

P R E S E N T A T I O N

# Development Status of CHAdeMO Quick Charger Connector

CHAdeMO

010  
10111

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# 1. Yazaki Quick Charger Connector

1990's

Since 1993

1<sup>st</sup> Edition



DC600V,150A  
Destination : Japan

2009

2<sup>nd</sup> Edition



DC600V,150A  
Destination : Japan

2010

New Version



DC500V,120A  
Destination : EU,US  
August 2010  
Certification



2012  
model



## 2. Fujikura Quick Charger Connector



Commercial model

Connector plugged in EV

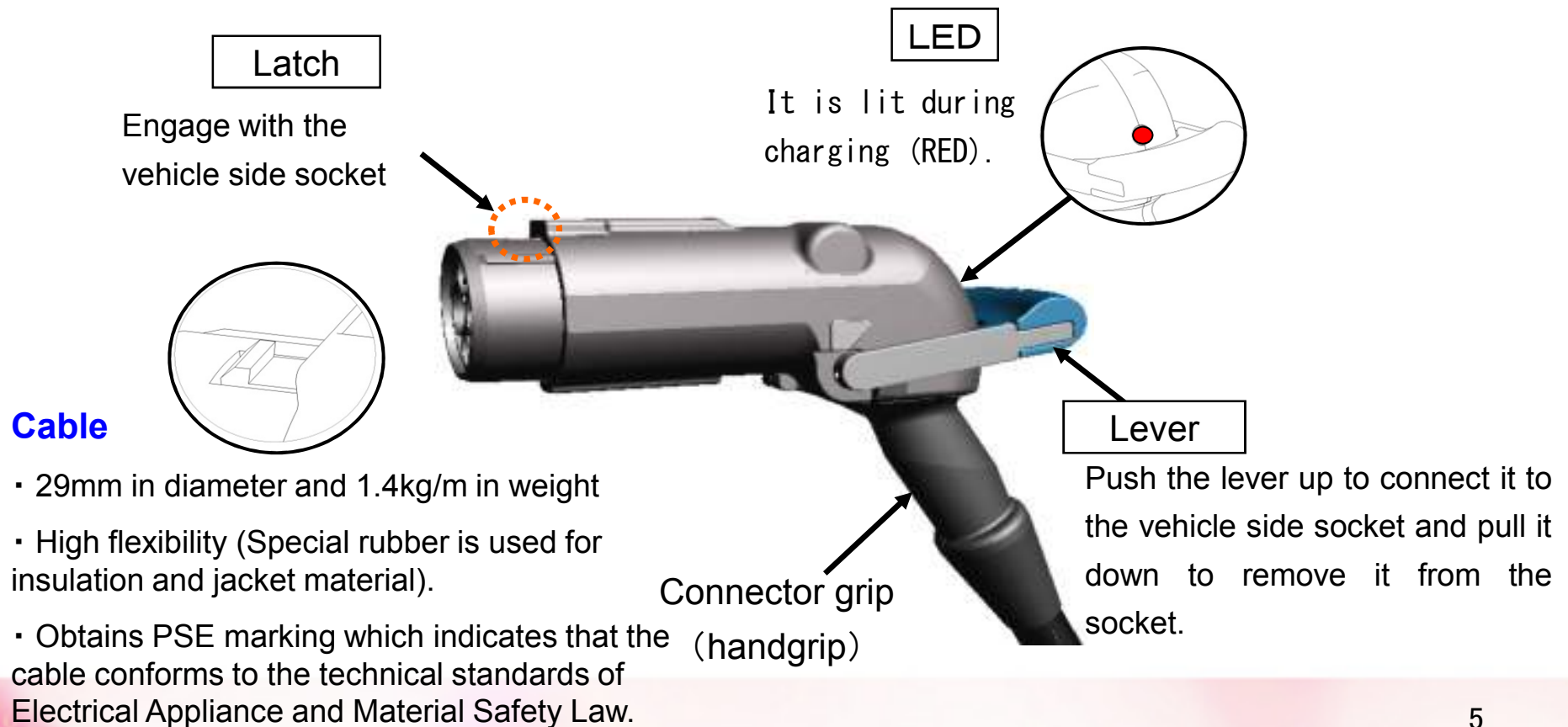


## 2. Fujikura Quick Charger Connector

### < Fujikura Connector Features >

- ① The connector has a control lever. Using the lever, users lock the connector after plugged into the vehicle inlet.
- ② When the charger starts charging, the LED comes on.
- ③ 304mm in length, 86mm in diameter, 2.5kg in weight

(The connector enjoys a good reputation for its total handleability with the cable. )





## 2. Fujikura Quick Charger Connector

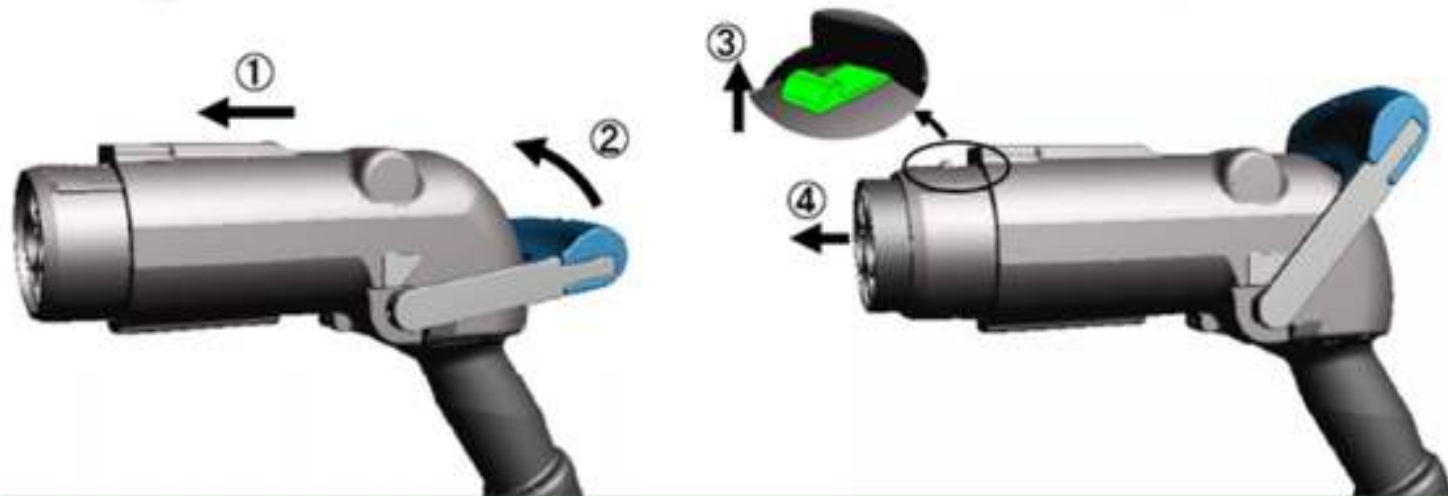
### < Connector operation >

The direction the connector is inserted is identical to the one the lever is pushed up. (To prevent erroneous operation.)

The connector is designed based on ergonomics. The series of the operation (insert and push-up, remove and pull-down) are performed in one direction. The connector is easy-to-use even for female users: the insertion force is less than half of the standard value, 90 (N).

**Safe, simple operation and secure**

- The series of the operation are performed in one direction.
- Low insertion force (less than half of 90N), easy-to-use for female users



①Connector insertion >> ②Push up the lever >> ③ Locked >>  
④Power and communication circuits are connected.

### 3. Japan Aviation Electronics Quick Charger Connector



### 3. Japan Aviation Electronics Quick Charger Connector



Shutoko (Metropolitan Expressway) Ichikawa PA



- **Lightweight**

Weight: Less than 1kg(connector only)

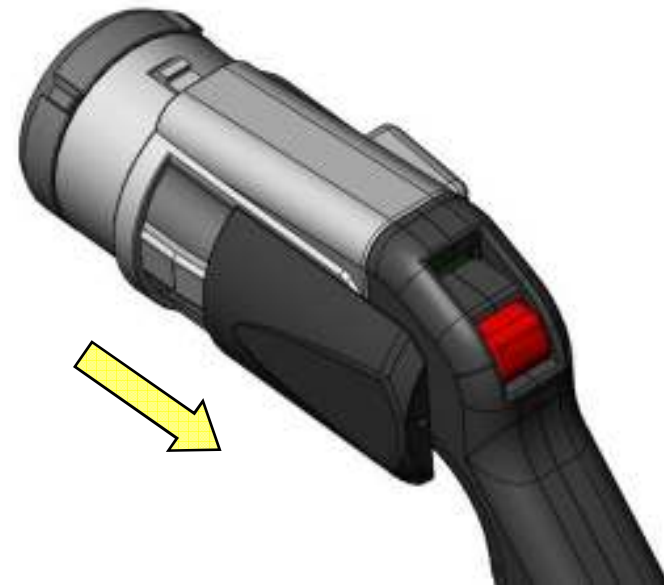
- **Better Maintainability**

Sliding body cover can be removed.

- **Single-handed Operation**

Similar connect/disconnect operation to an AC charging plug

- **Flexible and Robust Cable**



## 4. Appearance of EV Quick Charger Connector Assembly



“ Commercial model ”

## 4. Appearance of EV Quick Charger Connector Assembly

“ Charging test “



## 4. Appearance of EV Quick Charger Connector Assembly

### GUN (Main Body)

- 1) Completely **Compatible** with “**CHAdeMO**” Specification. (Just Fit to Receptors with Enhanced Connectivity)
- 2) **Easy Handling** (User Friendly).
  - Single Handed Operation.
  - Instruction Free, Just Plug-In.

### CABLE

- 1) **Durably Designed Flexible** Cable construction.
- 2) **Rubber material** is applied to outer sheath.  
(For Flexibility)

### FEATURE

- ① Plug-In/Plug-Off just **Single Actions**.  
(Just push into Receptor)
- ② Automated **Dual Safety Lock system** will be achieved for safety purpose.
- ③ **Simple Design, Light Weight** for Enhanced Hand ability.



## 5. Dyden Quick Charger Connector

### 構造

### Construction

ケーシング(アルミ合金)  
Enclosure (Aluminum alloys)

グリップ(プラスチック)  
Grip (Plastic)

位置合わせガイド  
Position guide  
センターマーク  
Center mark

フックカバー(ステンレス)  
Hook Cover (Stainless steel)

絶縁体保護金具(アルミ合金)  
Insulator protective cover (Aluminum alloys)

絶縁体(プラスチック)  
Insulator (Plastic)

異常ロック解除ねじ  
Unusual lock release screw

充電表示ランプ  
Charge pilot lamp

解除ボタン  
Release button

カラーベルト  
Color belt





## 5. Dyden Quick Charger Connector

It does not damage, even if vehicles with a weight of 2,000 kg perform drive over.



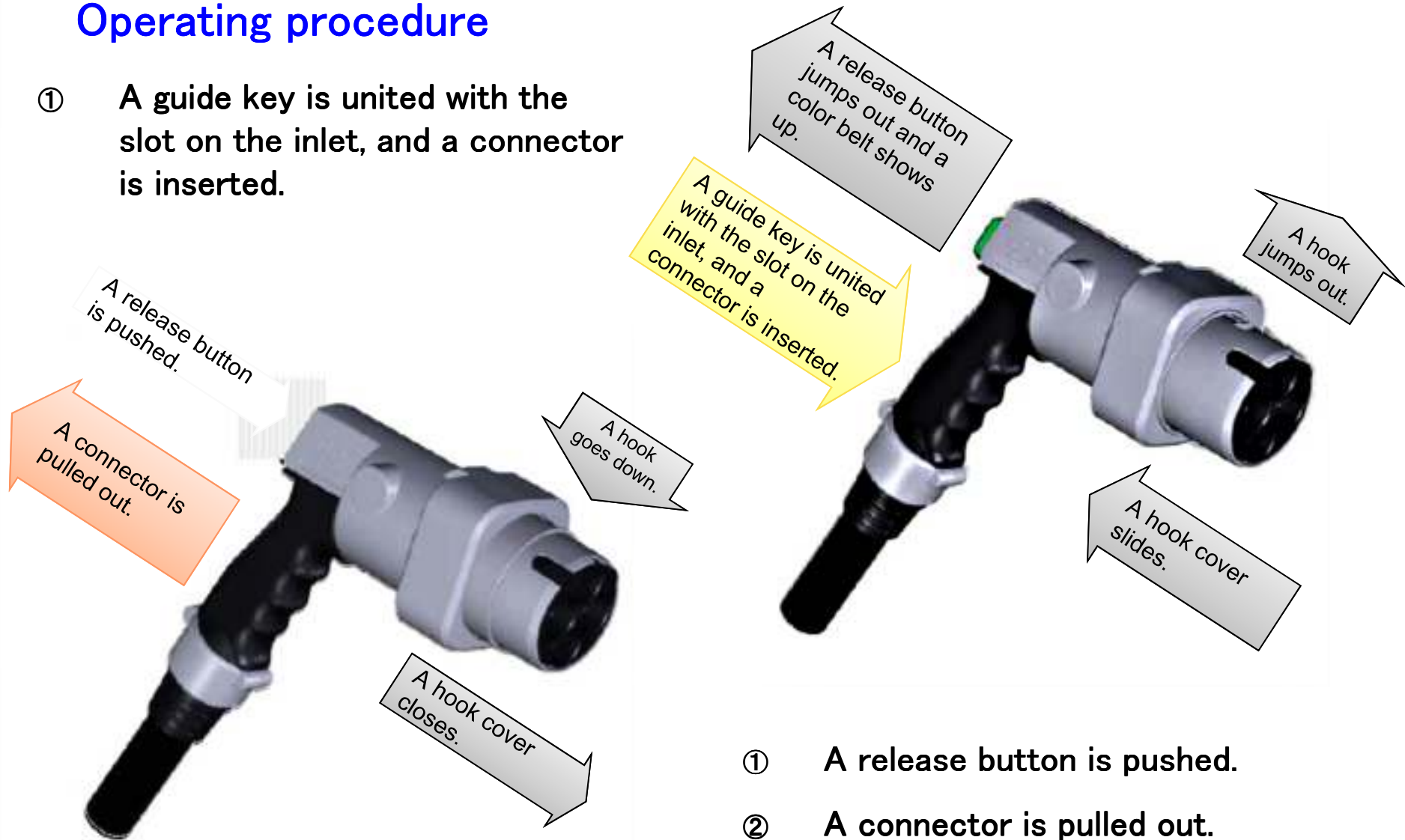
Connector plugged in EV



## 5. Dyden Quick Charger Connector

### Operating procedure

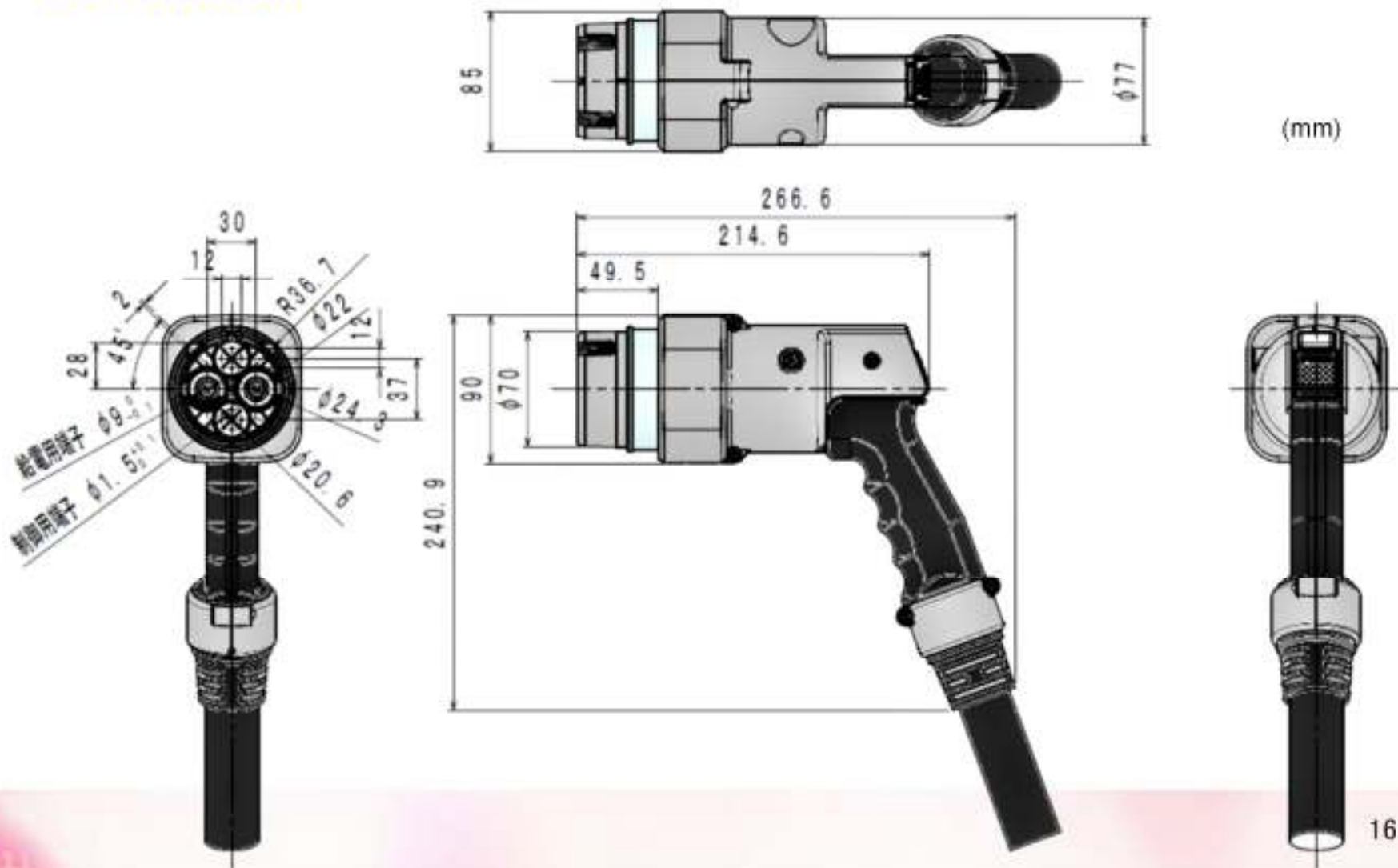
- ① A guide key is united with the slot on the inlet, and a connector is inserted.



- ① A release button is pushed.
- ② A connector is pulled out.

# 5. Dyden Quick Charger Connector

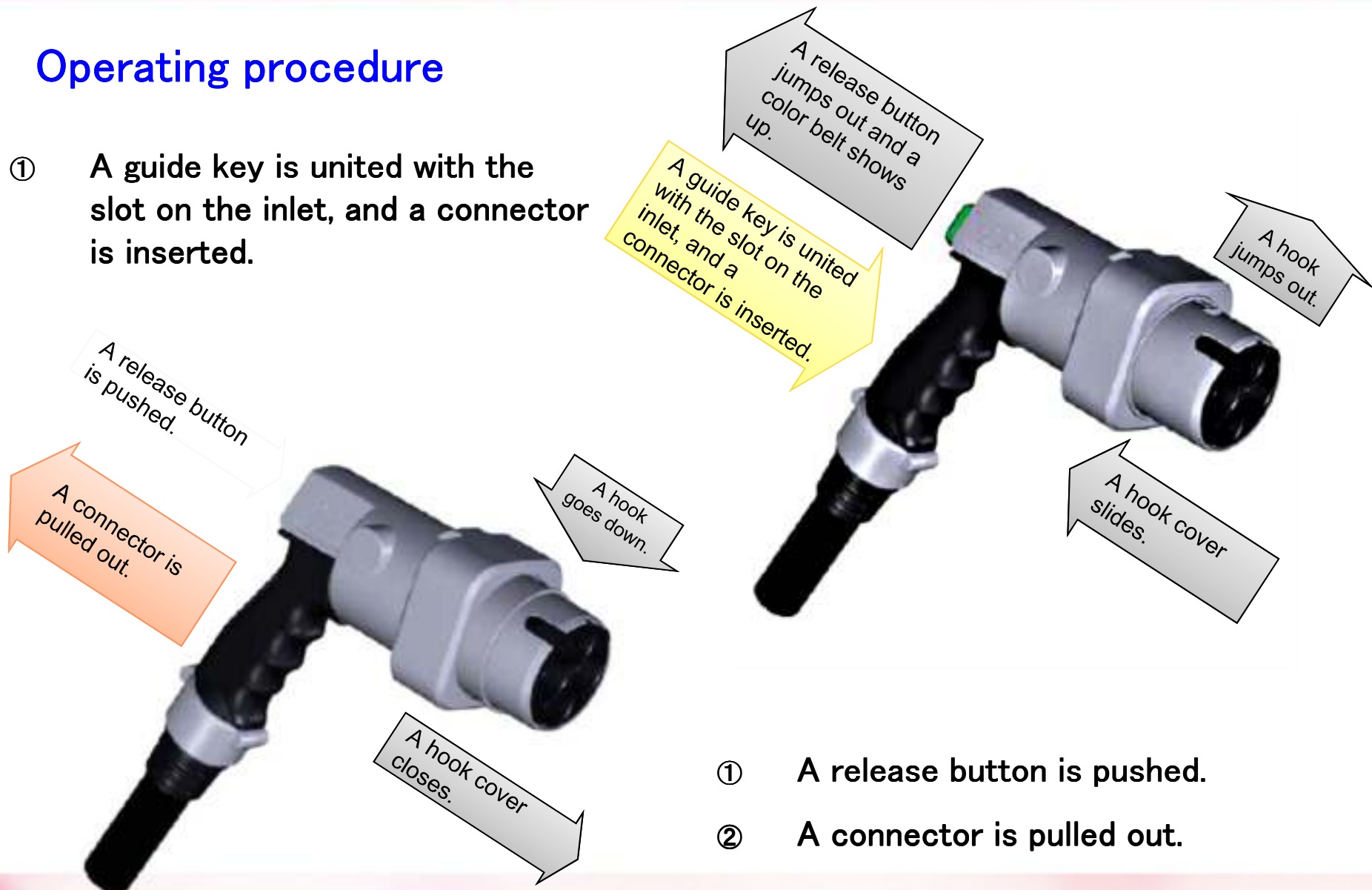
## 寸法 Dimensions



## 5. Dyden Quick Charger Connector

### Operating procedure

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