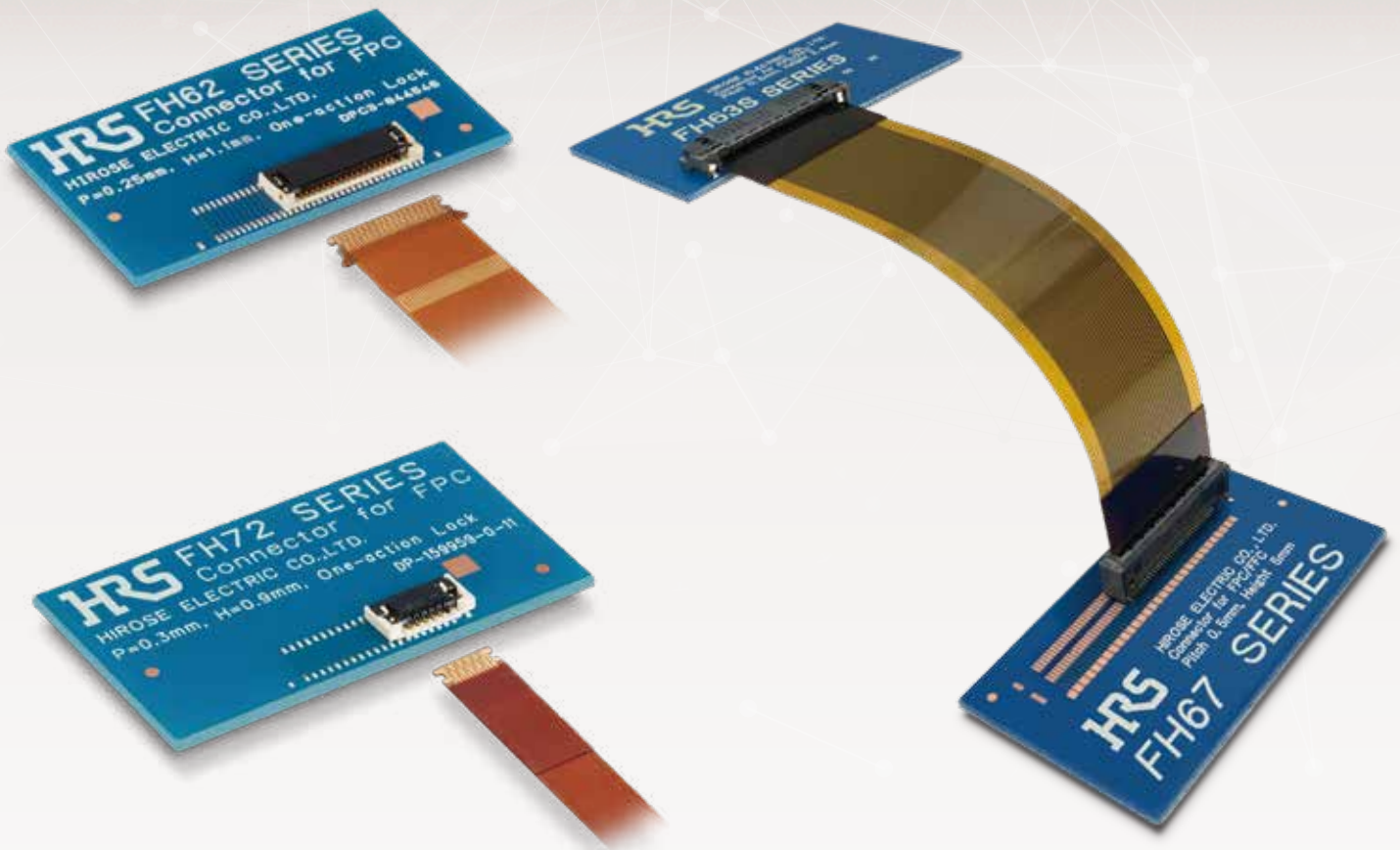


One Action FPC/FFC Connectors

OneAction **FH**™



One Action, Simple and Easy

3 Features of One Action FH™ that Realize Design Freedom and Automated Assembly

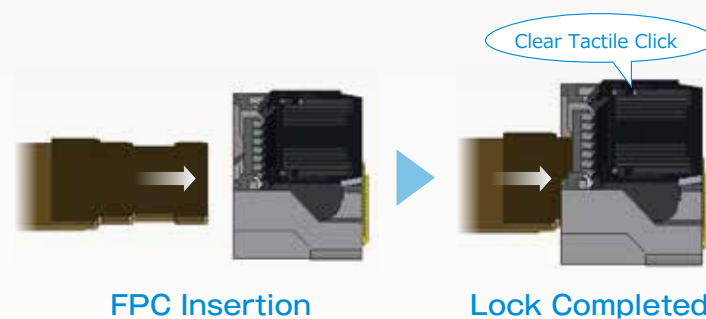
One Action FH can be connected by simply inserting the FPC/FFC, no actuator operation required. It is also effective for robot assembly, and by reducing the number of operations steps from three to one, the work time can be greatly reduced.

Feature 1 Connection Just by Insertion Easy and Simple

Unlike the conventional connection process of opening the actuator, inserting the FPC/FFC and then closing the actuator, connection is completed by just inserting the FPC/FFC with One Action FH. There is no need to touch the actuator when

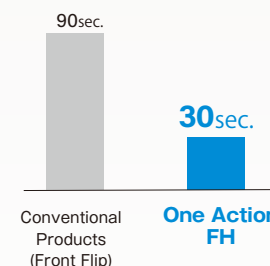
connecting, preventing actuator damage. Locking is completed at the same time as the FPC/FFC insertion so incomplete mating does not occur. The work time and number of operation steps are reduced to 1/3rd for a significant reduction in man-hours.

Work Time



Assembly Time Comparison

*For 30 Pieces



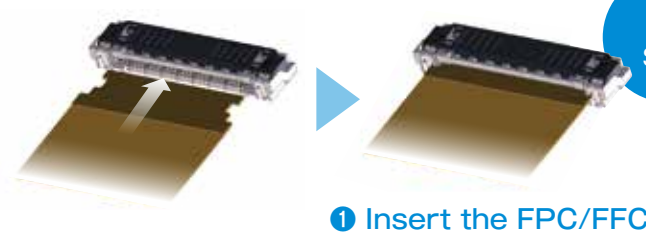
Work Time

$\frac{1}{3}$

Operation Steps



One Action FH



Number of Steps

$\frac{1}{3}$

Feature

2

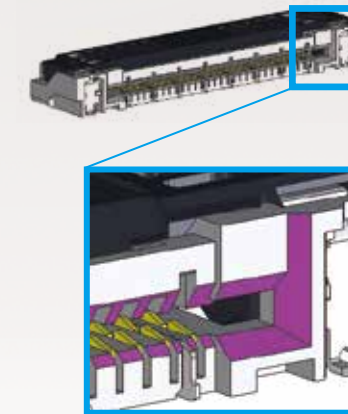
Contributes to Automation

Supports Robot Assembly

One Action FH features a large taper on the opening to allow smooth insertion. The unique spring design reduces the insertion force of the FPC/FFC and dramatically improves the

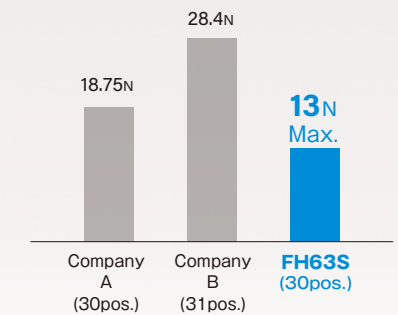
insertion performance, enabling easy operation for both humans and robots.

Compatible with Automated Assembly



Smooth insertion with large tapered openings.

FPC Insertion Force Compared to Competitors



The spring design does not interfere with FPC/FFC insertion and reduces insertion force.

Feature

3

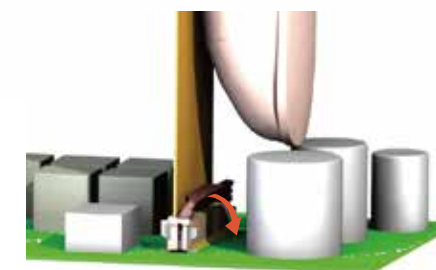
Increased Design Flexibility

Easy Connection in Narrow Spaces

Convention products require actuator operation when inserting the FPC/FFC. Therefore, it is difficult to open and close the actuator if there is another component placed nearby.

With One Action FH, only insertion is required. As long as there is space for FPC/FFC insertion then connection can be achieved even in narrow spaces.

FH12-SV



Cannot close the actuator well if there is a component nearby.

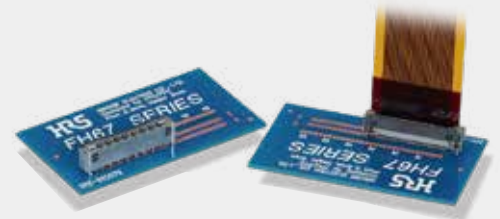
FH67



No problems even with other parts nearby since only insertion is required.

FH63S Series

- Pitch : 0.5mm
- Height : 2.8mm
- FPC/FFC thickness : $0.3 \pm 0.05\text{mm}$
- Supported Wiring : FPC/FFC/Shielded FFC
- Pos. Varieties : 10, 20, 30, 40pos. (50, 60pos. planned)
- Rated Current : 0.5A
- Rated Voltage : 50V AC/DC
- Operating Temperature : -55 to 125°C
(Includes the temperature rise by current flow.)
- Insulation Resistance : 50MΩ Min. (100V DC)
- Withstanding Voltage : 150V AC for 1 min.
- Contact Resistance : 100mΩ Max. (Includes FPC/FFC conductor resistance)

FH67 Series

- Pitch : 0.5mm
- Height : 5.2mm
- FPC/FFC thickness : $0.33 \pm 0.03\text{mm}$
($0.3 \pm 0.05\text{mm}$ planned)
- Supported Wiring : FPC/FFC/Shielded FFC
- Pos. Varieties : 30, 40pos. (10, 20, 50pos. planned)
- Rated Current : 0.5A
- Rated Voltage : 50V AC/DC
- Operating Temperature : -55 to 125°C
(Includes the temperature rise by current flow.)
- Insulation Resistance : 50MΩ Min. (100V DC)
- Withstanding Voltage : 150V AC for 1 min.
- Contact Resistance :
[FPC] Initial : 60mΩ Max. Post test : 80mΩ Max. (Includes FPC conductor resistance)
[FFC] Initial : 80mΩ Max. Post test : 100mΩ Max. (Includes FFC conductor resistance)

FH62 Series

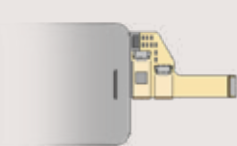
- Pitch : 0.25mm
- Height : 1.1mm
- FPC thickness : $0.3 \pm 0.03\text{mm}$
- Supported Wiring : FPC
- Pos. Varieties : 13, 17, 21, 31, 35, 39, 41, 55, 61pos.
- Rated Current : 0.3A
- Rated Voltage : 30V AC/DC
- Operating Temperature : -55 to 85°C
(Includes the temperature rise by current flow.)
- Insulation Resistance : 50MΩ Min. (100V DC)
- Withstanding Voltage : 90V AC for 1 min.
- Contact Resistance : 100mΩ Max. (Includes FPC conductor resistance)

FH72 Series

- Pitch : 0.3mm
- Height : 0.9mm
- FPC thickness : $0.2 \pm 0.03\text{mm}$
- Supported Wiring : FPC
- Pos. Varieties : 11, 15, 21, 31pos. (7, 9pos. planned)
- Rated Current : 0.3A
- Rated Voltage : 30V AC/DC
- Operating Temperature : -55 to 85°C
(Includes the temperature rise by current flow.)
- Insulation Resistance : 50MΩ Min. (100V DC)
- Withstanding Voltage : 90V AC for 1 min.
- Contact Resistance : 100mΩ Max. (Includes FPC conductor resistance)

Application Examples

[Mobile Devices]



●Display
(Around the Touch Panel)



●Smartwatch

[Smart Homes]

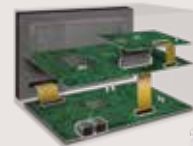


●Smart Speaker

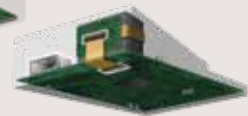


●Smart Lock

[Automotive Equipment]



●Car Navigation/IVI



●Motion Sensor Camera

OneAction FH™ Special Site →

Hirose One Action FH

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