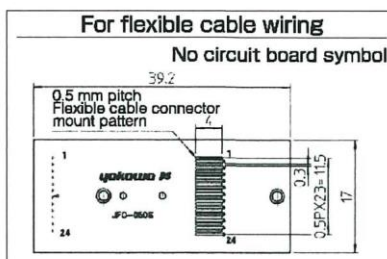


### Dimensional diagram for matching FPC/FFC terminals



### Product codes for different circuit boards

Please specify the desired board type on the Clip Connector Inquiry Sheet on **P80**.



- If board allowing flexible connector mounting (flexible wiring) is required: CCAC-050-10 (example)
- If board allowing discrete wiring by customer is required: CCAC-050-17P (example)

\*The probe and guide configuration for this product is designed to suit the specified number of pins with the center serving as the reference point.

\*No 0.5 mm pitch flexible connector provided for wiring.

0.2/0.25 mm pitch	0.3 mm pitch	0.4 mm pitch	<b>0.5 mm pitch</b>	0.8 mm pitch	1.0 mm pitch	1.25 mm pitch	Standard Clip CCSS series with individually machined guide surface	Option details Optional open/cable retaining function
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## Tools for Inspecting Flexible Printed Circuits

## Flexible Wiring Type

Reduced length, variable pin number, machinable guide, machinable width series

### CCSS Series

#### CCSS-050-(number of pins)

Range of available pin number (4 to 24 pins)



#### Items included in this product set

- Ultra-compact clip connector main body
- \* The Flexible cable holding board (for front surface) is fitted to the main body before delivery.

(Permissible thread depth: 2)

#### Recommended for the following applications

When space is at a premium  
(in the axis of length)

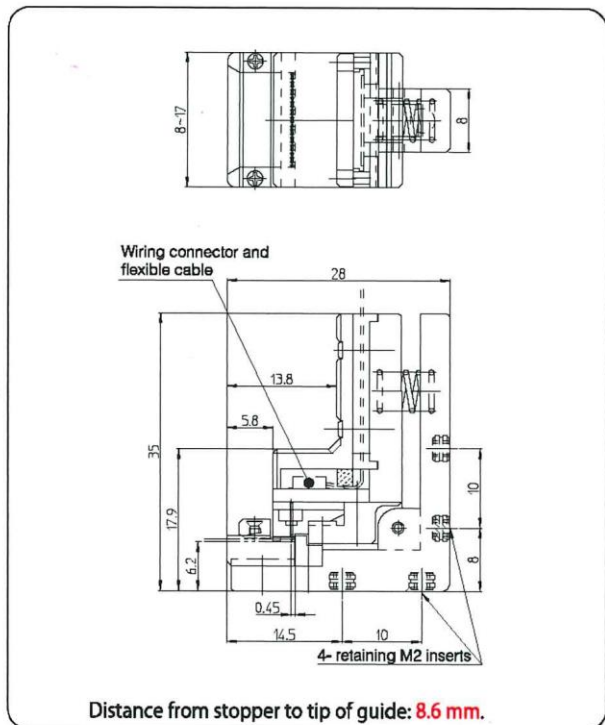
CCJF

CCSS

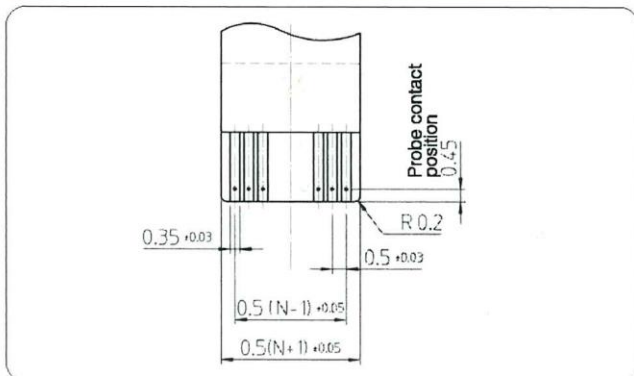
When space is at a premium  
(in the axis of height)

CCSS

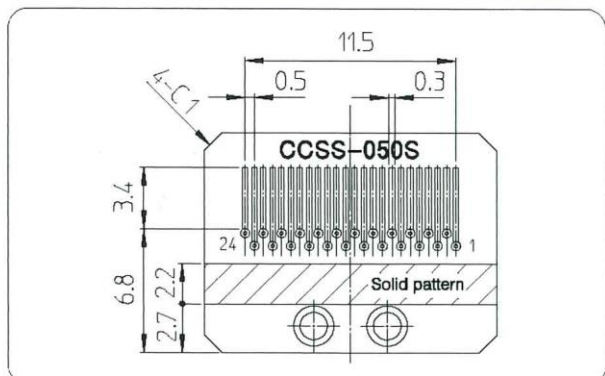
CCJF



#### Dimensional diagram for matching FPC/FFC terminals



#### Basic wiring dimensional diagram



\*The probe and guide configuration for this product is designed to suit the specified number of pins with the center serving as the reference point.

\*No 0.5 mm pitch flexible connector provided for wiring.



**0.5**  
mm pitch

## Tools for Inspecting Flexible Printed Circuits

### Flexible cable and discrete wiring type

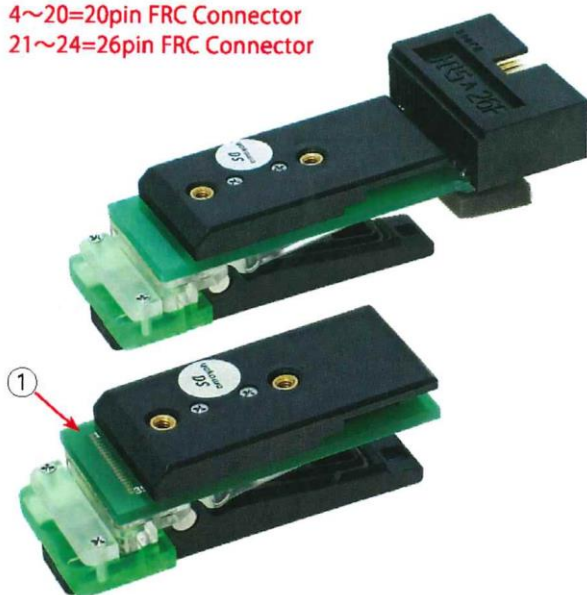
**Pin number specified, individually guide processed,  
width specified series**

**In response to demand, we now accommodate FRC connector wiring.**

## CCJF Series

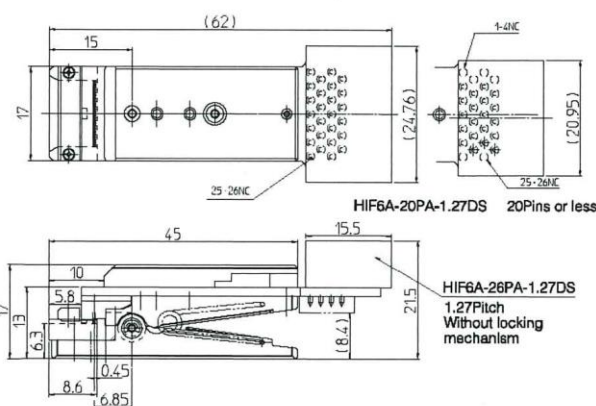
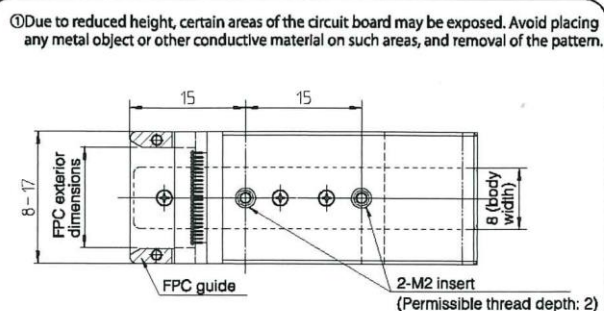
**CCJF-050-pin number circuit board symbol**  
**Range of available pin number (4 to 24 pins)**

4~20=20pin FRC Connector  
21~24=26pin FRC Connector



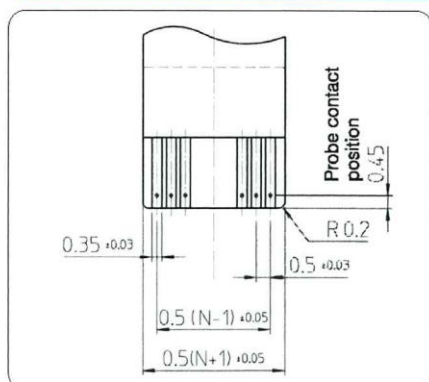
### Items included in this product set

- Ultra-compact clip connector main body
  - Flexible cable holding board (for rear surface)
- \* The Flexible cable holding board (for front surface) is fitted to the main body before delivery.

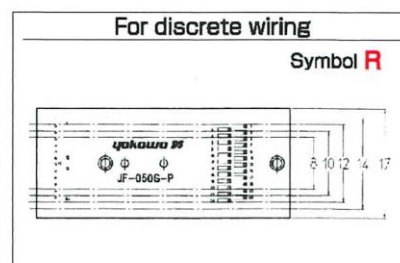
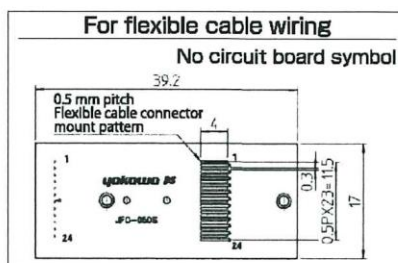


Distance from stopper to tip of guide: **8.6 mm.**

### Dimensional diagram for matching FPC/FFC terminals



### Product codes for different circuit boards

Please specify the desired board type on the Clip Connector Inquiry Sheet on **P80**

- If board allowing flexible connector mounting (flexible wiring) is required: CCJF-050-10 (example)
- If board allowing discrete wiring by customer is required: CCJF-050-17P (example)

\*The probe and guide configuration for this product is designed to suit the specified number of pins with the center serving as the reference point.

\*No 0.5 mm pitch flexible connector provided for wiring.

0.2/0.25 mm pitch	0.3 mm pitch	0.4 mm pitch	<b>0.5 mm pitch</b>	0.8 mm pitch	1.0 mm pitch	1.25 mm pitch	Standard Clip QGA0 Series with high-precision, machined	Option details Optional spring force retaining function
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## Tools for Inspecting Flexible Printed Circuits

## Flexible Wiring Type

**Pin number specified, individually guide processed,  
width specified series**

**In response to demand, we now accommodate FRC connector wiring.**

## CCJF Series (Multi-pin Version)

**Product no.: CCJF-050M-pin number**

### Range of available pin number (25 to 54 pins)

25~40=40pin FRC Connector

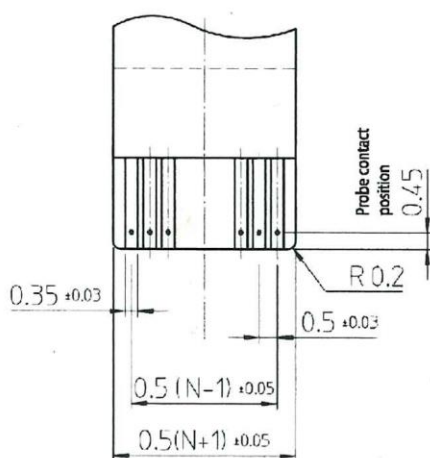
41~54=60pin FRC Connector



### Items included in this product set

- Ultra-compact clip connector main body
  - Flexible cable holding board (for rear surface)
- \* The Flexible cable holding board (for front surface) is fitted to the main body before delivery.

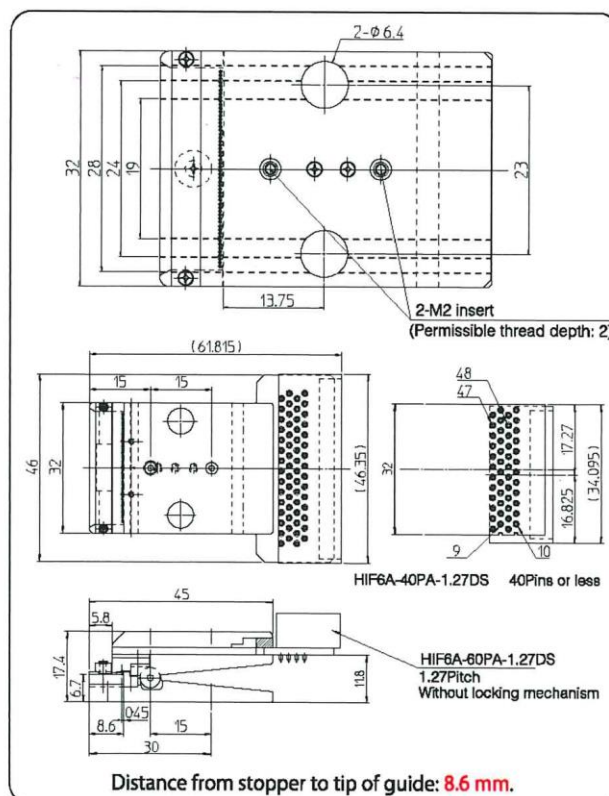
### Dimensional diagram for matching FPC/FFC terminals



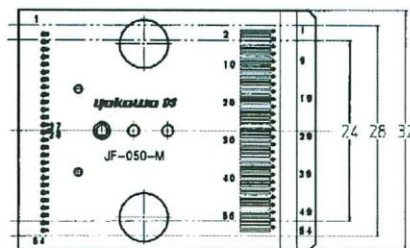
This product features probe pins configured in a single row for compatibility even with flexible cables with short electrodes.

\*The probe and guide configuration for this product is designed to suit the specified number of pins with the center serving as the reference point.

\*No 0.5 mm pitch flexible connector provided for wiring.



### Basic wiring dimensional diagram



**\*Used exclusively for flexible cable wiring.**



**0.5**  
mm pitch

## Flexible Inspection Tools

### Flexible/Discrete Wiring Type

## Discrete Wiring/Flexible Wiring Type

## Standard Product Series

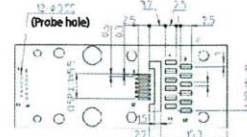
## Product Overview

- Guides are provided for each number of pins for use with any number of pins (within the range supported).
- Underside guides are also provided for use with reversible flexible printed circuits.
- A long 0.5 mm stopper can be specified as standard for flexible printed circuits with a coverlay on the front edge.

## Notice

CCNS-050-12 boards are available on which 0.5-mm pitch flexible connectors can be mounted.

Customers should specify product code CCNS-050-12-0.5FPC when ordering.



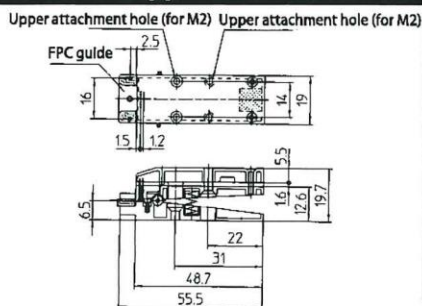
**Clip width** 19mm

**CCNS-050-12**

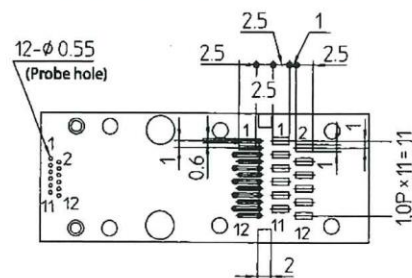
**Matching pin number: 3–12 pins**



### Appearance



## Basic wiring pattern



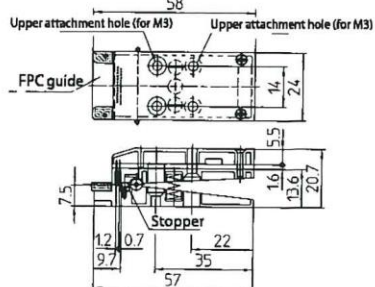
**Clip width** 24mm

## CCNM-050-26

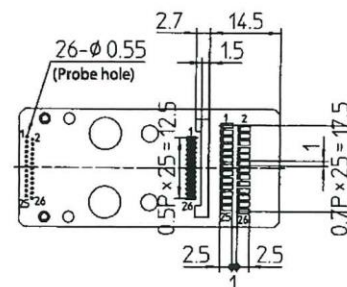
**Matching pin number: 13–26 pins**



58



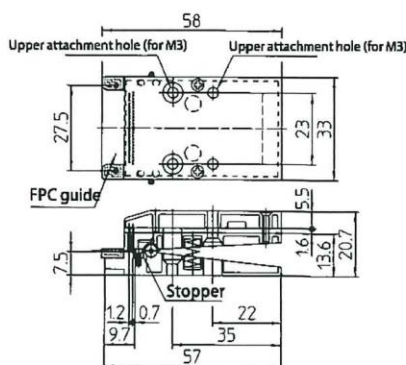
## 27 1/5



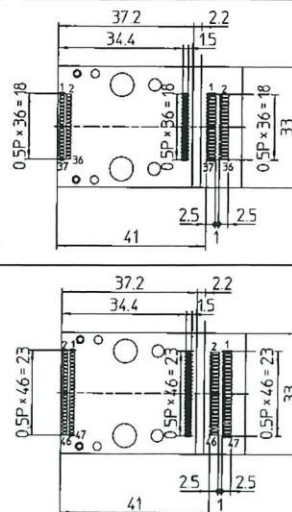
Clip width 33mm

**CCNL-050-37**

**Matching pin number: 27–37 pins**



37.2	2.2
34.4	15



**CCNL-050-47**

**Matching pin number: 38–47 pins**

0.2/0.25 mm pitch	0.3 mm pitch	0.4 mm pitch	<b>0.5 mm pitch</b>	0.8 mm pitch	1.0 mm pitch	1.25 mm pitch	Standard Clip KCC80 Series with individually machined guide sections	Option details Optional open/close retaining function
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Dimensions and wiring method	Product set
<p><b>Dimension of conforming FPC/FFC terminal</b></p>	<p>Contains the <b>five</b> items listed below:</p> <ul style="list-style-type: none"> <li>• Clip connector main body</li> <li>• Guide set (for 3–12 pin number)</li> <li>• Flexible cable holding board set (for the back and front surfaces)</li> <li>• Guide and flexible cable holding board lock screw x 3 pcs</li> <li>• Main body fixing M2 screws, 10 mm x 2 pcs. and 15 mm x 2 pcs.</li> </ul>
<p><b>Wiring method</b></p> <p>Wiring can be attached to this product by</p> <ul style="list-style-type: none"> <li>• Soldering a discrete wire</li> <li>• Connecting cable wiring to a flexible on-board cable connector</li> </ul>	<p>Contains the <b>four</b> items listed below:</p> <ul style="list-style-type: none"> <li>• Clip connector main body</li> <li>• Guide set (for 13–26 pin number)</li> <li>• Flexible cable holding board set (for the back and front surfaces)</li> <li>• Guide and flexible cable holding board lock screw x 2 pcs.</li> </ul> <p>Contains the <b>four</b> items listed below:</p> <ul style="list-style-type: none"> <li>• Clip connector main body</li> <li>• Guide set (for 27–37 pin number)</li> <li>• Flexible cable holding board set (for the back and front surfaces)</li> <li>• Guide and flexible cable holding board lock screw x 2 pcs.</li> </ul> <p>Contains the <b>four</b> items listed below:</p> <ul style="list-style-type: none"> <li>• Clip connector main body</li> <li>• Guide set (for 38–47 pin number)</li> <li>• Flexible cable presser set (for the back and front surfaces)</li> <li>• Guide and flexible cable presser lock screw x 2 pcs.</li> </ul>

- When ordering products in this series, specify the Product No. listed to the left.
- Please note that orders of 30 units or more may require a few days to prepare before shipment. Please contact us for more information.



**0.5**  
mm pitch

## Flexible Inspection Tools

### FRC connector type

## Discrete Wiring/Flexible Wiring Type

## Standard Product Series

## Product Overview

- Guides are provided for each number of pins for use with any number of pins (within the range supported).
- Underside guides are also provided for use with reversible flexible printed circuits.
- A long 0.5 mm stopper can be specified as standard for flexible printed circuits with a coverlay on the front edge.

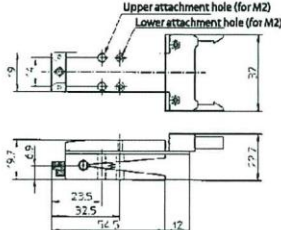
Clip width 19mm

**CCNS-050-12-FRC**

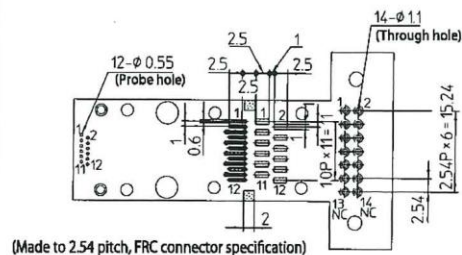
Matching pin number: 3–12 pins



### Appearance



## Basic wiring pattern



(Made to 2.54 pitch, FRC connector specification)

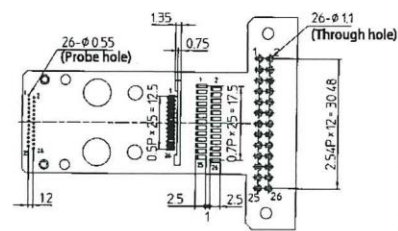
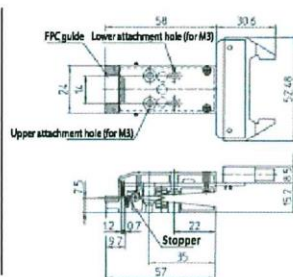
**Clip width** 24mm

**CCNM-050-26-FRC**

**Matching pin number: 13–26 pins**



58  
Lower attachment hole (for 407)



(Made to 2.54 pitch, FRC connector specification)

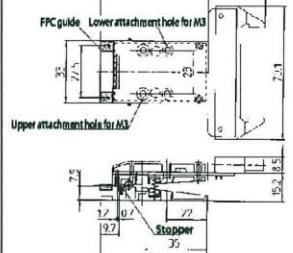
**Clip width** 33mm

**CCNL-050-37-FRC**

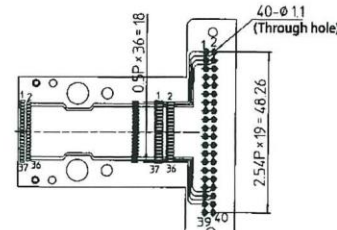
**Matching pin number: 27–37 pins**



Lower attachment hole for M3



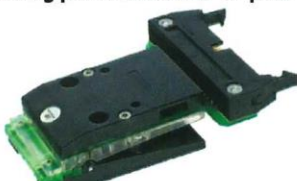
18



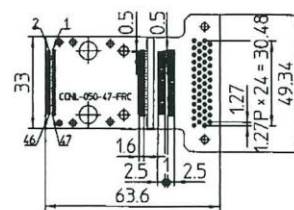
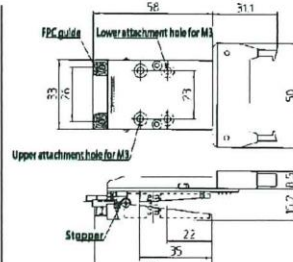
(Made to 2.54 pitch, FRC connector specification)

**CCNL-050-47-FRC**

Matching pin number: 38–47 pins



58  
Lower attachment hole for M3



(Made to 1.27 pitch, FRC connector specification)

0.2/0.25 mm pitch	0.3 mm pitch	0.4 mm pitch	<b>0.5 mm pitch</b>	0.8 mm pitch	1.0 mm pitch	1.25 mm pitch	Standard Clip OCMG Series with individually machined guide sections	Option details Optional open/close retaining function
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Dimension of conforming FPC/FFC terminal	Product set
	<p>Contains the <b>five</b> items listed below:</p> <ul style="list-style-type: none"> <li>• FRC connector-fitted clip connector main body</li> <li>• Guide set (for 3–12 pin number)</li> <li>• Flexible cable holding board set (for the back and front surfaces)</li> <li>• Guide and Flexible cable holding board lock screw x 3 pcs.</li> <li>• Main body fixing screws, 10 mm x 2 pcs. and 15 mm x 2 pcs.</li> </ul> <p>Note that the FRC connector used in this product is the HIF3BA-14PA-2.54DS, a 14-pin connector made by Hirose Electric (or equivalent). Pins 13 and 14 are not wired. This aspect must be duly considered before fabricating the connecting cable.</p>
	<p>Contains the <b>four</b> items listed below:</p> <ul style="list-style-type: none"> <li>• FRC connector-fitted clip connector main body</li> <li>• Guide set (for 13–26 pin number)</li> <li>• Flexible cable holding board set (for the back and front surfaces)</li> <li>• Guide and Flexible cable holding board lock screw x 2 pcs.</li> </ul> <p>Note that the FRC connector used in this product is the HIF3BA-26PA-2.54DS, a 26-pin connector made by Hirose Electric (or equivalent).</p>
	<p>Contains the <b>four</b> items listed below:</p> <ul style="list-style-type: none"> <li>• FRC connector-fitted clip connector main body</li> <li>• Guide set (for 27–37 pin number)</li> <li>• Flexible cable holding board set (for the back and front surfaces)</li> <li>• Guide and flexible cable presser lock screw x 2 pcs.</li> </ul> <p>Note that the FRC connector used in this product is the HIF3BA-40PA-2.54DS, a 40-pin connector made by Hirose Electric (or equivalent). Pins 38, 39 and 40 are not wired. This aspect must be duly considered before fabricating the connecting cable.</p>
	<p>Contains the <b>four</b> items listed below:</p> <ul style="list-style-type: none"> <li>• FRC connector-fitted clip connector main body</li> <li>• Guide set (for 38–47 pin number)</li> <li>• Flexible cable holding board set (for the back and front surfaces)</li> <li>• Guide and Flexible cable holding board lock screw x 2 pcs.</li> </ul> <p>Note that the FRC connector used in this product is the HIF6-50PA-1.27DS, a 50-pin connector made by Hirose Electric. Pins 48, 49 and 50 are not wired. This aspect must be duly considered before fabricating the connecting cable.</p>

● When ordering products in this series, specify the Product No. listed to the left.

● Please note that orders of 30 units or more may require a few days to prepare before shipment.

Please contact us for more information.



**0.5**  
mm pitch

Flexible Inspection Tools

Discrete and flexible cable wiring, and  
FRC connector type

Pin number specified, individually guide processed series

## CCSE Series

### Product Overview

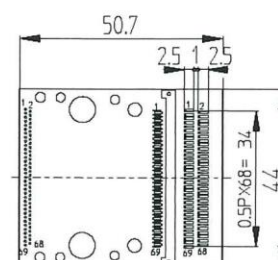
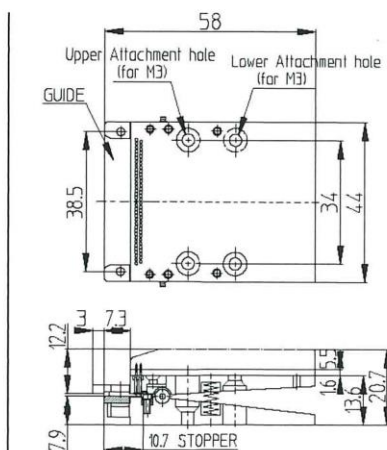
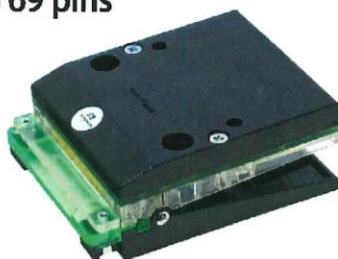
- The products in this series are produced from a 44 mm wide molded clip mother body, with desired pin number ranging from 48 to 69 pins of 0.5 mm pitch specifiable by the customer. The guide is processed individually to match the pin number and configuration specified by the customer.
- There are two product lines: one made to discrete wiring specifications in configurations of up to 60 pins and one made to FRC connector specifications. Only products made to discrete wiring specifications are available for pin number of 61 or more.
- \* The probe and guide configuration is designed to suit the specified number of pins with the center serving as the reference point.

Clip width **44mm**

Appearance

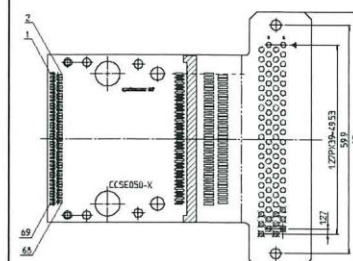
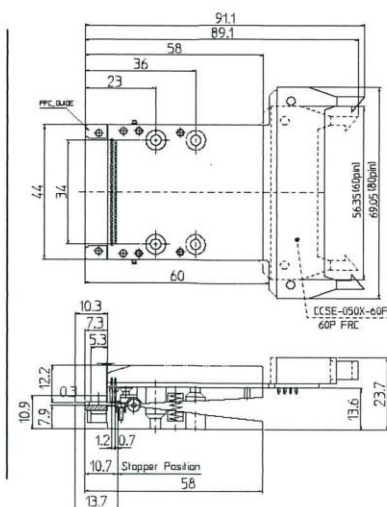
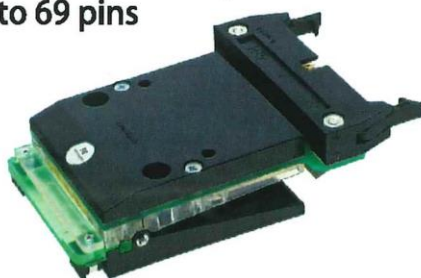
Basic wiring pattern

**CCSE-050X-pin number**  
(0.5 mm pitch)  
Range of available pin number  
48 to 69 pins



**FRC connector type**

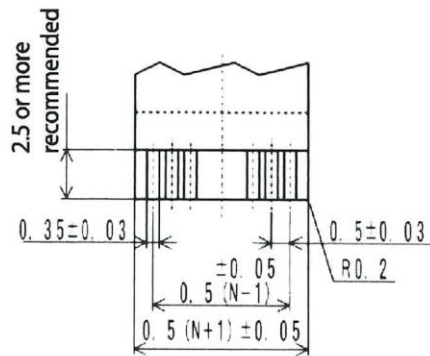
**CCSE-050X-pin number-FRC**  
(0.5 mm pitch)  
Range of available pin number  
48 to 69 pins



0.2/0.25 mm pitch	0.3 mm pitch	0.4 mm pitch	<b>0.5 mm pitch</b>	0.8 mm pitch	1.0 mm pitch	1.25 mm pitch	Standard Clip CCAMP Series with individually machined guide sections	Option details Optional connectors retaining function
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### Matching FPC terminal

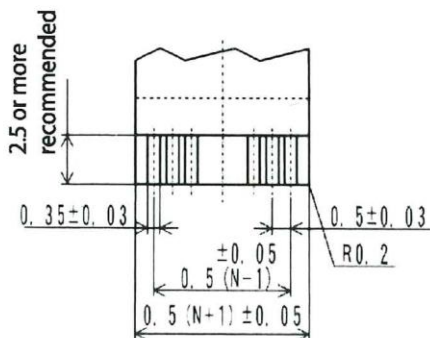


This product can be wired with soldered discrete wiring or flexible wiring by mounting a flexible connector.

### Product set

Contains the **three** items listed below:

- Clip connector main body (equipped with a guide manufactured to the customer-specified pin number)
- Guide and Flexible cable holding board lock screw x 2 pcs.
- Flexible cable holding board set (for back and front surfaces)



Contains the **three** items listed below:

- FRC connector-fitted clip connector main body (equipped with a guide manufactured to the customer-specified pin number)
- Guide and Flexible cable holding board lock screw x 2 pcs.
- Flexible cable holding board set (for back and front surfaces)

Note that the FRC connector used in this product is the HIF6-60PA-1.27DS, a 60-pin connector, Over 61 pins HIF6-80PA-1.27DS made by Hirose Electric.



**0.8 mm  
pitch**

Contents PART 1

Tools for Inspecting  
Flexible Printed Circuits

# Clip Connector

**Standard Product  
Series**

- Discrete cable wiring
- Flexible cable wiring
- FRC connector type

## Product Overview

- The products can be provided with a 0.5 mm depth extended stopper for flexible cables that have coverlay at the tip on customer request.

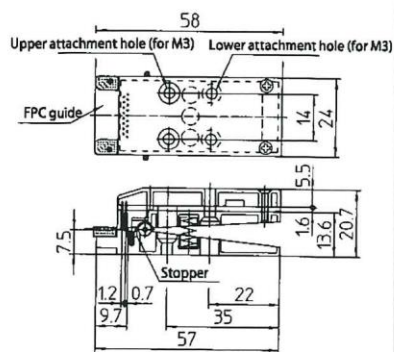
**Clip width 24mm**

**CCNM-080-17**

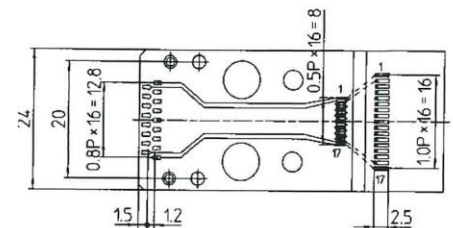
Matching pin number: 4–17 pins



## Appearance



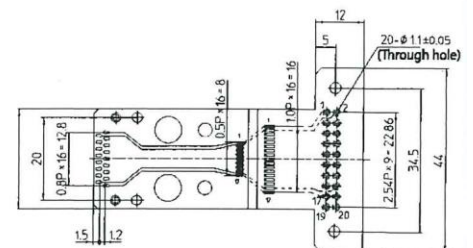
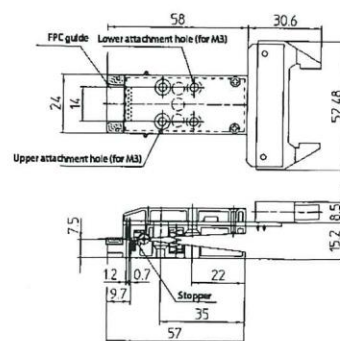
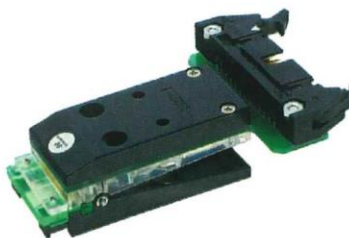
## Basic wiring pattern



**FRC connector type**

**CCNM-080-17  
-FRC**

Matching pin number: 4–17 pins

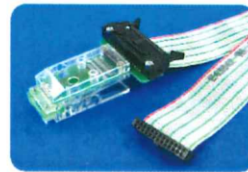


Note: To improve the visibility of the FPC and guide during operation, we will gradually transition the guide color from orange to blue.

0.2/0.25 mm pitch	0.3 mm pitch	0.4 mm pitch	0.5 mm pitch	<b>0.8 mm pitch</b>	1.0 mm pitch	1.25 mm pitch	Standard Clip CC300 Series with individually machined guide sections	Option details Optional connector retaining function
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**MG-Products B.V.**  
**Rijkevoortsedijk 27A**  
**5447 BD, Rijkevoort (NL)**  
Phone: +31 (0)485 382 133  
www: [www.designedfortest.com](http://www.designedfortest.com)  
E-mail: [Info@designedfortest.com](mailto:Info@designedfortest.com)



Dimension of conforming FPC/FFC terminal	Items included in this product set
	<p>Contains the <b>four</b> items listed below:</p> <ul style="list-style-type: none"> <li>• Clip connector main body</li> <li>• Guide set (for 4–17 pin number)</li> <li>• Flexible cable holding board set (for the back and front surfaces)</li> <li>• Guide and Flexible cable holding board lockscrew x 2 pcs.</li> </ul>
	<p>Contains the <b>four</b> items listed below:</p> <ul style="list-style-type: none"> <li>• FRC connector-fitted clip connector main body</li> <li>• Guide set (for 4–17 pin number)</li> <li>• Flexible cable holding board set (for the back and front surfaces)</li> <li>• Guide and Flexible cable holding board lockscrew x 2 pcs.</li> </ul> <p>Note that the FRC connector used in this product is the HIF3BA-20PA-2.54DS, a 20-pin connector made by Hirose Electric (or equivalent). Pins 18, 19 and 20 are not wired. This aspect must be duly considered before fabricating the connecting cable.</p>

- When ordering products in this series, specify the Product No. listed to the left.
- Please note that orders of 30 units or more may require a few days to prepare before shipment. Please contact us for more information.



**1.0 mm pitch**

## Contents PART 1

## Tools for Inspecting Flexible Printed Circuits

# Clip Connector

## Standard Product Series

- Discrete cable wiring
- Flexible cable wiring

## Product Overview

- The products can be provided with a 0.5 mm depth extended stopper for flexible cables that have coverlay at the tip on customer request.

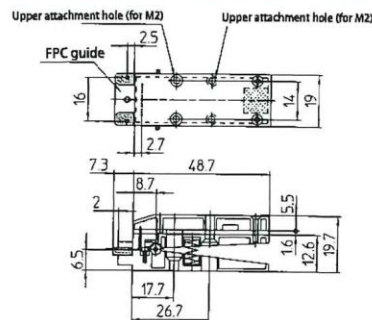
**Clip width** 19mm

CCNS-100-12

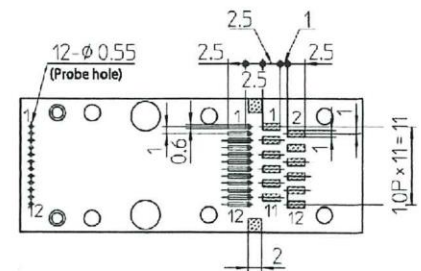
**Matching pin number: 3–12 pins**



### Appearance



## Basic wiring pattern



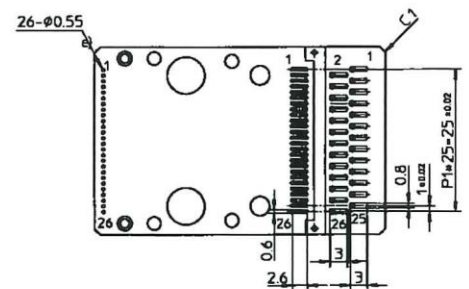
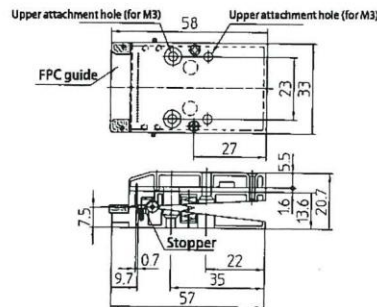
**Clip width** 33mm

**CCNL-100-26**

**Matching pin number: 13–26 pins**



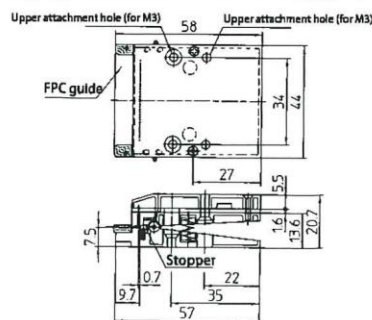
(for M3) 58 Upper att



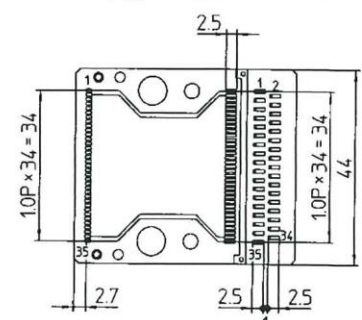
**Clip width** 44mm

CCNX-100-35

**Matching pin number: 27–35 pins**



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Note: To improve the visibility of the FPC and guide during operation, we will gradually transition the guide color from orange to blue.

0.2/0.25 mm pitch	0.3 mm pitch	0.4 mm pitch	0.5 mm pitch	0.8 mm pitch	1.0 mm pitch	1.25 mm pitch	Standard Clip DIN9130 Series with individually crimped or soldered contacts	Option details Optional approaches retaining function
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**MG-Products B.V.**  
Rijkevoortsedijk 27A  
5447 BD, Rijkevoort (NL)  
Phone: +31 (0)485 382 133  
www: [www.designedfortest.com](http://www.designedfortest.com)  
E-mail: [Info@designedfortest.com](mailto:Info@designedfortest.com)

Dimensions and wiring method	Items included in this product set
<p><b>Dimension of conforming FPC/FFC terminal</b></p>	<p>Contains the <b>five</b> items listed below:</p> <ul style="list-style-type: none"> <li>• Clip connector main body</li> <li>• Guide set (for 3–12 pin number)</li> <li>• Flexible cable holding board set (for the back and front surfaces)</li> <li>• Guide and Flexible cable holding board lock screw x 3 pcs.</li> <li>• Main body fixing screws, 10 mm x 2 pcs. and 15 mm x 2 pcs.</li> </ul>
<p><b>Wiring method</b></p> <p>Wiring can be attached to this product by</p> <ul style="list-style-type: none"> <li>• Soldering a discrete wire</li> <li>• Connecting cable wiring to a flexible on-board cable connector</li> </ul>	<p>Contains the <b>four</b> items listed below:</p> <ul style="list-style-type: none"> <li>• Clip connector main body</li> <li>• Guide set (for 13–26 pin number)</li> <li>• Flexible cable holding board set (for the back and front surfaces)</li> <li>• Guide and Flexible cable holding board lock screw x 6 pcs.</li> </ul>
	<p>Contains the <b>four</b> items listed below:</p> <ul style="list-style-type: none"> <li>• Clip connector main body</li> <li>• Guide set (for 27–35 pin number)</li> <li>• Flexible cable holding board set (for the back and front surfaces)</li> <li>• Guide and Flexible cable holding board lock screw x 2 pcs.</li> </ul>

- When ordering products in this series, specify the Product No. listed to the left.
- Please note that orders of 30 units or more may require a few days to prepare before shipment. Please contact us for more information.



**1.0**  
mm pitch

## Flexible Inspection Tools

### FRC connector type

## Discrete Wiring/Flexible Wiring Type

## Standard Product Series

## Product Overview

- The products can be provided with a 0.5 mm depth extended stopper for flexible cables that have coverlays at the tip on customer request.

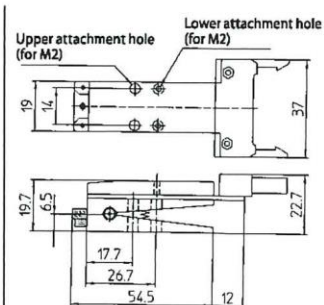
Clip width 19mm

**CCNS-100-12-FRC**

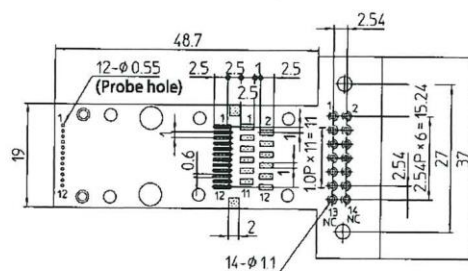
**Matching pin number: 3–12 pins**



### Appearance



### Basic wiring pattern

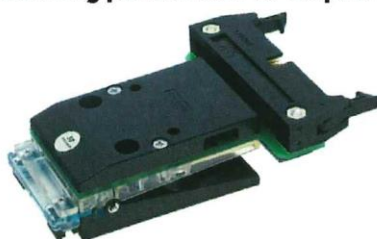


(Made to 2.54 pitch, FRC connector specification)

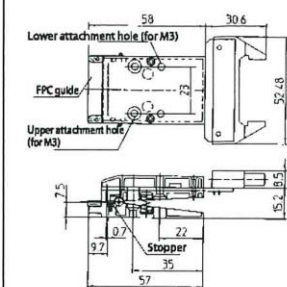
Clip width 33mm

**CCNL-100-26-FRC**

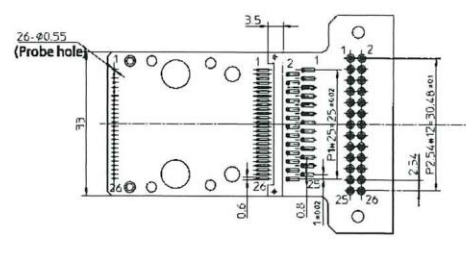
**Matching pin number: 13–26 pins**



### Appearance



### Basic wiring pattern

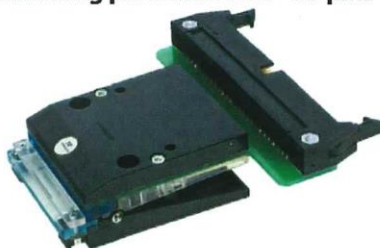


(Made to 2.54 pitch, FRC connector specification)

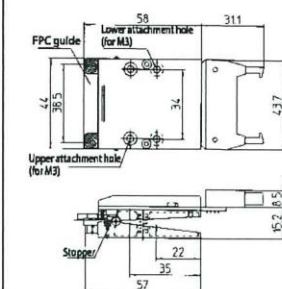
**Clip width** 44mm

**CCNX-100-35-FRC**

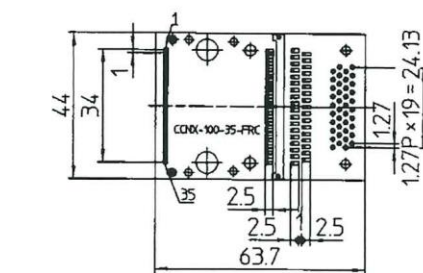
**Matching pin number: 27–35 pins**



### Appearance



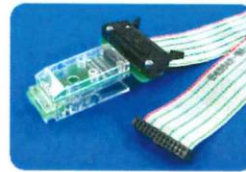
### Basic wiring pattern



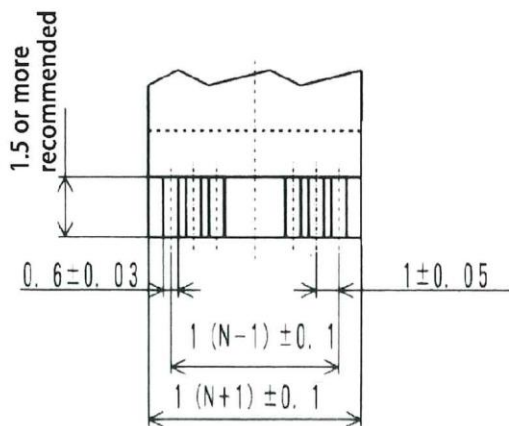
(Made to 1.27 pitch, FRC connector specification)

**Note:** To improve the visibility of the FPC and guide during operation, we will gradually transition the guide color from orange to blue.

0.2/0.25 mm pitch	0.3 mm pitch	0.4 mm pitch	0.5 mm pitch	0.8 mm pitch	<b>1.0 mm pitch</b>	1.25 mm pitch	Standard Clip SCMD Series with individually attached guide sections	Option details Optional open/closed releasing function
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### Dimensions and wiring method



### Items included in this product set

Contains the **five** items listed below:

- FRC connector-fitted clip connector main body
- Guide set (for 3–12 pin number)
- Flexible cable holding board set (for the back and front surfaces)
- Guide and Flexible cable holding board lockscrew x 3 pcs.
- Main body fixing screws, 10 mm x 2 pcs. and 15 mm x 2 pcs.

Note that the FRC connector used in this product is the HIF3BA-14PA-2.54DS, a 14-pin connector made by Hirose Electric (or equivalent). Pins 13 and 14 are not wired. This aspect must be duly considered before fabricating the connecting cable.

Contains the **four** items listed below:

- FRC connector-fitted clip connector main body
- Guide set (for 13–26 pin number)
- Flexible cable holding board set (for the back and surface)
- Guide and Flexible cable holding board lockscrew x 6 pcs.

Note that the FRC connector used in this product is the HIF3BA-26PA-2.54DS, a 26-pin connector made by Hirose Electric (or equivalent).

Contains the **four** items listed below:

- FRC connector-fitted clip connector main body
- Guide set (for 27–35 pin number)
- Flexible cable holding board set (for the back and surface)
- Guide and Flexible cable holding board lockscrew x 2 pcs.

Note that the FRC connector used in this product is the HIF6-40PA-1.27DS, a 40-pin connector made by Hirose Electric.

- When ordering products in this series, specify the Product No. listed to the left.
- Please note that orders of 30 units or more may require a few days to prepare before shipment. Please contact us for more information.



**1.25 mm  
pitch**

Contents PART 1

Tools for Inspecting  
Flexible Printed Circuits

# Clip Connector

**Standard Product  
Series**

- Discrete cable wiring
- Flexible cable wiring
- FRC connector type

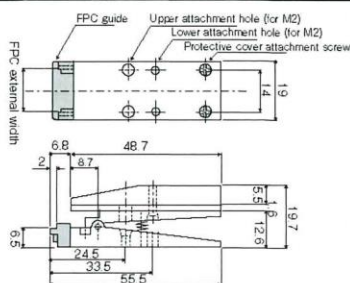
Clip width **19mm**

**CCS-125**

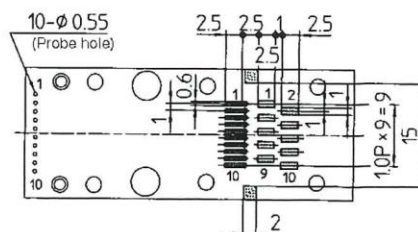
Matching pin number: 3–10 pins



Appearance



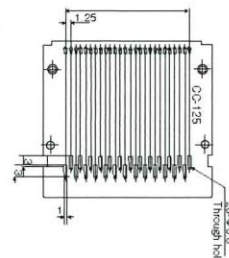
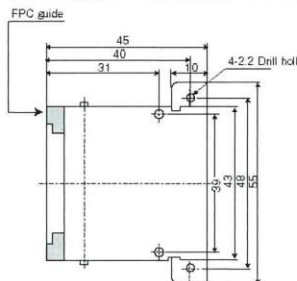
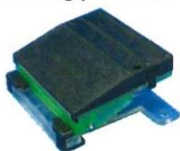
Basic wiring pattern



Clip width **43mm**

**CC-125**

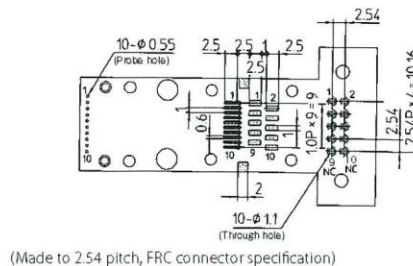
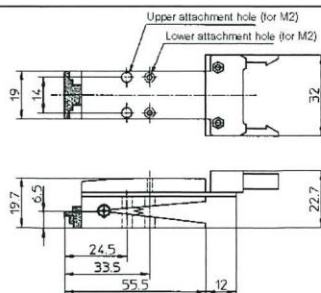
Matching pin number: 6–26 pins



Clip width **19mm**

**CCS-125-FRC**

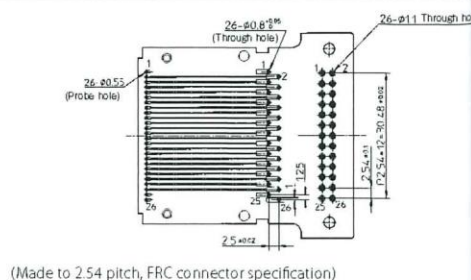
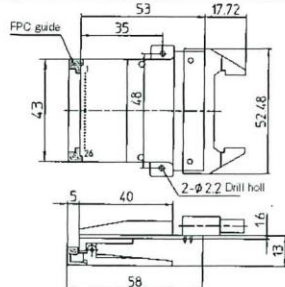
Matching pin number: 3–10 pins



Clip width **43mm**

**CC-125-FRC**

Matching pin number: 6–26 pins



0.2/0.25 mm pitch	0.3 mm pitch	0.4 mm pitch	0.5 mm pitch	0.8 mm pitch	1.0 mm pitch	1.25 mm pitch	Standard Clip C-clip series with individually machined guide sections	Option details Optional open/close releasing function
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**MG-Products B.V.**  
**Rijkevoortsedijk 27A**  
**5447 BD, Rijkevoort (NL)**  
**Phone: +31 (0)485 382 133**  
**www: [www.designedfortest.com](http://www.designedfortest.com)**  
**E-mail: [Info@designedfortest.com](mailto:Info@designedfortest.com)**

Dimensions and wiring method	Items included in this product set
<p><b>Dimension of conforming FPC/FFC terminal</b></p> <p><b>Wiring method</b></p> <p>Wiring can be attached to this product by</p> <ul style="list-style-type: none"> <li>• Soldering a discrete wire</li> <li>• Connecting cable wiring to a flexible on-board cable connector</li> </ul>	<p>Contains <b>2</b> items listed below:</p> <ul style="list-style-type: none"> <li>• Clip connector main body</li> <li>• Surface guide set (for 3–10 pin number)</li> </ul> <p>(No back guides are available.)</p>
<p><b>Dimension of conforming FPC/FFC terminal</b></p>	<p>Contains <b>2</b> items listed below:</p> <ul style="list-style-type: none"> <li>• FRC connector-fitted clip connector main body</li> <li>• Surface guide set (for 3–10 pin number)</li> </ul> <p>(No back guides are available.)</p> <p>Note that the FRC connector used in this product is the HIF3BD-10PA-2.54DS, a 10-pin connector made by Hirose Electric (or equivalent).</p>
<p><b>Dimension of conforming FPC/FFC terminal</b></p>	<p>Contains <b>2</b> items listed below:</p> <ul style="list-style-type: none"> <li>• FRC connector-fitted clip connector main body</li> <li>• Surface guide set (for 6–26 pin number)</li> </ul> <p>(No back guides are available.)</p> <p>Note that the FRC connector used in this product is the HIF3BA-26PA-2.54DS, a 26-pin connector made by Hirose Electric (or equivalent).</p>

- When ordering products in this series, specify the Product No. listed to the left.
- Please note that orders of 30 units or more may require a few days to prepare before shipment. Please contact us for more information.



# Guide Section Individually Machined Standard Clip

Contents PART 1

Tools for Inspecting  
Flexible Printed Circuits

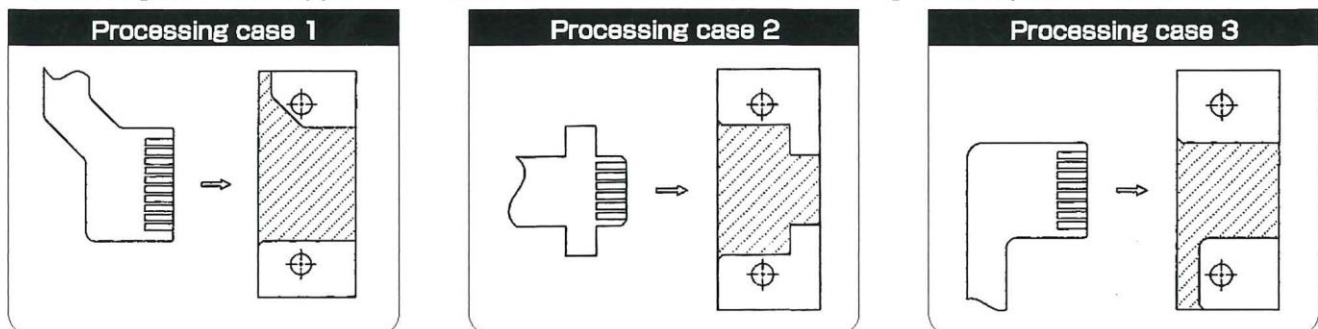
## Clip Connector

**CCMO Series**

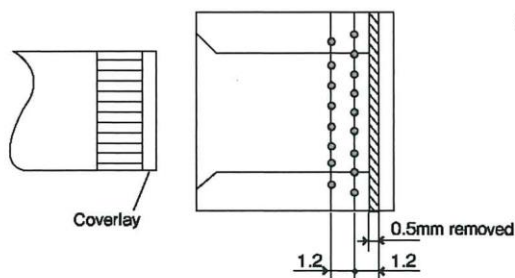
0.5 mm  
0.8 mm  
1.0 mm  
itches

### Product Overview

- This is a modified version of the standard product in which only the guide unit processed to make the connector compatible with flexible cables that are bent or otherwise have irregular configurations.
- Since the guide is individually processed to suit the form of the flexible cable, a customized-fit guide can be produced within a short timeframe.



- From July 2006 on, products in this series incorporate static-resistant polycarbonate resin for wiring covers and areas beneath the clip.
- The product set and FRC connectors in this series comply with specifications for the standard product series.
- The circuit board included with the CCMO-050-12 enables mounting of a 1.0 mm pitch flexible cable connector. To mount a 0.5 mm pitch flexible cable connector, specify the CCMO-050-12-0.5FPC.



- Clearly indicate if you want to extend the distance between the stopper and the pin. Up to 0.7 mm of the stopper can be removed without charge. (Note that the standard product will suffice if you want to modify the stopper only.)

# Options for Clip Connectors

## Optional Open/Close Retaining Function

**OMF Series**

Order this product when  
ordering the clip connector.

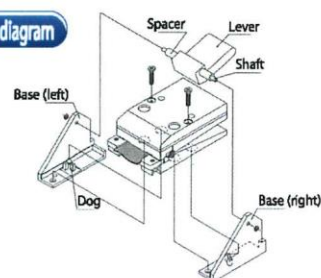
Closed



Open



Assembly diagram



### Features

Series adding function that allows the customer to set a default open/close status by mounting optional parts to the clip connector.

#### Compatible Series

Can be used with CCMO and CCSE Series standard clip connectors (excluding CC Series).  
Note that these can only be used on front contact.

#### Improved work efficiency

The connector opening is held open when the item being tested is removed from the clip connector, eliminating the need to open the connector again for the test item and improving work efficiency.

#### Ease of use

The connector opening is easily held open or closed simply by rotating the lever on top of the clip connector.

#### Reduces unnecessary damage

The mechanical connector opening reduces the chance of damage to the items being tested.

#### Reduces workload

The lever reduces the force needed to operate the function and reduces operator workload.

#### Optional part dimensions

##### Increased clip connector size

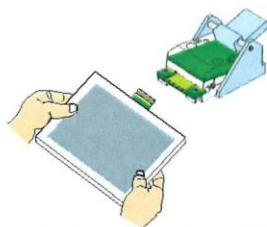
Width: 4.6 mm  
Length: 1.5 mm  
Height at base: 1.5 mm

##### Maximum space reductions for lever operating range

Height: 50 mm  
Length: 12 mm

### Uses

- When handling test items such as LEDs that must be held with both hands
- Large-volume testing with the clip connector fixed
- When handling small test items that are difficult to hold in one hand

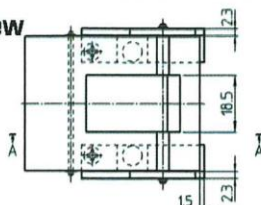


- Tests by transmitting a signal after making pin contact with the test item.

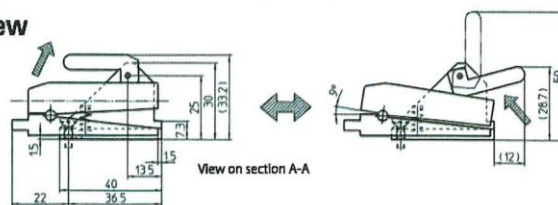


### External view

Plan view



Side view





0.2/0.25 mm pitch	0.3 mm pitch	0.4 mm pitch	0.5 mm pitch	0.8 mm pitch	1.0 mm pitch	1.25 mm pitch	Standard Clip CCMO Series with individually machined pins, 500 pieces	Option details Optional open/close retaining function
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## Product prices and lead times

### Standard Series

#### Product code (product specification method)

Add "-OMF" to the end of the standard product code.

Example: CCNM-050-26-OMF

### CCMO Series

#### Product code (product specification method)

Add "-OMF" to the end of the MO Series product code.

Example: CCMO-050-37-FRC-OMF

### CCSE Series

#### Product code (product specification method)

Add "-OMF" to the end of the SE Series product code.

Example: CCSE-030M-33-FRC-OMF

- Volume discounts are available, based on the quantity purchased per order.
- Please note that delivery times will be longer for orders of 10 units or more.
- Set contents and FRC connectors provided are the same as for the Standard Series.

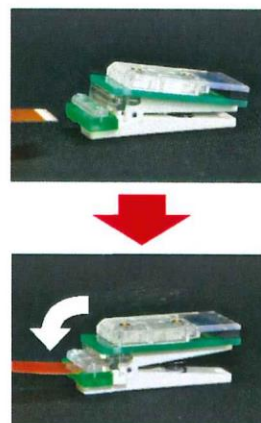
## Information

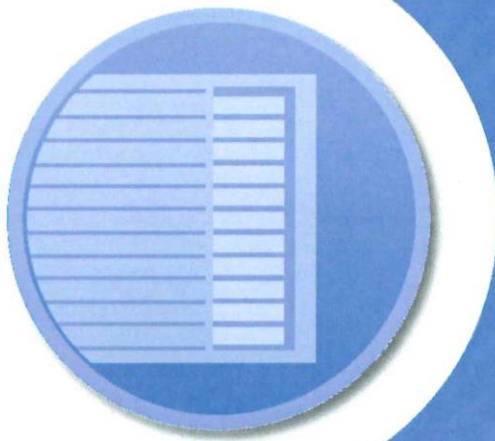
An auto close clip inspection tool is also available.

This tool automatically makes pin contact when a flexible printed circuit is inserted.

0.3-mm pitch= **P10**

0.5-mm pitch= **P24**





Contents PART 1

Tools for Inspecting  
Flexible Printed Circuits-PFC Series

# Push-Pull Flexible Cable

## 0.3 mm/0.5 mm pitch

Flexible cable for 0.3 or 0.5-mm pitch wiring between tools and measuring devices or for temporary wiring for board inspection

\* Orders for this product alone will be shipped FOB. Please refer to your account number when ordering.

### Product Overview

- Short lead time/Sold as 10-cable set
- Tough polyamide flexible cable suitable for wiring between tools or for extension wiring.
- Large range of pin number types
 

0.3-mm pitch: 11 to 65 pins (odd numbers only)	0.5-mm pitch: 6 to 60 pins
--	----------------------------

\*Products can also be made to order for other pin counts. Contact Yokowo for more information.
- 20 mm reinforcing plate provides sufficient length for holding while ensuring strength and low thickness for 0.3 mm pitch products.
- Overall length of 150 mm suitable for wiring and extension wiring

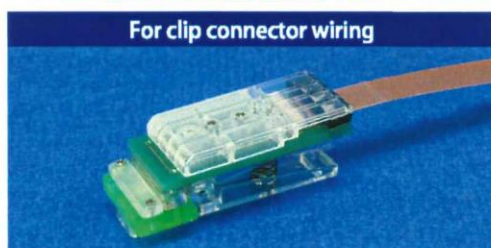
- Wear-resistant pin construction allows repeated FFC/FPC connector insertion/disconnection. (Excluding non-ZIF types)  
Durability: 1,000 cycles for 0.3 mm pitch, 3,000 cycles for 0.5 mm pitch

### test details

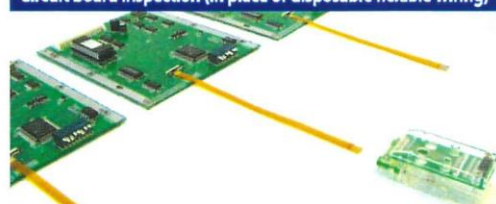
New FPC connectors corresponding to the manufacturer's recommended flexible board thickness of 0.15 mm and 0.2 mm for 0.3 mm pitch and 0.25 mm and 0.3 mm for 0.5 mm pitch are affixed to a proud plate and inserted and disconnected 10 times. The connectors are replaced with new connectors after checking conductivity, and the test is repeated with the number of insertion/disconnection cycles recorded for each pitch and board until conductivity fails. The boards are inserted and disconnected manually, taking care to insert and disconnect horizontally. The boards are inserted with the connector opened and disconnected with the connector closed. (Durability figures are guidelines, not guarantees. Actual performance will depend on connector specifications and conditions of use. Hold connectors close to the pins when inserting and disconnecting.)

\* Insertion/disconnection tests have not been performed for connectors of FPC thickness of 0.18 mm or less for the PFC-030 Series.

### Usage examples



Circuit board inspection (in place of disposable flexible wiring)



Also suitable for wiring between tools and measuring devices, and for extension wiring.

The PFEX and SFIB Series do not include mounted connectors or wiring. These should be purchased and mounted separately by the customer.



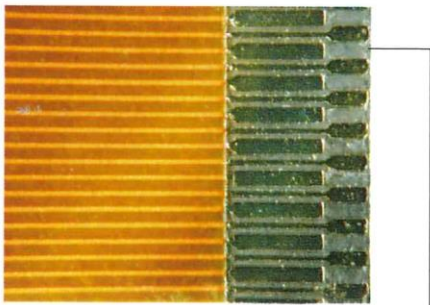


## Flexible Inspection Tools Push-Pull Flexible Cable

PFC Series

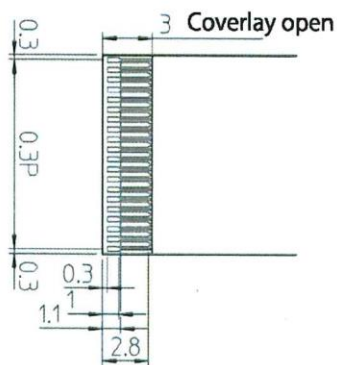
### 0.3 mm pitch PFC-030 Series

#### Product range with 11 to 65 pins

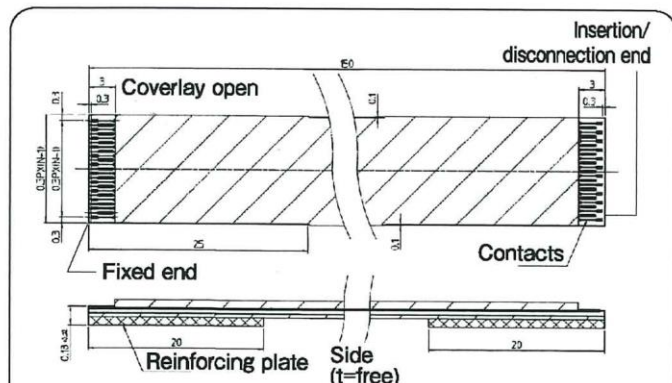


The insertion/disconnection end is the end with contacts not extending all the way to the tip.

#### Contact detail



#### External diagram



For manufacturing reasons, there is a height difference of approximately 0.1 mm at the position 25 mm from the end.

#### Ordering

- Please use the product codes listed below when ordering.
- Volume discounts are available, based on the quantity purchased per order.
- Please note that delivery times will be longer for orders of 10 units or more.  
Contact Yokowo for information on prices and delivery times.
- Extended delivery times apply to products indicated with an **asterisk**.

#### Main Specifications

Rated current: 200 mA

**Note:** Make sure total current does not exceed 6 A for products with more than 30 pins.

(Current per pin = 6 A/Number of pins)

Rated voltage: 20 V DC

Operating temperature: 0 to 80° C

Insulation resistance: Minimum 100 MΩ  
(insulation resistance between two contacts)

Withstand voltage: 100 V DC

Durability: 1,000 cycles  
(when used without opening locking lever)

**Note:** Connecting this product to a connector with no spring in the pin can result in greatly reduced durability.  
Always inspect connector before use.

\* Durability figures are guidelines, not guarantees.

Actual performance will depend on connector specifications and conditions of use.

\* Hold connectors close to the pins when inserting and disconnecting.

\* Insertion/disconnection tests have not been performed for connectors of FPC thickness of 0.18 mm or less for the PFC-030 Series.

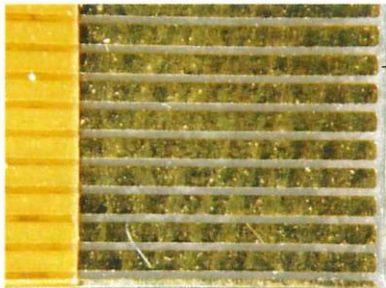


## Flexible Inspection Tools Push-Pull Flexible Cable

PFC Series

### 0.5 mm pitch PFC-050 Series

#### Product range with 6 to 60 pins

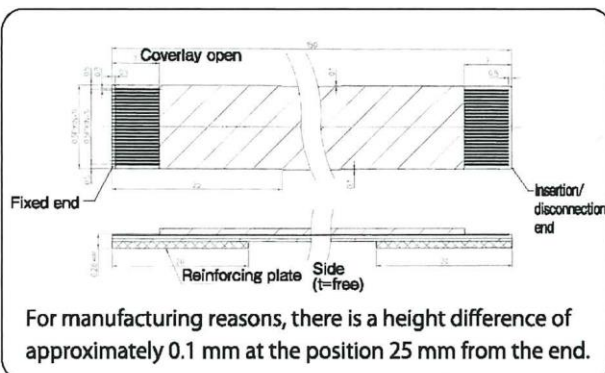


The insertion/disconnection end is the end with contacts not extending all the way to the tip.

#### Ordering

- Please use the product codes listed below when ordering.
- Volume discounts are available, based on the quantity purchased per order.
- Please note that delivery times will be longer for orders of 10 units or more. Contact Yokowo for information on prices and delivery times.
- Extended delivery times apply to products indicated with an **asterisk**.

#### External diagram



#### Main Specifications

Rated current: 200 mA

**Note:** Make sure total current does not exceed 6 A for products with more than 30 pins.

(Current per pin = 6 A/Number of pins)

Rated voltage: 20 V DC

Operating temperature: 0 to 80° C

Insulation resistance: Minimum 100 MΩ

(insulation resistance between two contacts)

Withstand voltage: 100 V DC

Durability: 3,000 cycles

(when used without opening connecting lever)

**Note:** Connecting this product to a connector with no spring in the pin can result in greatly reduced durability. Always inspect connector before use.

\* Durability figures are guidelines, not guarantees. Actual performance will depend on connector specifications and conditions of use.

\* Hold connectors close to the pins when inserting and disconnecting.





## Accessories - Repair Parts Ultra-fine Probes

\* Products on this page cannot be ordered individually. They must be ordered at the same time the main unit is ordered.

## Wiring accessories

## Wiring accessories

Handy accessories for wiring or replacing clip connectors

※ Postage is charged on all orders of less than US\$600.

### Information

- Push-Pull flexible cables (0.5 mm and 0.3-mm pitch) are available for customers using FFC (flexible cable) for clip connector wiring. See **P46** for more information.

## 2.54 mm pitch connector flat ribbon cable: FCA Series

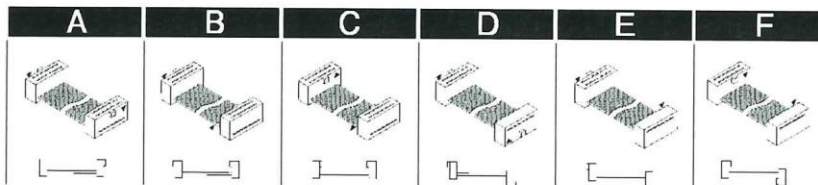
### Clip connector product no. in question

Standard product series	All products fitted with FRC connectors, except CCNL-050-47-FRC and CCNX-100-35-FRC
CCMO series	All products fitted with FRC connectors, except CCMO-050-47-FRC and CCMO-100-35-FRC



### How to specify the product no.

Series name No. of cores Overall length Direction of connector  
**FCA-30-120-A~F**  
Cable: FLEX-B made by Oki Electric (or equivalent)  
Connector: HIF3BA-2.54R series made by Hirose Electric (or equivalent)  
50-pin and 60-pin are HIF3BB-2.54.  
(One pin slot in center)



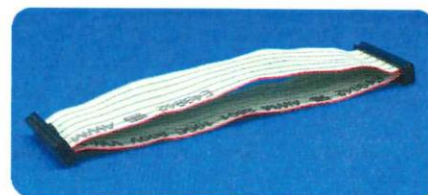
### delivery times

No. of cores	Specification
10	Fabricated in lengths of 20 cm multiples (from 20 up to 200 cm). Depending on polarity, the connector can be fitted in one of six orientations. Refer to the diagram below and specify the fitting direction. Please specify a letter <b>A</b> to <b>F</b> in the diagram above.
14	
20	
26	
30	
40	
50	
60	

## 1.27 mm pitch connector flat ribbon cable: FCH Series

### Corresponding clip connector product codes

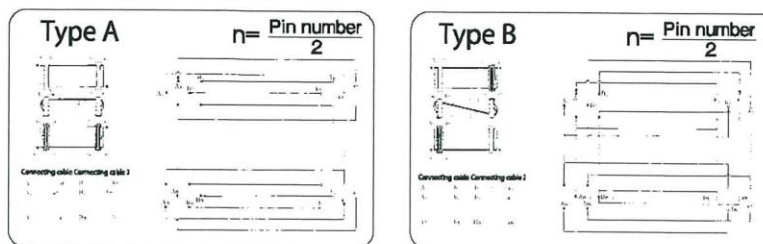
BtoB Stamp	BBSP-040-(specified number of pins)-FRC
BtoB Clip	CCBB-040-(specified number of pins)-FRC CCBB-040T-(specified number of pins)
Standard Series	CCNL-050-47-FRC CCNX-100-35-FRC
CCMO Series	CCMO-050-47-FRC CCMO-100-35-FRC
CCSE Series	CCSE-050X-(specified number of pins)-FRC CCSE-030-(All series types)-FRC
CCJF Series	CCJF-040-(specified number of pins)-FRC



### How to specify the product no.

Series name No. of cores Overall length Direction of connector  
**FCH-32-120-A**  
**- B**  
Cable: FLEX-B made by Oki Electric (or equivalent)  
Connector: HIF6-Pin number D-1.27R made by Hirose Electric (or equivalent)

### The direction of the connector



### delivery times

No. of cores	Specification
32	Overall length manufactured from 20 cm to 200 cm in 20 cm intervals. The connector can be mounted in one of two ways, depending on polarity. Please specify a letter <b>A</b> to <b>B</b> in the diagram above.
40	
50	
60	
80	
100	





## Accessories - Repair Parts - Ultra-fine Probes

## Product Repair Parts

### Ultra-fine Probes

All products on this page comply with the RoHS Directive.

※Postage is charged on all orders of less than US\$600.

### Socket sets

#### CP-001/CP-101

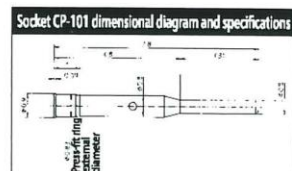
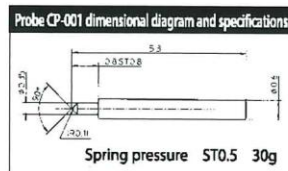
Standard

CCMO

##### Features

CCSE(excluding 0.3mm pitch type)

- Ultra-fine probes and sockets used in Yokowo clip connectors
- Can be arranged in a single row of up to 1.0-mm pitch.
- Allows convenient use with flexible tools and ultra-fine pattern tools manufactured by the customer.



### Double-ended movable type

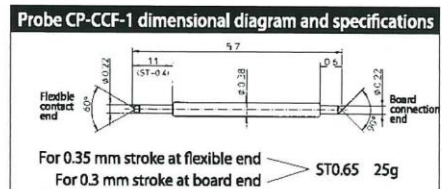
#### CP-CCF-1

CCJF / CCAC / CCSS (0.25/0.3/0.4/0.5-mm Pitch type)

##### Features

CCSE (0.3-mm Pitch type)

- Double-ended movable probe used in Yokowo 0.3-mm pitch flexible clip connectors and CCJF/CCAC/CCSS Series clip connectors. (with out 0.2-mm pitch)  
Does not use sockets.
- Can be arranged in a single row of up to 0.6-mm pitch.



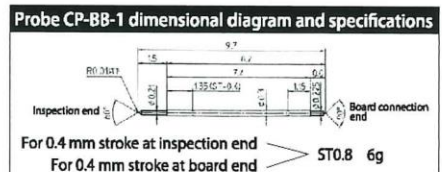
#### CP-BB-1

BtoB stamp

BtoB clip

##### Features

- Double-ended movable probe used in Yokowo BtoB clip connectors.  
Does not use sockets.
- Can be arranged in a single row of up to 0.4-mm pitch.

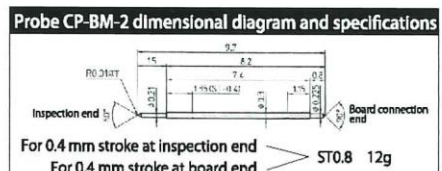


#### CP-BM-2

BM22 Series BtoB Clip

##### Features

- The double-ended movable probe used in Yokowo's BM22 Series BtoB clip connectors.  
Does not use sockets.
- Can be arranged in a single row of up to 0.4-mm pitch.

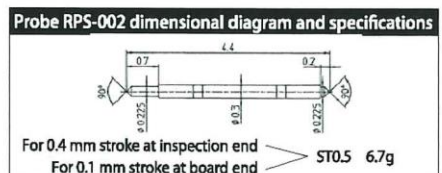


#### RPS-002

Fine-wire coaxial clip (0.4-mm pitch type)

##### Features

- Double-ended movable probe used in Yokowo fine-wire coaxial clips (0.4-mm pitch type).  
Does not use sockets.
- Can be arranged in a single row of up to 0.4-mm pitch.

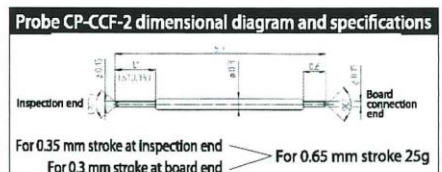


#### CP-CCF-2

Just-fit clip (0.2-mm pitch type)

##### Features

- Double-ended movable probe used in Yokowo just-fit clips (0.2-mm pitch type).  
Does not use sockets.
- Can be arranged in a single row of up to 0.4-mm pitch.

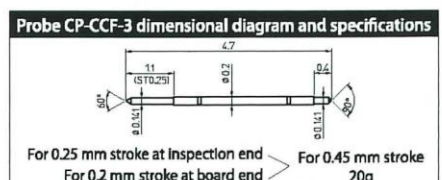


#### CP-CCF-3

Fine-wire coaxial clip (0.3-mm pitch type)

##### Features

- Double-ended movable probe used in Yokowo fine-wire coaxial clips (0.3-mm pitch type).  
Does not use sockets.
- Can be arranged in a single row of up to 0.3-mm pitch.









## Accessories - Repair Parts - Ultra-fine Probes

## Product Repair Parts

## Repair Parts

Separate shipping costs apply when products on this page are ordered separately.

### Repair Guide Parts

Series	Clip connector product no.	Type of guide		Repair guide product no.	Packaging unit
Standard product series	CCNS- 050-12 CCNM-050-26 CCNL- 050-37 CCNL- 050-47 CCNS- 050-12-FRC CCNM-050-26-FRC CCNL- 050-37-FRC CCNL- 050-47-FRC			GOP-050-used pin number	1set of 10 pcs
	CCNS- 080-17 CCNM-080-17-FRC			GOP-080-used pin number	1set of 10 pcs
	CCNS- 100-12 CCNL- 100-26 CCNX- 100-35 CCNS- 100-12-FRC CCNM-100-26-FRC CCNX- 100-35-FRC			GOP-100-used pin number	1set of 10 pcs
	CCS-125 CCS-125-FRC			GCS-125-used pin number	1set of 10 pcs
	CC-125 CC-125-FRC (CCW-125)	Right		GCC-125R-removed pin number	1set of 10 pcs
		Left		GCC-125L-removed pin number	1set of 10 pcs
CCMO/ CCSE Series	Place "GCMO" in front of the response drawing number when ordering.	per unit (for 0.3/0.5/0.8/1.0-mm pitch)			
CCJF/ CCAC/ CCSS Series	Place "GCJF" in front of the response drawing number when ordering.	per unit (for 0.2/0.3/0.4/0.5-mm pitch)			



## Accessories - Repair Parts - Ultra-fine Probes

DRS Series

### Dust Remover Sheet

You can remove dust simply by pressing the probe tip against this sheet

By using the sheet for flexible wiring clip connector, you can remove dust from the probe without having to disassemble the clip connector.

### Dust Remover Sheet

#### Product Overview

- This sheet uses the adhesion of the material itself to remove dust from the tip of the probe.
- This product differs from adhesive tape because no adhesive material remains on the probe. You can use it with complete confidence.
- Available in two sheet thicknesses: 0.3 mm and 1.5 mm.

※Postage is charged on all orders of less than US\$600.

- The 0.3-mm thick Dust Remover Sheet can be used to clean the probe simply by inserting the sheet into the flexible wiring connection slot. Simply working the clip several times cleans the probe, so there is no need to disassemble the connector clip.
- Because the sheet is only 1.5 mm thick, it can be inserted deeply into the probe. It is well suited for long probes attached to frame jigs and pin boards and the like. Because the adhesive is present on both sides of the sheet, the sheet resists sliding when it is simply placed on the board. You can also reverse the sheet once one side becomes soiled.

#### Usage Guidelines

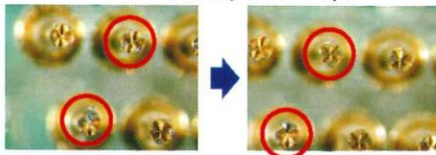
※Note: These are intended as general guidelines only and are subject to modification to accommodate your usage environment and the properties of the material to be inspected.

- This sheet is not intended to remove dirt that has become embedded over time. Please use this sheet for relatively light cleaning by contacting the probe several times (every 500 to 1,000 cycles).
- Use only at room temperature.
- Cut off and discard any dirty parts after use. We recommend cutting off areas that have been used about 60 times. Each sheet can normally be cut about seven times when used with clip connectors.  
(The 1.5-mm-thick Dust Remover Sheets can be reused multiple times if washed occasionally with neutral detergent or water.)

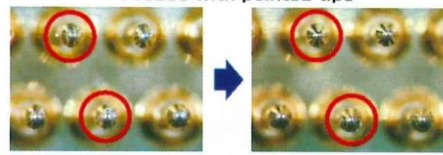


#### [Cleaning Test]

Probes with quartered tips



Probes with pointed tips



### Available Products

#### Using with clip connectors

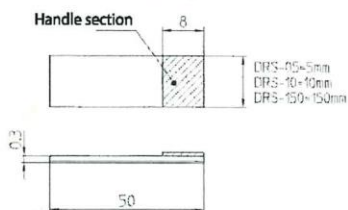
- Without disassembling the connector clip, insert the Dust Remover Sheet into the flexible wiring connection slot and work the clip several times.

Product code

DRS-05 (5-mm thick)

DRS-10 (10-mm thick)

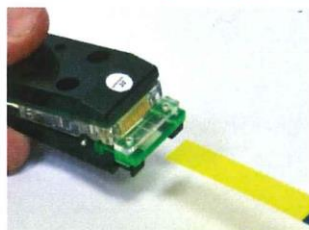
DRS-150 (no cutting)



#### Using with flexible wiring clip connectors

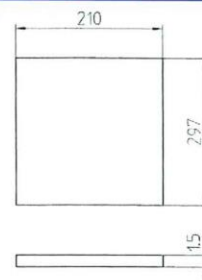
※Note: Never pull out the Dust Remover Sheet while it is clamped in the clip connector.

Work the clip gently several times with the sheet inserted into the flexible wiring connection slot.



#### Using with a probe installed on a frame jig or pin board

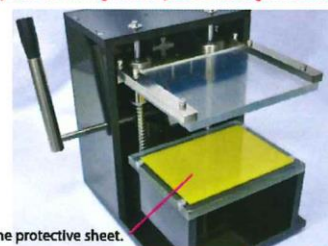
- Place the sheet on the board instead of the substrate and touch the sheet with the tip of the probe.
- Because the adhesive is present on both sides of the sheet, the sheet resists sliding when it is simply placed on the board. You can also reverse the sheet once one side becomes soiled.



Product code : DRS-A4

#### Example of use with a frame jig

※Note: Remove the sheet only after confirming that the probe is no longer in contact.



※Use only after removing the protective sheet.

\* In response to the requests from customers, we have changed to insulated raw materials. From this change, the color has been altered from green to yellow. Viscosity is as per prior.