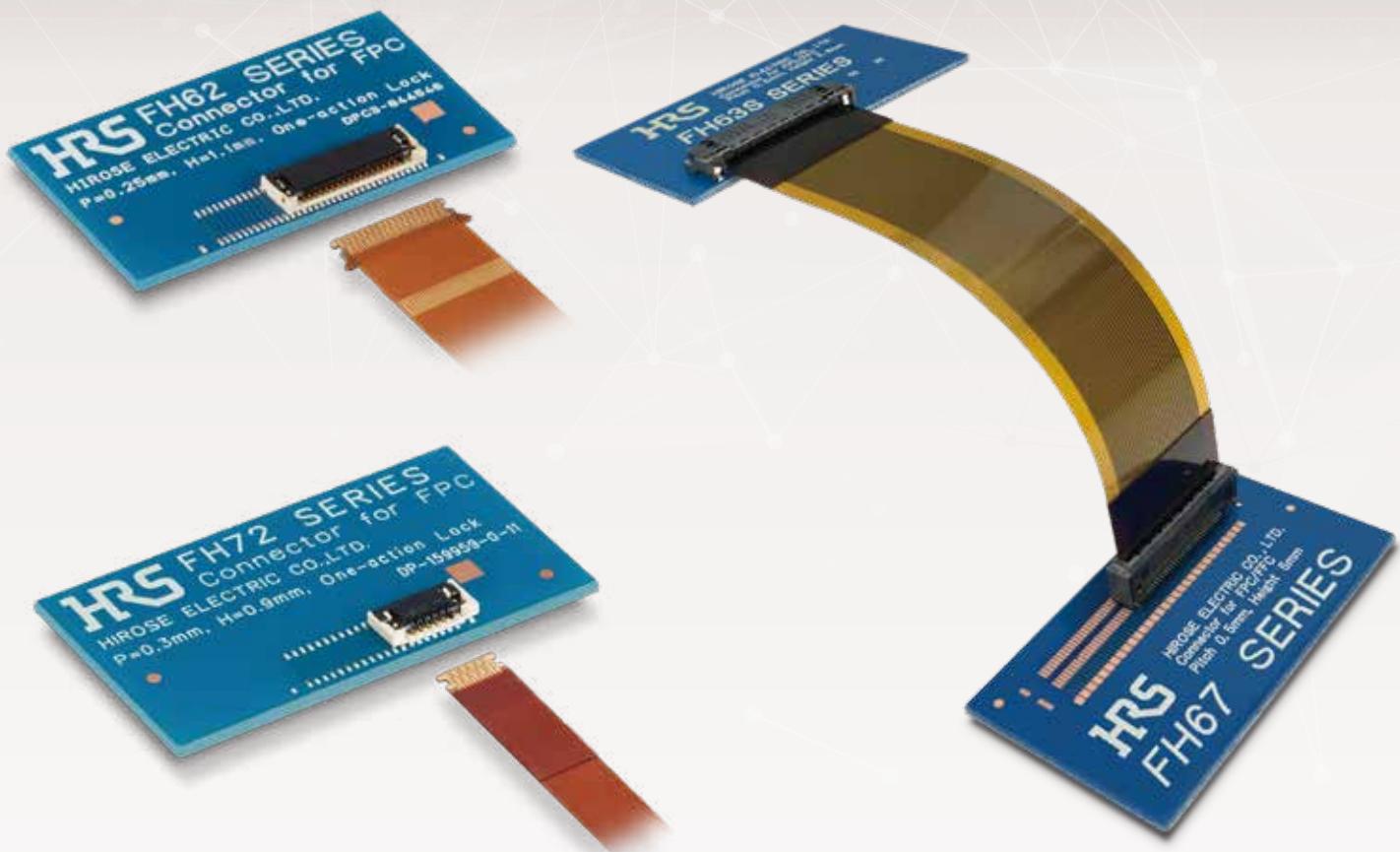


One Action FPC/FFC Connectors

# One Action **FH**™



# One Action, Simple and Easy

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

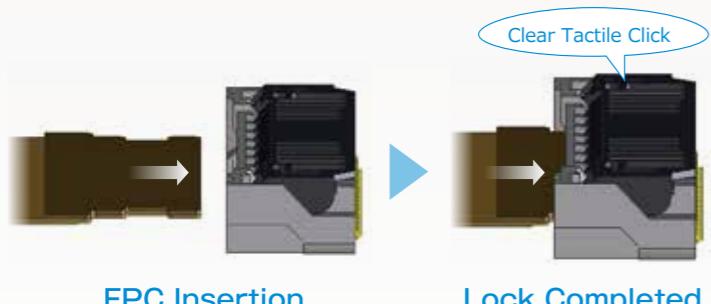
One Action FH can be connected by simply inserting the FPC/FFC, no actuator operation required. It is also effective for robot assembly, and by reducing the number of operations steps from three to one, the work time can be greatly reduced.

### 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

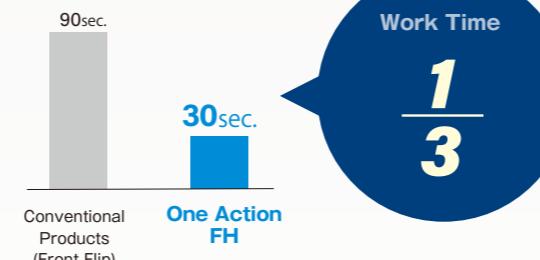
connecting, preventing actuator damage. Locking is completed at the same time as the FPC/FFC insertion so incomplete mating does not occur. The work time and number of operation steps are reduced to 1/3rd for a significant reduction in man-hours.

Work Time

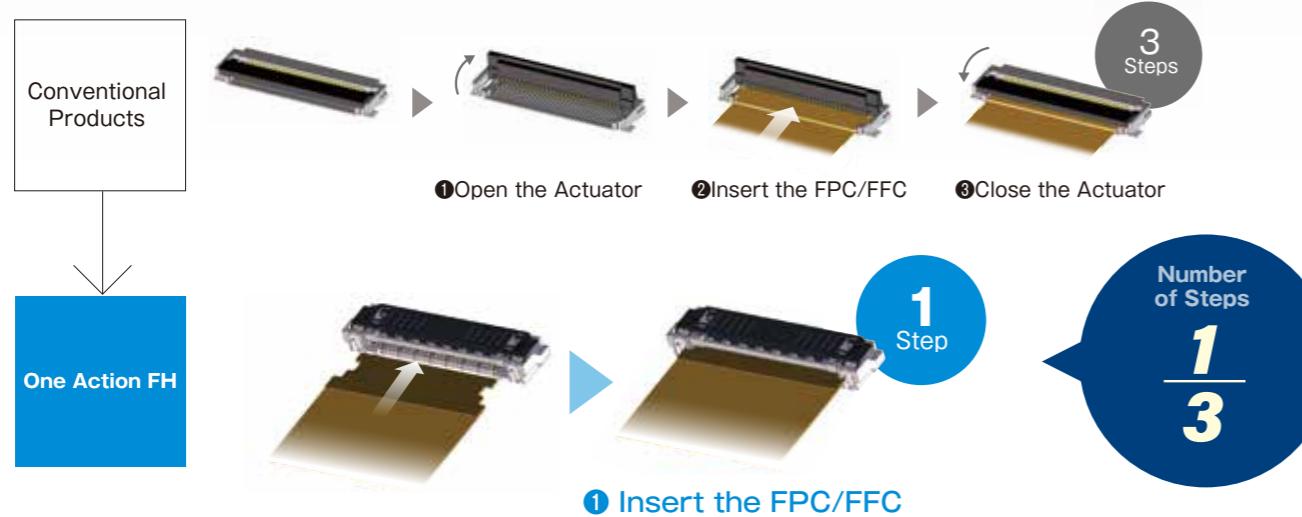


#### Assembly Time Comparison

\*For 30 Pieces



Operation Steps



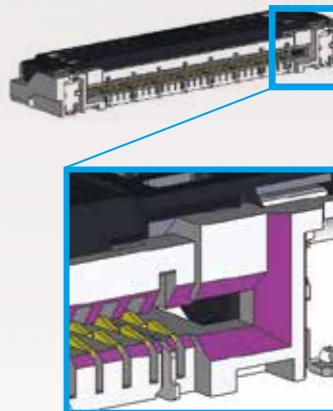
## Feature 2 Contributes to Automation Supports Robot Assembly

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.

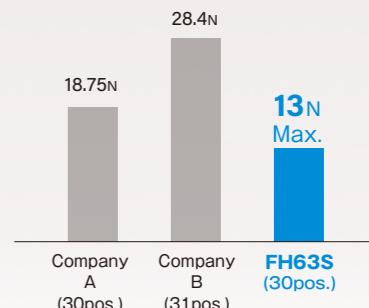


#### Compatible with Automated Assembly



Smooth insertion with large tapered openings.

#### FPC Insertion Force Compared to Competitors



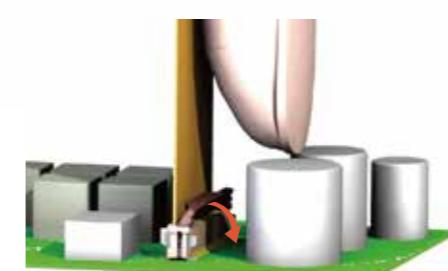
The spring design does not interfere with FPC/FFC insertion and reduces insertion force.

## Feature 3 Increased Design Flexibility Easy Connection in Narrow Spaces

Conventional 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

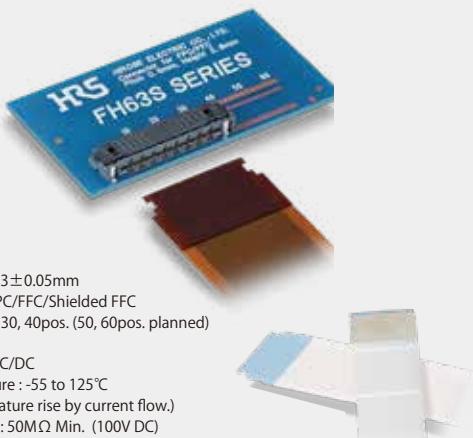


Cannot close the actuator well if there is a component nearby.

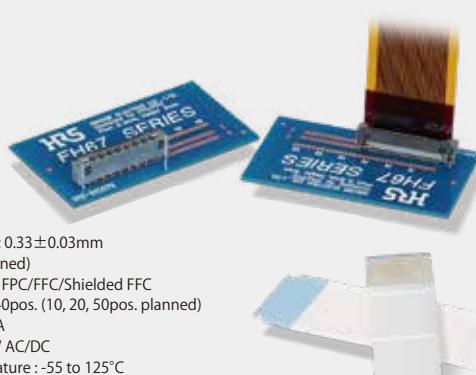
#### FH67



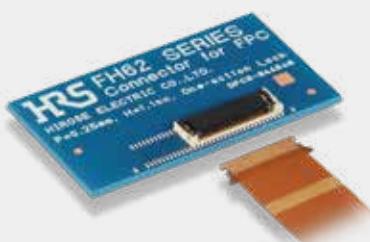
No problems even with other parts nearby since only insertion is required.

**FH63S Series**

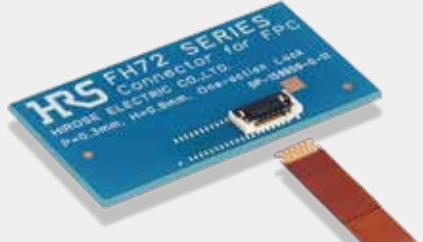
- Pitch : 0.5mm
- Height : 2.8mm
- FPC/FFC thickness : 0.3±0.05mm
- Supported Wiring : FPC/FFC/Shielded FFC
- Pos. Varieties : 10, 20, 30, 40pos. (50, 60pos. planned)
- Rated Current : 0.5A
- Rated Voltage : 50V AC/DC
- Operating Temperature : -55 to 125°C  
(Includes the temperature rise by current 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±0.03mm  
(0.3±0.05mm 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±0.03mm
- 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 ±0.03mm
- 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

**One Action FH™ Special Site** →

Hirose One Action FH



## HIROSE WORLDWIDE SALES LOCATIONS

- ◆ JAPAN : Tokyo
- ◆ CHINA : Shanghai, Shenzhen, Beijing / ◆ HONG KONG / ◆ TAIWAN / ◆ KOREA
- ◆ SINGAPORE / ◆ INDIA : Delhi, Bangalore / ◆ MALAYSIA : Penang
- ◆ THAILAND : Bangkok
- ◆ U.S.A : Chicago, San Jose, Detroit, Boston, Dallas, Irvine
- ◆ THE NETHERLANDS : Amsterdam / ◆ GERMANY : Stuttgart, Nuremberg, Hanover
- ◆ FRANCE : Paris / ◆ UNITED KINGDOM / ◆ ITALY : Milan