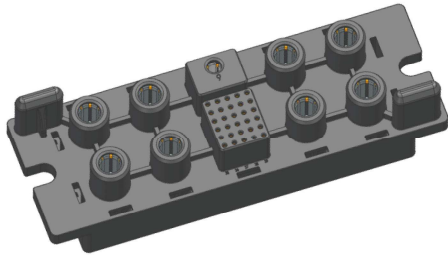


# HFLPR12 plug series

# POWER CONNECTOR



## Features

- The contact are made of copper alloys with high conductivity
- The use of crown springs for contact ensures contact reliability
- It has the characteristics of reliable connection, soft insertion, low contact resistance and high current carrying density
- Power distribution module for DC charging station, also suitable for industrial equipment electricity Source module
- Mating With:  
HFLPR12-ZP0930VYB Power connector socket

**RoHS compliant**

## ELECTRICAL DATA

|                       |                    |
|-----------------------|--------------------|
| Rated Voltage         | 1500V              |
| Rated current         | 160A               |
| Voltage Proof         | 5700VAC            |
| Contact Resistance    | $\leq 0.6m\Omega$  |
| Insulation Resistance | $\geq 1000M\Omega$ |

**Notes:** 1) The data shown above are initial values.

## STORAGE REQUIREMENT

|                         |   |
|-------------------------|---|
| Environment temperature | -10°C to +40°C                                      |
| Humidity                | 80% Max   |
| Ambient gas             | No acidity, No alkalescence and other corrosive gas |
| Stockpile period        | Doesn't exceed one year from production date        |

**Notes:** 1) The data shown above are initial values.

## CHARACTERISTICS

|                   |   |
|-------------------|---|
| Temperature Range | -40°C to 125°C  |
| Salt Mist         | 48h   |
| Temperature life  | 168 hours at 125±5°C <sup>2)</sup>  |
| Thermal Shock     | -40°C(30 min), +125°C(30 min), 5 times <sup>2)</sup>  |
| Mechanical Shock  | Acceleration of 500m/s <sup>2</sup> , half sine wave, lasting 11 ms, ±X, ±Y, ±Z direction 3 times each, the current instantaneous break time is less than 1μs |
| Vibration         | Frequency 10Hz ~ 55Hz ~ 10Hz, AM 0.75mm,each vertical direction lasts for 2 h,the current instantaneous break time is less than 1μs                           |
| Protection Grade  | IP20  |
| Quality           | Approx.309.5g   |
| Marking Mode      | Laser etching   |
| Durability        | 50 Times Min  |
| Termination       | Cable crimping  |

**Notes:** 1) The data shown above are initial values.

- 2) The parts should not be damaged, and the contact resistance should meet the requirements of electrical performance parameters.  
3) No physical damage, electrical and mechanical properties meet sequential testing.

## ORDERING INFORMATION

|                          |                        |           |          |           |           |          |          |          |
|--------------------------|------------------------|-----------|----------|-----------|-----------|----------|----------|----------|
|                          | <b>HFLPR12</b>         | <b>-T</b> | <b>S</b> | <b>09</b> | <b>30</b> | <b>V</b> | <b>Y</b> | <b>B</b> |
| Type                     |                        |           |          |           |           |          |          |          |
| Type of Connector        | T: Plug                |           |          |           |           |          |          |          |
| Type of Contact          | S: Receptacle          |           |          |           |           |          |          |          |
| No.of Power Contact      | 09: 9 Power Contacts   |           |          |           |           |          |          |          |
| No.of Signal Contact     | 30: 30 Signal Contacts |           |          |           |           |          |          |          |
| Structural Form          | V: Vertical            |           |          |           |           |          |          |          |
| Power pin wiring method  | Y: Crimping cables     |           |          |           |           |          |          |          |
| Signal pin wiring method | B: Welding             |           |          |           |           |          |          |          |



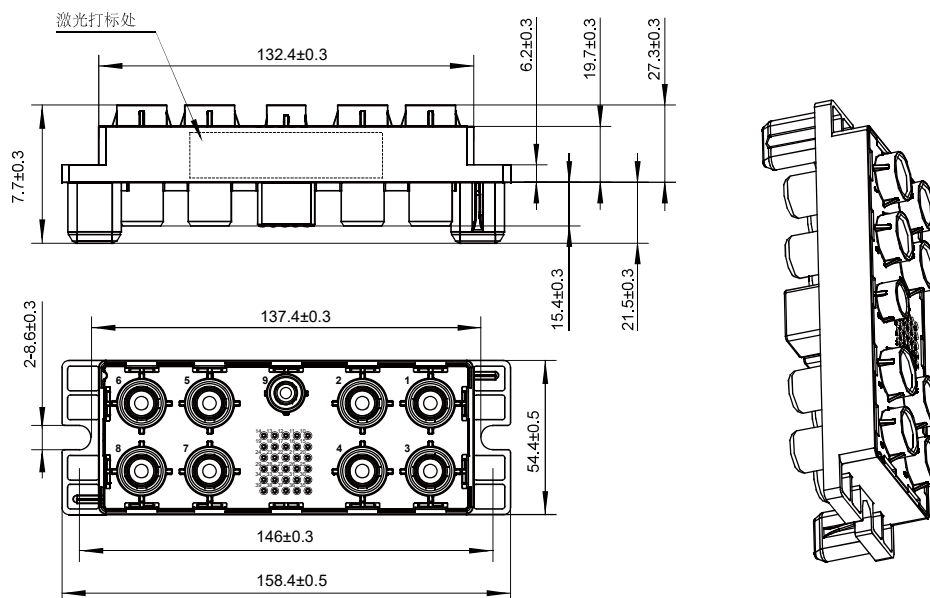
HONGFA POWER CONNECTOR SOCKET

2024 Rev. 2.00

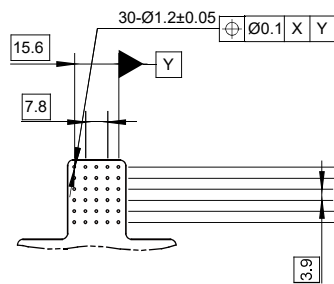
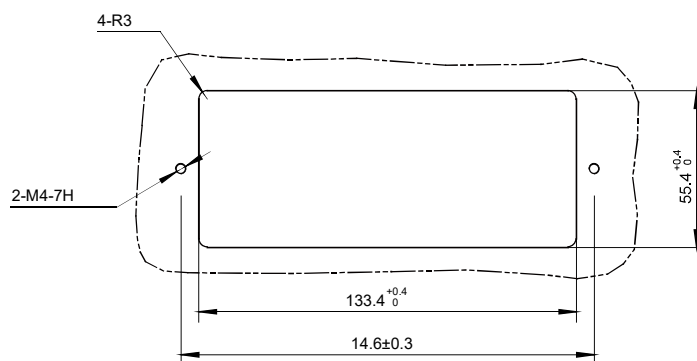
# OUTLINE DIMENSIONS AND PC BOARD LAYOUT

Unit: mm

## Outline Dimensions



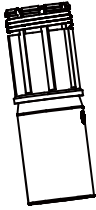
## PCB Layout (Bottom view)



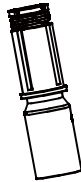
## DIMENSION OF RELATED ACCESSORY(Package delivery)

Unit: mm

Ø8  
Socket component



Ø5  
Socket component



Ø1.02  
Socket component



Assembly screw M4



## SELECTION OF PARTS

| Serial No. | Part And Components Name | Material     | Finishing     | Notes                          |
|------------|--------------------------|--------------|---------------|--------------------------------|
| 1          | Ø8 Socket component 1    | Copper Alloy | Silver plated | Suitable for 35 sq. ft. cable  |
| 2          | Ø8 Socket component 2    | Copper Alloy | Silver plated | Suitable for 25 sq. ft. cable  |
| 3          | Ø5 Socket component      | Copper Alloy | Silver plated | Suitable for 16 sq. ft. cables |
| 4          | Ø1.02 Socket component   | Copper Alloy | Gold plated   | /                              |
| 5          | Assembly screw M4        | Mild steel   | Galvanizing   | /                              |

## PRECAUTIONS FOR USE

### 1. Adapter cable:

35mm<sup>2</sup> or 25mm<sup>2</sup> (Recommended: Ø8 Socket component 1 is suitable for 35mm<sup>2</sup> cable, Ø8 Socket component 2 is suitable for 25mm<sup>2</sup> cable, customer's choice according to requirements.);

### 2. Whether the power Socket component is reliable, refer to the minimum pulling force requirements:

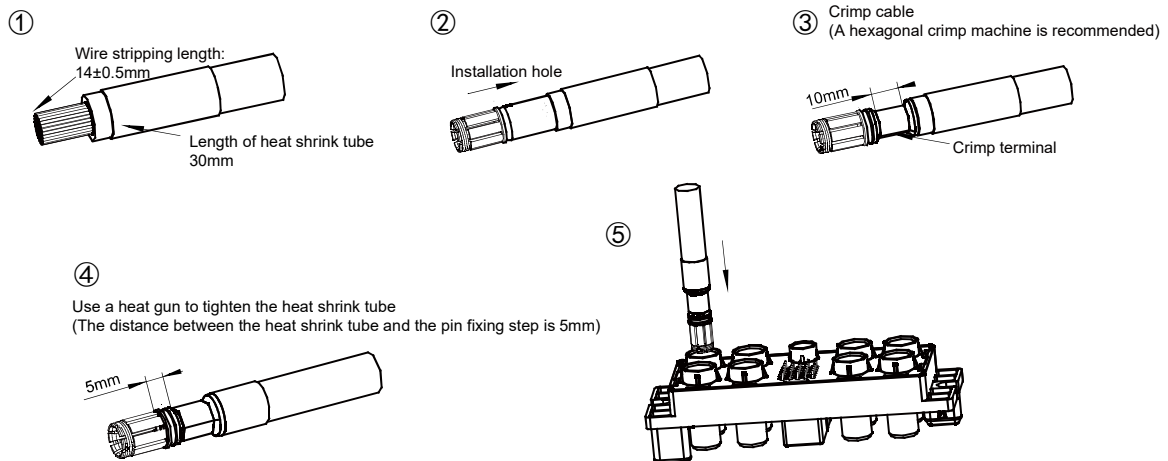
Ø8 Socket component 1 crimp 35mm<sup>2</sup> cable, minimum pulling force 2200N

Ø8 Socket component 2 crimp 25mm<sup>2</sup> cable, minimum pulling force 1600N

Ø5 Socket component crimp 16mm<sup>2</sup> cable, minimum pulling force 1300N

### 4. The operation process is as follows:

#### Ø8 Power Socket component Cable (crimp) ◆◆◆



## Disclaimer

The specification is for reference only. Specifications subject to change without notice.

We could not evaluate all the performance and all the parameters for every possible application. Thus the user should be in a right position to choose the suitable product for their own application. If there is any query, please contact Hongfa for the technical service. However, it is the user's responsibility to determine which product should be used only.

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