



**Renhotecpro.com**  
Professional Cable & Connector Manufacturer

No.5, Xinyuan North Fifth Road  
Ludong Village, Humen Town  
Dongguan, Guangdong, China

0086-769-81100186

0086-13925799591

sale@renhotec.com



Renhotecpro.com is a department of Renhotec Group Ltd focus on professional connectors, cable assemblies for harsh environment, especial for Industrial or Military use. Our goals is to provide high performance connectors and cables with reliable quality and reasonable price.



WE MAKE  
CONNECTION  
EASIER

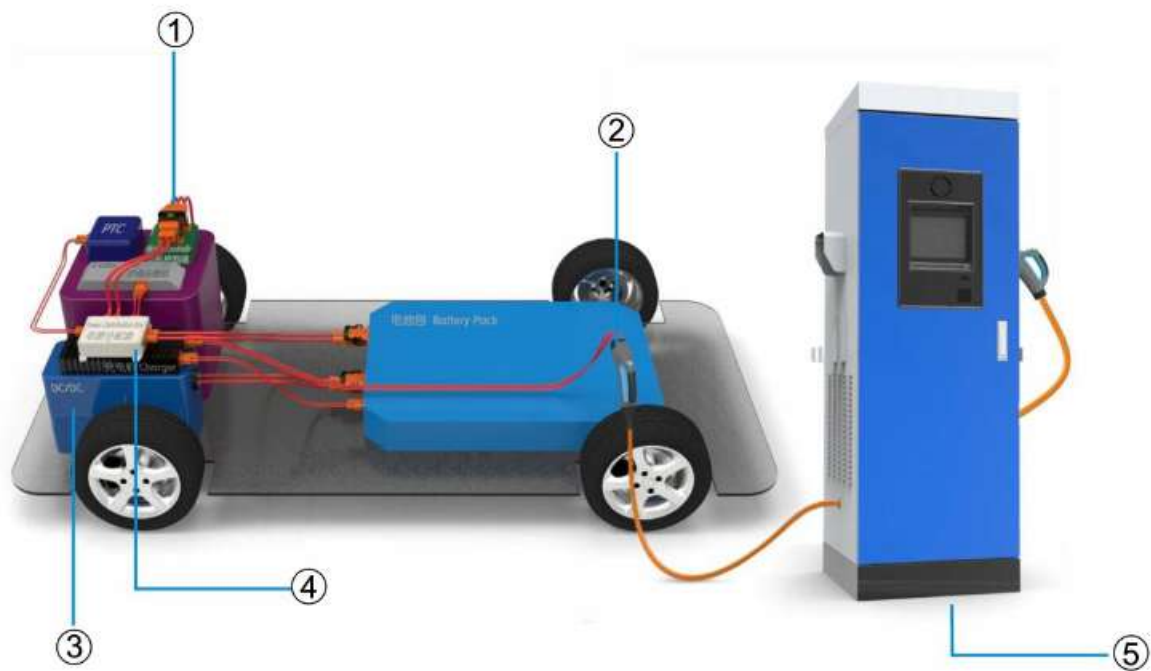
# NEW ENERGY

---

## VEHICLE CONNECTOR

### PRODUCT PRESENTATION AND ORDER GUIDE

# New Energy Vehicle High Voltage Interconnection and Charging Equipment Solution



## ① High voltage Equipment Connectors and Harness Assemblies



High - Voltage Equipment Interconnection Harness Assembly



High Voltage Vonnector (High Current)



High Voltage Connector (Low Current)

## ② Exchange Electrical Connectors and Harness Assembly



## ③ Signal Type Connector



## ④ Power Distribution Unit(PDUs)



## ⑤ AC and DC Charging Equipment





## CONTENTS

DQ Series of EV Sharging Interface	1
NDQ Series of EV Charging Interface	9
EVC Series of EV Charging Interface	18
HVIL Series of High Voltage Interlock Connectors	21
HVIL Series 80A High Voltage Interlock Connectors	42
BPC10 / BPC50 Trunk Battery Connectors	45
BPC20 Trunk Battery Connectors	48
BPC30 Chassis Battery Connectors	51
BPA30 Trunk Battery Connectors	53
CT34C Series Push-Pull High Current Connectors	56
CT34DC Series Bayonet Connectors	59
CT34E Series Push-Pull High Current Connectors	65
CT34T Series Connectors	74
GYH Series of High-Voltage Interlock Connectors	81
CT63-01 Series Circular Electrical Connectors	89

This catalog is used for model selection and contract reference, not for product design and user acceptance basis. please refer to the actual consultation, contract and related technical specifications. If there is difference between this catalog with the previous one, please subject to this catalog.



C105 Series Push-Pull Signal Connectors	97
DLQ1 Series of Electric Vehicle Manual Circuit Breakers	112
DLQ2 Series of Electric Vehicle Manual Circuit Breakers	114
DLQ4 Series of Electric Vehicle Manual Circuit Bbreakers	118
High-Voltage Distribution Box (Customized by Customers Principles and Models)	120
JX49 Terminal Block Series	123
JX59 Terminal Block Series	125
EV Cable Assemblies	126
Appendix	132

This catalog is used for model selection and contract reference, not for product design and user acceptance basis, please refer to the actual consultation, contract and related technical specifications. If there is difference between this catalog with the previous one, please subject to this catalog.



## DQ Series of EV Charging Interface

### Products Introduction

- Products complies with GB/T20234-2011 standard;
- Various types for choice, include DC charging connector (125A, 250A current rating), AC charging connector (Vehicle side, power supply side, 16A, 32A current rating).
- Humanized design with a good grasp feel, easy to use.
- Fully functional with pilot lamp, electronic locks and other functional devices for choice.
- Various accessories available, protection cap include damping cap, metal string cap, etc.
- The plug and socket termination type is wire crimping.
- Degree of protection: IP55



### Usage

Used for connection between the high voltage cables inside the electric vehicle.

### Application

For high-voltage connection of car charger, high voltage distribution box, motor controller, air conditioning, PTC, battery, etc. Can also be used for short circuit control.

### Main Technical Specification

#### [Material]

- Shell: Thermoplastics
- Insulator: Thermoplastic
- Sealing ring: rubber material
- Insulator flame retardant grade: UL94-V0
- Contact: Copper alloy, power contact with gold-plated, signal contact with gold-plated

#### [Environmental Performance]

- Operating Temperature: -30℃~+50℃
- Relative Humidity : 98%at 40℃
- Degree of protection: IP55 (during charging)

#### [Electrical Performance]

- Rating current and contact resistance:

Contact Size mm	Contact Resistance mΩ	Rating Current A	Applicable Wire mm <sup>2</sup>
12	0.25	125	35
		250	70
6	0.5	32	6
		16	2.5
3	0.75	2	0.75

- Rating voltage: 250/440V AC, 750V DC
- Insulation resistance: ≥1000MΩ( AC charging connector); ≥2000MΩ(DC charging connector)

#### [Mechanical Performance]

- Durability: Exceed 10,000 times (Non-charged State)



## Model Name

### [AC Charging Connector]

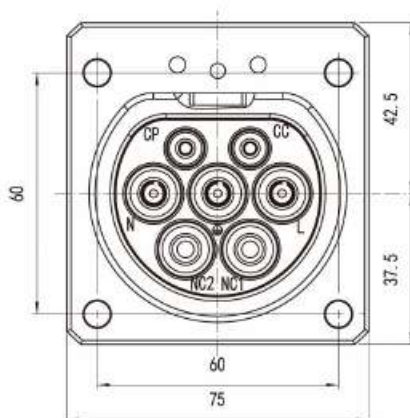
Series Name	DQ Charging Connector
Connection Class	C for vehicle end G for power supply using
Number of Contacts	7, Z for socket
Rated current	16A or 32A
Rated Voltage	250/440V
Dust Cap Type	0 (without dust cap), 1 (with metal string cap) 2 (sealed cap)
Electronic Lock	0 (without electronic lock), 1 (with electronic lock)
LED Light	0 (without LED lights), 1 (with LED lights)
Modification Code	Specific cable assembly wiring method (Customized according to customer requirements)
Cable Length	(Customized according to customer requirements)
Example: DQ C-7Z(16A-250/440V)-0 00 5m 16A vehicle end socket without dust cap, electronic lock and LED lights,cable length is 5m.	
Series Name	DQ charging connector
Connection Class	C for vehicle end G for power supply using
Number of Contacts	7, T for Plug
Rated Current	16A or 32A
Rated Voltage	250/440V
Cable Length	(Customized according to customer requirements)
Example: DQ C-7Z(16A-250/440V)-5m 16A vehicle end plug with dust cover, cable length is 5m.	

### [ DC charging connector ]

Series Name	DQ charging connector
Number of Contacts	9, Z for socket
Rated Current	125A or 250A
Rated Voltage	750V
Dust Cap Type	0 (Without dust cap), 2 (Sealed cap)
LED Lights	0 (without LED lights), 1 (with LED lights)
Modification Code	Specific cable assembly wiring method (Customized according to customer requirements)
Cable Length	(Customized according to customer requirements)
Example: DQ-9Z(250A-750)-0 00 5m 250A DC socket without dust cap and LED lights, cable length is 5m.	
Series Name	DQ charging connector
Number of Contacts	9, T for plug
Rated Current	125A or 250A
Rated Voltage	750V
Cable length	(Customized according to customer requirements)
Example: DQ-9T(250A-750V)5m 250A DC plug with 5m cable.	

### AC Interface Dimensions

#### [ AC charging connector contact arrangement and terminal function definition ]



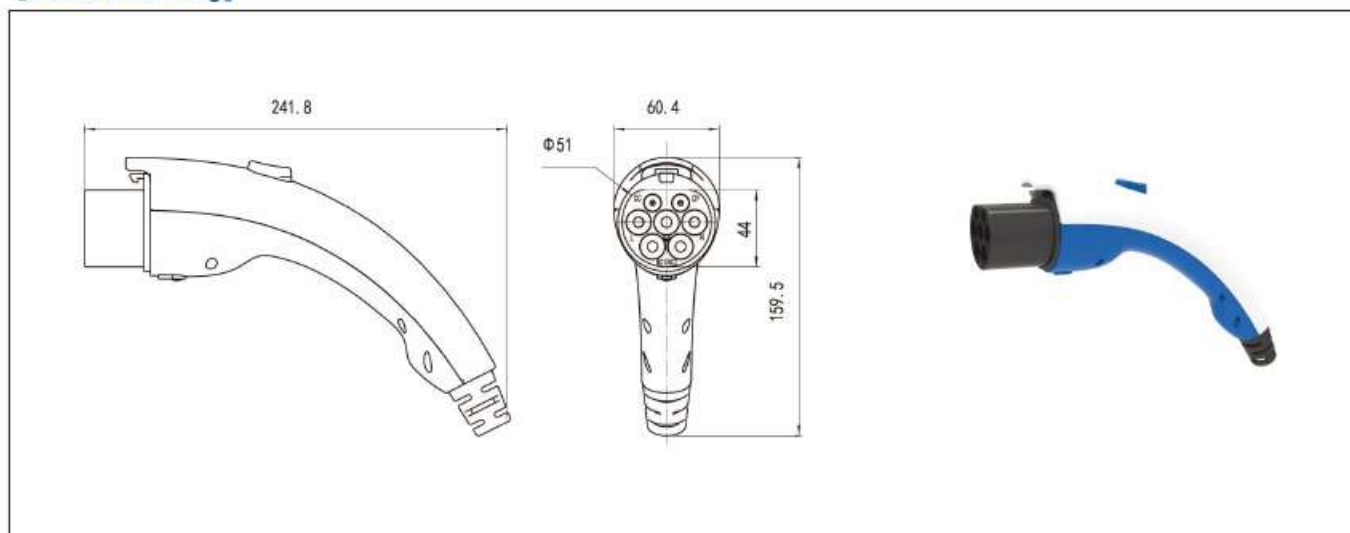
Contact arrangement (Take the socket as an example)

### Contact Definition:

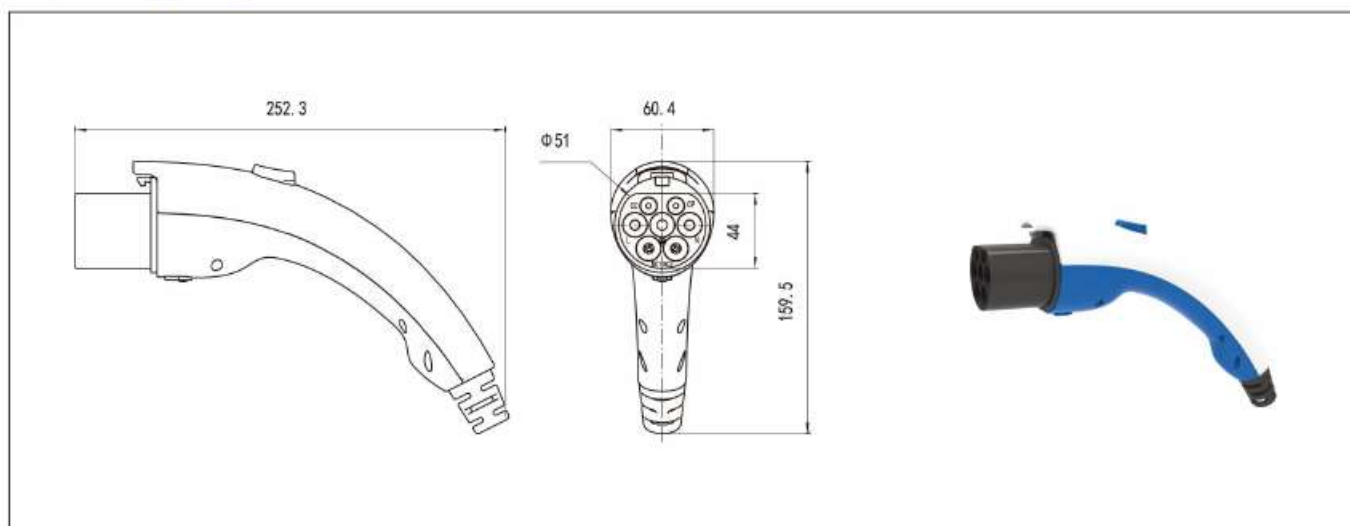
Contact mark	Rated voltage and rated current		Functional definition
L	250/440V	16A/32A	AC power supply
NC1	/		Standby contact
NC2	/		Standby contact
N	250/440V	16A/32A	Center cable
	/		Ground protect, connect the power supply equipment ground and vehicle body ground
CC	30V	2A	Charging connection confirmation
CP	30V	2A	Control confirmation

### AC Charging Plug

#### [Vehicle End Plug]



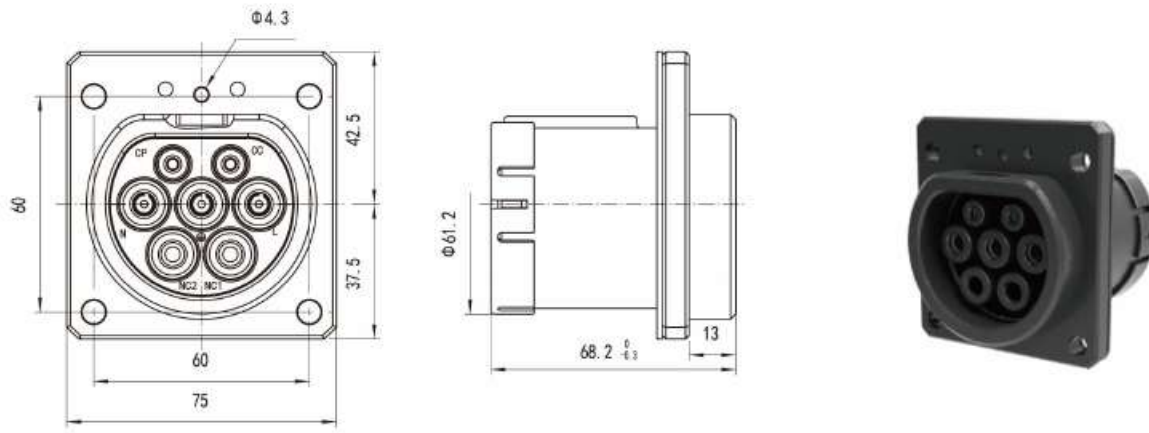
#### [Power Supply Plug]



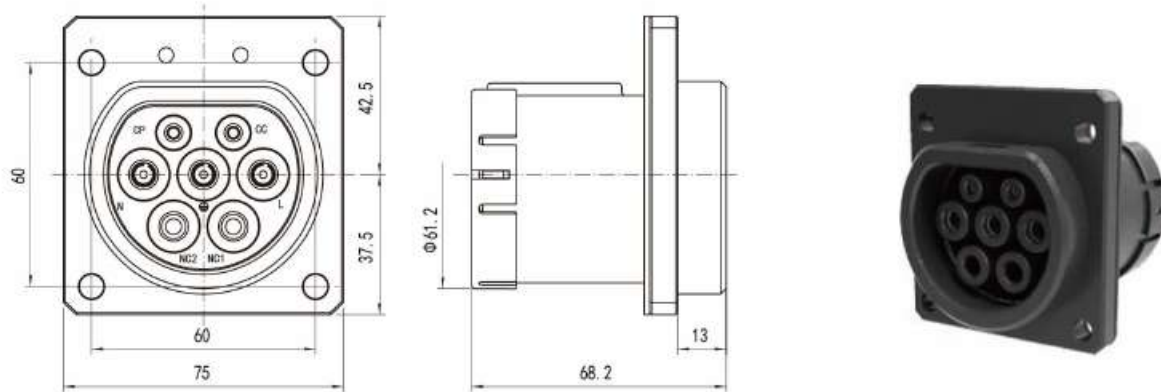


## AC Charging Socket

### [Vehicle End Socket]

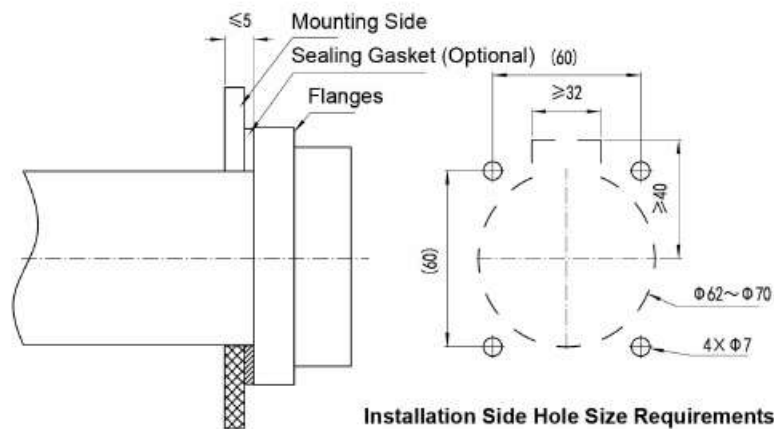


### [Power Supply Socket]

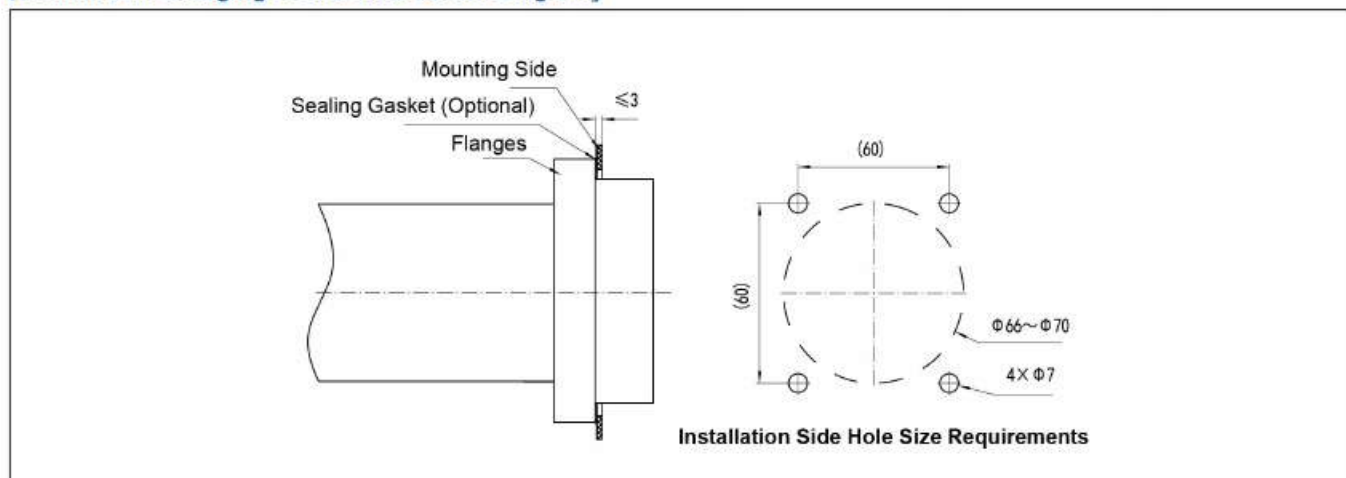


## Vehicle End Charging Socket Recommended Installation Dimensions

### [Vehicle End Charging Socket Front Mount Ddiagram]

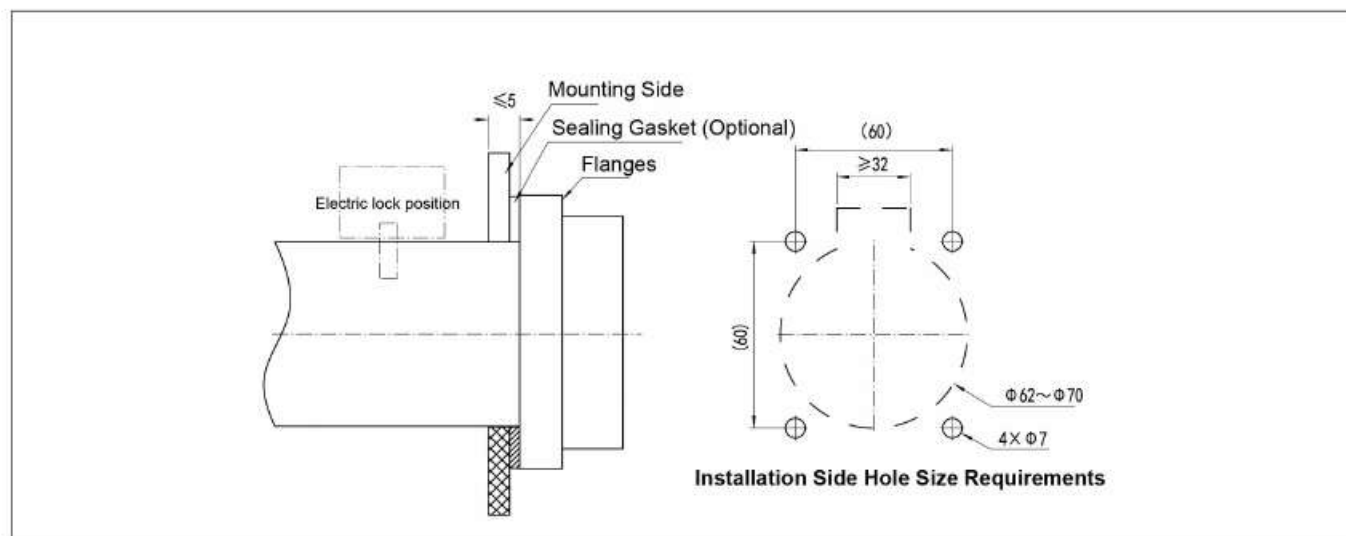


**[Vehicle End Charging Socket Rear Mount Diagram]**

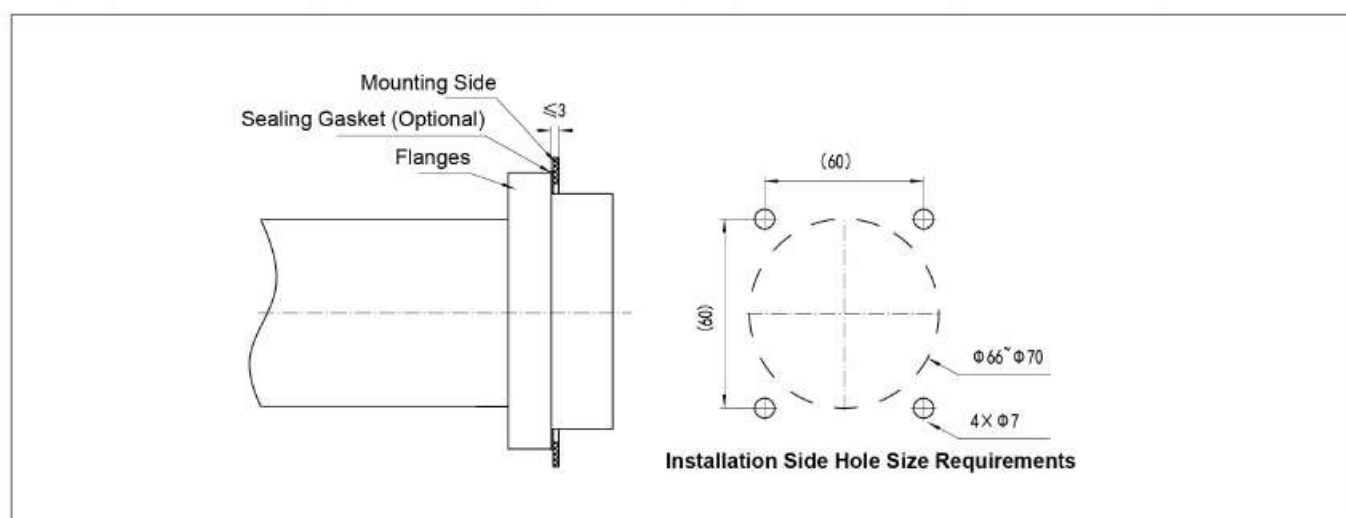


**Power Supply End Charging Socket Recommended Installation Dimensions**

**[Power Supply End Charging Socket Front Mount Diagram]**

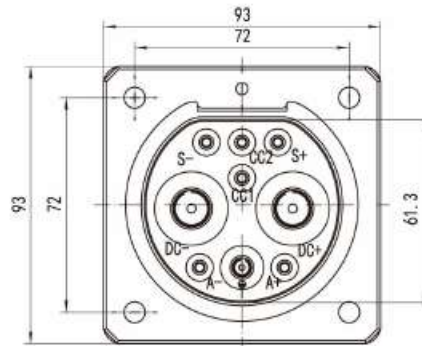


**[Power Supply End Charging Socket Rear Mount Diagram]**




## DC Interface Dimensions

### [DC Charging Connector Contact Arrangement and Terminal Function Definition]



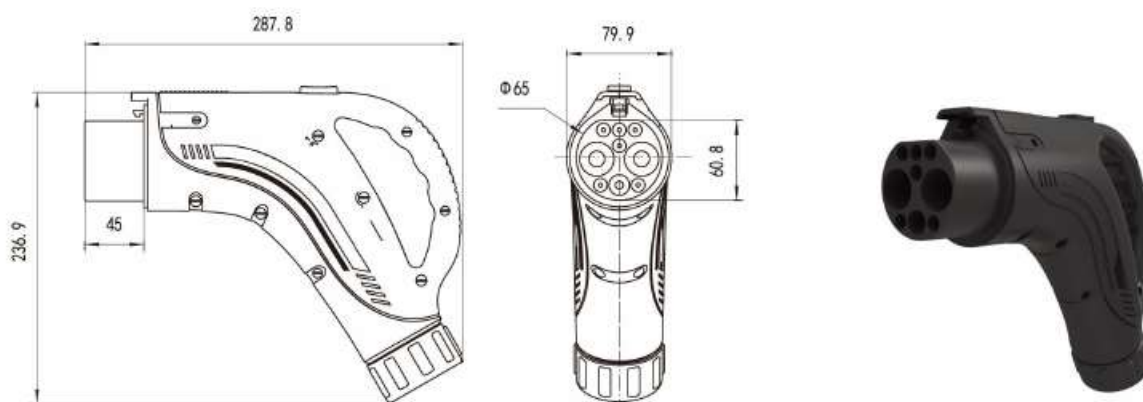
Contact arrangement (Take the socket as an example)

#### Contact Definition:

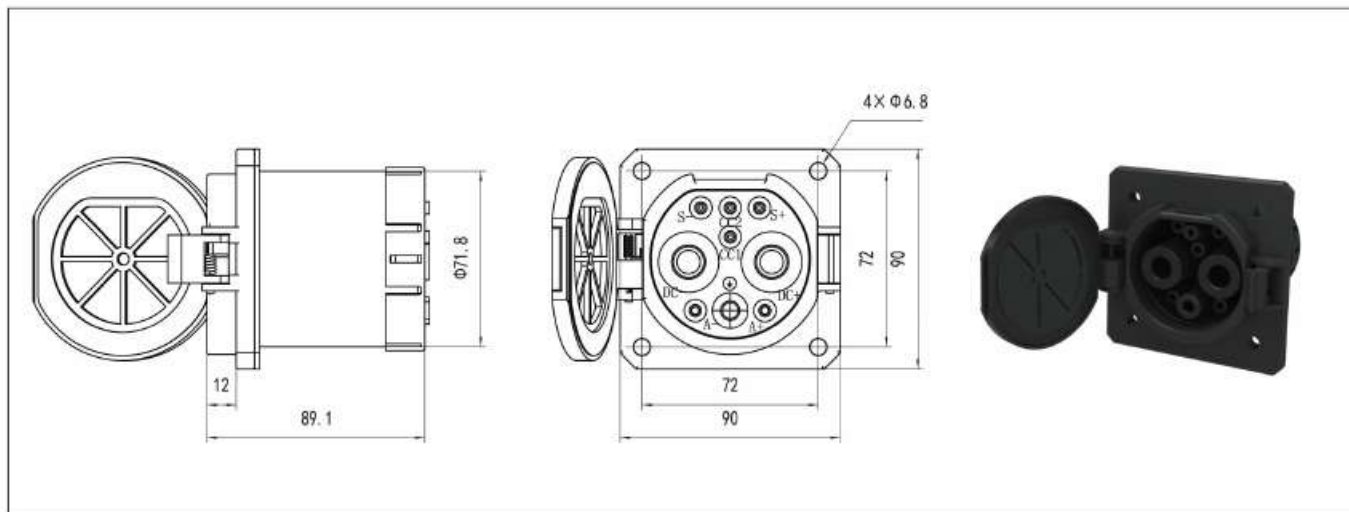
Contact mark	Rated voltage and rated current		Functional definition
DC+	750V	125A/250A	DC power supply positive
DC-	750V	125A/250A	DC power supply negative
	/		Ground protect, connect the power supply equipment ground and vehicle body ground
S+	30V	2A	Charging communication CAN_H, connecting non-car charger and electric vehicle communication cable
S-	30V	2A	Charging communication CAN_L, connecting non-car charger and electric vehicle communication cable
CC1	30V	2A	Charging connection confirmation 1
CC2	30V	2A	Charging connection confirmation 2
A+	30V	20A	Low voltage auxiliary power supply positive
A-	30V	20A	Low voltage auxiliary power supply negative

## Dimension

### [DC Charging Plug DQ9T(250A-750V)]

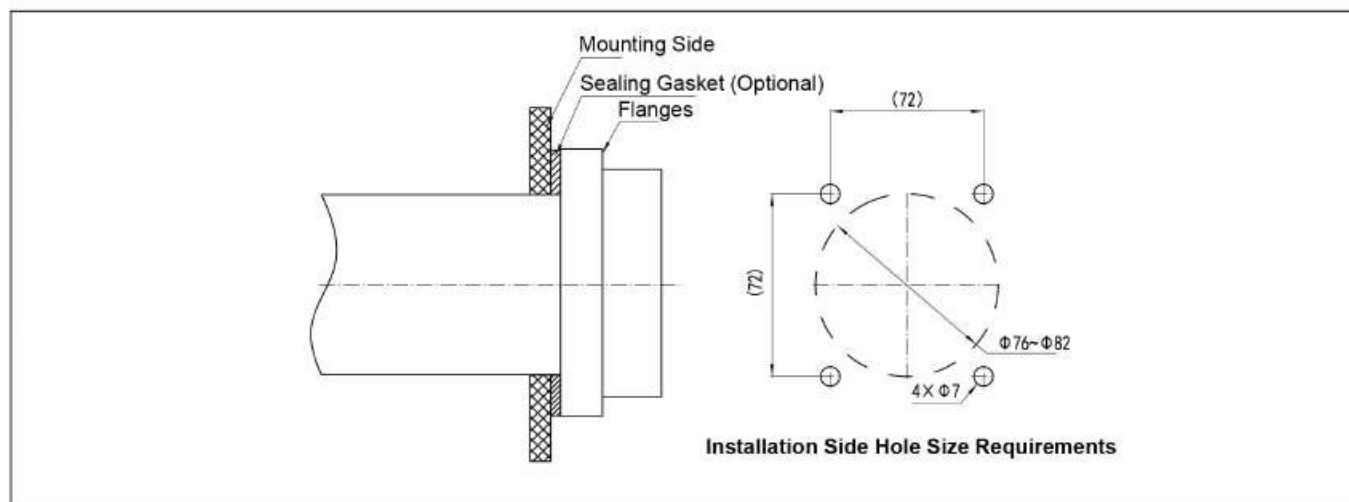


## DC Charging Socket Drawing DQ-9Z(250A-750V)-20

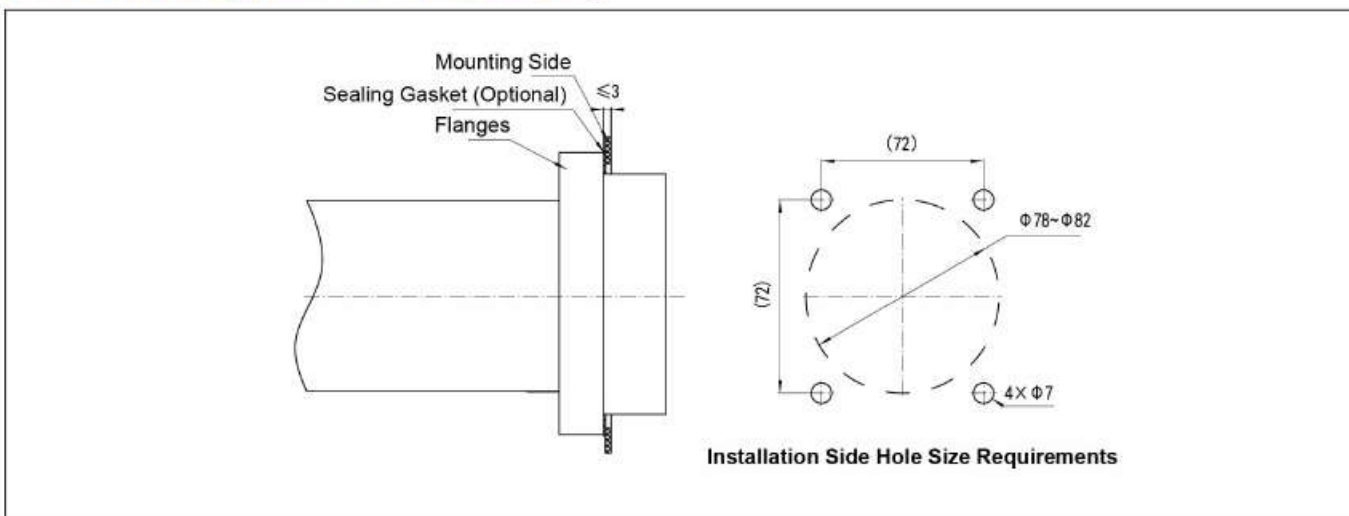


### DC Charging Socket Installation Dimension

#### [Vehicle End Charging Socket Front Mount Diagram]



#### [Vehicle End Charging Socket Rear Mount Diagram]







## NDQ Series of EV Charging Interface

### Products Introduction

- Products complies with GB/T20234-2015 standard;
- Current Rating include:  
AC: 10A, 16A, 32A, 63A  
DC: 80A, 125A, 200A, 250A
- Design and development combined with ergonomics, small size with beautiful appearance. Good security and easy to operate.
- Excellent electrical performance, with electronic locking, temperature sensing function
- The plug and socket termination type is wire crimping.
- Degree of protection: IP54(with protective cap), IP55(Gun Assembly)



### Usage

Used for connection between the high voltage cables inside the electric vehicle.

### Application

For vehicle charging system using, such as vehicle charger, DC charger, AC charger,etc

### Main Technical Specification

#### [Material]

- Shell: Thermoplastics
- Insulator: Thermoplastic
- Sealing Ring: Rubber Material
- Insulator Flame Retardant Grade: UL94-V0
- Contact: Copper Alloy

#### [Environmental Performance]

- Operating temperature: -30°C~+50°C
- Relative humidity : 98% at 40°C
- Degree of Protection: IP55 (During Charging)

#### [Electrical Performance]

- Rating Voltage: 250/440V AC, 750V DC
- Insulation Resistance:  $\geq 1000\text{M}\Omega$  (AC Charging Connector);  
 $\geq 30\text{M}\Omega$  (DC Charging Connector)

#### [Mechanical Performance]

- Durability:  
Exceed 10000 Times (Non-Charged State)

### Model Name

#### [AC Charging Connector]

Series Name	NDQ			C	-7T	(16A	-250/440V)
Connection Class	C-Vehicle End	G- Power Supply Using					
Current Mode	7T-AC Charging Gun		7Z-AC Charging Socket				
Rated Current	16A-AC 16A	32A-AC / DC 32A	63A-AC 63A				
Rated Voltage	-250 / 440V AC charging gun						
Protected Method	L-Receptacle Left Filp Cap	R-Receptacle Right Filp Cap	0 - Pluggable Cap	Not Marked - Charging Gun			

Note: The Above Model Name is The Naming Norms, Please Contact for The Specific Models.

#### [Example of Model Number]

- NDQC-7Z(16A-250/440V)-L      AC 16A Left Filp Cap Vehicle End Charging Socket  
NDQC-7T(16A-250/440V)      AC 16A Power Supply End Charging Gun

### [DC Charging Connector]

Series Name	NDQ	-9T	(80A	-750V)	-L
Current Mode	-9T AC Charging Gun	-9Z Charging Socket			
Rated Current	80A DC80A 200A DC200A	125A DC125A 250A DC250A			
Rated Voltage	-750V AC Charging Gun				
Protected Method	L-Receptacle Left Filp Cap O-Pluggable Cap	R-Receptacle Right Filp Cap E-Charging Gun			

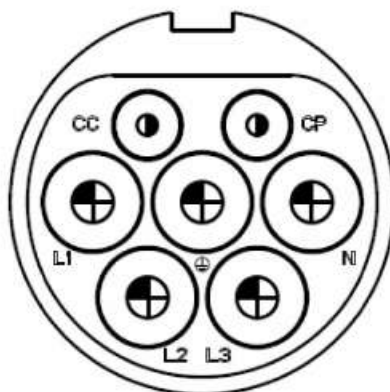
Note: The above model name is the naming norms, please contact for the specific models.

### [ Example of Model Number ]

NDQ-9Z(125A-750V)-L      DC 125A Left Filp Cap Charging Socket  
NDQ-9T(125A-750V)-E      DC 125A Charging Gun


### AC Interface Dimensions

#### [AC Charging Connector Contact Arrangement and Terminal Function Definition]



Contact Arrangement (Take the Gun As an Example)

Contact Definition:

Contact Mark	Rated Voltage and Rated Current		Functional Definition
L1	250/440V	16A/32A	AC Power Supply Single Phase
L2	250/440V	16A/32A/63A	AC Power Three-Phase
L3	250/440V	16A/32A/63A	AC Power Three-Phase
N	250/440V	16A/32A/63A	Center Cable
	/		Ground Protect, Connect the Power Supply Equipment Ground and Vehicle Body Ground
CC	0~30V	2A	Charging Connection Confirmation
CP	0~30V	2A	Control Confirmation

## AC Charging Plug

### [ Vehicle End Plug ]



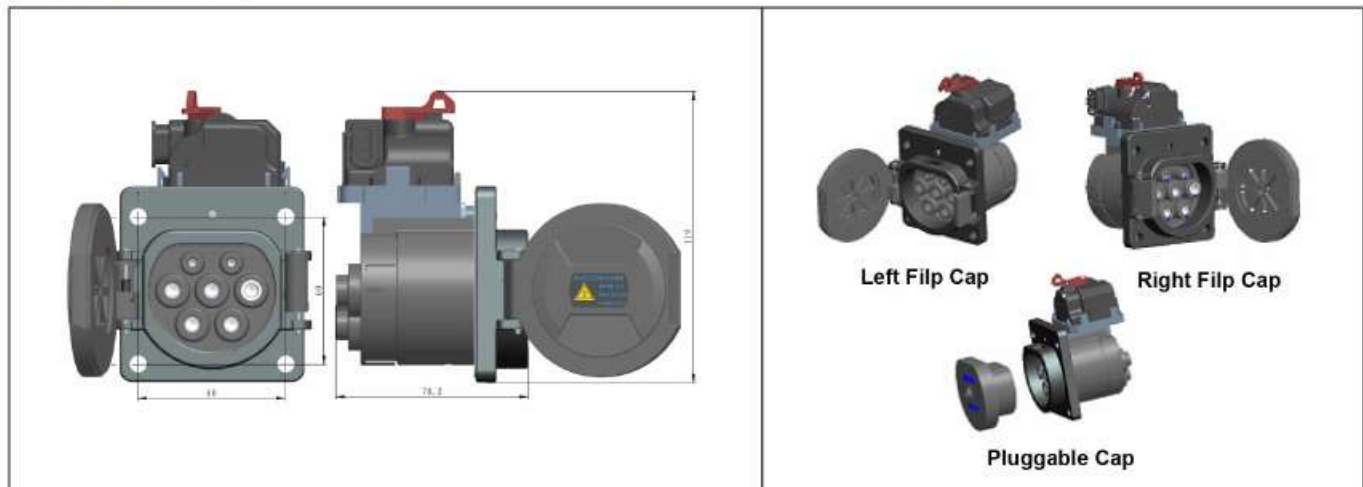
### [ Power Supply Plug ]





## AC Charging Socket

### [Vehicle End Socket]

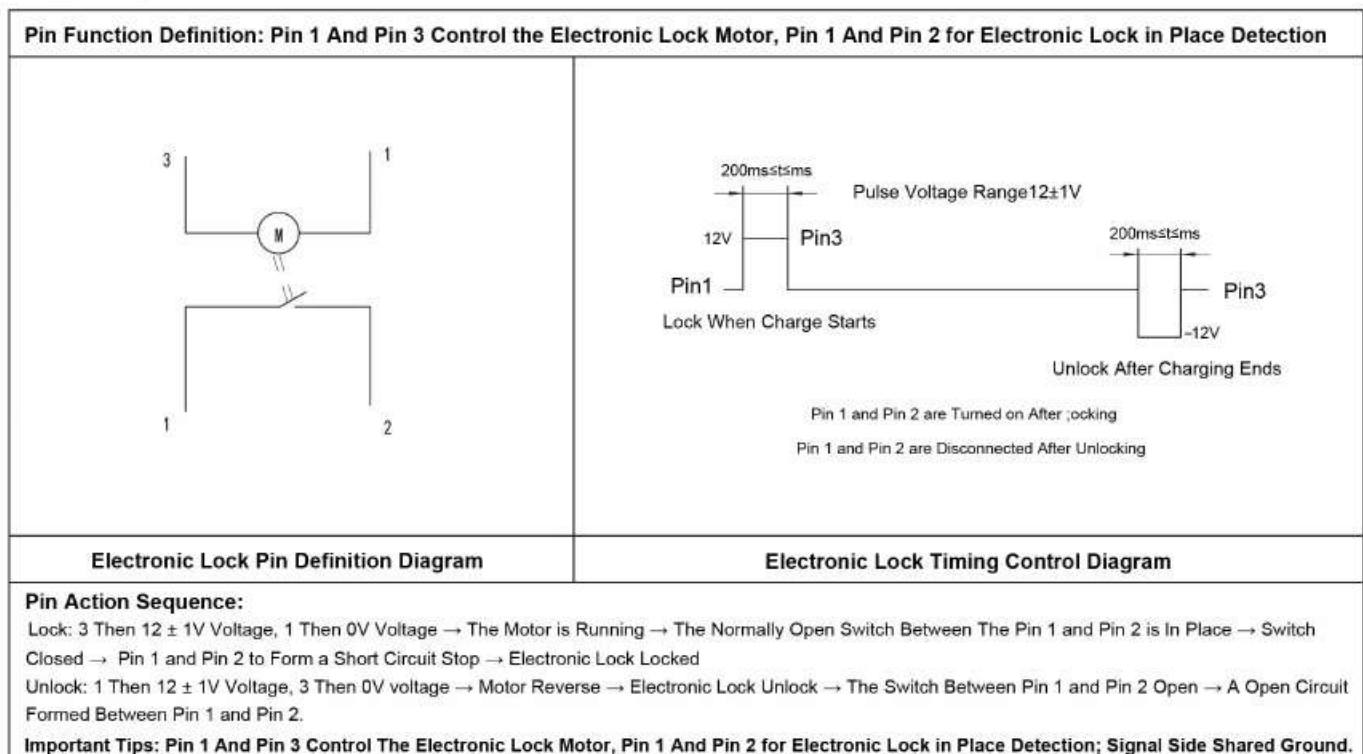


### [Electronic Lock Control Circuit Diagram]

#### Electronic Lock Performance Indicators:

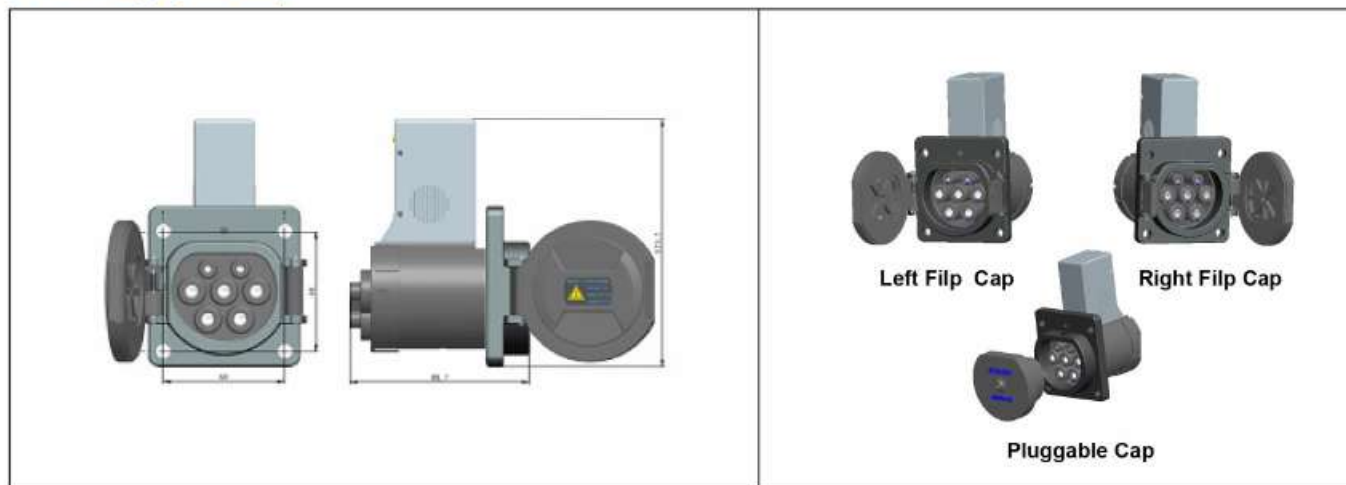
NO	Performance Item Name	Detail	Remarks
1	Rated Voltage	12±1 V DC	
2	Working Current	≤2.4A	Stall Current 3.2A (Stalled Time not Available)
3	Rotate Output Force	300N•mm	Break Locking Force 300N
4	Working Stroke	Rotate80±2°	
5	Internal Switch Trigger Time Angle	Rotate18°	
6	Operating Temperature	-30~+50°C	

#### Circuit Principle





### [Power Supply Socket]



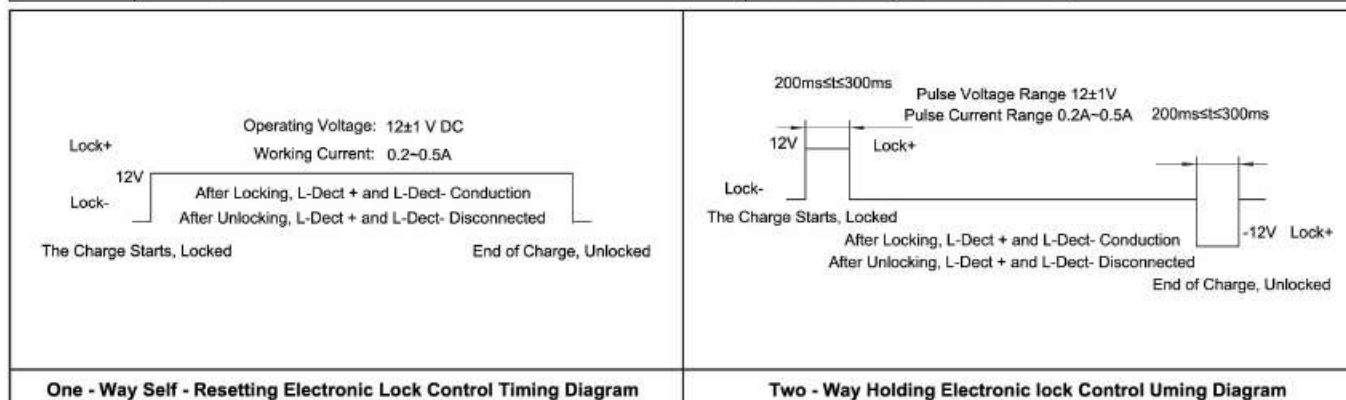
### [Electronic Lock Control Circuit Diagram]

Electronic Lock Performance Indicators:

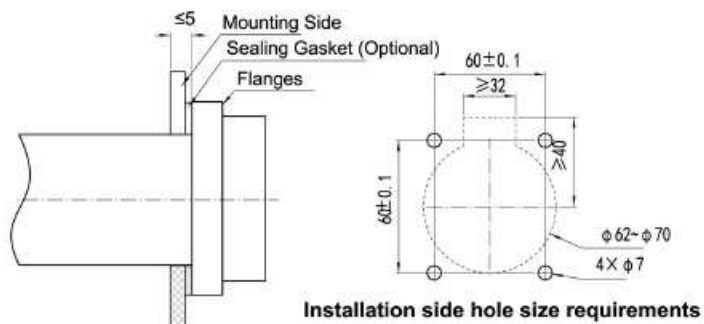
No	Performance Item Name	Detail	Remarks
1	Rated Voltage	12±1 V DC	
2	Working Current	0.2~0.5A	Continuous Power 1h, Electronic Lock Temperature Rise 60K
3	Rotate Output Force	Stroke 7.8mm, the Thrust 75g	
4	Working Stroke	7.8mm	
5	Internal Switch Trigger	Electronic Lock Movement 7.8mm	
6	Operating Temperature	-30~+50°C	

Circuit Principle

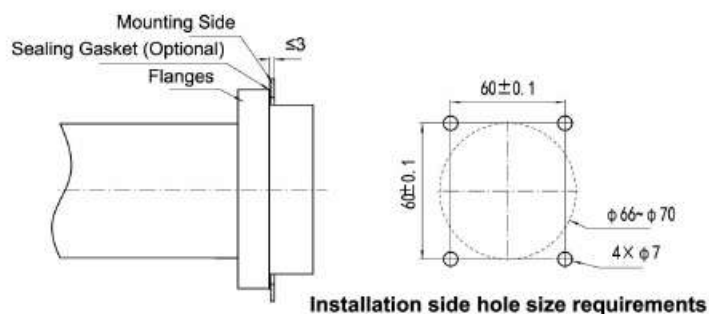
	One - Way Self - Resetting Electronic Lock	Two - Way Holding Electronic Lock
<b>Free State</b>	Unlock state of charging gun and charging socket is: the state between L-dect + and L-dect- is si off;	Unlock state of charging gun and charging socket is: the state between L-dect + and L-dect- is si off;
<b>Locked State</b>	After charging gun connected with charging socket, the electronic lock wire lock + and lock-continuous power 12 ± 1V, electronic lock locked, and the state between L-dect + and L-dect- changed to si closed;	After charging gun connected with charging socket, the electronic lock wire lock + and lock-continuous power 12 ± 1V pulse voltage, that is, lock + pass 12V voltage, lock- pass 0V voltage, the power time is shown as below. then electronic locked, L- dect + and L-dect- are transformed from si to closed state;
<b>Unlock State</b>	If charge is terminated or the charging request is stopped, the electronic lock wire will interrupted between lock + and lock-, the electronic lock is disconnected, and the L-dect + and L-dect- are changed to si disconnected;	If charge is terminated or the charging request is stopped, electronic lock wire between the lock + and lock- pass reverse pulse voltage, that is, lock- pass 0V voltage, lock + pass -12V voltage, the power time is shown as below. Then the electronic lock is disconnected, and the L-dect + and L-dect- are changed to si disconnected;



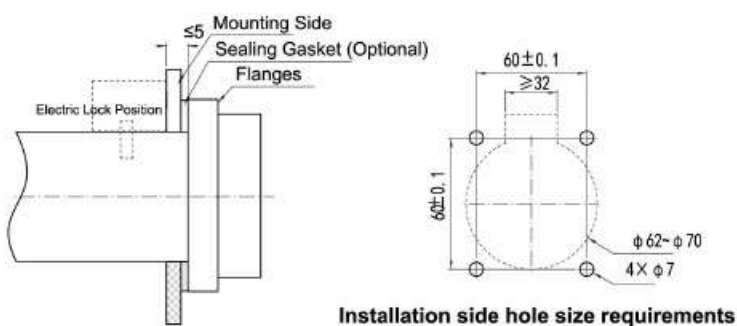
### [Vehicle Side AC Charging Socket Front Mount Diagram]



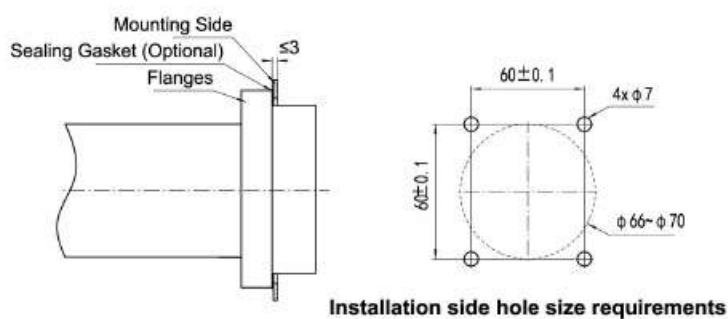
### [Vehicle Side AC Charging Socket Rear Mount Diagram]



### [Power Supply Side AC Charging Socket Front Mount Diagram]

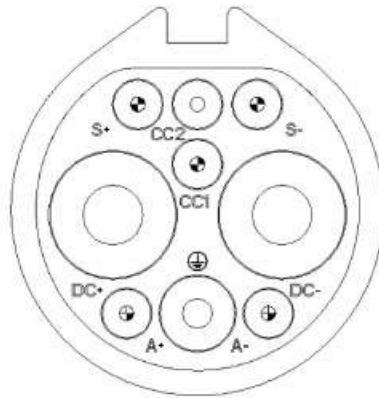


### [Power Supply Side AC Charging Socket Rear Mount Diagram]



## DC Interface Dimensions

### [DC Charging Connector Contact Arrangement and Terminal Function Definition]



Contact Arrangement (Take the gun as an example)

#### Contact Definition:

Contact Mark	Rated Voltage and Rated Current	Functional Definition
DC+	750V 80A/125A/200A/250A	DC power supply positive
DC-	750V 80A/125A/200A/250A	DC power supply negative
⊕	/	Ground protect, connect the power supply equipment ground and vehicle body ground
S+	0~30V 2A	Charging communication CAN_H, connecting non-car charger and electric vehicle communication cable
S-	0~30V 2A	Charging communication CAN_L, connecting non-car charger and electric vehicle communication cable
CC1	0~30V 2A	Charging connection confirmation 1
CC2	0~30V 2A	Charging connection confirmation 2
A+	0~30V 2A	Low voltage auxiliary power supply positive, connecting non-car charger to provide low-voltage auxiliary power for electric vehicles.
A-	0~30V 2A	Low voltage auxiliary power supply negative, connecting non-car charger to provide low-voltage auxiliary power for electric vehicles.



### [DC Charging Plug Drawing]



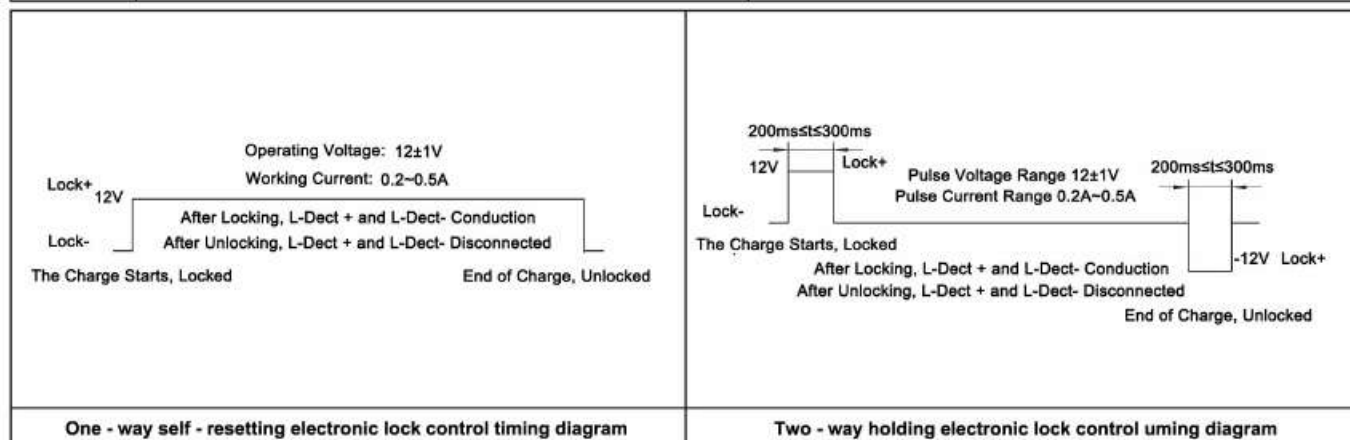
### [Electronic Lock Control Circuit Diagram]

#### Electronic Lock Performance Indicators:

NO.	Performance Item name	Detail	Remarks
1	Rated Voltage	12±1 V DC	
2	Working Current	0.2~0.5A	Continuous Power 1h, Electronic Lock Temperature Rise 60K
3	Rotate Output Force	Stroke 4mm, the Thrust 100g	
4	Working Stroke	4mm	
5	Internal Switch Trigger	Electronic Lock Movement 4mm	
6	Operating Temperature	-30~+50°C	

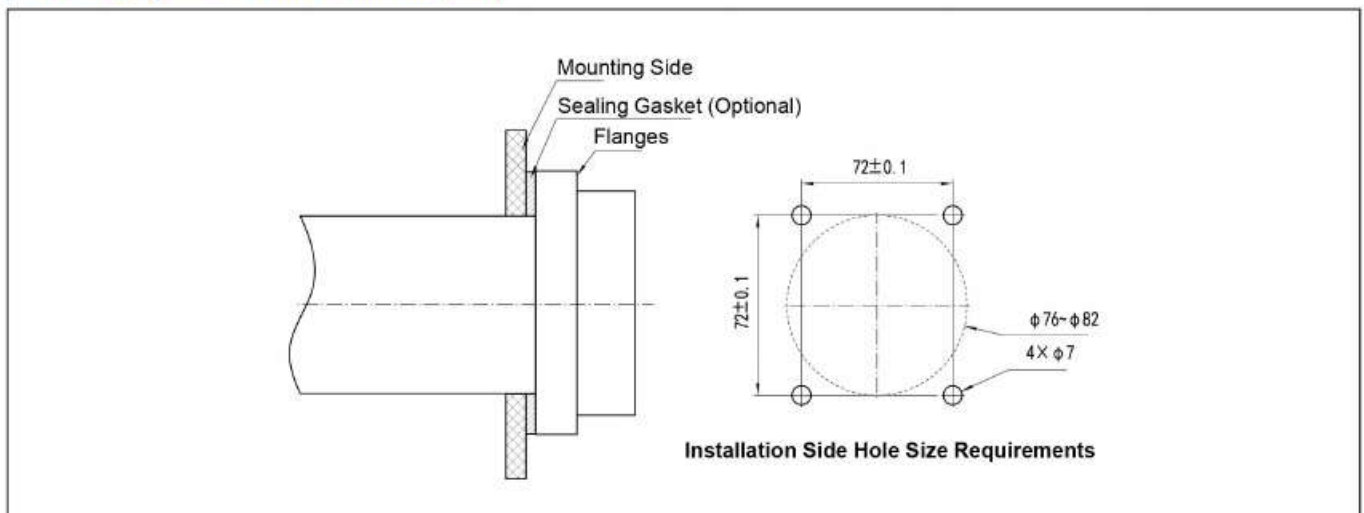
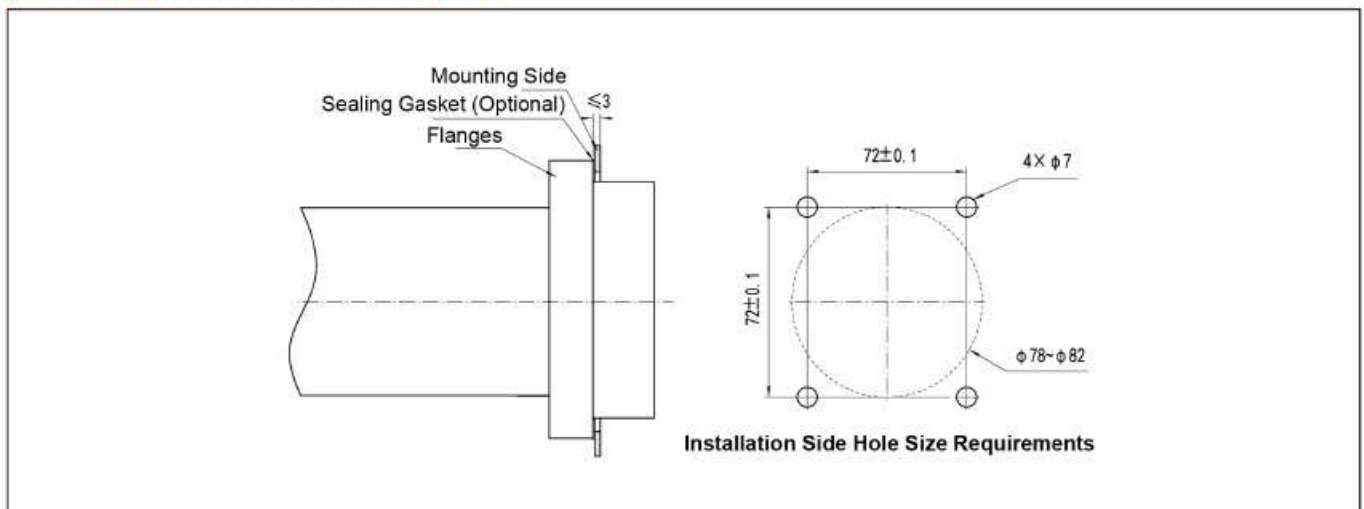
#### Circuit Principle

	One - Way Self - Resetting Electronic Lock	Two - Way Holding Electronic Lock
<b>Free State</b>	Unlock state of charging gun and charging socket is: the state between L-dect + and L-dect- is SI off;	Unlock state of charging gun and charging socket is: the state between L-dect + and L-dect- is SI off;
<b>Locked State</b>	After charging gun connected with charging socket, the electronic lock wire lock + and lock-continuous power 12 ± 1V, electronic lock locked, and the state between L-dect + and L-dect- changed to SI closed;	After charging gun connected with charging socket, the electronic lock wire lock + and lock-continuous power 12 ± 1V pulse voltage, that is, lock + pass 12V voltage, lock- pass 0V voltage, the power time is shown as below. then electronic locked, L- dect + and L-dect- are transformed from SI to closed state;
<b>Unlock State</b>	If charge is terminated or the charging request is stopped, the electronic lock wire will interrupted between lock + and lock-, the electronic lock is disconnected, and the L-dect + and L-dect- are changed to SI disconnected;	If charge is terminated or the charging request is stopped, electronic lock wire between the lock + and lock- pass reverse pulse voltage, that is, lock- pass 0V voltage, lock + pass -12V voltage, the power time is shown as below. Then the electronic lock is disconnected, and the L-dect + and L-dect- are changed to SI disconnected;





**[DC Charging Socket Drawing]**

**DC Charging Socket Installation Dimension**
**[DC Charging Socket Front Mount Diagram]**

**[DC Charging Socket Rear Mount Diagram]**


## EVC Series of EV Charging Interface

### Products Introduction

- Products complies with IEC 62196 standard;
- Various types for choice, include type 1 AC charging connector  
(According to SAE J1775 and IEC 62196), Type2 DC charging connector  
(According to IEC62196), Type2 AC charging connector (According to IEC 62196)
- Humanized design with a good grasp feel, easy to use.
- Arious accessories available, protection cap include damping cap, metal string cap,etc.
- The plug and socket termination type is wire crimping.
- Degree of protection: IP55



### Usage

Used to connect the electric car and power supply equipment, and then charge the electric car.

### Main Technical Specification

#### [Material]

- Shell: Thermoplastics
- Insulator: Thermoplastic
- Sealing Ring: Rubber Material
- Insulator Flame Retardant Grade: UL94-V0
- Contact: Base Material Copper Alloy  
The Contact Surface is Silver Plated

#### [Environmental Performance]

- Operating Temperature:-30°C~+50°C
- Relative Humidity : 98% at40°C
- Degree of Protection: IP55 (During Charging)

#### [Mechanical Performance]

- Durability:  
Exceed 10,000 Times (Non-Charged State)

#### [Electrical Performance]

##### Type 1:

Contact Specification mm	Rated Voltage V	Rated Current A	Applicable Wire mm <sup>2</sup>
3.6	240	16	2.5
		32	6
		63	16
2.8	240	Rated for the highest current	Power cable with same current specification
1.5	30	2	16AWG

—— Insulation Resistance≥1000MΩ (Room Temperature)

##### Type 2:AC

Contact Specification mm	Rated Voltage V	Rated Current A	Rated Voltage V AC	Applicable Wire mm <sup>2</sup>
φ6	16	Single Phase	250	2.5
		Three Phases	480	
	32	Single Phase	250	6
		Three Phases	480	
	63	Single Phase	250	16
φ3	2	Single Phase/Three Phases	30	0.5

Insulation Resistance≥1000MΩ (Room Temperature)

### Type 2 DC (Combo):

Contact Specification mm	Rated Voltage V	Rated Current V AC	Applicable Wire mm <sup>2</sup>
φ8	125	1000	35
	200	1000	70
φ6	Rated for The Highest Current		25
φ3	2	30	0.5

Insulation Resistance ≥ 1000MΩ (Room Temperature)

### Model Name (Type 1)

Series Name		EVC1	-VC	-63A	-240V
Connection Class	-VC	Vehicle End Plug			
Rated Current	-16A	AC16A			
	-32A	AC32A			
	-63A	AC63A			
Rated Voltage	-240V				

[Example of Model Number]

Type 1 AC 63A Vehicle end Plug: EVC 1-VC-63A-240V

### Model Name (Type 2)

Series Name		EVC2	P	-P	-16A	-250V	-1	G001
Error-Proof	P-There is Error-Proof	Default - no Error-Proof						
Connector Type	P-Power Supply Plug VC-Vehicle End Plug	S-Power Supply Socket VR-Vehicle End Socket						
Rated Current	16A-AC 16A	32A-AC 32A	63A-AC 63A					
	125A+DC 125A	200A+DC 200A						
Rated Voltage	250V-AC Single Phase	480V-AC Three-Phase		1000V-DC				
Protective Cap Type	Default - No Protective Cap 2R-Right Flip Cap	1-In-Line Protective Cap 2U-Up Flip Cap		2L-Left Flip Cap 2D-Down Flip Cap				
Modified Mark	G001, G002... For Details, Please Contact the Technical Staff							

[Example of Model Number]

1. European standard type2 AC vehicle end charging plug, rated current of 32A, three-phase, no error-proof, no dust cap.

Model is: EVC2-VC-32A-480V

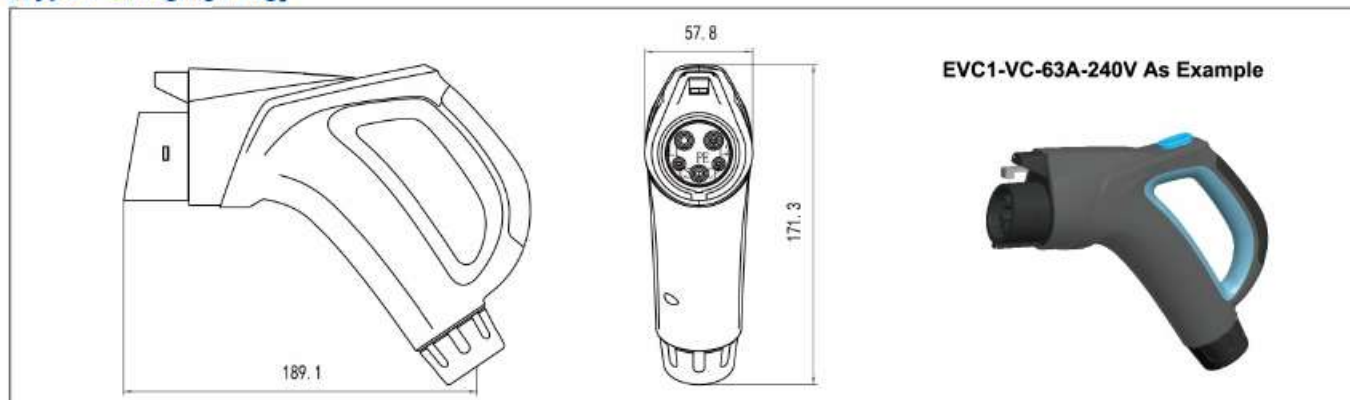
2. European standard type2 AC power supply charging socket, rated current of 16A, single phase, no error-proof, with left flip cap.

Model is: EVC2-S-16A-250V-2L

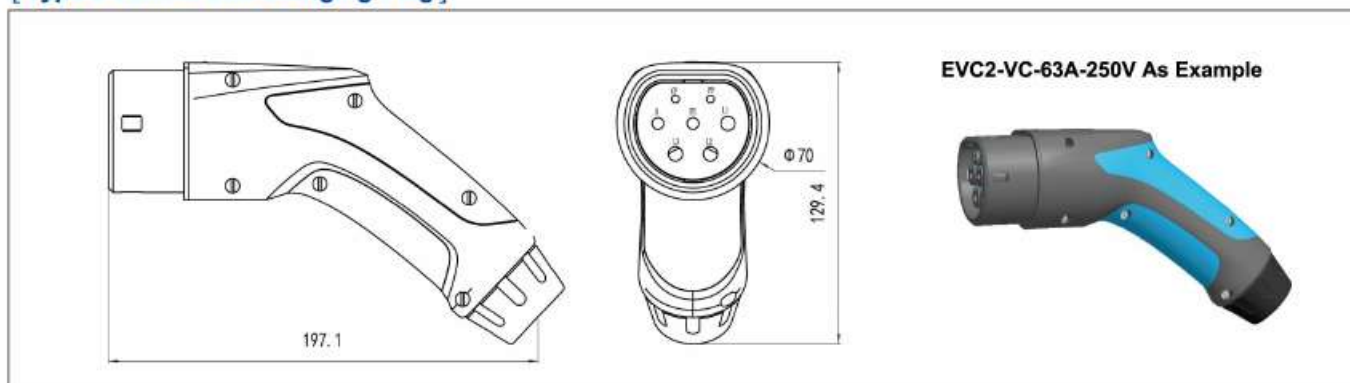


## Dimensions

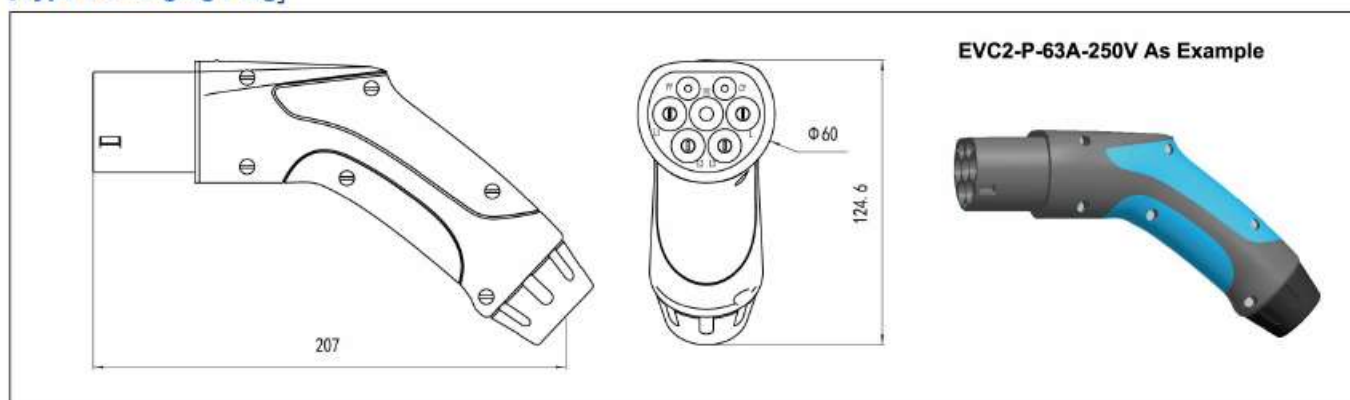
### [Type 1 Charging Plug]



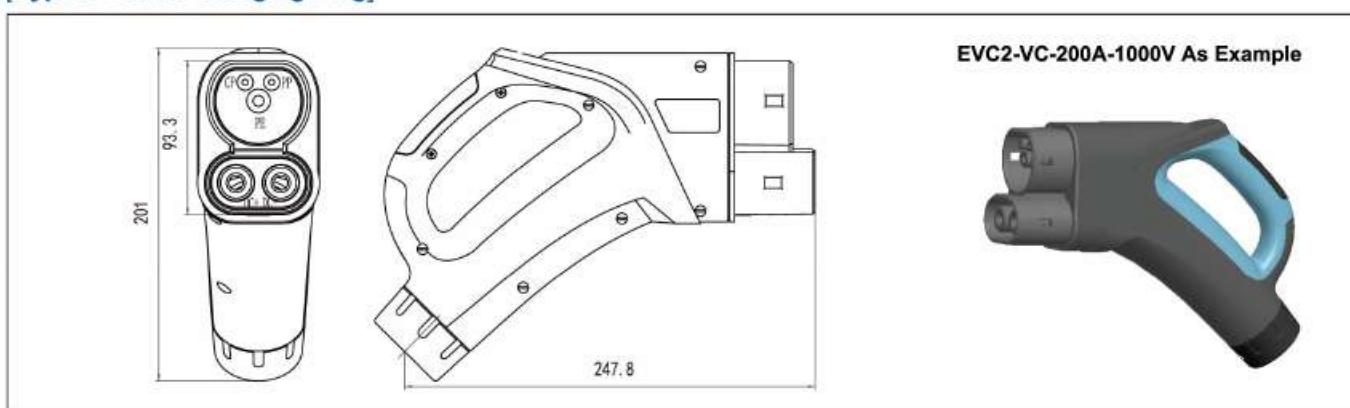
### [Type 2 Vehicle End Charging Plug]



### [Type 2 Charging Plug]



### [Type 2 Combo Charging Plug]





## HVIL Series of High Voltage Interlock Connectors

### Products Introduction

- Applicable to inside of electric vehicles for high pressure, shielding and sealed connection
- With 360°shielding
- The product has a signal loop that can achieve short circuit
- Plug crimping single-core shielded wire, socket crimp single-core non-shielded cable (Square flange socket) or single-core shielded wire (Rejection line socket)
- There are two types of socket, include square flange socket and shredded socket
- Straight push-pull shrapnel locking structure and handle push-pull locking structure for choice
- With secondary locking function to prevent accidental disconnection caused by incorrect operation
- Shell made by plastic, which is lightweight and more security in using.
- Orange color act as a warning
- Anti-touch design
- A variety of key positions for installation identification and insert recognition
- Meet the IP67 protection rating
- Implementation of the standard: Q / 21EJ1799



### Usage

Products used for high-voltage connection of car charger, battery pack, high voltage distribution air conditioning, PTC, battery, etc. can also be used for short circuit control.

### Application

Used for connection between the high voltage cables inside the electric vehicle.

### Main Technical Specification

#### [Mechanical Performance]

- Contact, Shield: Copper
- Insulator: Engineering Plastics
- Sealing Ring: Rubber Material
- Vibration: Meet the Requirements of QC / T413
- Impact: Meet the Requirements of QC / T413
- Durability: 500 Times
- Contact Resistance and Rated Current

#### [Environmental Performance]

- Operating Temperature: -40°C~+125°C
- Relative Humidity : 95% at40°C
- Degree of Protection: IP67
- Environmental Resistance Performance: 48 Hours

#### —— Rated Current, Withstand Voltage and Insulation Resistance

Contact Specification mm	Rated Current A	Applicable Wire mm <sup>2</sup>
φ10	200	50
φ8	150	25~35
4.8*0.8	40	2.5~6
2.8*0.8	16	1~2.5
1.2*0.6	5	0.5~0.75

Working Environment	Rated Voltage V	Withstand Voltage V	Insulation Resistance MΩ
Normal Temperature State	600 AC	3000 AC	≥5000

**Note:** The product rated current is related to the connected wire.

## Model Name

Series Name	HVIL		-M	2	S	(16A)	U	-00	A	-1
HVIL	High voltage connector with short circuit									
HV	High voltage connector without short circuit									
Connector Type	M-Plug	M-Socket								
Number of Contacts	The number indicates the number of current contact cores									
Contact Type	P-Male Pin	S-Female Pin								
Rated Current	The number indicates the product rated current									
Socket Mounting Method (Only the socket model has this part)	U-Rejection line socket		Non- Square flange socket							
Cable Outlet Angle (Only the plug model has this part)	The number indicates the cable outlet angle									
Wiring Type	Letters means wiring type, confirmed by customer and manufacturer according to the actual situation									
Key Code	The number indicates the key, no number indicates no key									

## [Example of Model Number]

1. High-voltage interlock connector, plug, 2-pin, female pin, rated current 16A, straight outlet, applicable wire single core 2.5 square, key code 1, model is:  
HVIL-M2S(16A)-00A-1
2. High voltage interlock connector, square flange socket, 2 pin, male pin, rated current 16A, applicable wire 2.5 square, key code 1, model is:  
HVIL-F2P(16)-A-1

## Contact Pins to Be Ordered Separately

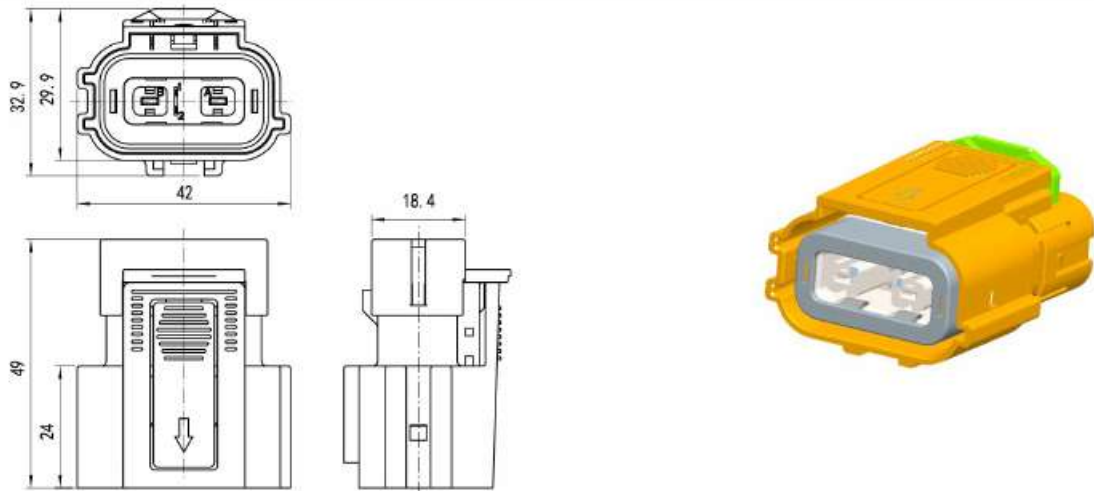
Connector Type	Rated Current	Wire Size	Contact Pin
Plug	16A	2.5	06-02-877
Socket	16A	2.5	06-02-1156
Plug	40A	2.5~4	21E8-571-6494-A1
Socket	40A	2.5~4	21E8-570-9801-A1
Plug	40A	> 4~6	21E8-571-6204-A1
Socket	40A	> 4~6	21E8-570-9296-A1
Socket	5A	0.5~0.7	06-02-770

**Note:** The number of separately ordered contact pin should be decided according to the related product contacts' number

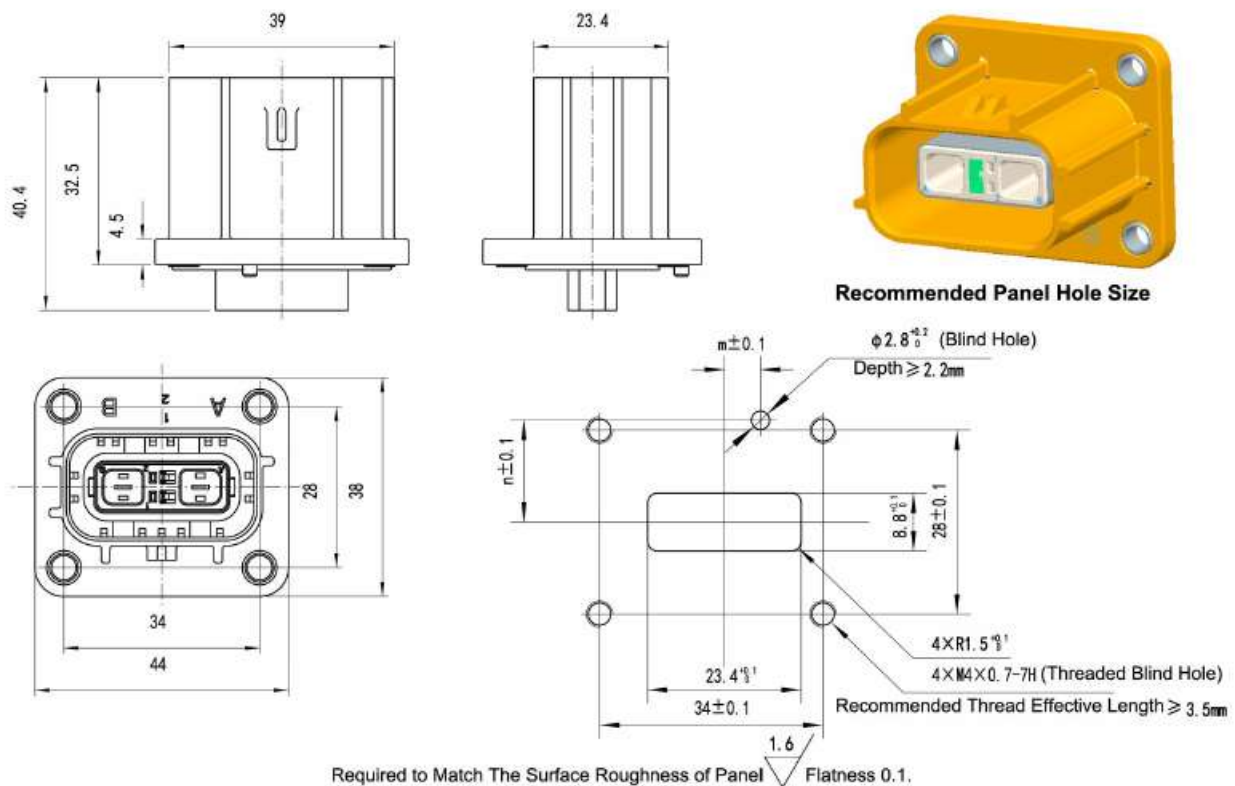
## Dimensions

**2 Pin 16A Product (The Tolerance Unlabeled is  $\pm 0.3$ )**

[Plug HVIL-M2S(16)-00A-1]



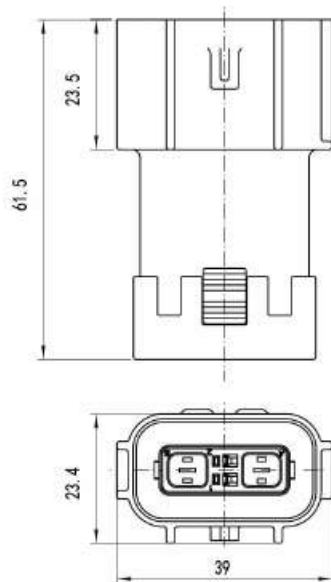
[Square Flange Socket HVIL-F2P(16A)-A-1]



Key Postion	m	n
HVIL-F2P(16A)-A-1	5.5	15.5
HVIL-F2P(16A)-A-2	-5.5	15.5
HVIL-F2P(16A)-A-3	2	15.5
HVIL-F2P(16A)-A-4	-2	15.5

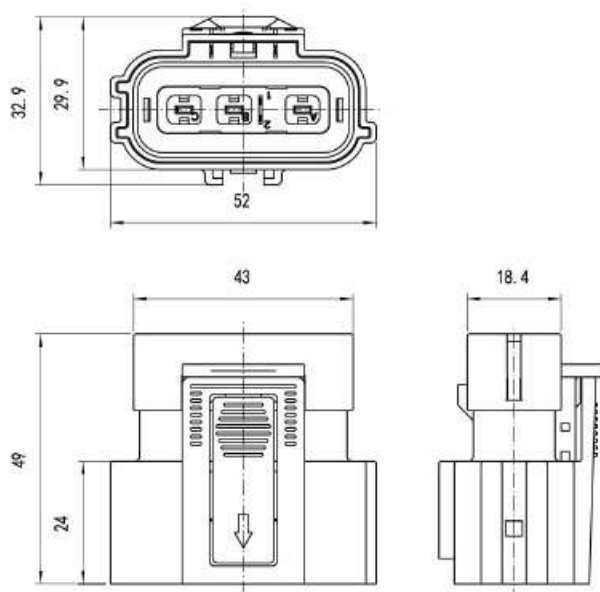


[ Rejection Line Socket HVIL-F2P(16A)U-A-1 ]



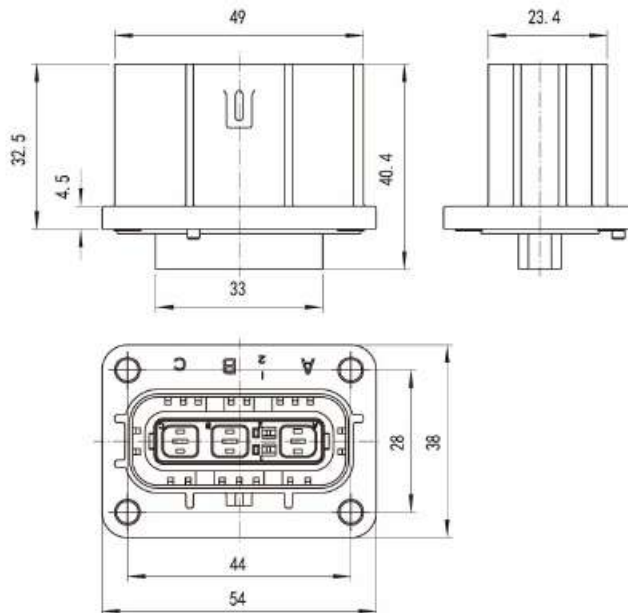
**3 Pin 16A Product**

[ Plug HVIL-M3S(16A)00A-1 ]

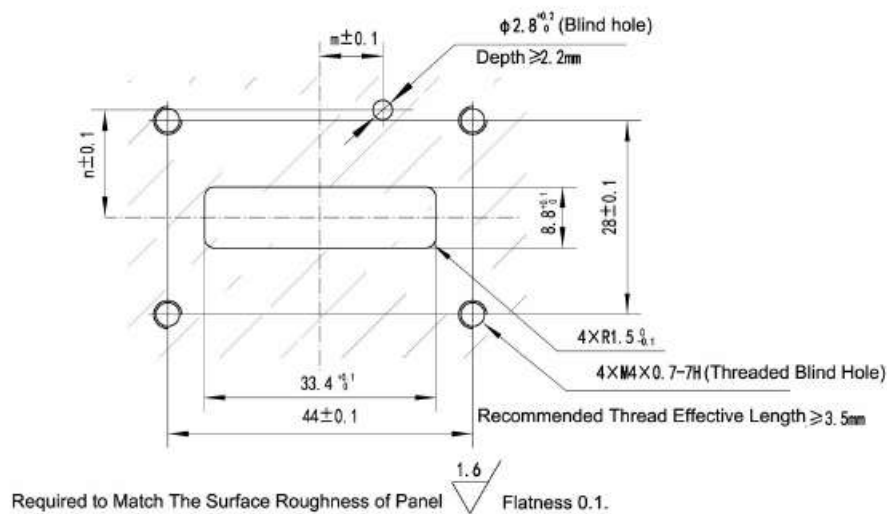




### [ Square Flange Socket HVIL-F3P(16A)-A-1 ]

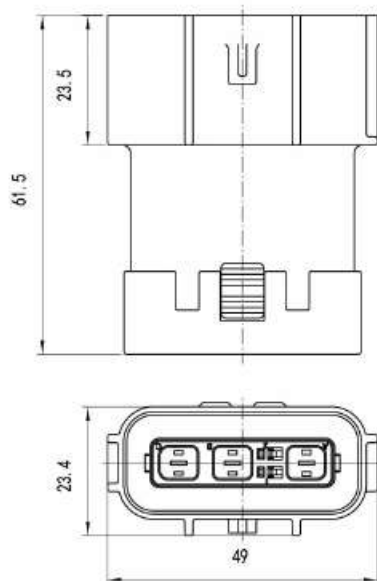


#### Recommended Panel Hole Size



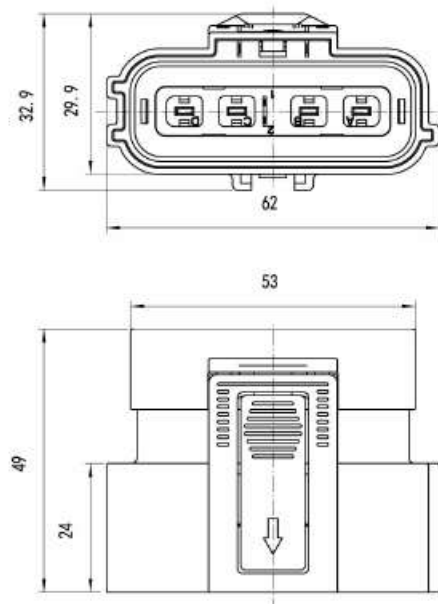
Key Postion	m	n
HVIL-F3P(16A)-A-1	9	15.5
HVIL-F3P(16A)-A-2	-9	15.5

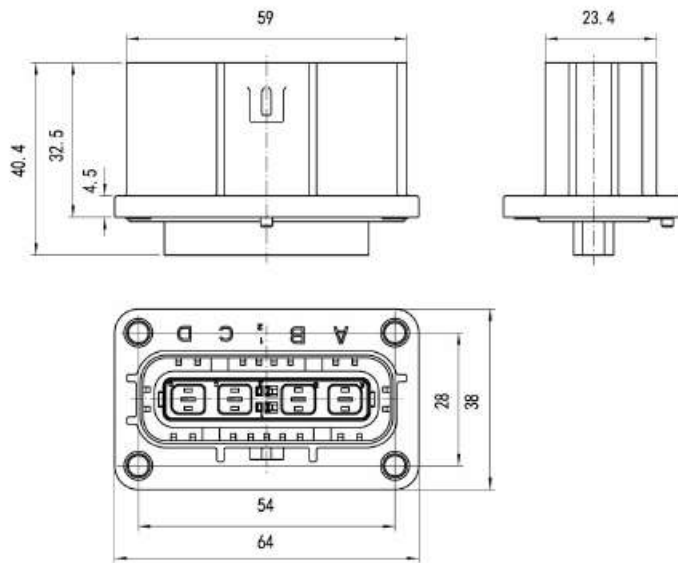
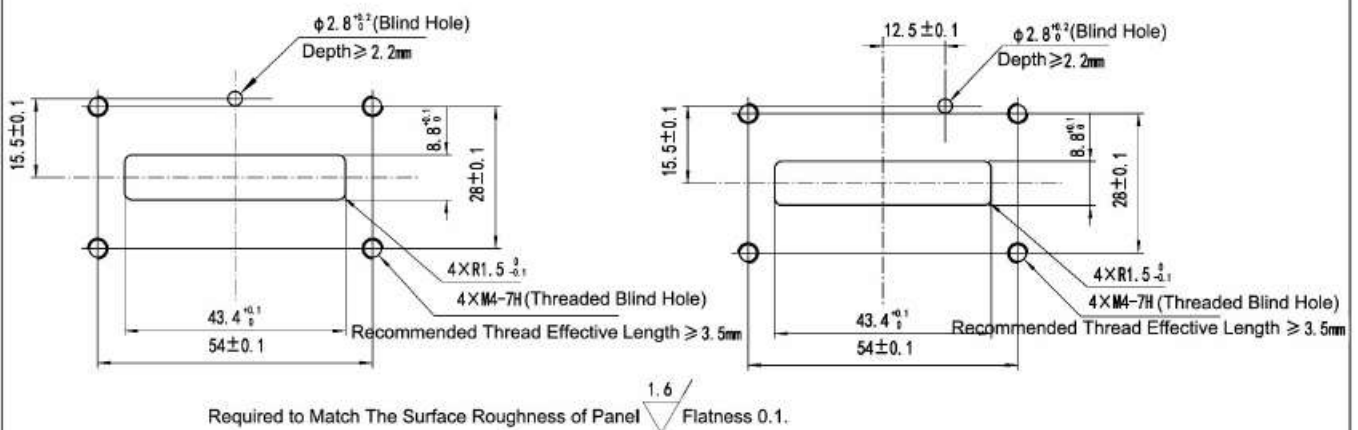
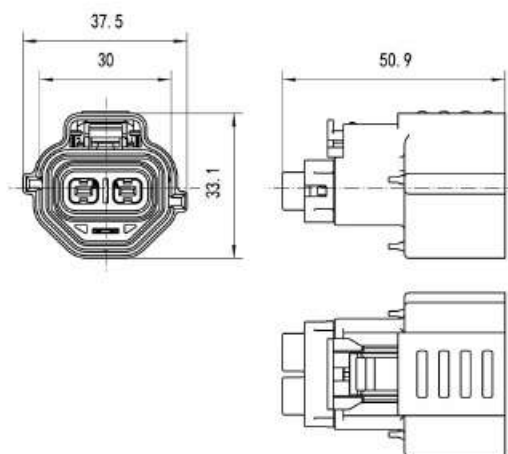
[ Rejection Line Socket HVIL-F3P(16A)U-A-1 ]



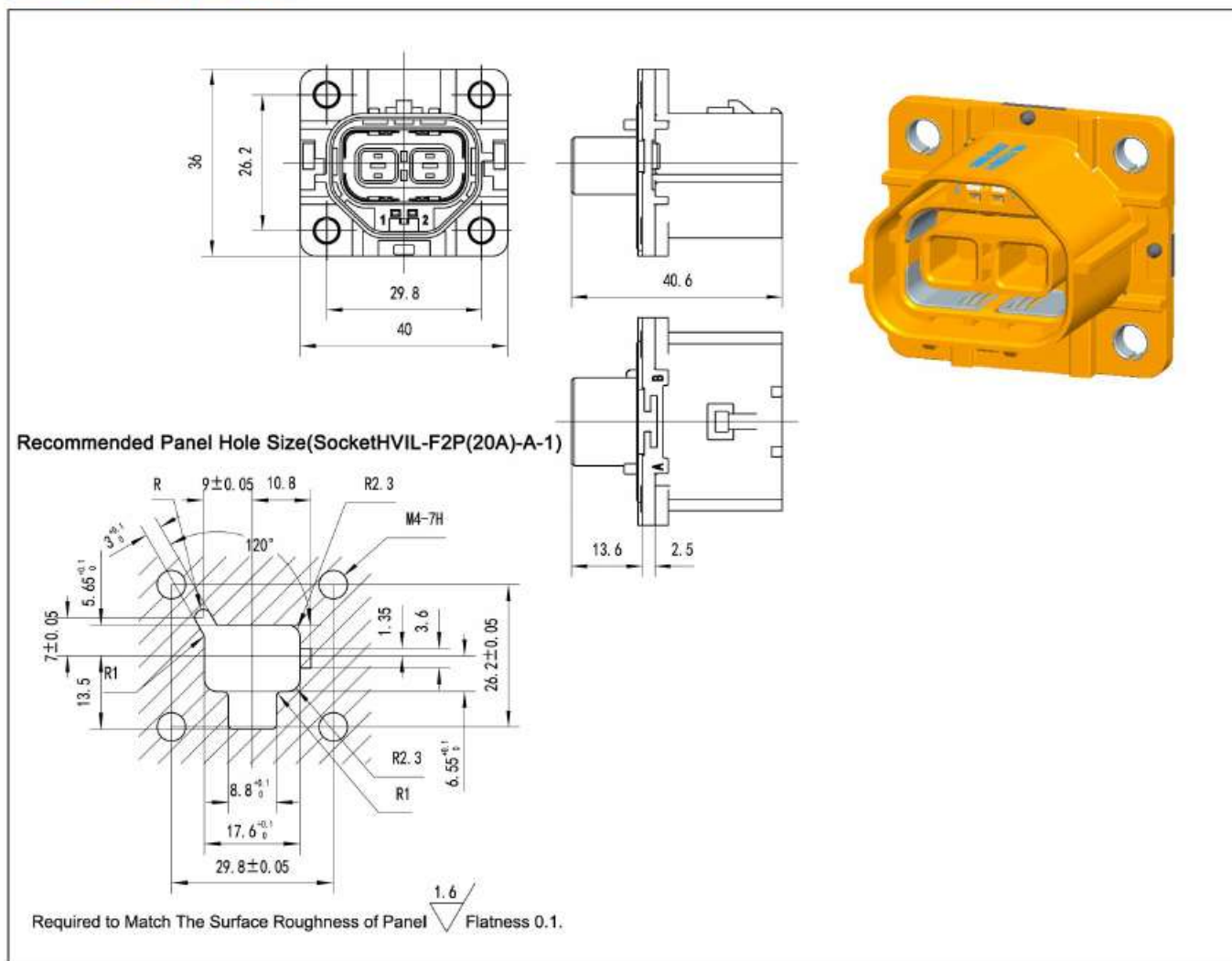
**4 Pin 16A product**

[ Plug HVIL-M4S(16A)00A-1 ]



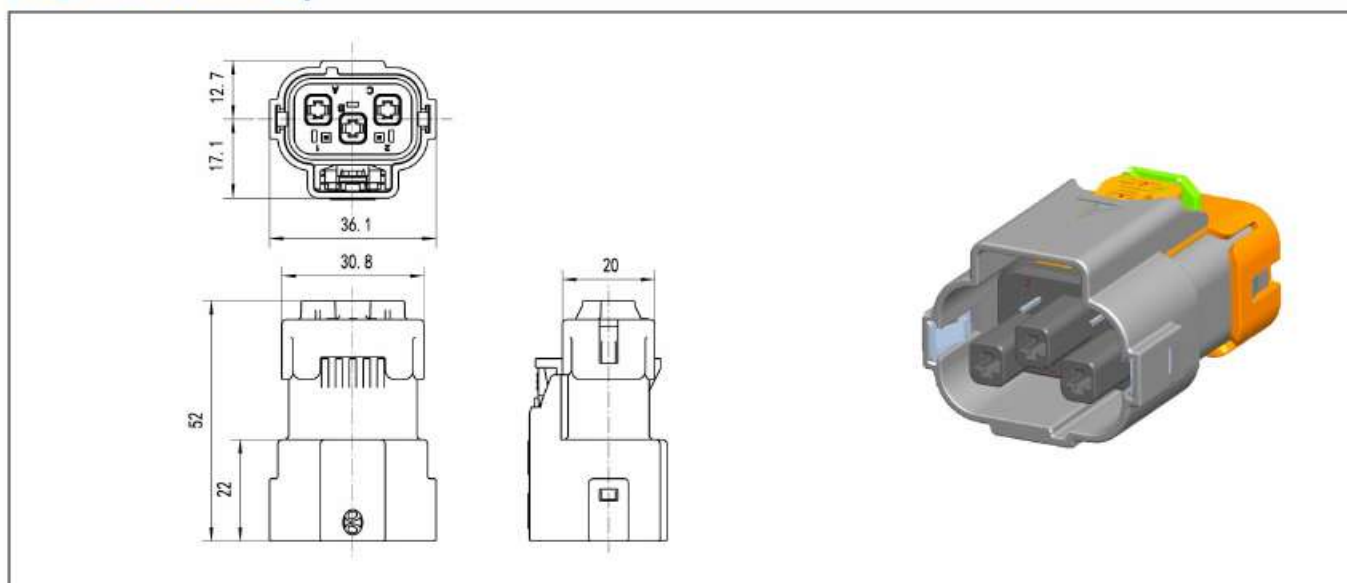
**[ Socket HVIL-F4P(16A)-A-1 ]**

**Recommended Panel Hole Size (Socket HCIL-F4P(16A)-A-1)**
**Recommended Panel Hole Size (Socket HCIL-F4P(16A)-A-2)**

**2 Pin 20A Product**
**[ Plug HVIL-M2S(20A)-00A-1 ]**


[Socket HVIL-F2P(20A)-A-1]

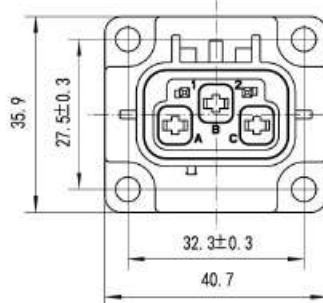
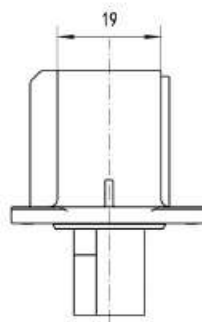
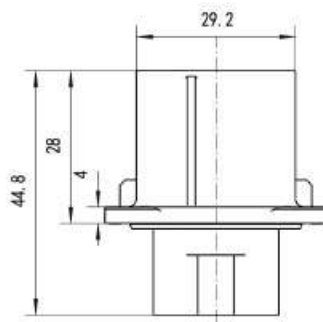
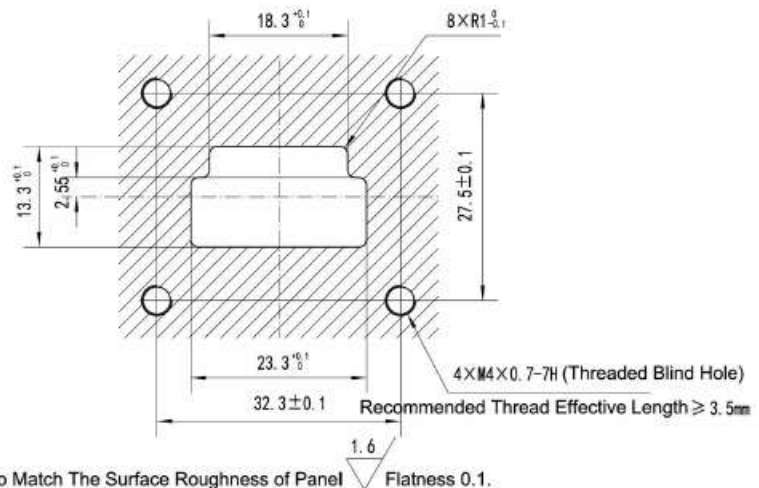
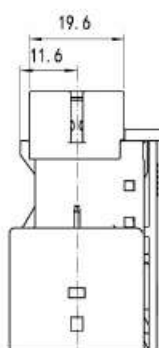
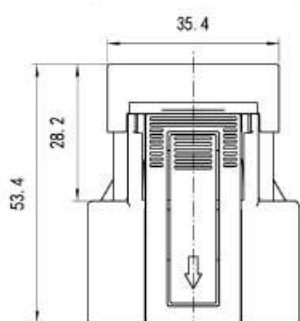
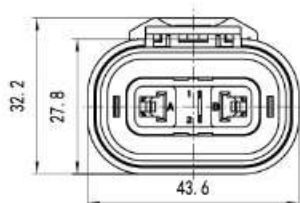


**3 Pin 20A Product**

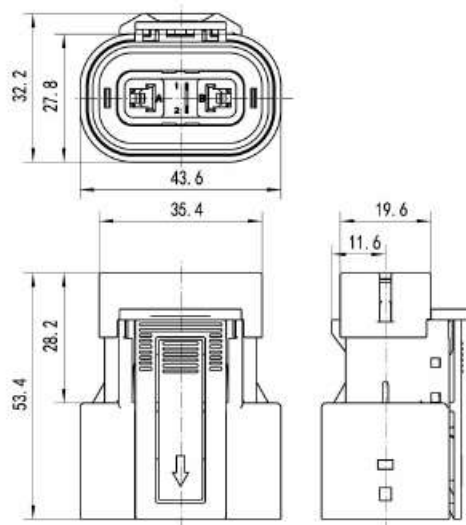
[Plug BJEV-3FP-020001-A]



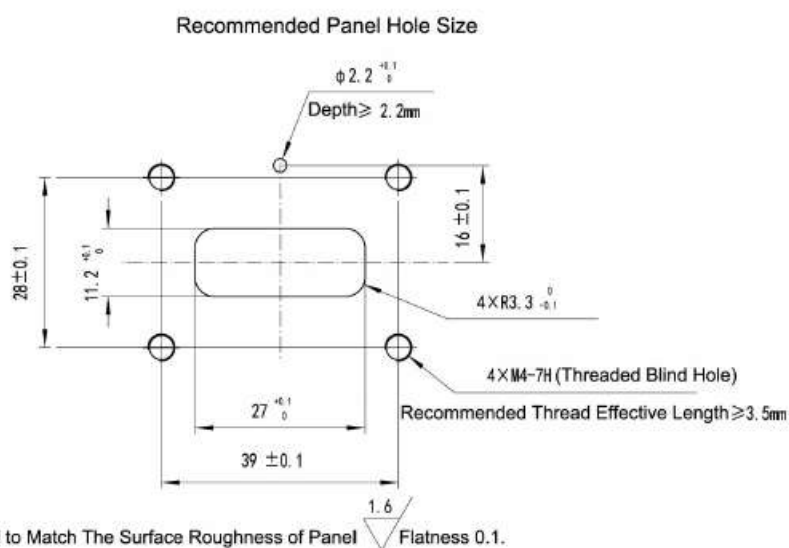
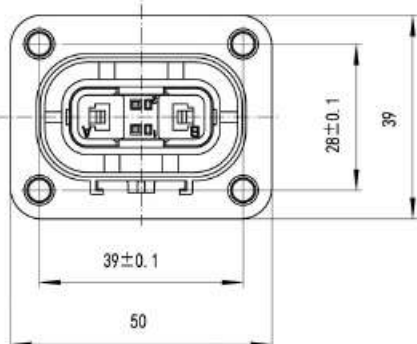
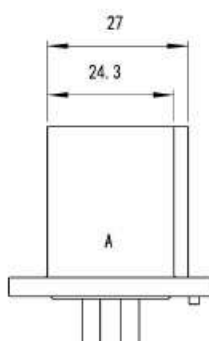
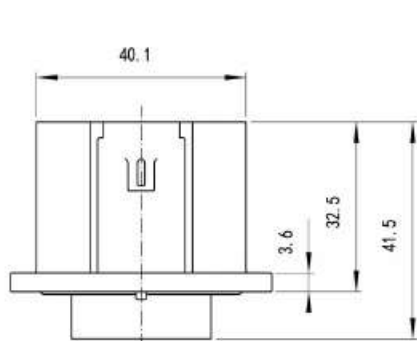


**[Socket BJEV-3MR-020001-A]**

**Recommended Panel Hole Size(Socket BJEV-3MR-020001-A/B)**

**2 Pin 40A Product**
**[Plug HVIL-M2S(40A)-00A]**


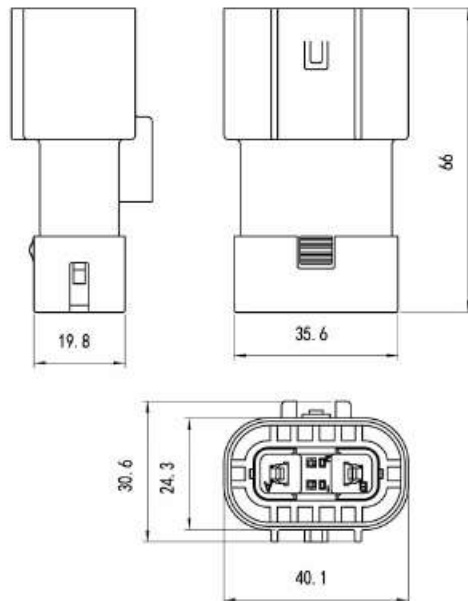
[Plug HVIL-M2S(40A)00B]



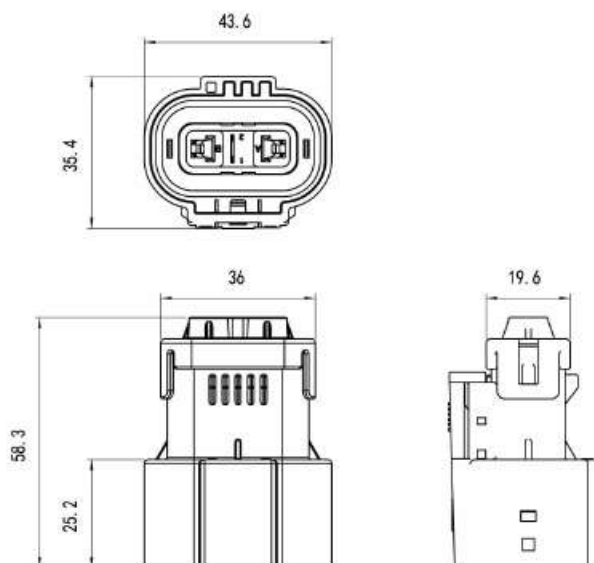
[Socket HVIL-F2P(40A)-A]



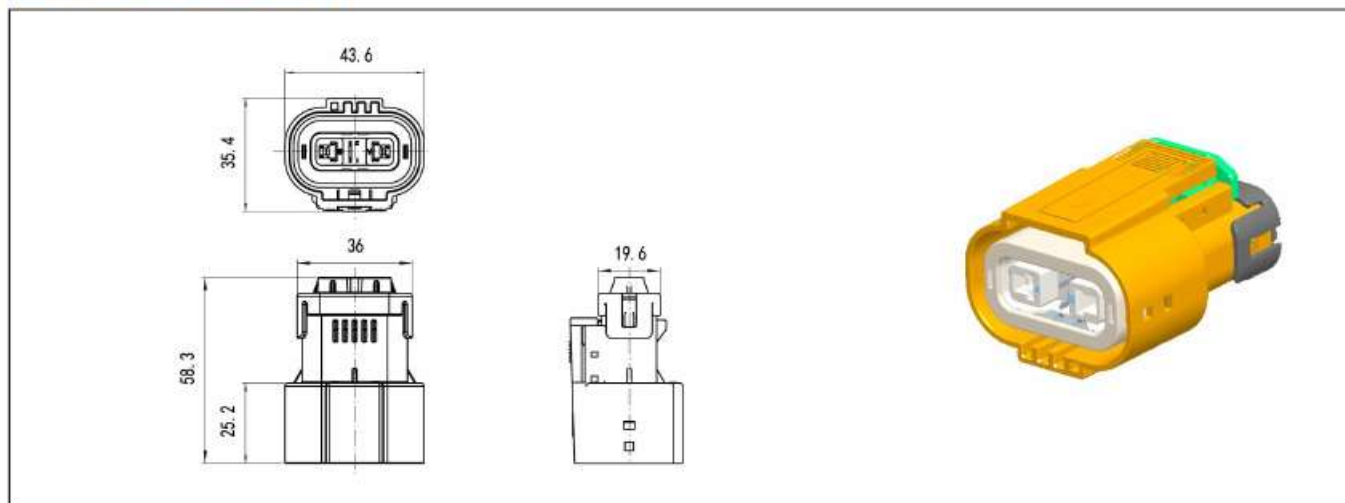
[ Socket HVIL-F2P(40A)U-B ]



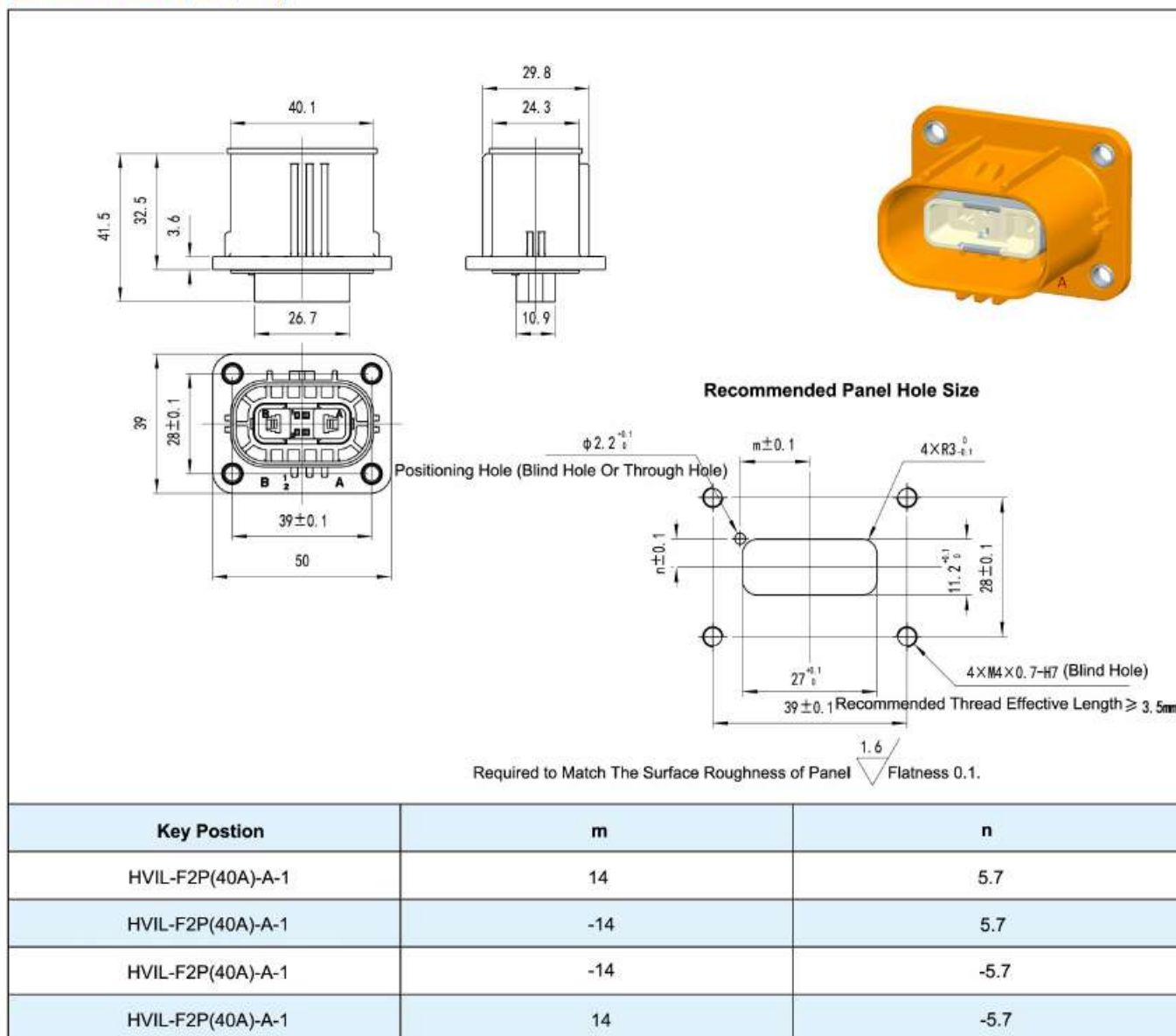
[ Plug HVIL-M2S(40A)00A-1 ]



[Plug HVIL-M2S(40A)-00B-1]



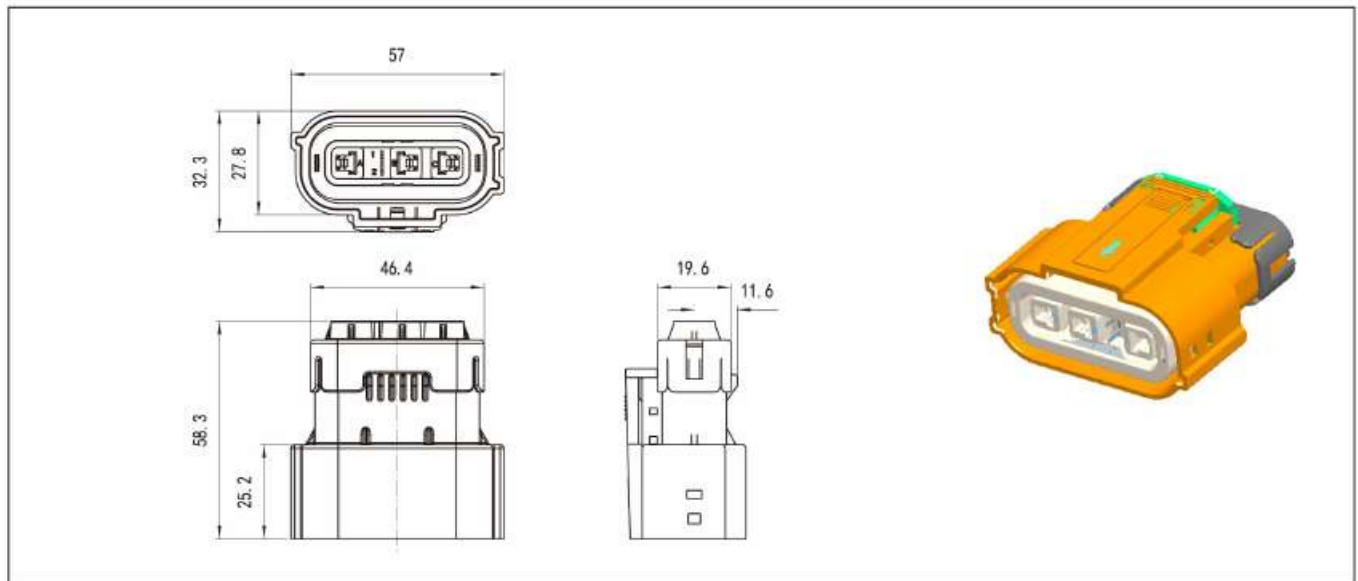
[Socket HVIL-F2P(40A)-A-1]



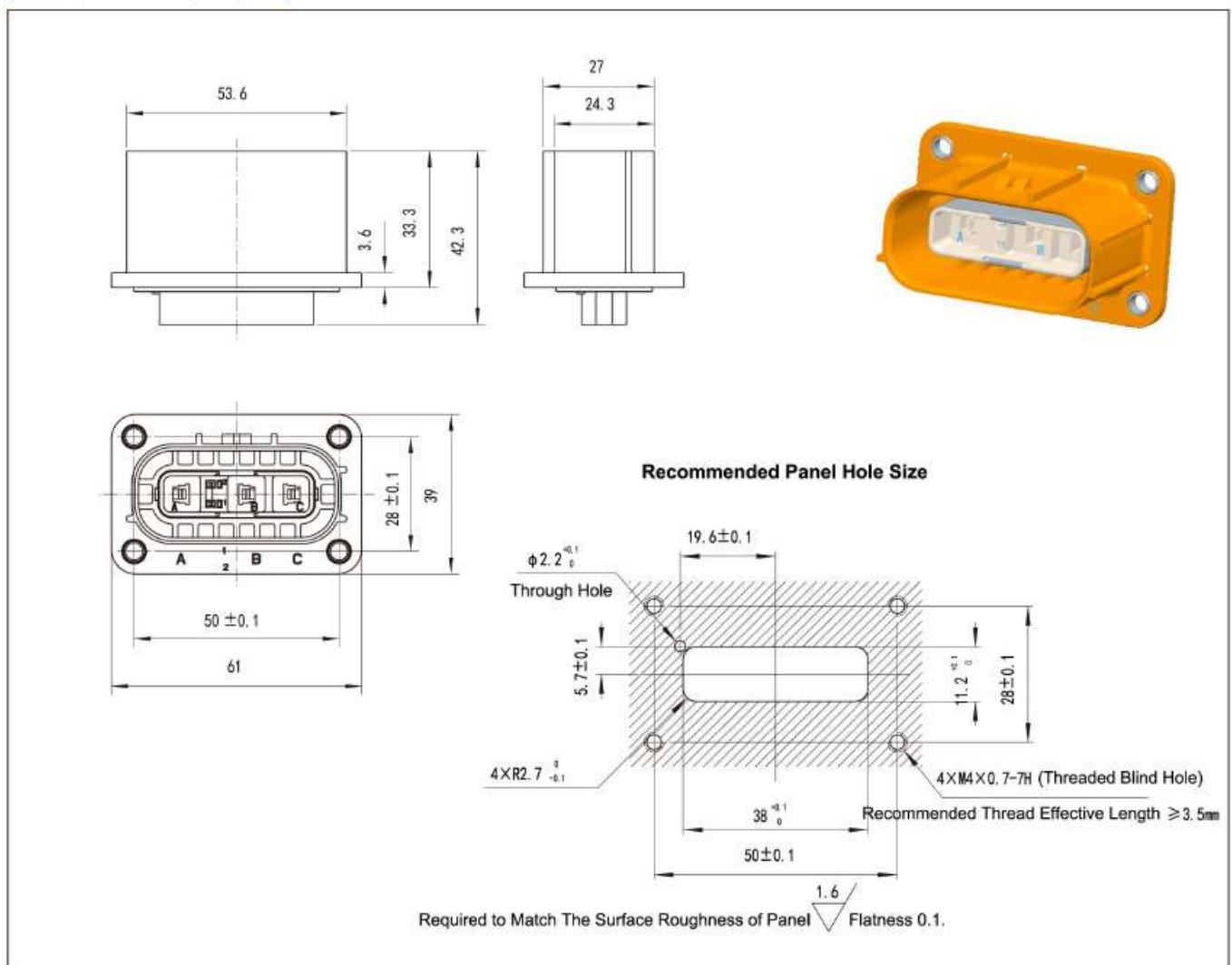


### 3 Pin 40A Product

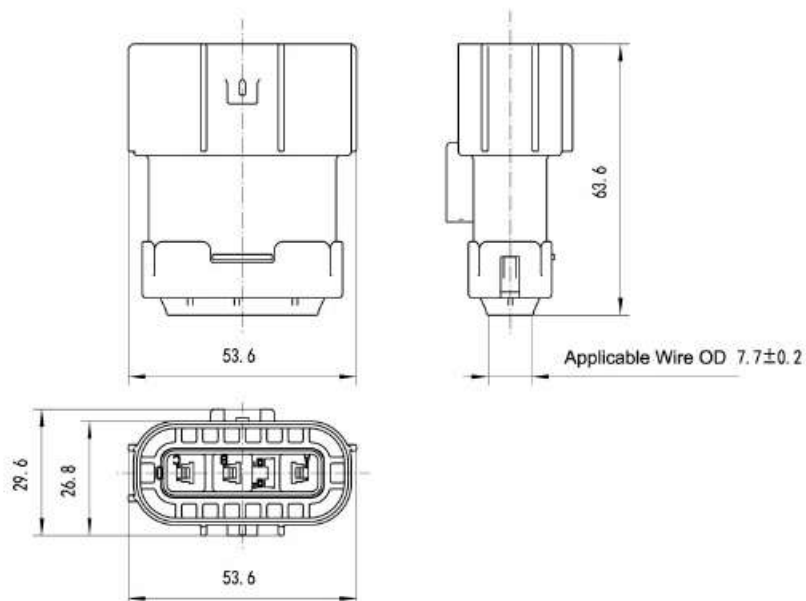
[Plug HVIL-M3S(40A)-00A-1]



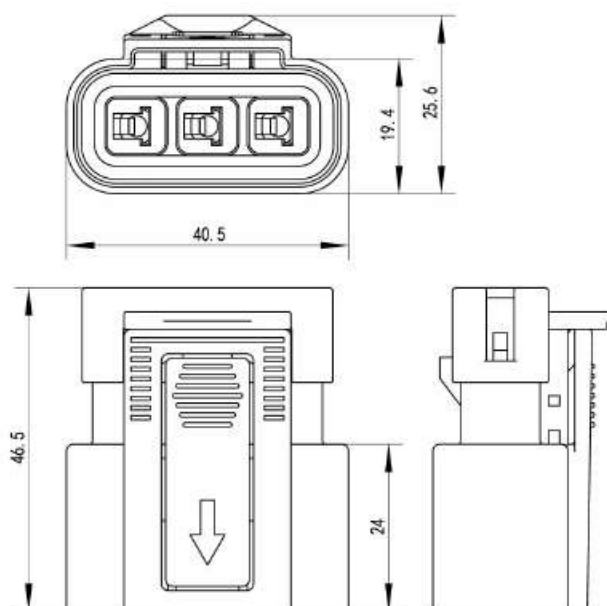
[Socket HVIL-F3P(40A)-A-1]



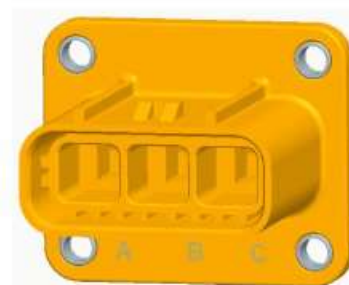
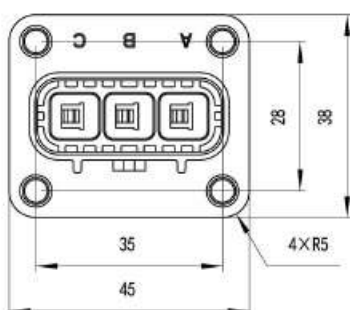
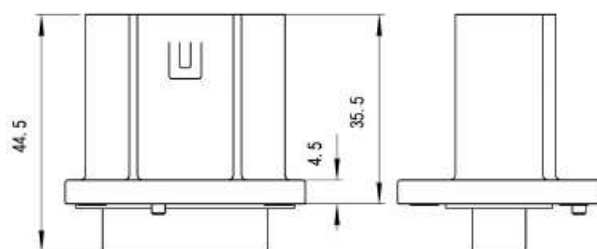
[Socket HVIL-F3P(40A)U-A-1]



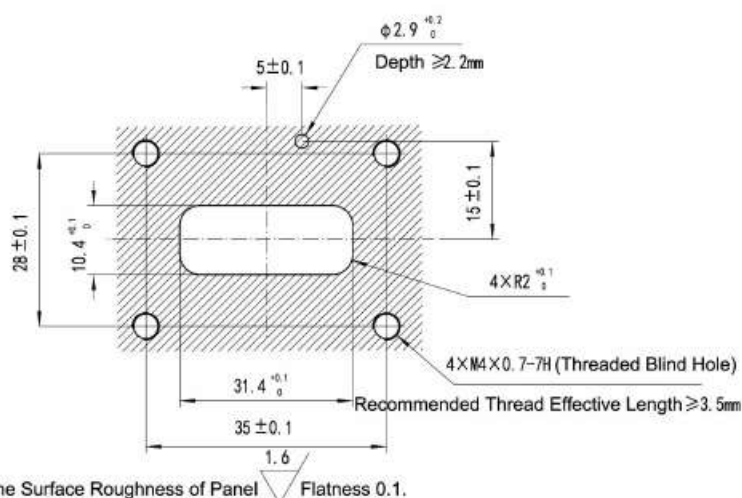
[Plug HV01-M3S(40A)-00A]



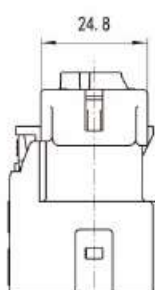
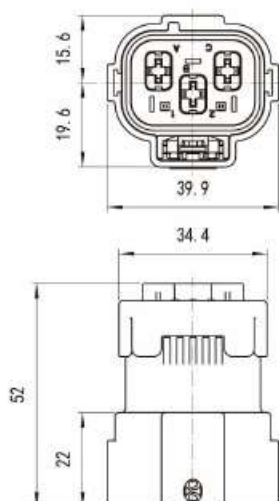
[Socket HV01-F3P(40A)-A]



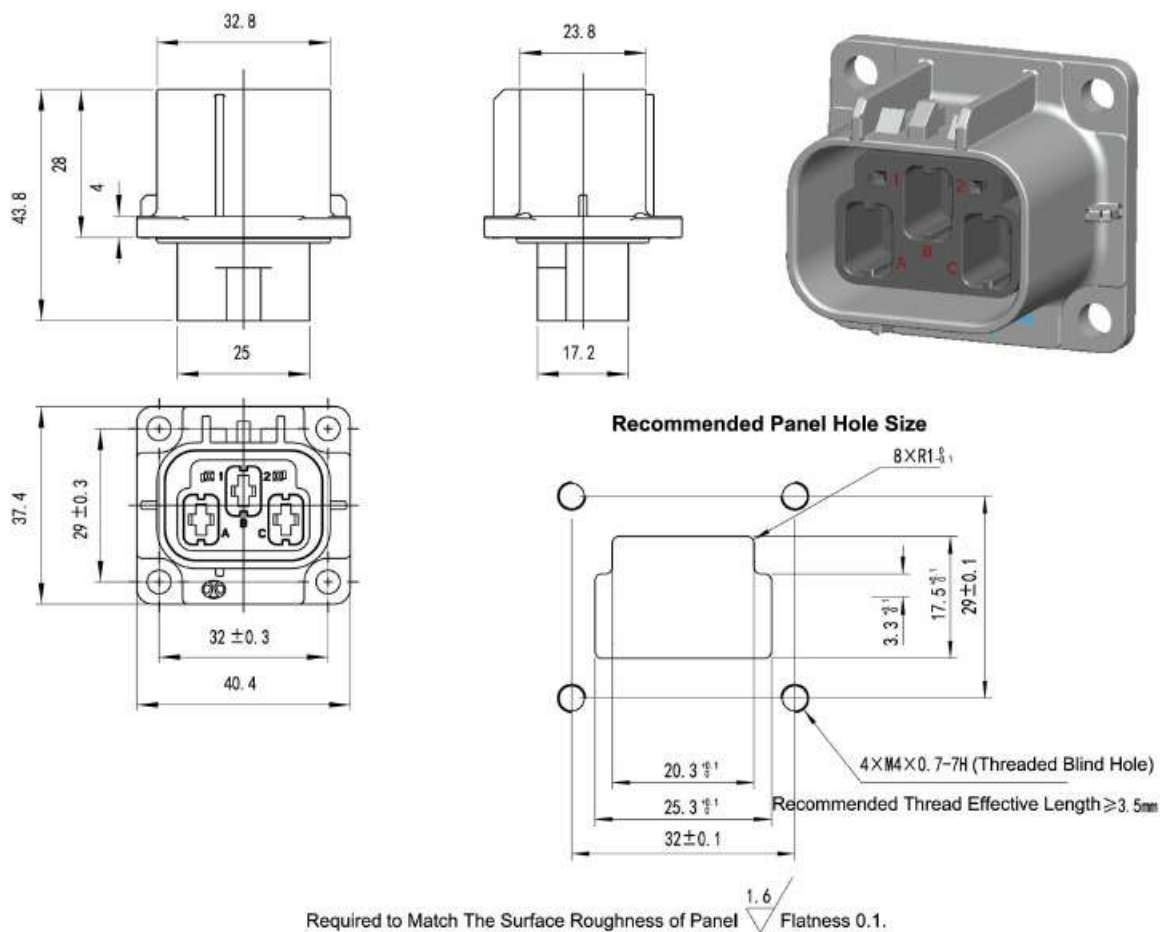
**Recommended Panel Hole Size**



[Plug BJEV-3FP-040001-A]

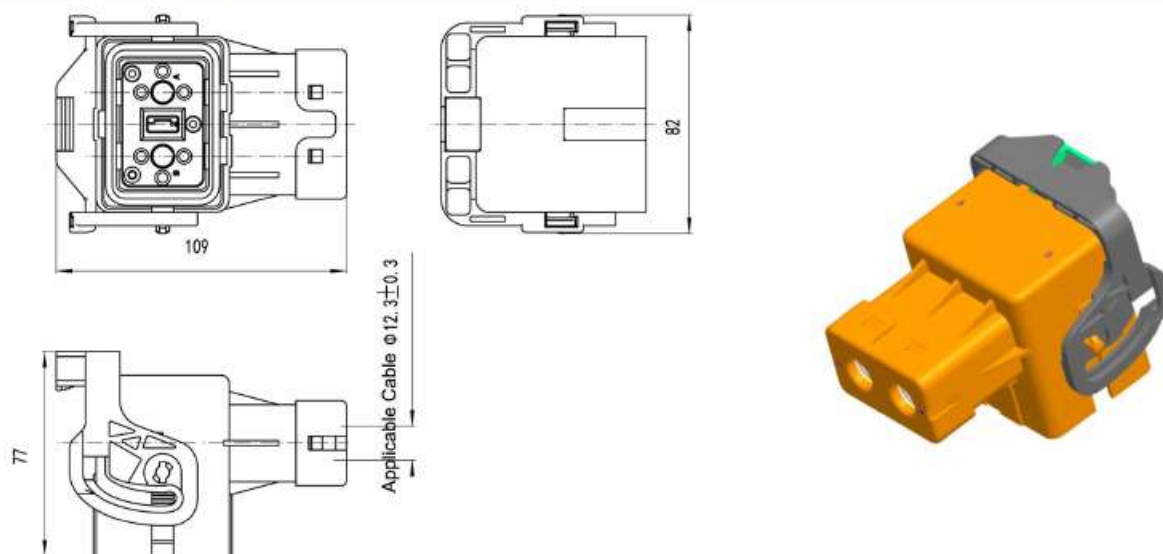


[Socket BJEV-3MR-040001-A]



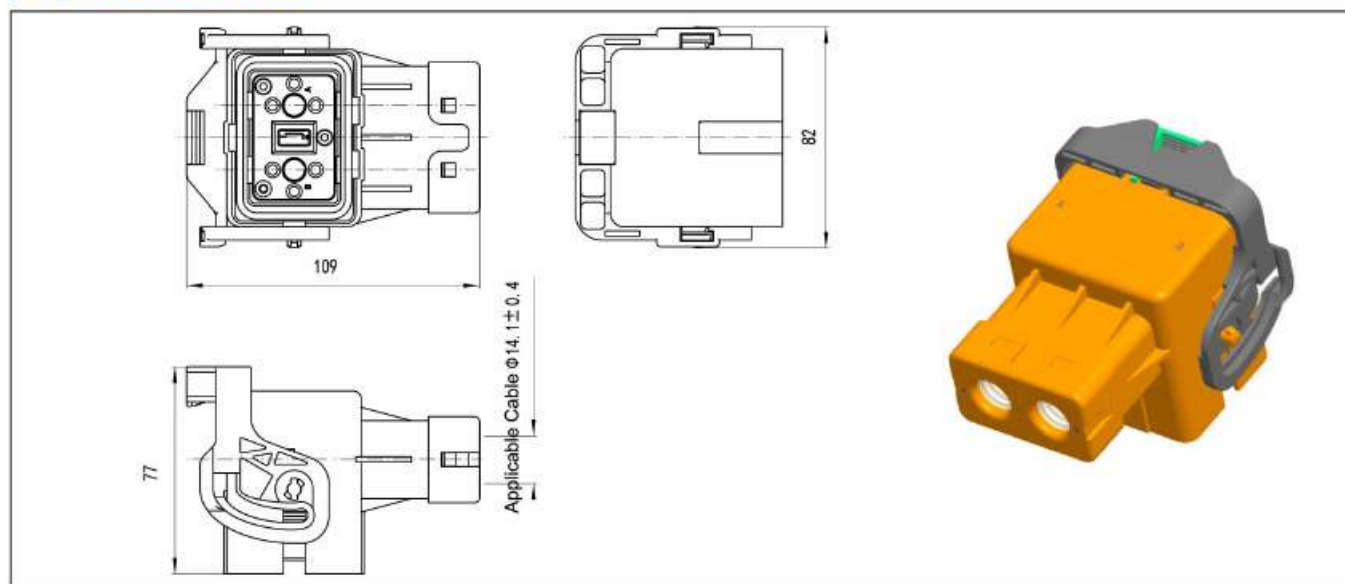
**2 Pin Angled 150A Product**

[Plug HVIL-M2S(150A)-90]

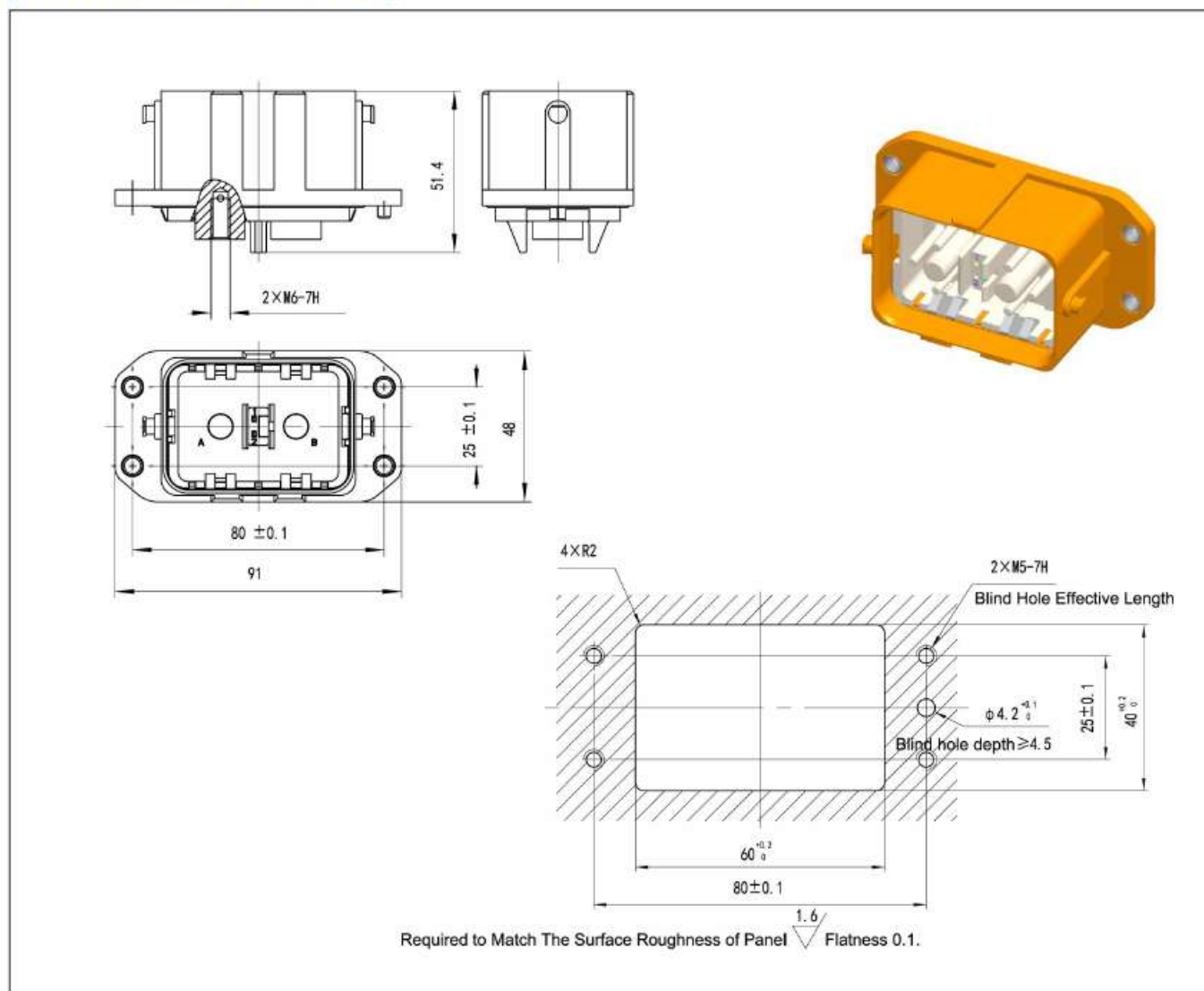




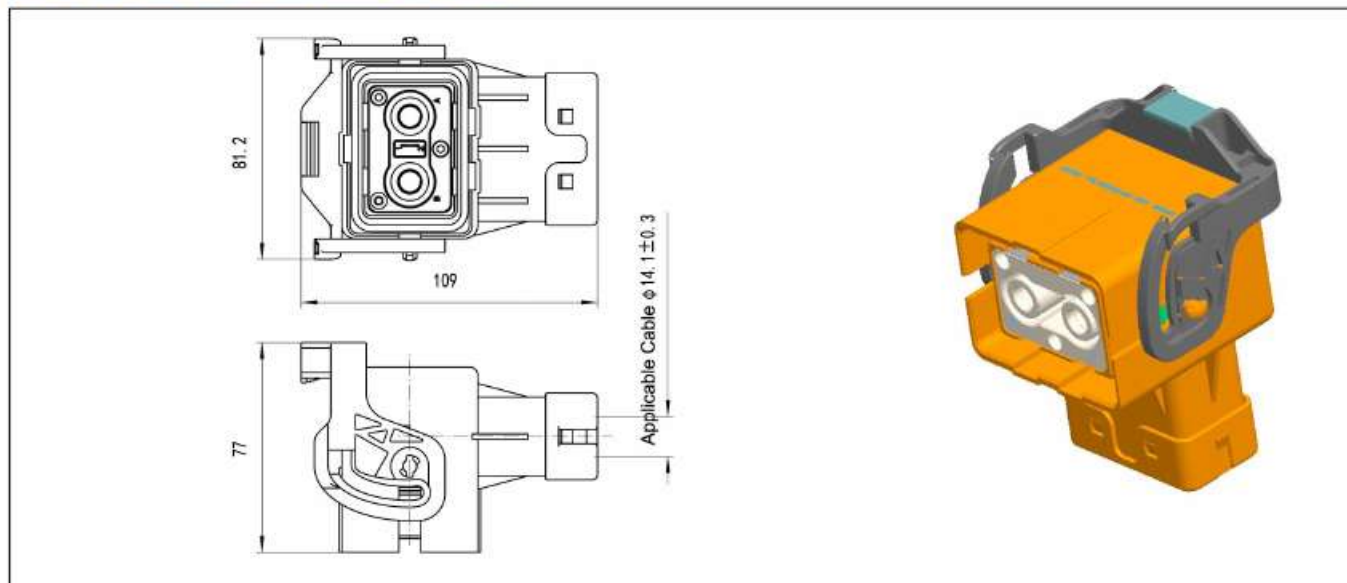
[Plug HVIL-M2S(150A)-90A]



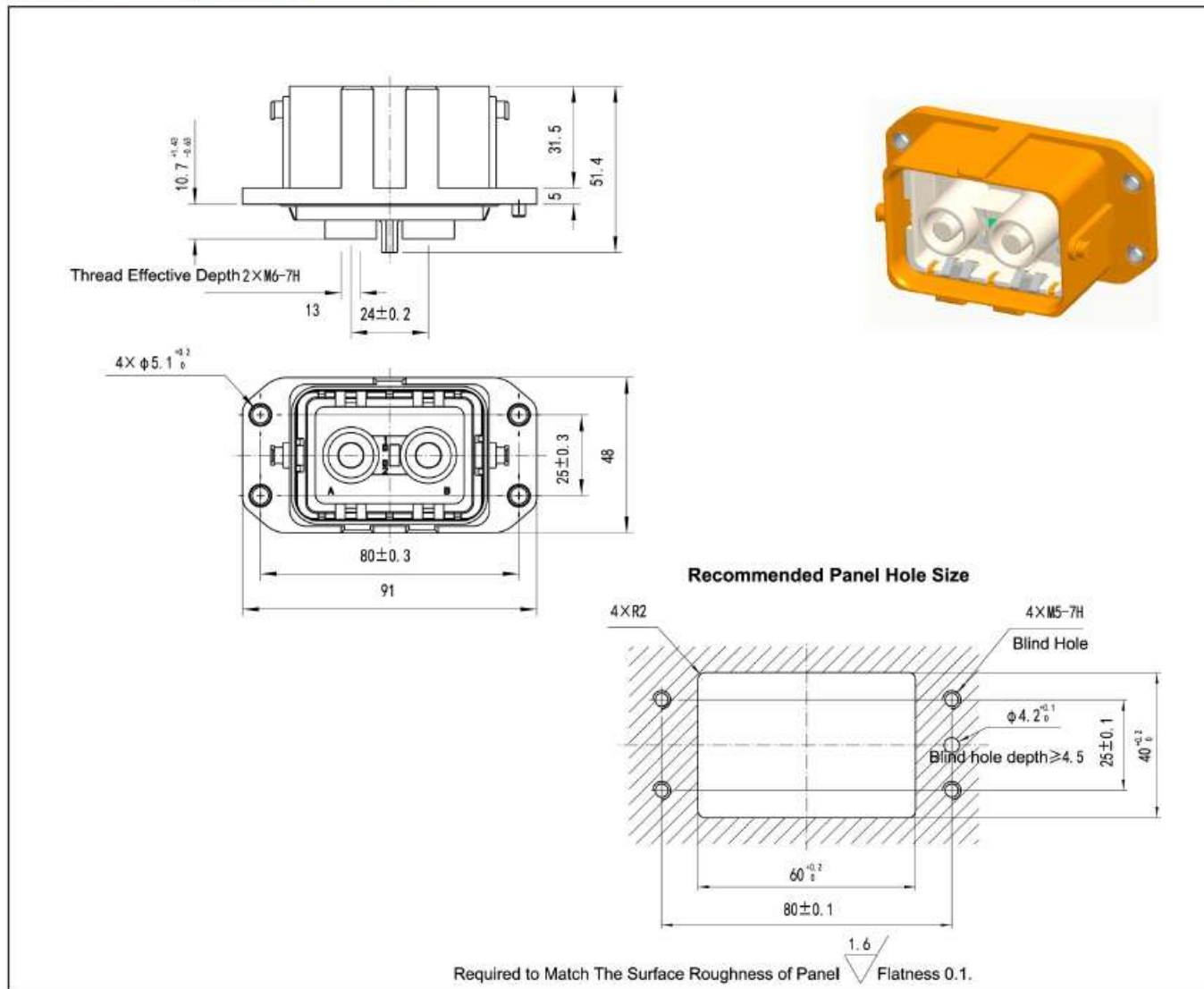
[Square Flange Socket HVIL-F2P(150A)]



**[Plug HVIL-M2S(150A)-90A G002] Meet IP67B**

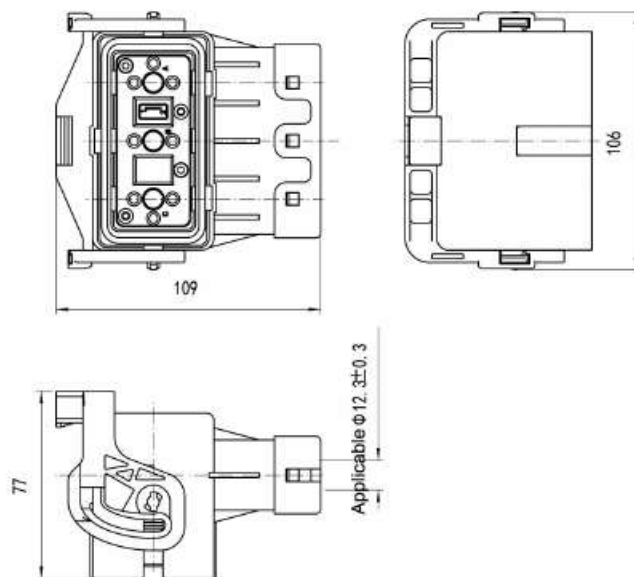


**[Socket HVIL F2P(150A)G002] Meet IP67B**

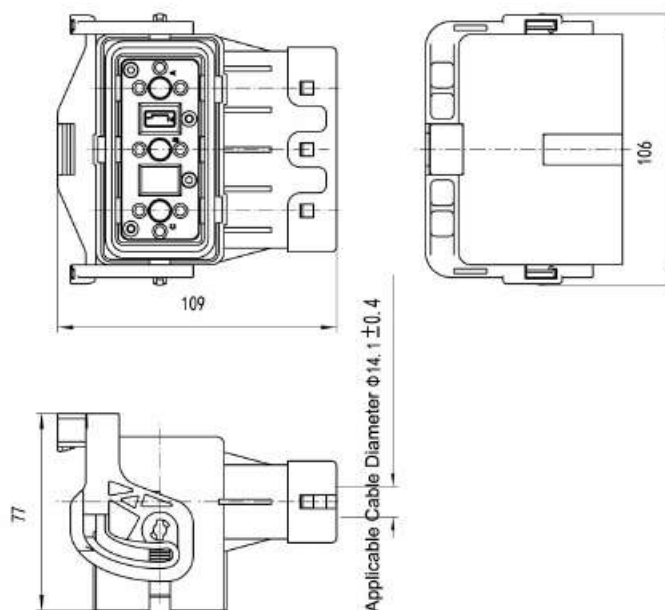


### 3 Pin Angled 150A Product

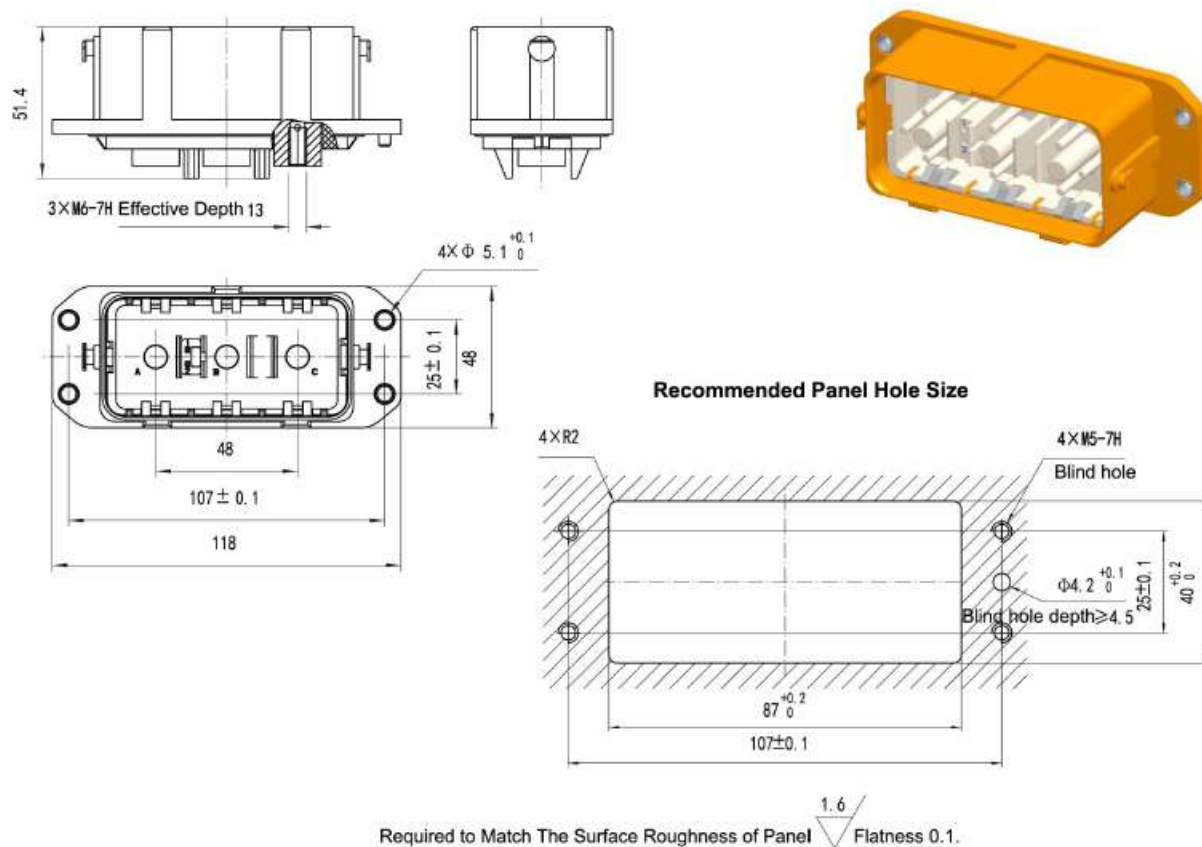
[Plug HVIL-M3S(150A)-90]



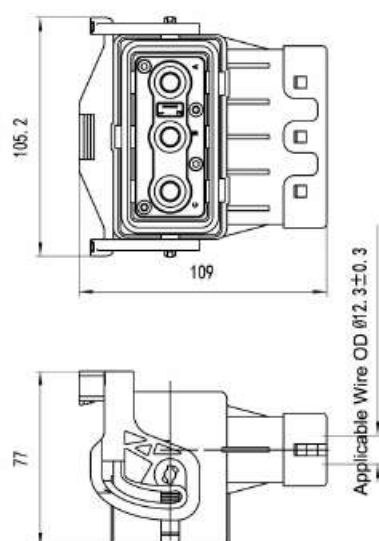
[Plug HVIL-M3S(150A)-90A]



[Square Flange Socket HVIL-F3P(150A)]

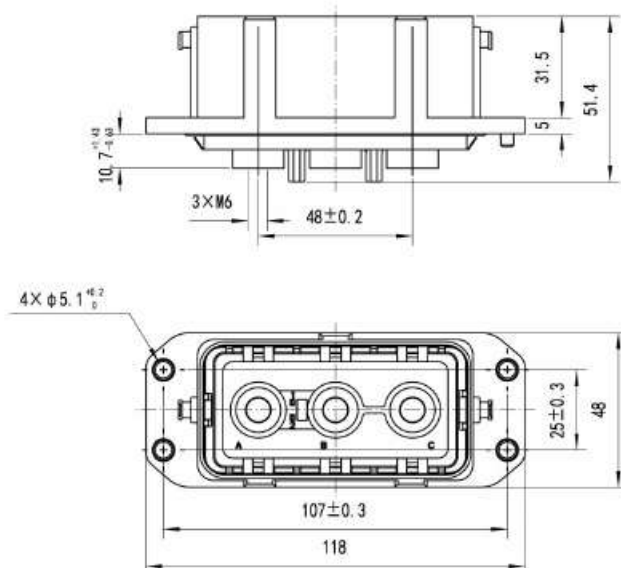


[Plug HVIL-M3S(150A)-90 G002] Meet IP67B

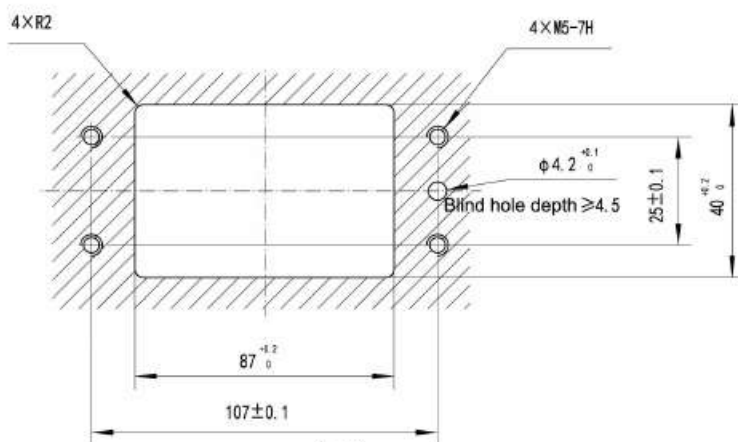




[Socket HVIL-F3P(150A)G002] Meet IP67B



**Recommended Panel Hole Size**



Required to Match The Surface Roughness of Panel  $\sqrt{1.6}$  Flatness 0.1.

## HVIL Series 80A High Voltage Interlock Connectors

### Products Introduction

- Applicable to inside of electric vehicles for high pressure, shielding and sealed connection
- With 360°shielding
- The product has a signal loop that can achieve short circuit
- Plug crimping single-core shielded wire, socket is connected by copper connection
- Use straight push-pull shrapnel locking structure
- With secondary locking function to prevent accidental disconnection caused by incorrect operation
- Shell made by plastic, which is lightweight and more security in using.
- Orange color act as a warning
- Anti-touch design
- A variety of key positions for installation identification and insert recognition
- Meet the IP67 protection rating
- Implementation of the standard: Q / 21EJ1799



### Usage

Products used for high-voltage connection of car charger, battery pack, high voltage distribution box, motor controller, motor, air conditioning, PTC, battery, etc. can also be used for short circuit control.

### Application

Products Used for Connection Between the High Voltage Cables Inside the Electric Vehicle.

### Main Technical Specification

#### [ Mechanical Performance ]

- Contact, Shield: Copper
- Insulator: Engineering Plastics
- Sealing Ring: Rubber Material
- Vibration: Frequency 10~25Hz, Amplitude 1.2mm
- Impact: 25~500Hz, 30m/s<sup>2</sup>
- Durability: 500 Times

#### [ Environmental Performance ]

- Operating Temperature: -40°C~+125°C
- Relative Humidity : 95% at 40°C
- Degree of Protection: IP67
- Environmental Resistance Performance: 48 Hours

#### —— Contact Resistance and Rated Current

#### —— Rated Current, Withstand Voltage and Insulation Resistance

Contact Specification mm	Rated Current (MAX) A	Applicable Wire(Shielded) mm <sup>2</sup>	working Environment	Rated Voltage V	Withstand Voltage V	Insulation Resistance MΩ
4#	80A	10~25	Normal Temperature State	600 AC	3000 AC	≥5000

**Note:** The product rated current is related to the connected wire.

## Model Name

Series Name	HVIL	-M	2	S	(80A)	U	-0010	B	-1
HVIL	High voltage connector with short circuit								
HV	High voltage connector without short circuit								
Connector Type	M-Plug	F-Socket							
Number of Contacts	The number indicates the number of current contact cores								
Contact Type	P-Male Pin	S-Female Pin							
Rated Current	The number indicates the product rated current								
Socket Mounting Method (Only the socket model has this part)	U-Rejection line socket				Non- Square flange socket				
Cable Outlet Angle (Only the plug model has this part)	The number indicates the cable outlet angle								
Wiring Type	B-letters means copper connection								
Key Code	The number indicates the key, no number indicates no key								

## [ Example of Model Number ]

1. High-voltage interlock connector, plug, 2-pin, female pin, rated current 80A, straight outlet, applicable wire single core 10 square, key code 1, model is:  
HVIL-M2S(80A)-0010-1
2. High-voltage interlock connector, square flange socket, 2 pin, male pin, rated current 80A, copper wiring, key code 1, model is:  
HVIL-F2P(80A)-B-1

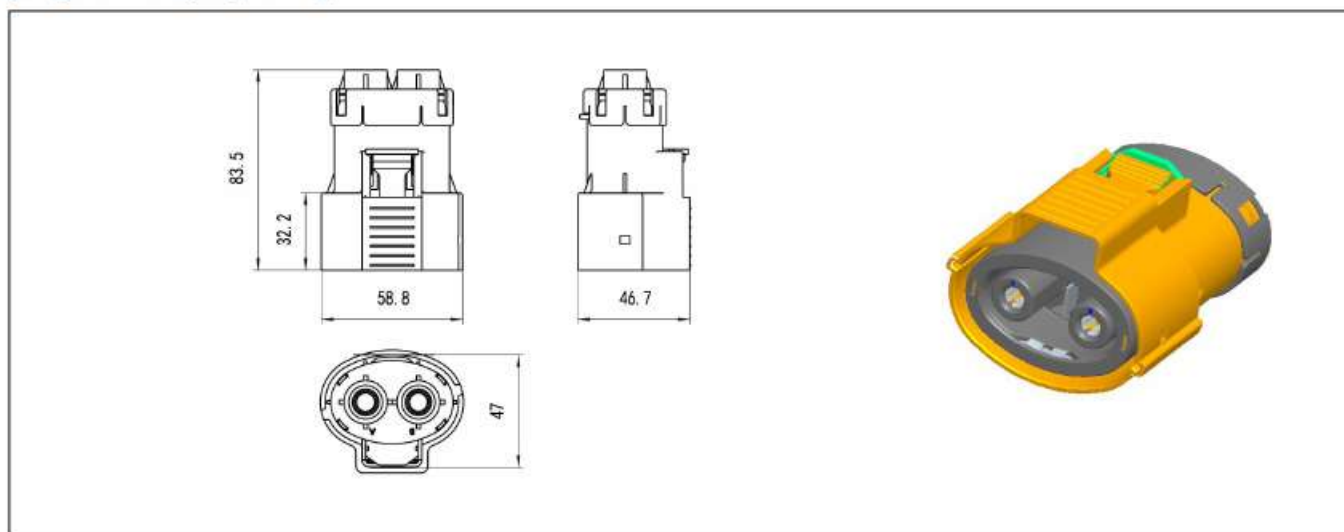
## Contact Pins to Be Ordered Separately

No.	Connector Type	Rated Current	Wire Size	Contact Pin	Number of Contacts Per Set of Products
1	Socket	20A	0.5~1	06-02-876	2

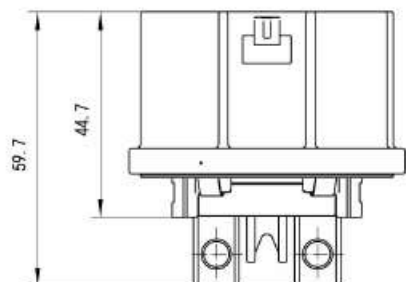
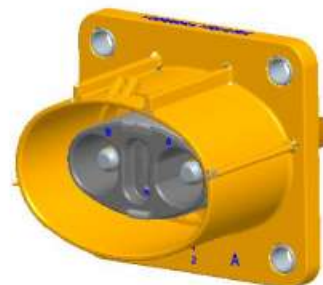
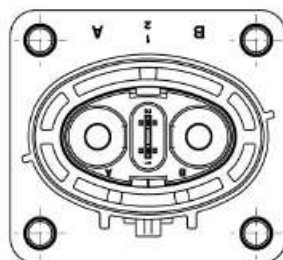
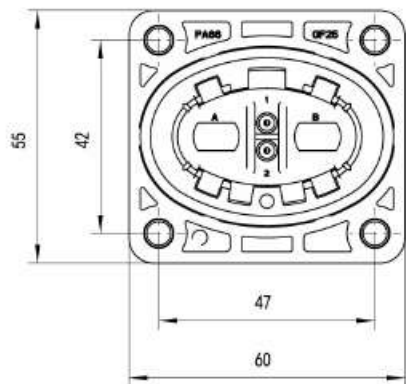
**Note:** The number of separately ordered contact pin should be decided according to the related product contacts' number

## Dimensions (The tolerance unlabeled is $\pm 1$ )

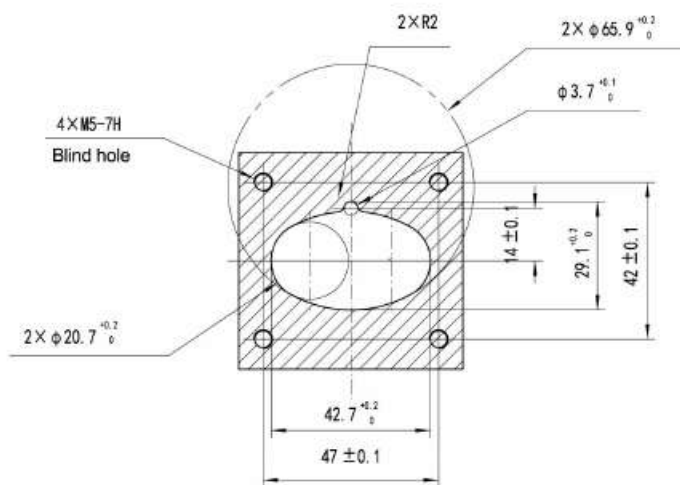
### [ Plug HVIL-M2S(80A)-0010-1 ]



[ Square Flange Socket HVIL-F2P(80A)-B-1 ]



**Recommended Panel Hole Size**



Installation Panel Hole Size

Installation Panel Flatness ≤ 0.1, Surface Roughness ≤ 0.3



## BPC10 / BPC50 Trunk Battery Connectors

### Products Introduction

- Termination method: Signal and auxiliary: crimp, power and ground: Threaded connection
- Implementation of enterprise standards: Q / 21E1660

### Usage

The product is a straight pull no-locking connector. The locking mechanism is between equipment. It is mainly used for the current transmission between the battery box and the vehicle side, the battery wire and the charging end.

### Product Introduction

Used in vibration environment during car driving.

### Main Technical Specification

#### [Mechanical Performance]

- Shell: PBT Flammability Rating UL94-V0
- Insulator: PBT Flammability Rating UL94-V0
- Contact: Copper Alloy With Gold Plated
- Vibration: 10~500Hz
- Durability: 10000 Times

#### [Electrical Performance]

- Rated Operating Current: Signal 2A, Auxiliary 20A, Power Supply 400A, Ground 250A.
- Signal and Auxiliary  $\leq 0.75\text{m}\Omega$ , Power and Grounding  $\leq 0.2\text{m}\Omega$
- Insulation Resistance:  $\geq 100\text{m}\Omega$  (At room Temperature, After Wiring)
- Withstand Voltage: Between Power and Ground 3000V AC
- Between Signal and Holes: 500VAC

#### [Environmental Performance]

- Operating temperature:  $-40^{\circ}\text{C} \sim +80^{\circ}\text{C}$
- Salt Spray: 240 Hours

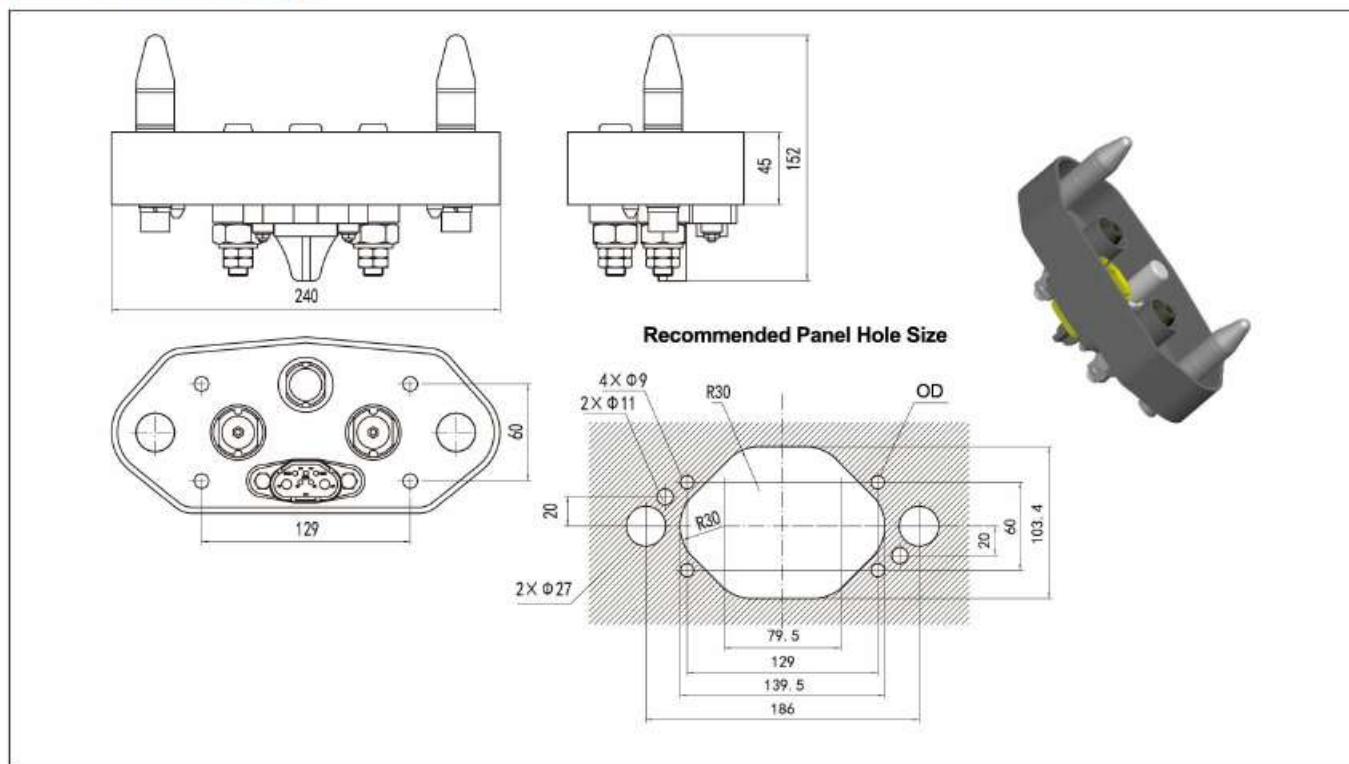


### Model Name

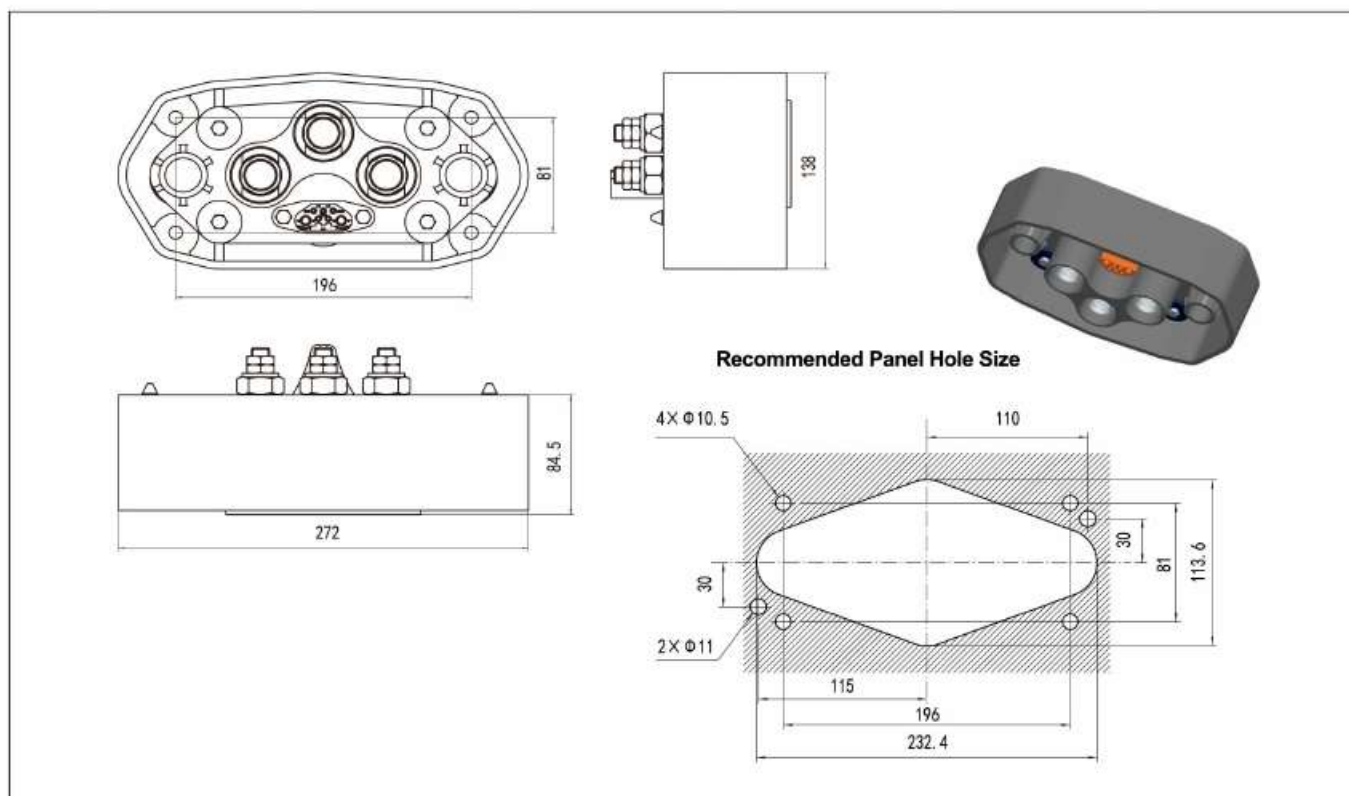
Series Name	BPC	50/10	-S-	400A	/	750V
Connector Type	10					
Contact Type	S-Female Pin	P-Male Pin				
Rated Current	400A					
Separator	/					
Rated Voltage	750V					

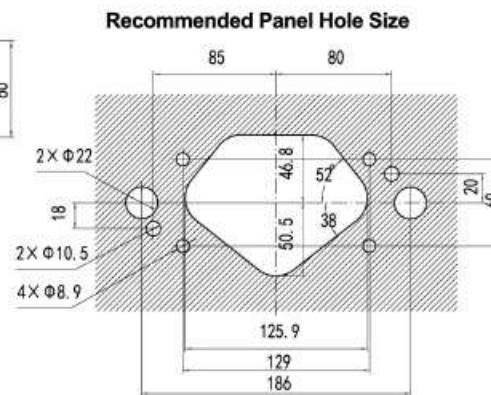
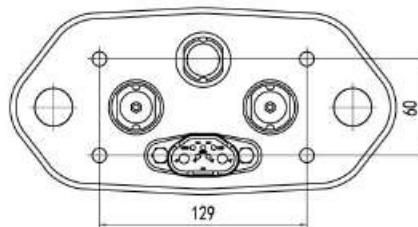
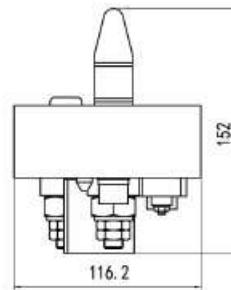
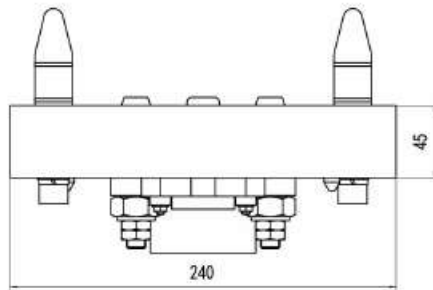
## Dimensions

[BPC10-P-400A/750V(Plug)]

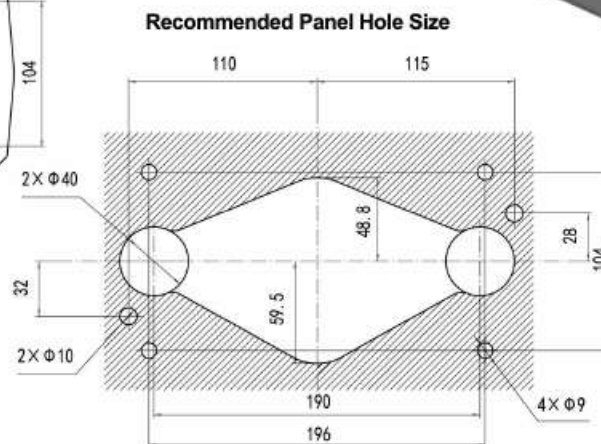
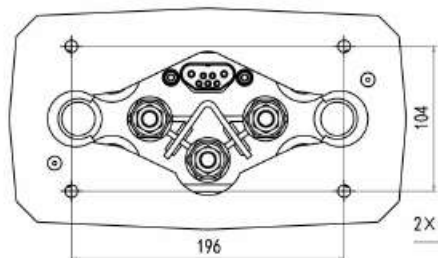
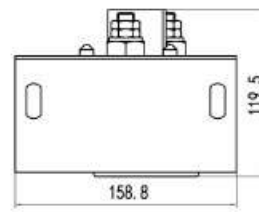
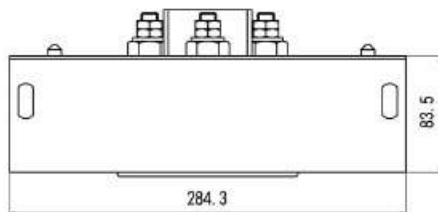


[BPC10-S-400A/750V(Socket)]



**[BPC50-P-400A/750V(Plug)]**


Fixed Plug

**[BPC50-S-400A/750V(Socket)]**


Floating Socket



## BPC20 Trunk Battery Connectors

### Products Introduction

- Termination Method: Crimping
- Implementation of enterprise standards: Q / 21E1660

### Usage

The product is a straight pull no-locking connector. The locking mechanism is between equipment. It is mainly used for the current transmission between the battery box and the vehicle side, the battery wire and the charging end.

### Application

Used in vibration environment during car driving.



### Main Technical Specification

#### [Mechanical Performance]

- Shell: PBT Flammability Rating UL94-V0
- Insulator: PBT Flammability Rating UL94-V0
- Contact: Copper Alloy With Gold Plated
- Vibration: 10~500Hz
- Durability: 10000 Times

#### [Environmental Performance]

- Operating Temperature: -40°C~+80°C
- Salt Spray: 240 Hours

#### [Electrical Performance]

- Rated Operating Current: Signal 2A, Auxiliary 20A, Power Supply 200A, Ground 80A
- Contact Resistance: Signal and Auxiliary ≤ 0.75mΩ, Power and Grounding ≤ 0.5mΩ
- Insulation Resistance: ≥ 100mΩ (At room Temperature, After Wiring)
- Withstand Voltage: Between Power and Ground 3000V AC
- Between Signal and Holes: 500V AC

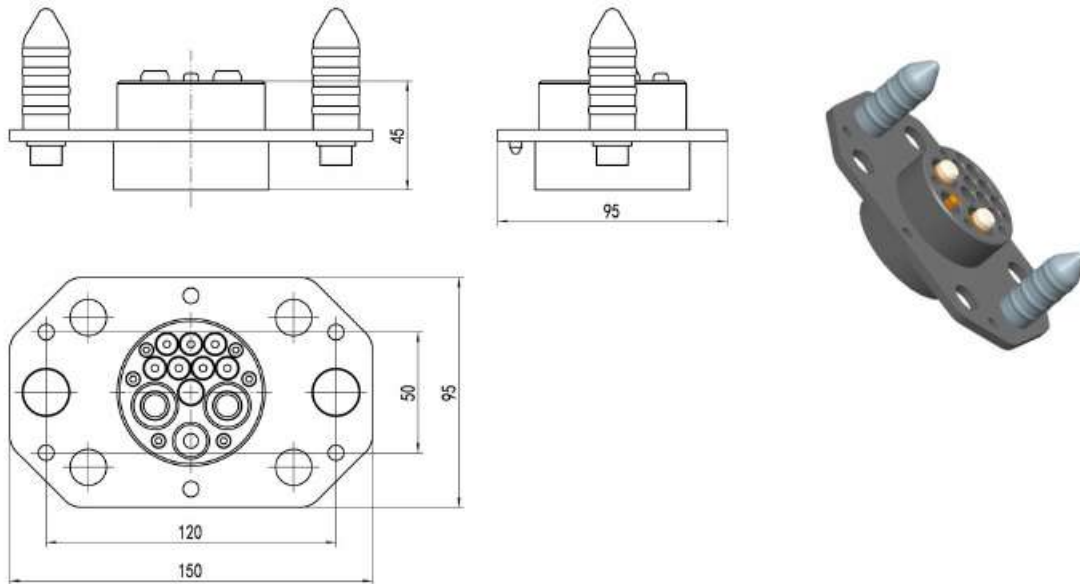
### Model Name

Series Name	BPC	20	-S-	200A	/	750V
Connector Type	20					
Contact Type	S-Female Pin	P-Male Pin				
Rated Current	200A					
Separator	/					
Rated Voltage	750V					

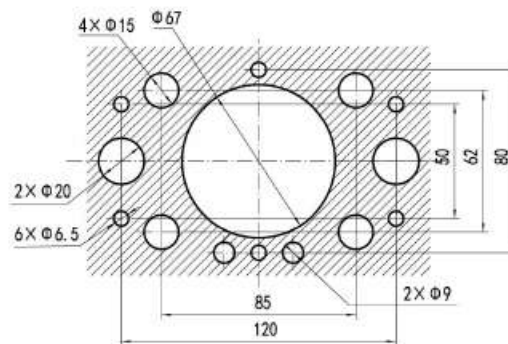


## Dimensions

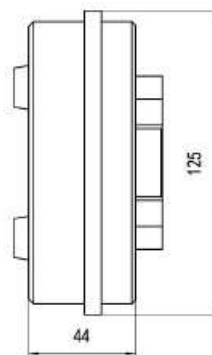
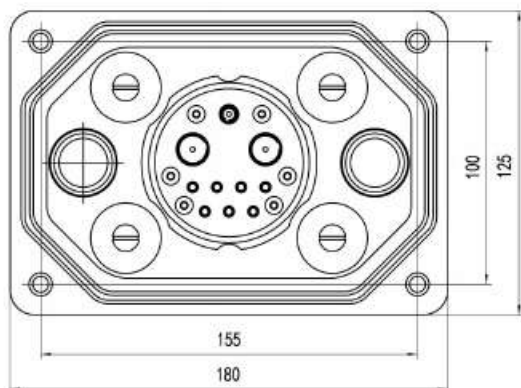
[BPC20-P-200A/750V(Plug)]



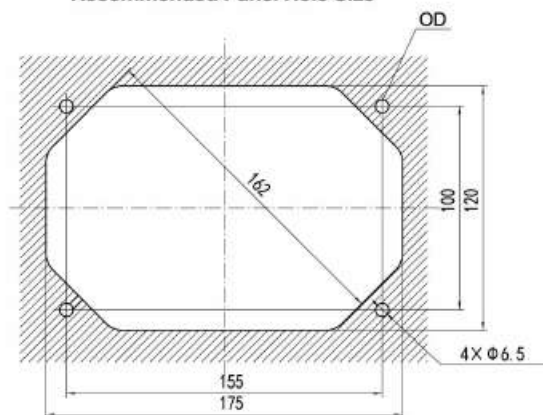
### Recommended Panel Hole Size



[BPC20-S-200A/750V(Socket)]



**Recommended Panel Hole Size**



# BPC30 Chassis Battery Connectors

## Products Introduction

- Termination method: Crimping, for car socket, it's pinhole
- Implementation of enterprise standards: Q / 21E1660

## Usage

The product is a straight pull no-locking connector. The locking mechanism is between equipment. It is mainly used for the current transmission between the battery box and the vehicle side, the battery wire and the charging end.

## Application

Used in vibration environment during car driving.

## Main Technical Specification

### [Mechanical Performance]

- Shell: Aluminum With Nickel Plating
- Insulator: PBT Flammability Rating UL94-V0
- Contact: Copper Alloy With Gold Plated
- Vibration: 10~500Hz
- Durability: 10000 Times

### [Environmental Performance]

- Operating Temperature: -40°C~+80°C
- Salt Spray: 240 Hours

### [Electrical Performance]

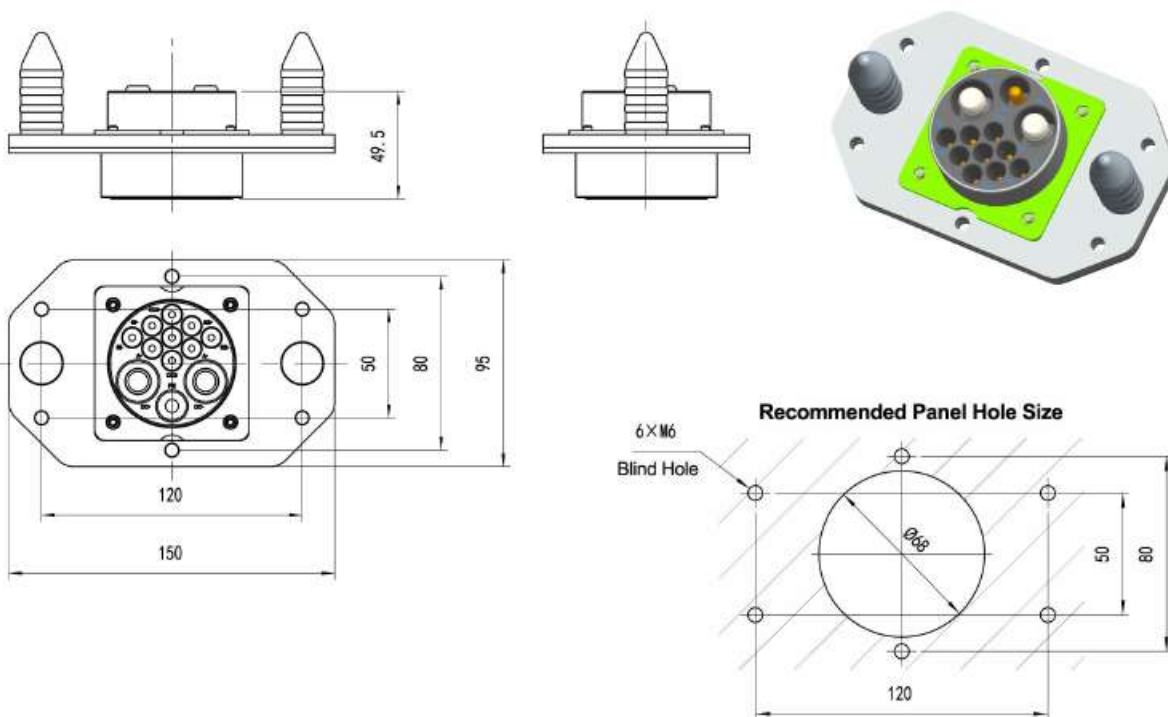
- Rated operating current: Signal 2A, auxiliary 20A, power supply 250A, ground 80A
- Contact resistance: Signal and auxiliary  $\leq 0.75m\Omega$ , power and grounding  $\leq 0.5m\Omega$
- Insulation resistance:  $\geq 100m\Omega$  (At room temperature, after wiring)
- Withstand voltage: Between power and ground 3000V AC between signal and holes: 500V AC

## Model Name

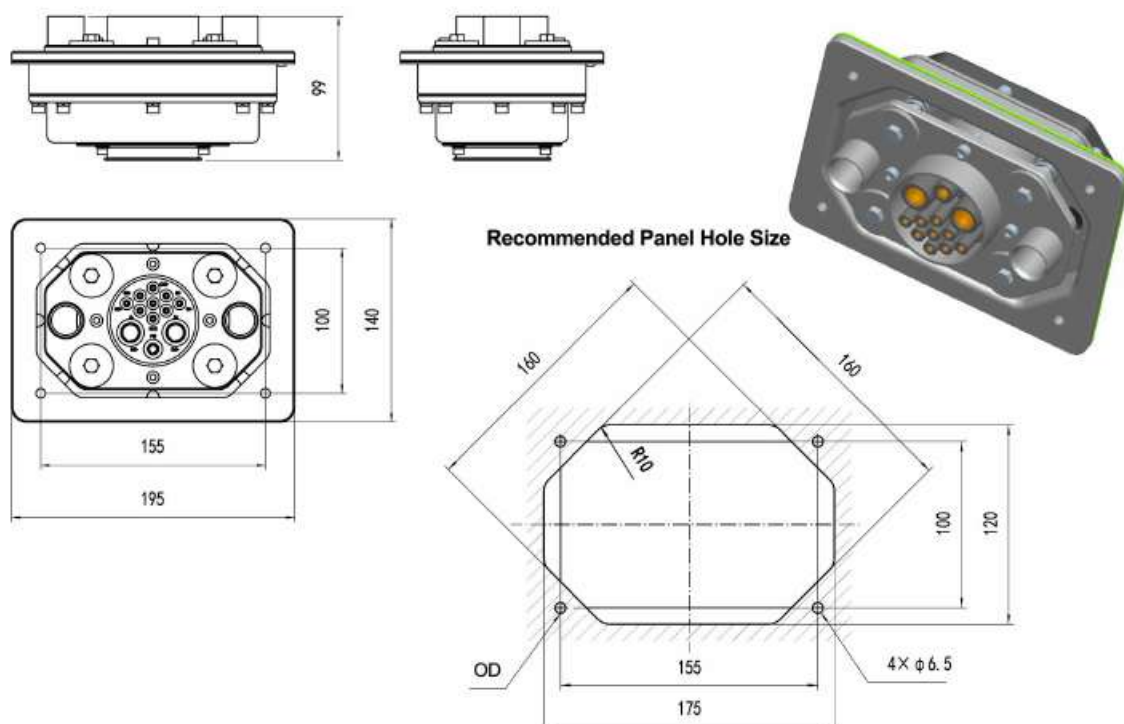
Series Name	BPC	30	-S-	250A	/	750V
Connector Type						
Contact Type	S-Female Pin	P-Male Pin				
Rated Current						
Separator						
Rated Voltage						

## Dimensions

### [BPC30-P-250A/750V-01(Battery Box Plug)]



### [BPC30-S-250A/750V-CR(Mounted Sockets)]





## BPA20 Trunk Battery Connectors

### Products Introduction

- Termination method: Crimping
- Implementation of enterprise standards: Q / 21E1660

### Usage

The product is a straight pull no-locking connector. The locking mechanism is between equipment. It is mainly used for the current transmission between the battery box and the vehicle side, the battery wire and the charging end.

### Application

Used In vibration environment during car driving.

### Main Technical Specification

#### [Mechanical Performance]

- Shell: Aluminum Spray Black Paint
- Insulator: PT -610 Flammability Rating UL94-V0
- Contact: Copper Alloy With Gold Plated
- Vibration: 10~500Hz
- Durability: 10000 Times

#### [Environmental Performance]

- Operating Temperature: -40°C~+80°C
- Salt Spray: 240 Hours

#### [Electrical Performance]

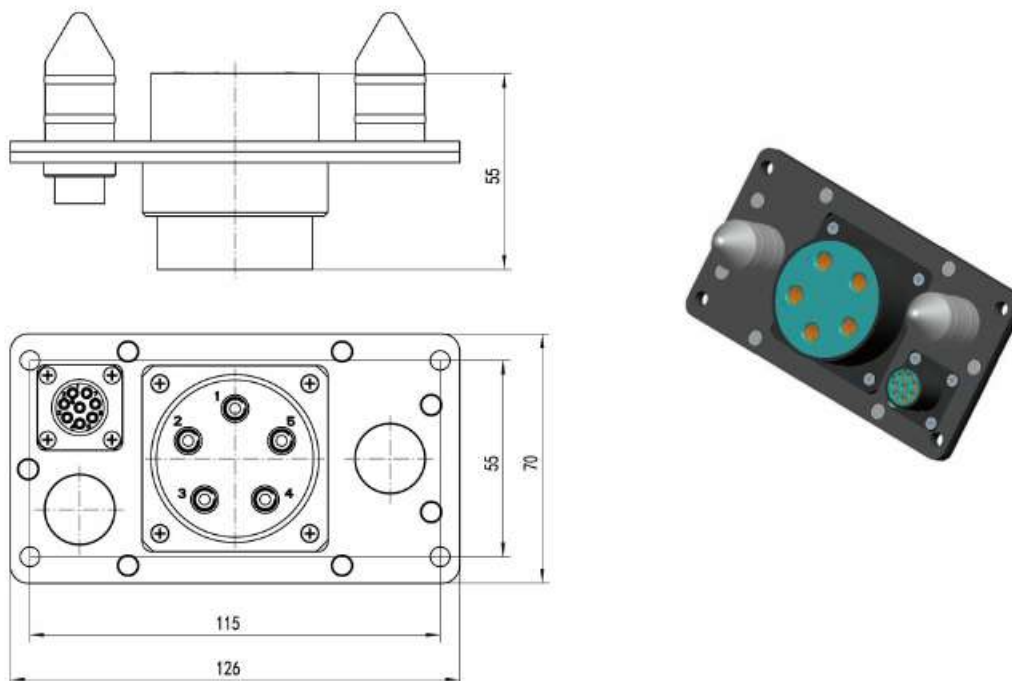
- Rated Operating Current: Signal 2A, Power Supply 80A
- Contact Resistance: Signal and Auxiliary  $\leq 0.4\text{m}\Omega$ , Power and Grounding  $\leq 5\text{m}\Omega$
- Insulation Resistance:  $\geq 100\text{m}\Omega$  (At room Temperature, After Wiring)
- Withstand Voltage: Between Power and Ground 3000V AC
- Between Signal and Holes: 400V AC

### Model Name

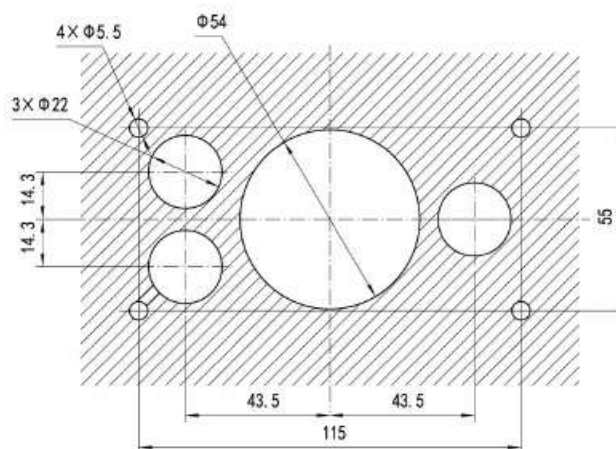
Series Name	BPA	20	-S-	160A	/	750V				
Connector Type										
Contact Type	S-Female Pin	P-Male Pin								
Rated Current										
Separator										
Rated Voltage										

## Dimensions

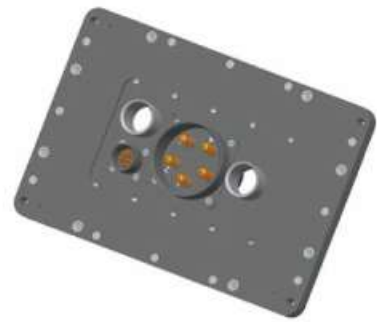
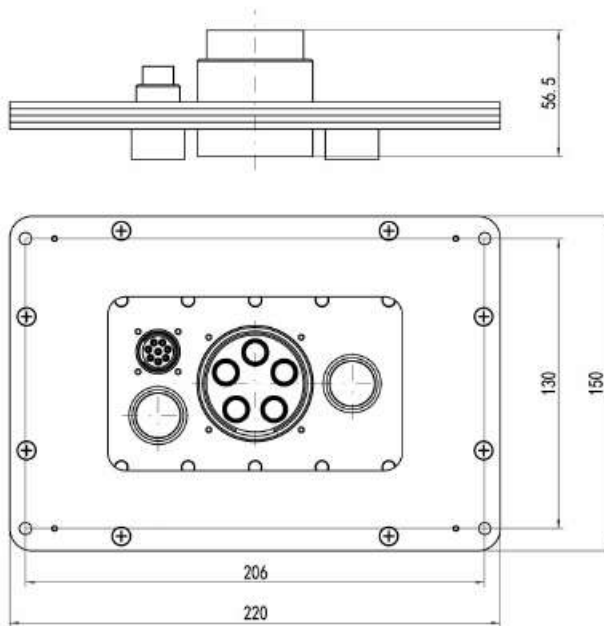
[BPA20-P-160A/750V(Socket)]



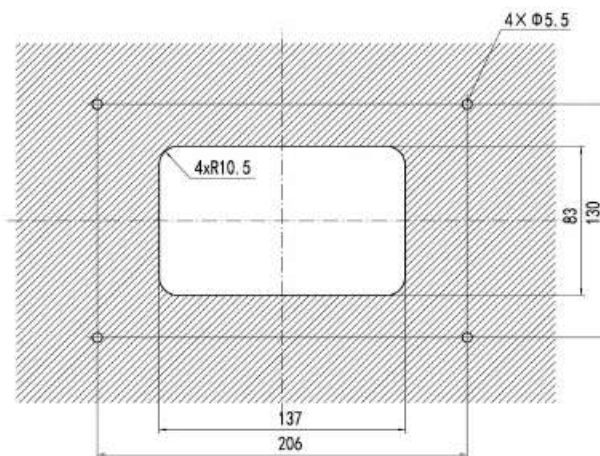
### Recommended Panel Hole Size



[BPA20-S-160A/750V(Socket)]



**Recommended Panel Hole Size**



## CT34C Series Push-pull High Current Connectors

### Products Introduction

- Plug termination type is crimping, socket termination type include crimping, copper connection and threaded coupling.
- Highly reliable spring opening eemale pin make the connector plug soft and the contact eesistance small.
- Push-pull fast connection
- Five types of key positions avoid misplaced
- Meet the enterprise standard: Q / 21E1660

### Usage

Suitable for high Current Transmission Connector, With Interlocking Function.

### Application

Applicable to high current transmission of wet, rain environment for electric vehicles.

### Main Technical Specification

#### [Mechanical Performance]

- Shell: Aluminum Alloy With Nickel Plating
- Insulator: PBT
- Sealing Line Part and Sealing Ring: Silicone Rubber
- Contact: Copper Alloy With Silver Plated
- Vibration: Frequency 10~200Hz Acceleration: 147m/s<sup>2</sup>
- Impact: Acceleration 490 m/s<sup>2</sup>
- Constant Acceleration: 190 m/s<sup>2</sup>
- Durability: 500 Times

#### [Environmental Performance]

- Operating Temperature: -40°C~+125°C
- Relative Humidity: 40°C, UP to 95%
- Protection Degree: IP67
- Environmental Resistance Performance: 48 Hours

#### [Electrical Performance]

— Rated voltage, withstand voltage and insulation resistance

Working Environment	Rated Voltage V	Withstand Voltage V	Insulation Resistance MΩ
Normal Temperature State	1000 AC	3000 AC	≥5000

— Contact resistance and rated current

Contact Specification mm	Contact resistance MΩ	Rated Current A	Applicable Wire mm <sup>2</sup>
φ 10	≤0.3	200	50

### Model Name

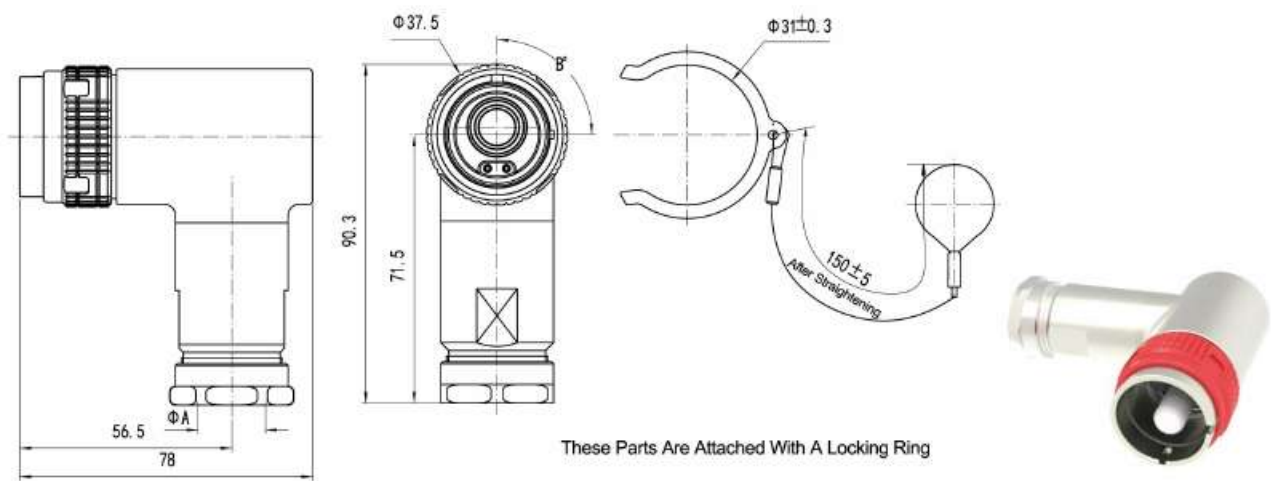
<b>Series Name</b>	CT34C300		-1	J	2	K	T	90(RE)
<b>Number of Contacts</b>	1-Power Contacts	2-Interlocking Contact						
<b>Power Contact Type</b>	J-Male Contact	K-Female Contact						
<b>Number of Contacts</b>	1-Power Contacts	2-Interlocking Contact						
<b>Interlocking Contact Type</b>	J-Male Contact	K-Female Contact						
<b>Plug or Socket</b>	T-Plug	Z-Socket						
<b>Shell Key Position Angle, Color</b>	180(BK)	90(RE)	135(BL)	225(GR)	270(YE)			
<b>Modification Code</b>	Basic Type	-01	-02					





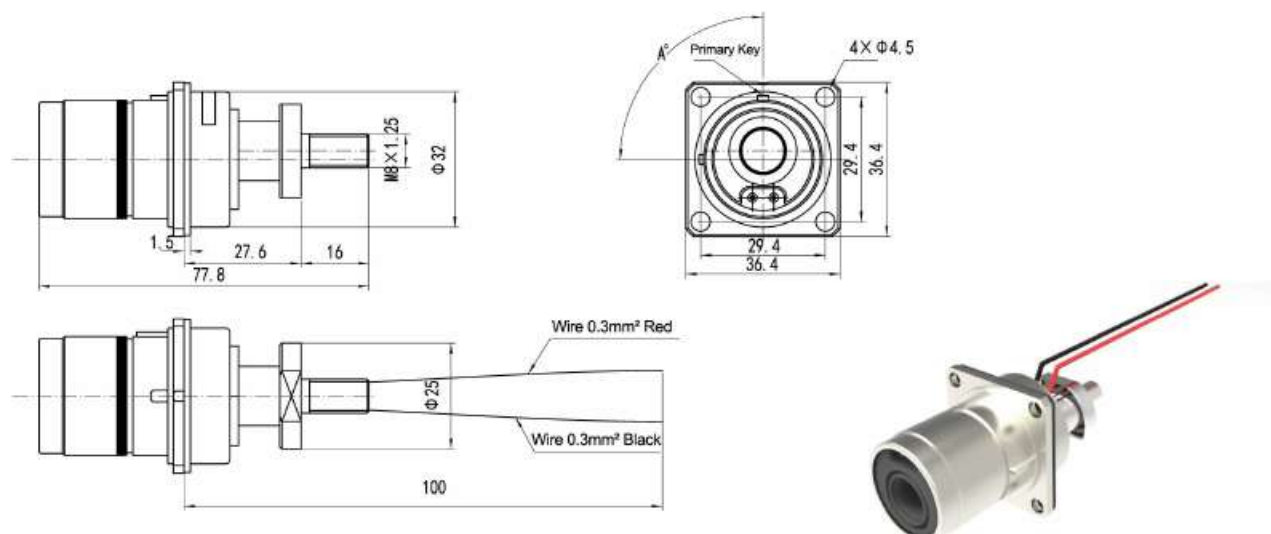
## Dimensions

### [Plug]



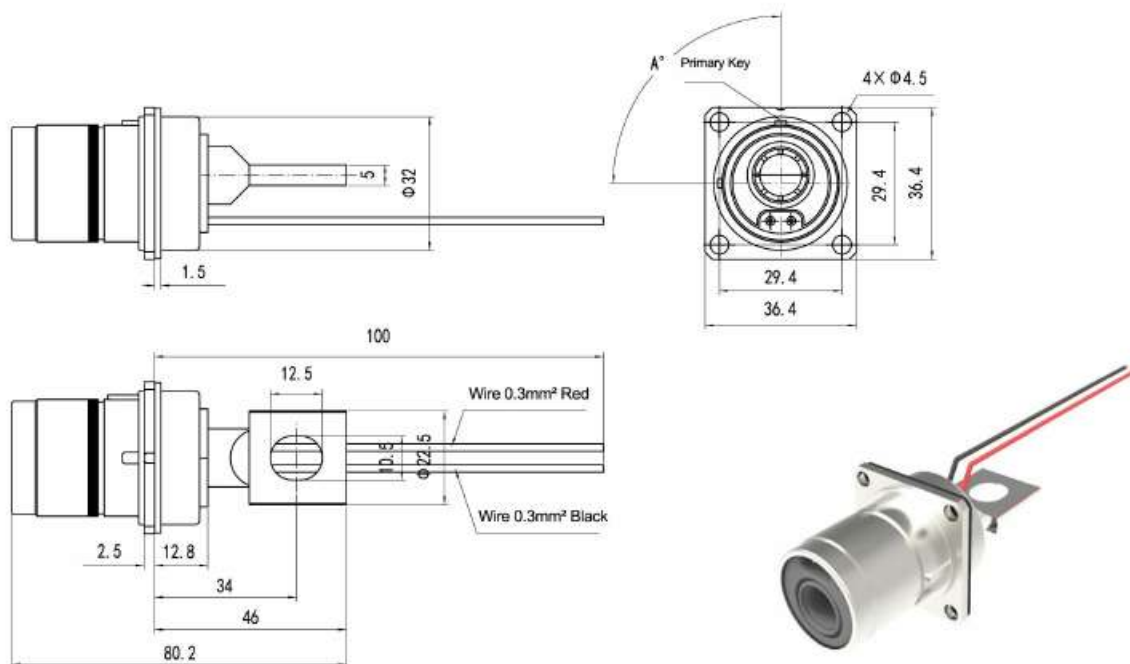
Model	A	B	Applicable Cable
CT34C300-1J2KT90(RE)	18	See Model	50 Square Shielded Cable
CT34C300-1J2KT90(RE)-01	16	See Model	35 Square Shielded Cable
CT34C300-1J2KT90(RE)-02	15	See Model	25 Square Shielded Cable

### [Square Flange Socket]



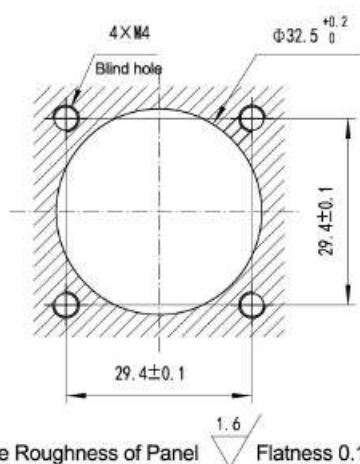
Model	A
CT34C300-2J1KZ90(RE)	See Model

### [ Square Flange Socket ]



Model	A	Anti-error Function
CT34C300-2J1KZ90(RE)-01	See Model	Key Position Error Prevention

### [ Recommended Panel Hole Size ]



## CT34DC Series Bayonet Connectors

### Products Introduction

- Applicable to high current transmission of wet, rain environment for electric vehicles.
- Plug termination is crimping, socket termination type include threaded coupling, copper connection and crimping
- Shell shield
- Highly reliable spring opening female pin make the connector plug soft and the contact resistance small
- Bayonet quick connection
- Implementation of the standard: Q / 21EJ874
- IP protection degree: IP67



### Usage

Current transmission of main circuit of electric vehicle.

### Application

Applicable to main circuit of EV.

### Main Technical Specification

#### [Mechanical Performance]

- Shell: Shielded products with nickel plated
- Insulator: PBT
- Sealing line part and sealing ring: Silicone rubber
- Contact: Copper alloy with silver plated
- Vibration: Frequency 10~2000Hz acceleration: 196 m/s<sup>2</sup>
- Impact: Acceleration 490 m/s<sup>2</sup>
- Constant acceleration: 190 m/s<sup>2</sup>
- Durability: 500 times

#### —— Contact resistance and rated current

Contact Specification mm	Contact resistance mΩ	Rated Current A	Applicable Wire mm <sup>2</sup>
φ 12	0.25	300	70

#### [Environmental Performance]

- Operating Temperature: -40°C~+125°C
- Relative Humidity: 40°C, UP to 95%
- Protection Degree: IP67(May effected by customer installation)
- Environmental resistance performance: 48 hours

#### —— Rated voltage, withstand voltage and insulation resistance

Working Environment	Rated Voltage V	Withstand Voltage V	Insulation Resistance MΩ
Normal Temperature State	600 AC	3000 AC	≥5000

### Model Name

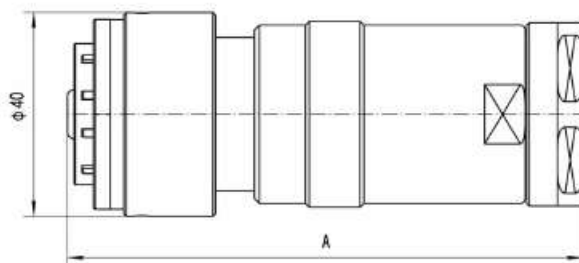
Series Name	CT34	DC	300	-1	T	J	N	-XX
Power Supply Series	DC							
Current Magnitude	300-300A		200-200A					
Number of Contacts	1 Pin							
Plug or Socket	T-Plug		Z-Socket					
Contact Type	J-Male contact		K-Female contact					
Shell Key Position	N W X Y Z/ Ribbon color corresponding to clue, green, yellow, red							
Modification Code	-XX Socket installation in different ways, or the plug cable outlet diameter is different, for example							

### [Example of Model Number]

**CT34DC300-1TJN**

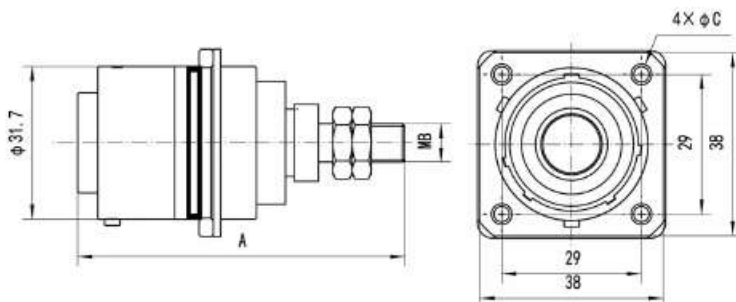
**CT34DC Series Bayonet Connection Plug, Rated Current is 300A, 1 Pin, Female Contacts, Shell Key Position is N, Corresponding to The Blue Ribbon.**

### [Straight Plug]



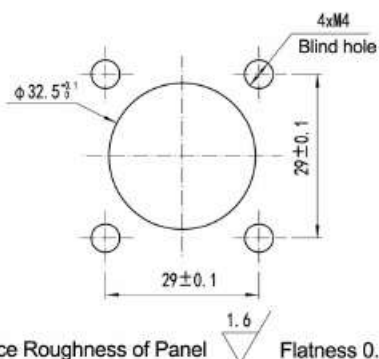
Model	A	Crimp Ferrule Diameter	Cable Outlet Diameter	Shielding	Anti-Error Function
CT34DC300-1TJ/KN	101.2	φ12.5	φ17~φ19	Yes	Key, Color Error-Proof
CT34DC300-1TJ/KN-02	101.2	φ8.6	φ13~φ15	Yes	Key, Color Error-Proof
CT34DC300-1TJ/KN-03	101.2	φ10.5	φ16~φ18	Yes	Key, Color Error-Proof

### [Screw Pillar Square Flange Socket]



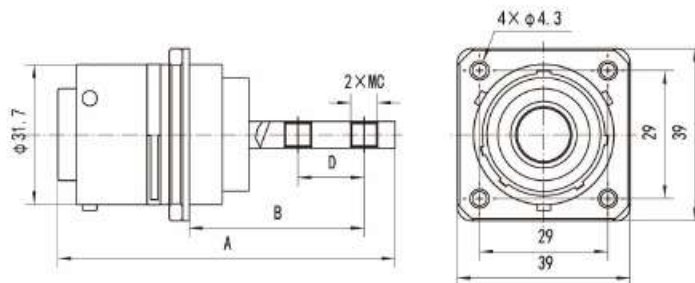
Model	A	B	C	Shielding	Anti-Error Function
CT34DC300-1ZK/JN	63	8	4.3	Yes	Key, Color Error-Proof
CT34DC300-1ZK/JN-03	68	8	4.3	Yes	Key, Color Error-Proof

### [Recommended Panel Hole Size]



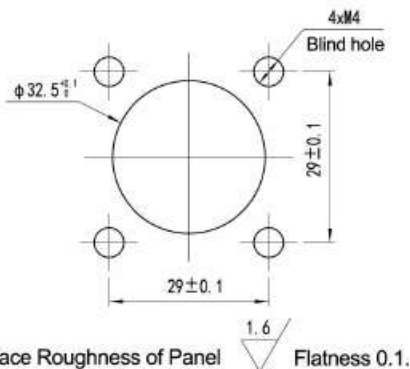


### [Double Hole Square Flange Socket]

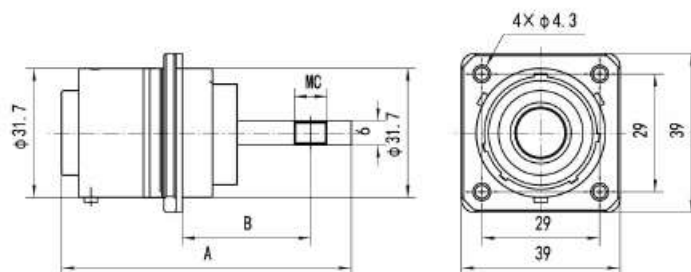


Model	A	B	C	D	Shielding	Anti-Error Function
CT34DC300-1ZK/JN-01	87.3	50.6	8	19	Yes	Key, Color Error-Proof
CT34DC300-1ZK/JN-06	77.05	39.6	6	15	Yes	Key, Color Error-Proof

### [Recommended Panel Hole Size]

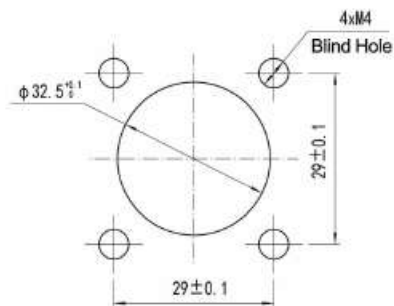


### [Square Flange Shielded Socket]



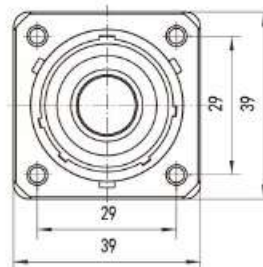
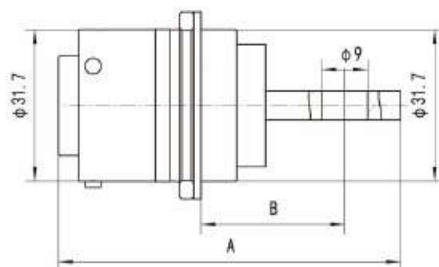
Model	A	B	C	Shielding	Anti-Error Function
CT34DC300-1ZK/JN-02	71.3	31.6	8	Yes	Key, Color Error-Proof
CT34DC300-1ZK/JN-04	86.3	46.6	8	Yes	Key, Color Error-Proof

### [Recommended Panel Hole Size]



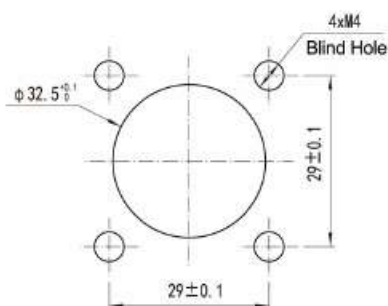
Required to Match The Surface Roughness of Panel  $\sqrt{1.6}$  Flatness 0.1.

### [Copper Connection Square Flange Socket]



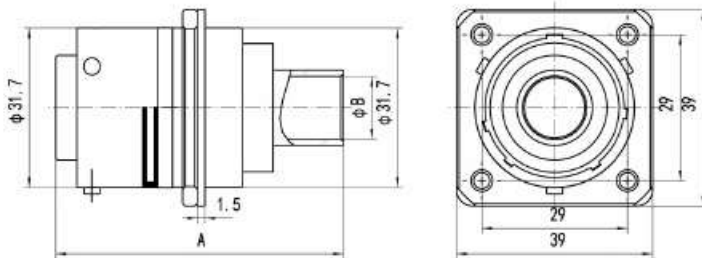
Model	A	B	Shielding	Anti-Error Function
CT34DC300-1ZK/JN-05	71.3	31.6	Yes	Key, Color Error-Proof

### [Recommended Panel Hole Size]



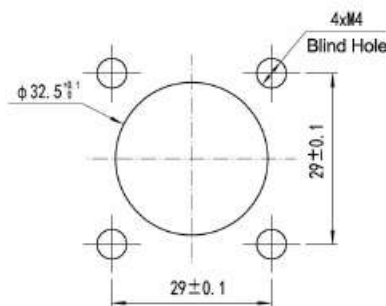
Required to Match The Surface Roughness of Panel  $\sqrt{1.6}$  Flatness 0.1.

### [Crimp Socket]



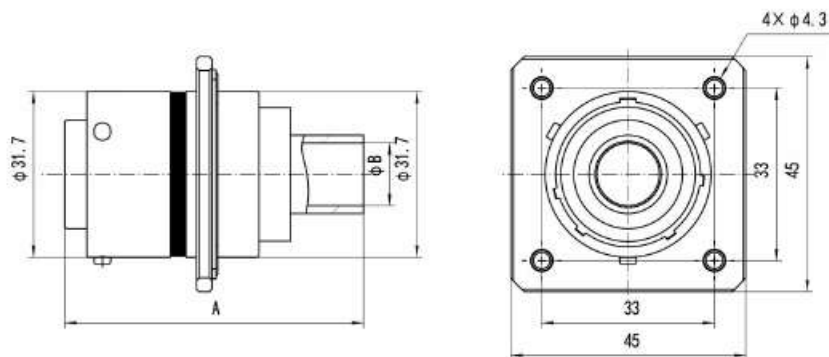
Model	A	B	Applicable Cable	Shielding	Anti-Error Function
CT34DC300-1ZK/JN-07	57.2	12.5	70mm <sup>2</sup>	Yes	Key, Color Error-Proof
CT34DC300-1ZK/JN-08	57.2	10.5	50mm <sup>2</sup>	Yes	Key, Color Error-Proof

### [Recommended Panel Hole Size]



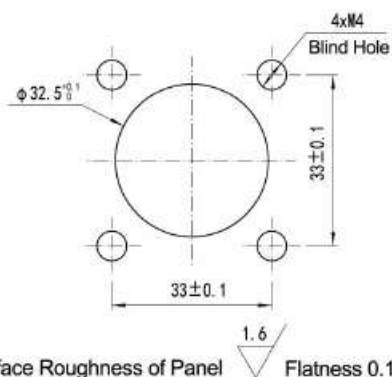
Required to Match The Surface Roughness of Panel  $\sqrt{1.6}$  Flatness 0.1.

### [Crimp Socket]



Model	A	B	Applicable Cable	Shielding	Anti-Error Function
CT34DC300-1ZK/JN-10	57.2	12.5	70mm <sup>2</sup>	Yes	Key, Color Error-Proof

### [Recommended Panel Hole Size]





## CT34E Series Push-pull High Current Connectors

### Products Introduction

- Plug termination is crimping, socket termination type include threaded coupling, copper connection and crimping.
- Five kinds of color distinction male pin and female pin to prevent incorrect insertion.
- Highly reliable spring hole to make connection soft and the contact resistance is small.
- Straight push-pull fast connection.
- Executive standard: enterprise standard Q / 21EJ1032-2009
- IP protection degree: Coupling interface of the installation socket meet the IP67 standard



### Usage

Current transmission of high voltage parts of electric vehicle.

### Application

Applicable to electrical connection of wet, rain environment for electric vehicles.

### Main Technical Specification

#### [Mechanical Performance]

- Shell: Aluminum alloy shell with oxide nickel plating
- Insulator: PBT
- Sealing line part and sealing ring: Silicone rubber
- Contact: Power supply contacts with silver plated
- Vibration: Frequency 10~2000Hz acceleration: 196 m/s<sup>2</sup>
- Impact: Acceleration 980 m/s<sup>2</sup>
- Durability: 500 times

#### [Environmental Performance]

- Operating temperature: -55°C~+90°C
- Relative humidity: 40°C, UP to 95%
- Protection degree: IP67(May effected by customer installation)
- Environmental resistance performance: 48 hours

#### [Electrical Performance]

——Rated voltage, withstand voltage and insulation resistance

Working Environment	Rated Voltage V	Withstand Voltage V	Insulation Resistance MQ
Normal Temperature State	600 AC	2500 AC	≥5000

——Contact resistance and rated current

Contact Specification mm	Contact Resistance MQ	Rated Current A	Applicable Wire mm <sup>2</sup>
φ8.0	0.2	80	20
		130	35

### Power Supply Series Connectors

#### Model Name

Series Name	CT34	E	-1	Z	J	(BK)	-01
Power Supply Series	E——130A Series						
Number of Contacts	1 Pin						
Plug or Socket	T-Plug      Z-Socket						
Contact Type	J-Male Contact      K-Female Contact						
Shell Color	(BK)-Black    (GR)-Green    (BL)-Blue    (RE)-Red    (YE)-Yellow						
Modification Code	Basic Type - no Mark      Five Key Anti-error Type-01 or A G00X						



Model	Color Cues	Mechanical Cues	Reverse Pole	Modification Code
CT34E Basic Type	Satisfy	Not Satisfied	Satisfy	A0001,A0002.....
CT34E-01 Basic Type	Satisfy	Satisfy	Satisfy	A, B, C, D..... or A G00X.....

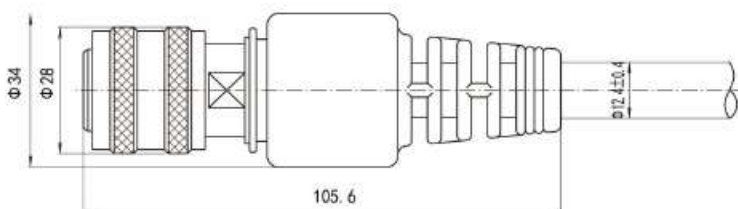
#### [Example of Model Number]

**CT34E-1TJ(BK)**

CT34E Series Push-pull Type Plug, 1 Pin, Female Contacts, Shell Color is Black.

#### Dimensions

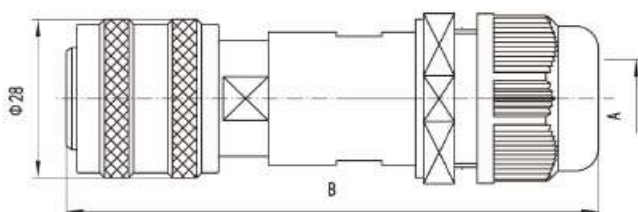
[Straight Pre-assembled Plug(Cable Diameter and Length Can Be Customized According to User Requirements, We] Recommend to Refer to Wiring Harness Model When You Place The Order)



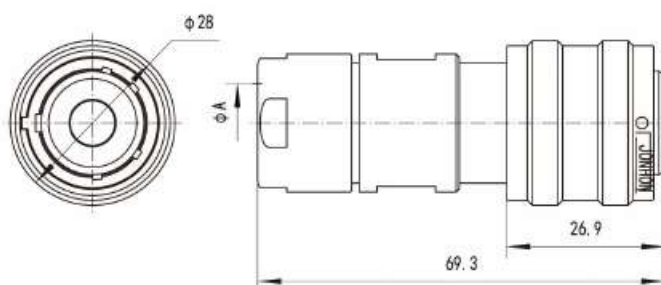
Please Consult Our Engineers for Specific Models

Model	Applicable Wire(mm²)	Anti-error Function	Remarks
CT34E-1TJ/K(XX)A001	25	Color	For harness Models, Please Consult Product Engineers
CT34E-1TJ/K(XX)A002	35	Color	For harness Models, Please Consult Product Engineers
CT34E-1TJ/K(XX)-01	35	Color, Key	For harness Models, Please Consult Product Engineers

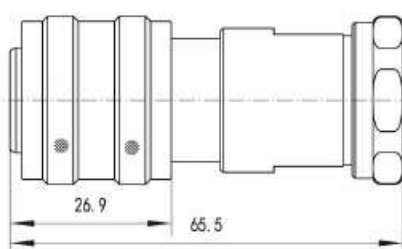
#### [Straight Plug CT34E-1TK/J(XX)A00X]



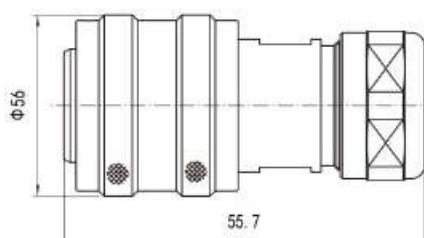
Model	Cable Outlet Size φA	B	Applicable Wire(mm²)	Anti-error Function
CT34E-1TK/J(XX)A003	φ8.5~φ14	94	35 Unshielded	Color Error-proof
CT34E-1TK/J(XX)01L	φ8.5~φ14	94	35 Unshielded	Color, key

**[Straight Plug CT34E-1TJ/K(XX)-01M G001]**


Model	Cable Outlet Size φA	B	Applicable Wire(mm²)	Anti-error Function
CT34E-1TJ/K(XX)-01M G001	φ11~φ13.5	70	25 Shield	Color, key

**[Straight Plug CT34E-1TJ/K(XX)-01M G002]**


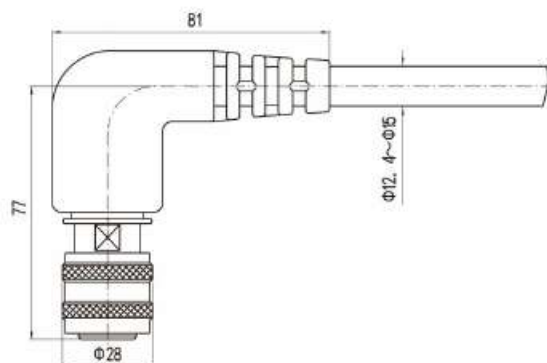
Model	Cable Outlet Size φA	Applicable Wire(mm²)	B	Anti-error Function
CT34E-1TJ/K(XX)-01M G002	φ11~φ13.5	35 Shield	75	Color, Keys Error-proof

**[Straight Plug CT34E-1TK/J(XX)-01U]**


Model	Cable Outlet Size φA	Applicable Wire(mm²)	Anti-error Function
CT34E-1TK/J(XX)-01U	φ10	16 Unshielded	Color, Keys Error-proof

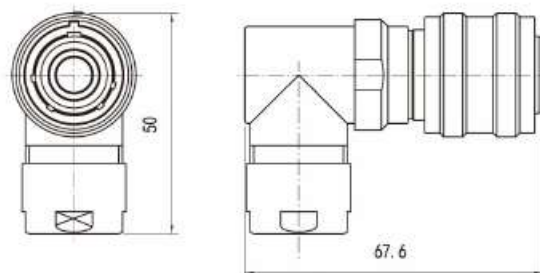


[Angled Pre-assembled Plug(Cable Diameter and Length Can Be Customized According to User Requirements,]  
We Recommend to Refer to Wiring Harness Model When You Place The Order)



Model	Applicable Wire(mm²)	Anti-error Function	Remarks
CT34E-1TJ/K(XX)A001	25	Color Error-proof	For harness Models, Please Consult Product Engineers
CT34E-1TJ/K(XX)A002	35	Color Error-proof	For harness Models, Please Consult Product Engineers
CT34E-1TJ/K(XX)-01	35	Color, key	For harness Models, Please Consult Product Engineers

[ Angled Plug CT34E-1TK(XX)01W]



Model	Applicable Wire	Cable Outlet OD	Anti-error Function
CT34E-1TK(XX)-01W	25 Shield	φ12~φ13.5	Color, Five Keys Error-proof
CT34E-1TJ(XX) A018	25 Shield	φ12~φ13.5	Color



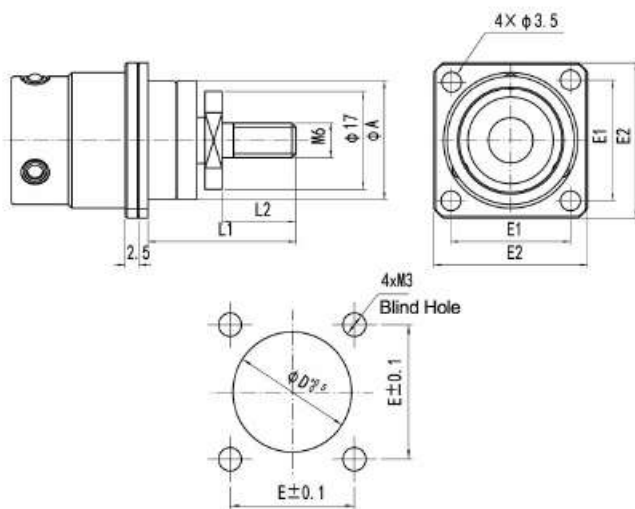
**[Angled Plug CT34E-1TJ/K180(XX)-01M]**

Model	Applicable Wire	Cable Outlet OD	Cable Outlet Direction A	Anti-error Function
CT34E-1TJ/K90(XX)-01M	35 Shield	$\phi 12.5 \sim \phi 14.5$	90	Color, Five Keys Error-proof
CT34E-1TJ/K135(XX)-01M	35 Shield	$\phi 12.5 \sim \phi 14.5$	135	Color, Five Keys Error-proof
CT34E-1TJ/K180(XX)-01M	35 Shield	$\phi 12.5 \sim \phi 14.5$	180	Color, Five Keys Error-proof
CT34E-1TJ/K225(XX)-01M	35 Shield	$\phi 12.5 \sim \phi 14.5$	225	Color, Five Keys Error-proof
CT34E-1TJ/K270(XX)-01M	35 Shield	$\phi 12.5 \sim \phi 14.5$	270	Color, Five Keys Error-proof
CT34E-1TJ/K90(XX)-01M G001	35 Shield	$\phi 10.5 \sim \phi 12.5$	90	Color, Five Keys Error-proof
CT34E-1TJ/K135(XX)-01M G001	35 Shield	$\phi 10.5 \sim \phi 12.5$	135	Color, Five Keys Error-proof
CT34E-1TJ/K180(XX)-01M G001	35 Shield	$\phi 10.5 \sim \phi 12.5$	180	Color, Five Keys Error-proof
CT34E-1TJ/K225(XX)-01M G001	35 Shield	$\phi 10.5 \sim \phi 12.5$	225	Color, Five Keys Error-proof
CT34E-1TJ/K270(XX)-01M G001	35 Shield	$\phi 10.5 \sim \phi 12.5$	270	Color, Five Keys Error-proof

**[Square Flange Socket:End With M8 Screw Pillar]**

Model	L1	L2	$\phi A$	E1	E2	E	$\phi D$	Anti-error Function
CT34E-1ZJ/K(XX)	30	18	20.6	23	32	23	21	Color Error-proof
CT34E-1ZJ(XX)-01B	30.5	16.5	23	23	31	23	23.5	Color, key
CT34E-1ZJ/K(XX)-02	30.5	18	20.6	23	32	23	21	Color, key

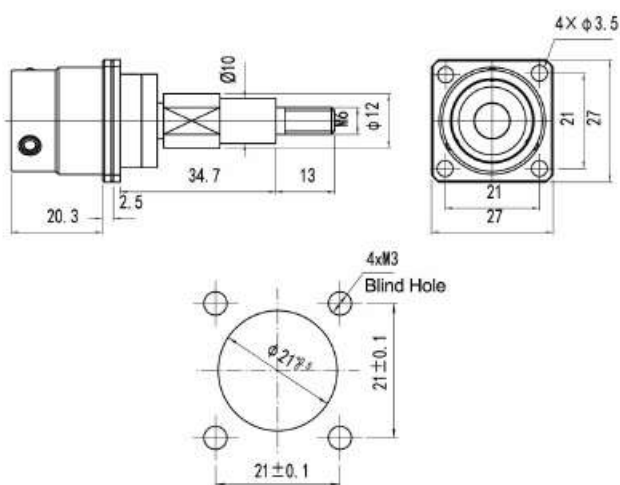
### [Square Flange Socket:End With M8 Screw Pillar]



Required to Match The Surface Roughness of Panel  $\sqrt{1.6}$  Flatness 0.1.

Model	L1	L2	$\phi A$	E1	E2	E	$\phi D$	Anti-error Function
CT34E-1ZJ/K(XX) A001	26	13	20.6	21	27	21	21	Color Error-proof
CT34E-1ZJ/K(XX) A003	22.7	10	20.6	21	27	21	21	Color Error-proof
CT34E-1ZJ/K(XX) -01	30	12	20.6	21	27	21	21	Color, Five Keys Error-proof
CT34E-1ZJ/K(XX) -01A	25.7	13	20.6	21	27	21	21	Color, Five Keys Error-proof

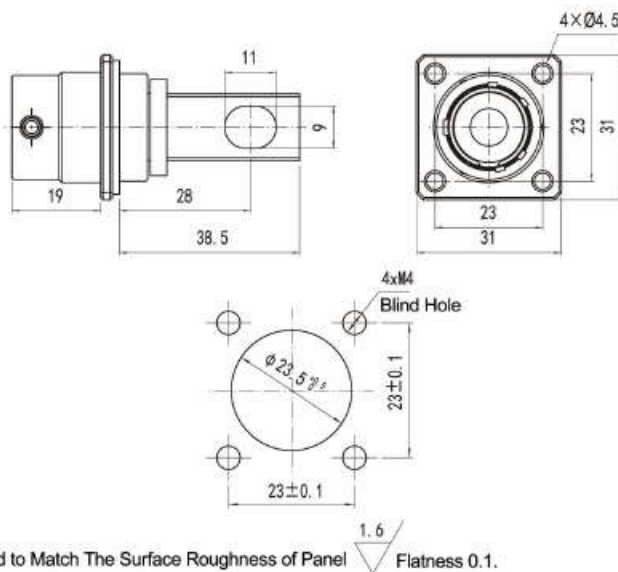
### [Square Flange Socket]



Required to Match The Surface Roughness of Panel  $\sqrt{1.6}$  Flatness 0.1.

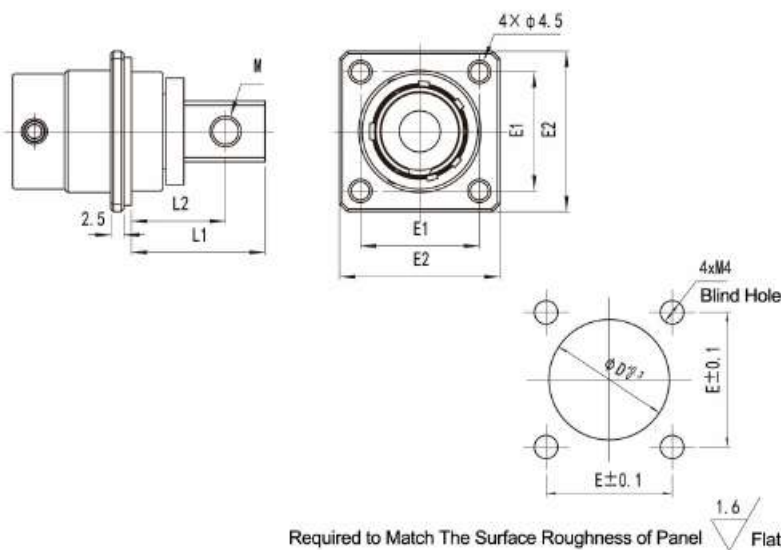
Model	Anti-error Function
CT34E-1ZJ(XX) A008	Color Error-proof
CT34E-1ZJ(XX) -01C	Color, Five Keys Error-proof

### [Square Flange Socket:End With Elliptical Hole Copper]



Model	Anti-error Function
CT34E-1ZJ/K(XX)-01G	Color, Five Keys Error-proof

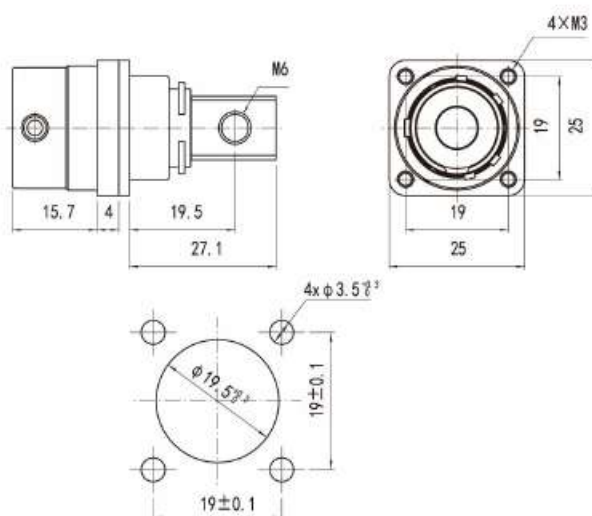
### [Square Flange Socket:End With Thread Hole Copper]



Model	L1	L2	E1	E2	E	φD	Mounting Hole M	Anti-error Function
CT34E-1ZK(XX) A018	35.8	27.1	23	32	23	21	M6	Color Error-proof
CT34E-1ZJ/K(XX)-01D	25.8	18.2	23	31	23	23.5	M6	Color, Five Keys Error-proof
CT34E-1ZJ/K(XX)-01E	37.2	28.5	23	31	23	23.5	M6	Color, Five Keys Error-proof
CT34E-1ZJ(XX)-01J	56.1	39.1	23	31	23	23.5	M6	Color, Five Keys Error-proof
CT34E-1ZJ/K(XX)-01V	41.7	34.1	23	31	23	23.5	M8	Color, Five Keys Error-proof; Copper With 10mm Heat s Hrink Tubing

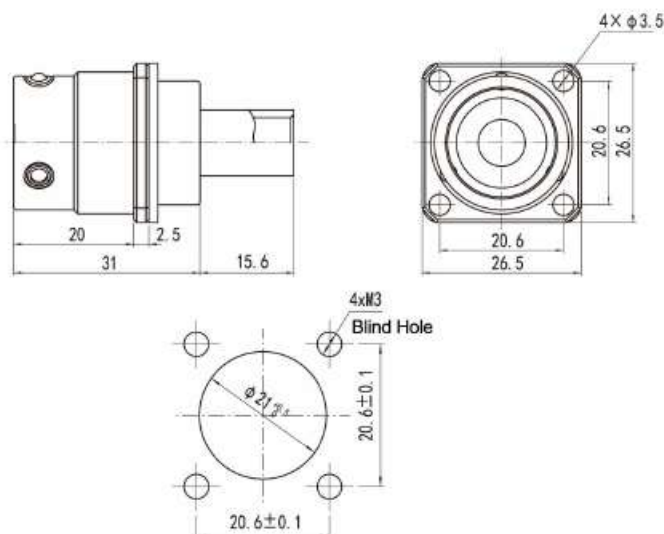


[Square Flange Socket:End With M6 Copper]



Model	Anti-error Function	Remarks
CT34E-1ZJ/K(XX)-01F	Color, Five Keys Error-proof	The Socket is Installed From The Rear Side

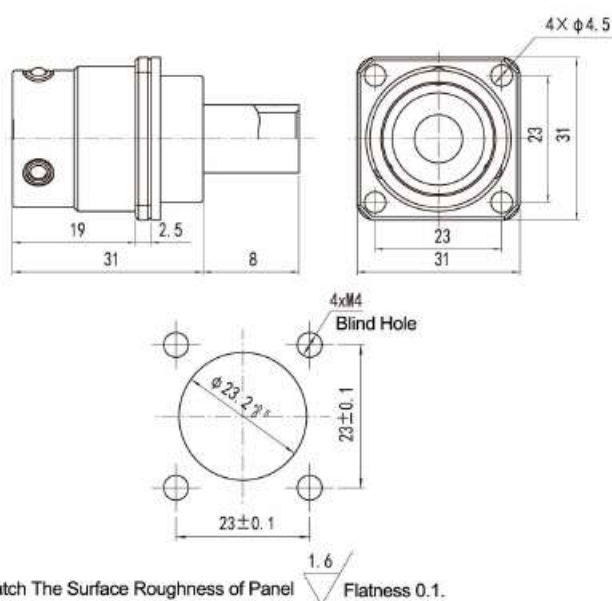
[Square Flange Socket:End Crimping]



Model	Applicable Wire(mm <sup>2</sup> )	Anti-error Function
CT34E-1ZJ(XX) A002	35	Color Error-proof
CT34E-1ZJ(XX) A009	16	Color Error-proof

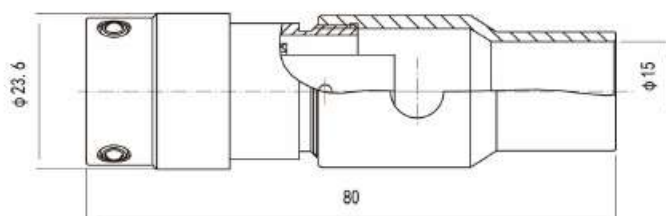


### [Square Flange Socket:End Crimping]



Model	Applicable Wire(mm <sup>2</sup> )	Anti-error Function
CT34E-1ZJ/K(XX)-01H	25	Color, Five Keys Error-proof

### [Circular Flange Socket]



Model	Applicable Wire(mm <sup>2</sup> )	Anti-error Function
CT34E-1ZJ/K(XX)A010	35	Color Error-proof

## CT34T Series Push-pull High Current Connectors

### Products Introduction

- Plug termination is crimping, socket termination type include threaded coupling, copper connection and crimping.
- Highly reliable spring opening to make the connection soft and the contact resistance is small
- Push-pull fast connection
- Two kinds of key positions of 90 °and 180 ° to prevent incorrect insertion
- Meet the enterprise standard: Q / 21EJ1326



### Usage

Heavy current transmission connector.

### Application

Applicable to high current transmission of wet, rain environment for electric vehicles.

### Main Technical Specification

#### [Mechanical Performance]

- Shell: With nickel plating
- Insulator: PBT
- Sealing line part and sealing ring: Silicone rubber
- Contact: Copper alloy with silver plated
- Vibration: Frequency 10~2000Hz acceleration: 147 m/s<sup>2</sup>
- Impact: Acceleration 490 m/s<sup>2</sup>
- Durability: 500 times

#### [Environmental Performance]

- Operating temperature: -40°C~+125°C
- Protection degree: IP67
- Salt spray: 48 hours

#### [Electrical Performance]

##### —— Rated voltage, withstand voltage and insulation resistance

working Environment	Rated Voltage V	Withstand Voltage V	Insulation Resistance MΩ
Normal Temperature State	1000 AC	3000 AC	≥5000

##### —— Contact resistance and rated current

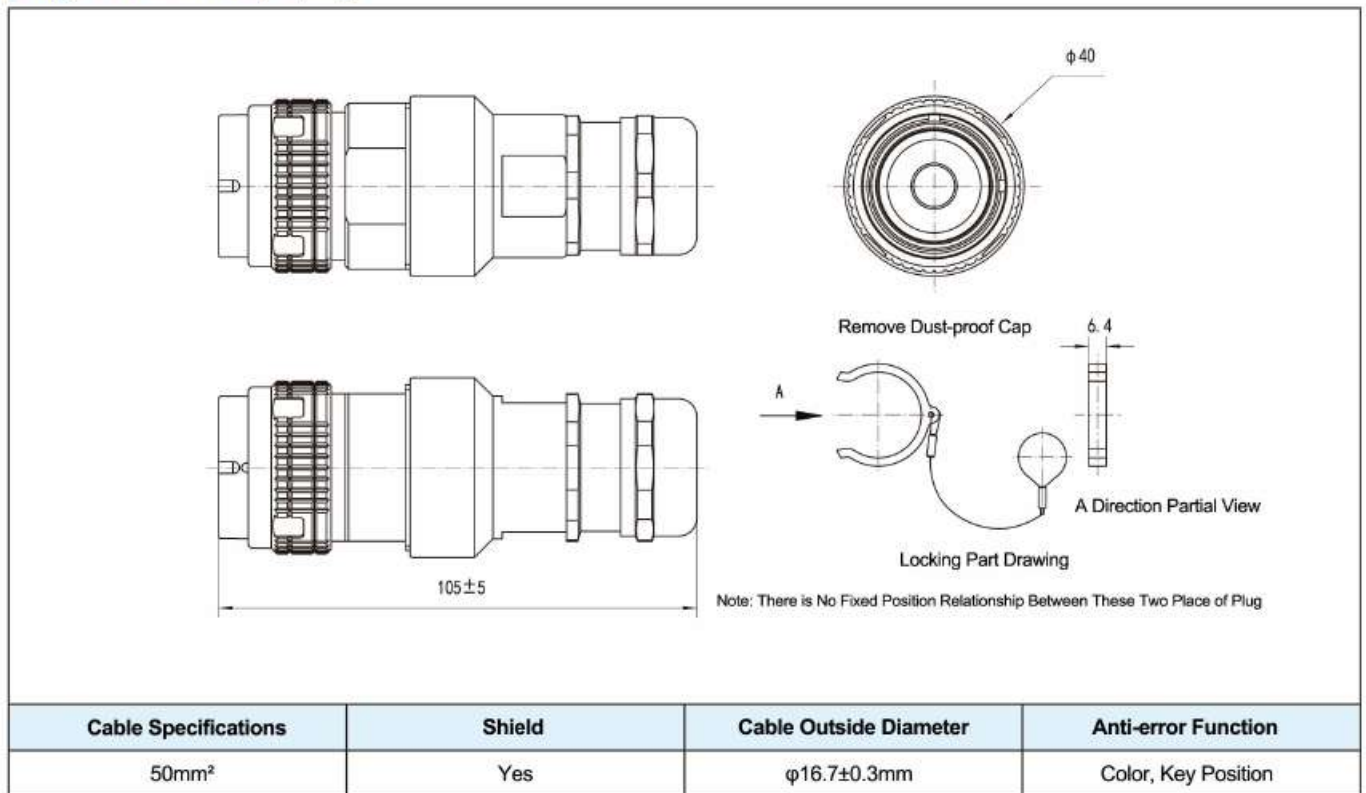
Contact Specification mm	Contact Resistance MΩ	Rated Current A	Applicable Wire mm <sup>2</sup>
φ10	≤0.30	200	50

### Model Name

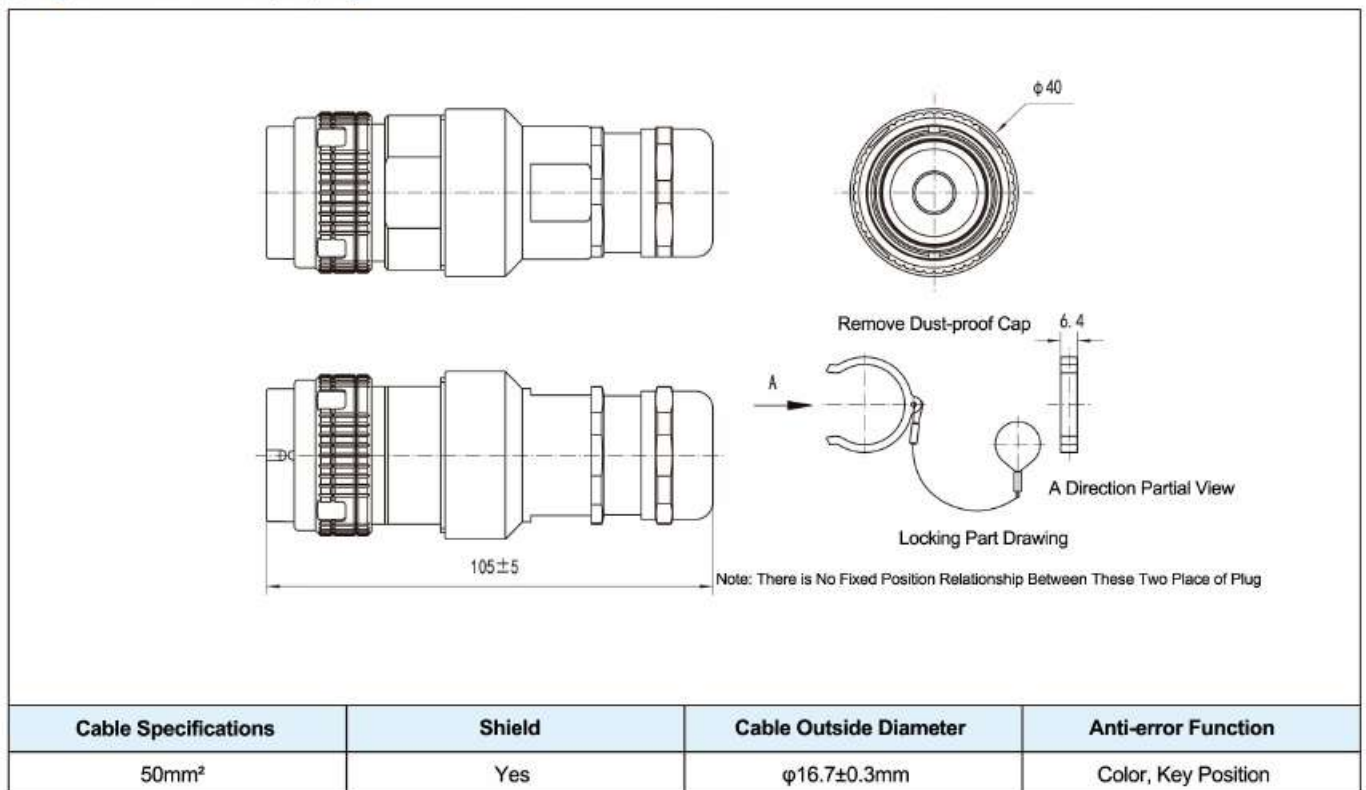
Series Name	CT34	T	300	-1	T	J	90	(RE)	-01
Push-pull Series	T								
Series Code	300								
Number of Contacts	1 Pin								
Plug or Socket	T-Plug	Z-Socket							
Contact Type	J-Male Contact	K-Female Contact							
Shell Key Position Angle	90	180							
Color Identification	RE	BK							
Modification Code	Basic Type	-01	-02	-03	A001	A0002			

## Dimensions

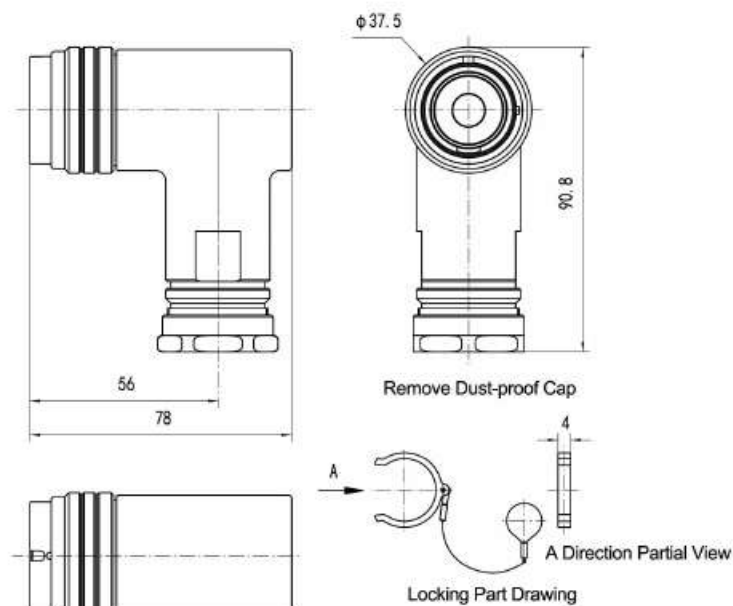
[Plug(CT34T300-1TJ90(RE)-06)]



[Plug CT34T300-1TJ180(BK)-06]

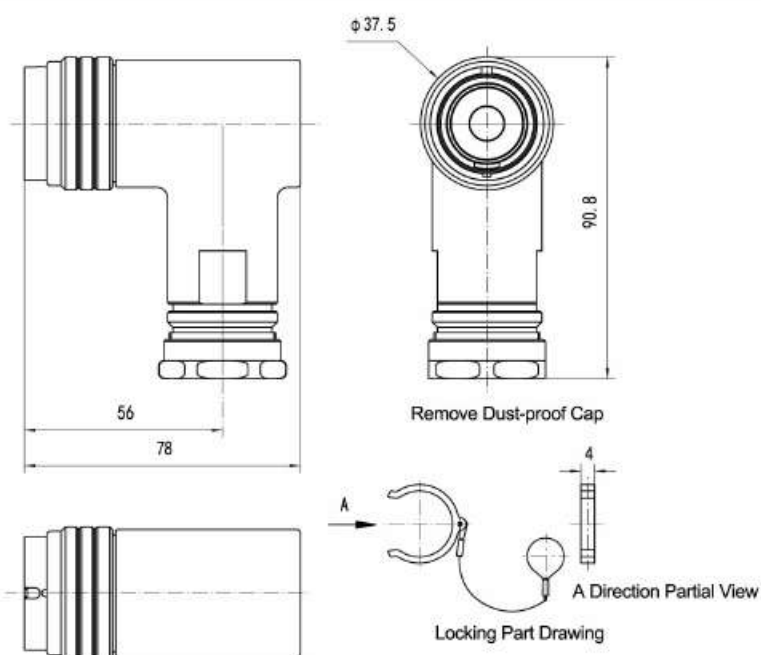


[Plug CT34T300-1TJ90(RE)-08]



Cable Specifications	Shield	Cable Outside Diameter	Anti-error Function
50mm <sup>2</sup>	Yes	φ17.6±0.4mm	Color, Key Position

[Plug CT34T300-1TJ180(BK)-08]

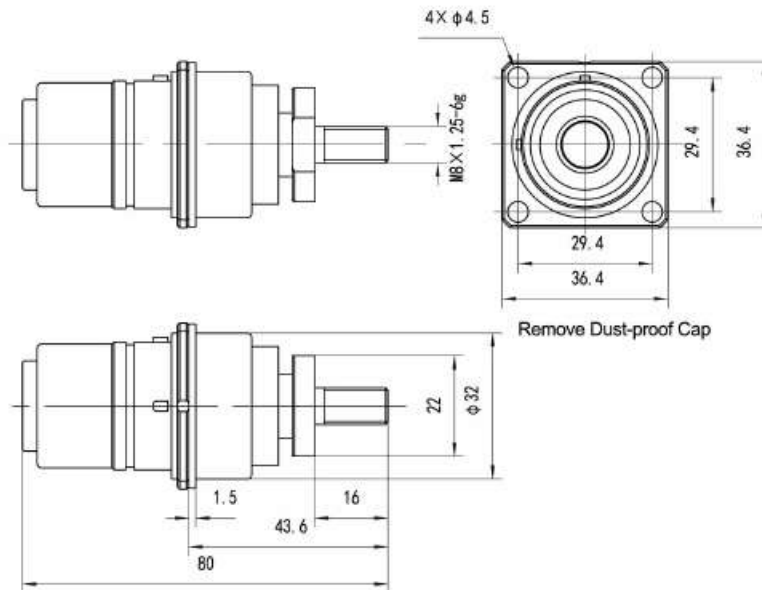


Cable Specifications	Shield	Cable Outside Diameter	Anti-error Function
50mm <sup>2</sup>	Yes	φ17.6±0.4mm	Color, Key Position



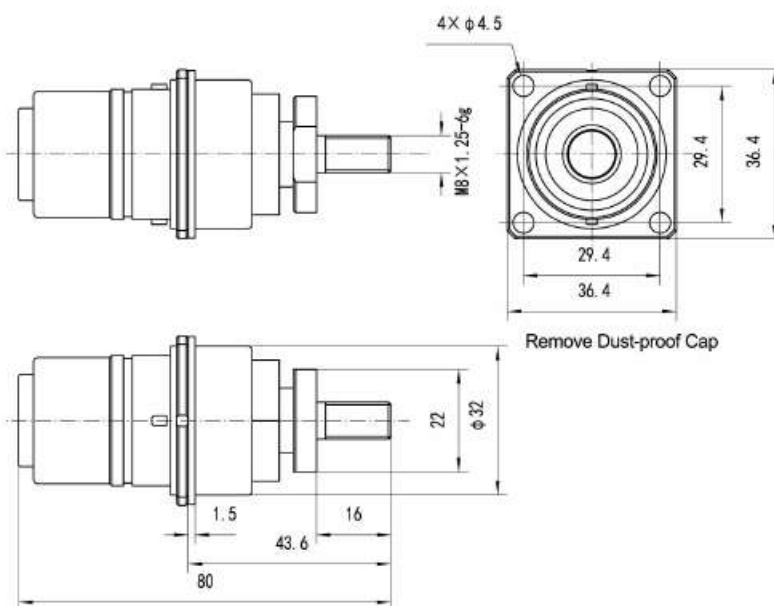
## 200A Socket

### [Square Flange Socket CT34T300-1ZK90-02]



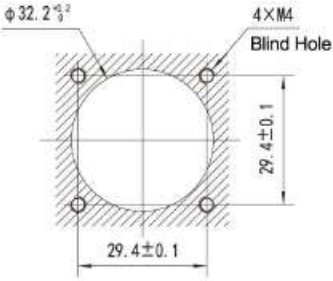
Model	Shield	Anti-error Function
CT34T300-1ZK90-02	Yes	Key Position Error-proof

### [Square Flange Socket CT34T300-1ZK180-02]

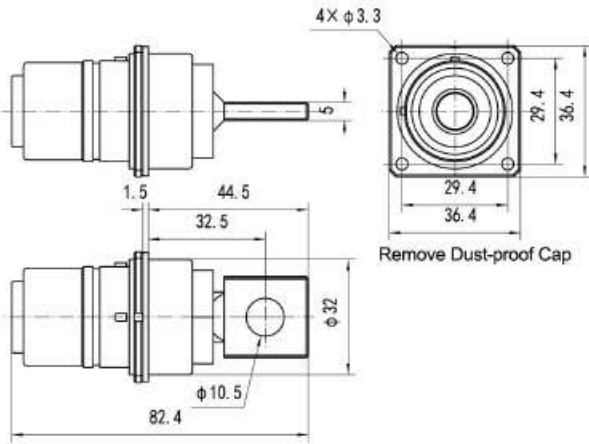


Model	Shield	Anti-error Function
CT34T300-1ZK180-02	Yes	Key Position Error-proof

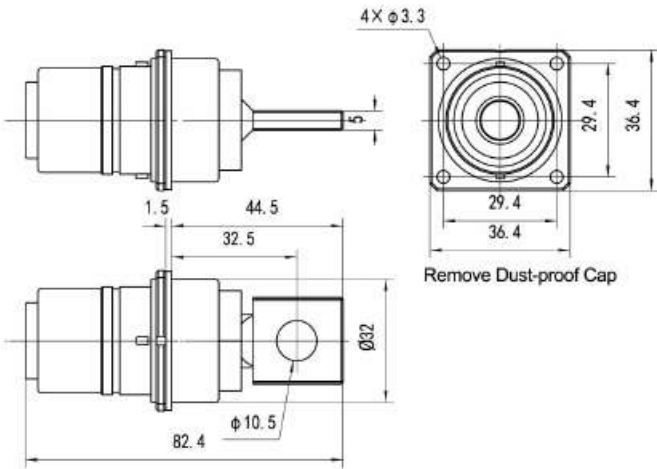
[Recommended Panel Hole Size]

	
<b>Flatness</b>	<b>Smoothness</b>
0.1	1.6

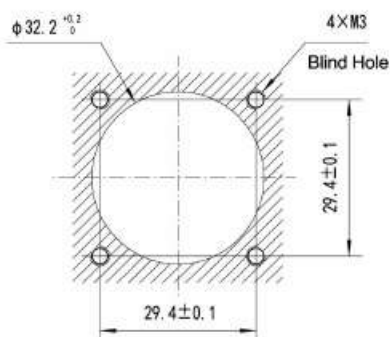
[Square Flange Socket CT34T300-1ZK90-03]

		
<b>Model</b>	<b>Shield</b>	<b>Anti-error Function</b>
CT34T300-1ZK90-03	Yes	Key Position Error-proof

[Square Flange Socket CT34T300-1ZK180-03]

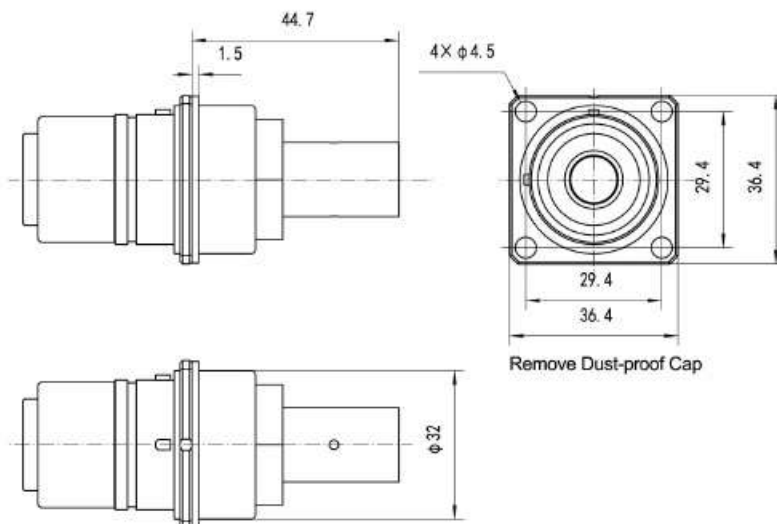
		
<b>Model</b>	<b>Shield</b>	<b>Anti-error Function</b>
CT34T300-1ZK90-03	Yes	Key Position Error-proof

### [ Recommended Panel Hole Size ]



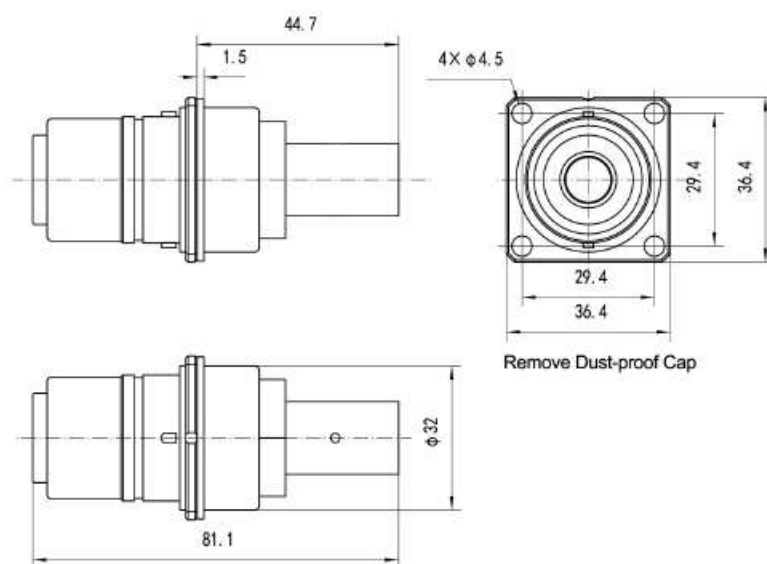
Flatness	Smoothness
0.1	1.6

### [ Square Flange Socket CT34T300-1ZK90 A002 ]



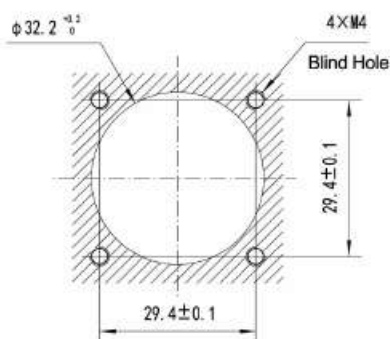
Model	Shield	Anti-error Function
CT34T300-1ZK90-A002	Yes	Key Position Error-proof

[ Square Flange Socket CT34T300-1ZK180 A002 ]



Model	Cable	Anti-error Function
CT34T300-1ZK180-A002	70mm <sup>2</sup>	Key Position Error-proof

[ Recommended Panel Hole Size ]



Flatness	Smoothness
0.1	1.6



## GYH Series of High-voltage Interlock Connectors

### Products Introduction

- The product has a shielding function
- With soft coupling, small contact resistance and excellent vibration resistance performance.
- Straight clamp quick connection
- Shell with IP67 protection grade design



### Usage

Applicable to high current transmission between the electric vehicle motor, battery and inverter .

### Application

Products meet the vibration requirements of QC / T413 standard, which applies to the shock environment inside the electric vehicles, and also with function of moisture and rain resistance.

### Main Technical Specification

#### [Mechanical Performance]

- Shell: Aluminum with nickel plating or PA66
- Insulator: PA66 or PET
- Sealing line part and sealing ring: Silicone rubber
- Contact: Copper alloy with silver or gold plated
- Vibration: Frequency 10~2000Hz Acceleration: 196 m/s<sup>2</sup>
- Impact: Acceleration 490 m/s<sup>2</sup>
- Durability: 500 times
- Rated voltage, withstand voltage and insulation resistance

working Environment	Rated Voltage V	Withstand Voltage V	Insulation Resistance MΩ
Normal Temperature State	500/1000	2000/4000	≥5000

#### [Environmental Performance]

- Operating temperature: -40°C~+120°C
- Relative humidity: 40°C, UP to 95%
- Protection degree: IP67(May effected by customer installation)
- Environmental resistance performance: 48 hours

#### —— Contact resistance and rated current

Contact Specification mm	Contact Resistance MΩ	Rated Current A	Applicable Wire mm <sup>2</sup>
φ10	0.5	150~200	10,35,50
φ8	0.5	150	25
φ6	0.8	80	16
16#	2.5	5	0.5
20#	5	5	0.5

### GYHA Model Name

Series Name	GYH	A	-3	-200	T	-01
Change of Connector Structure	A					
Number of Contacts	3					
Rated Current	200 A					
Plug or Socket	T-Plug	Z-Socket				
Modification Code	-01,-02,-03..... -01 Termination method, wire diameter, see dimension drawing					



## GYHD,GYHE,GYHF, Model Name

Series Name	GYH	D	-2	-150	T	G001
Change of Connector Structure	D, E, F					
Number of Contacts	2					
Rated Current	80A, 150A, 200A					
Plug or Socket	T-Plug      Z-Socket					
Modification Code	G001, G002, G003..... G001 Termination Method, Wire Diameter, See Dimension Drawing A, B, C Stands for Different Keys, GYHE, GYHF Have Different Key Position to Distinguish.					

**Note:** GYHE Products Do Not Have Shielding, Interlocking Function.

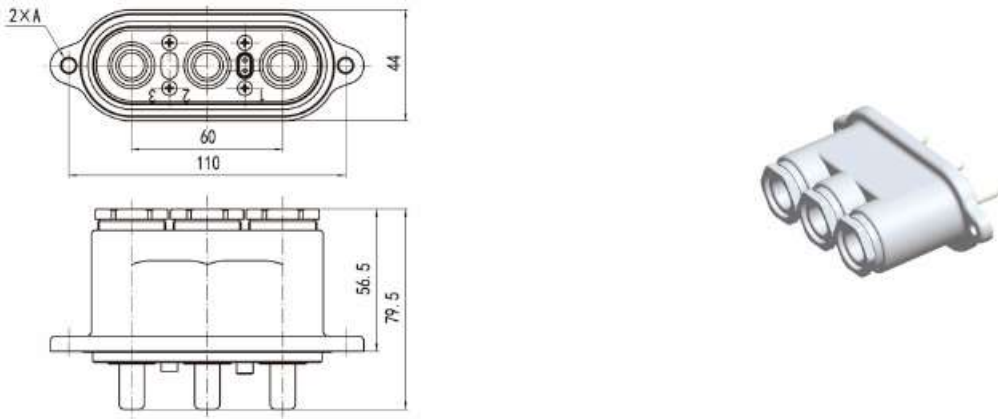
### [Example of Model Number]

**GYHA-3-200T**

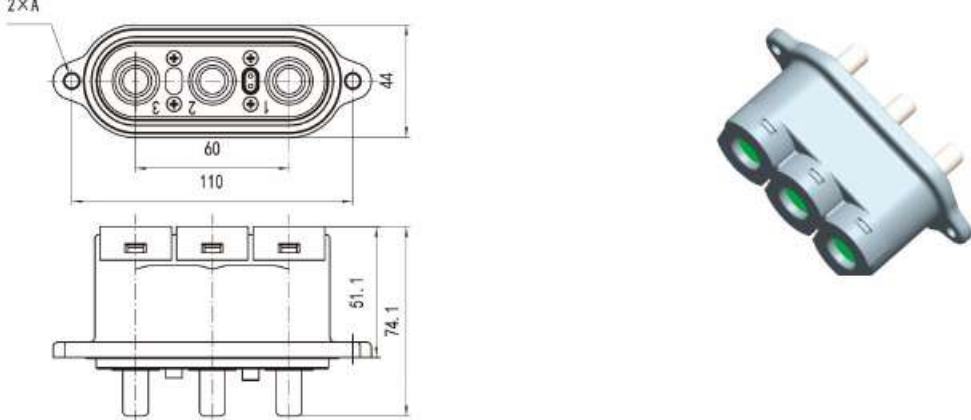
GYHA Series Plug, 3Pin, Rated Current 200A.

## Dimensions

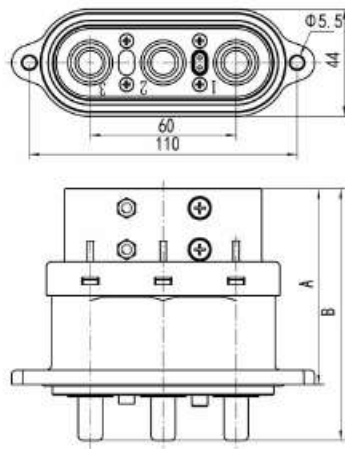
### Plug [Clamp Type GYHA-3-200T,GYHA-3-200T-01,GYHA-3-200T-02]

 <p>The Tolerance Unlabeled is:±0.5</p>		
Model	A	Applicable Cable
GYHA-3-200T	φ5.5	25
GYHA-3-200T-01	φ5.5	50
GYHA-3-200T-02	M16	25

### Plug [Snap on Type GYHA-3-200T-03]

 <p>The Tolerance Unlabeled is:±0.5</p>		
Model	A	Applicable Cable
GYHA-3-200T-03	φ5.5	35

### Plug [End With Clamps Connection / Panel With Two Bolts to Fixed]

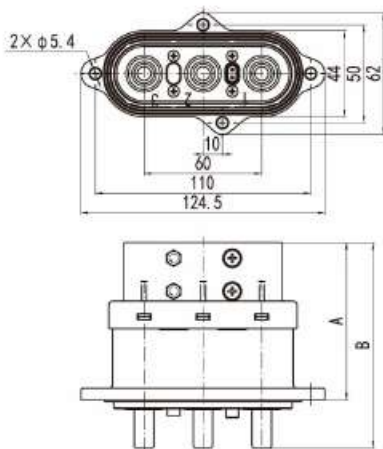


The Tolerance Unlabeled is:  $\pm 0.5$



Model	A	B	Applicable Cable
GYHA-3-200T-04	80.5	103.5	35
GYHA-3-200T-05	82	105	50

### Plug [End With Clamps Connection / Panel With Two Bolts to Fixed]

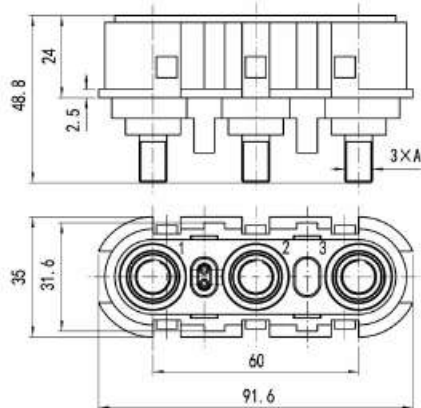


The Tolerance Unlabeled is:  $\pm 0.5$



Model	A	B	Applicable Cable
GYHA-3-200T-06	80.5	105	35
GYHA-3-200T-07	80.5	105	50

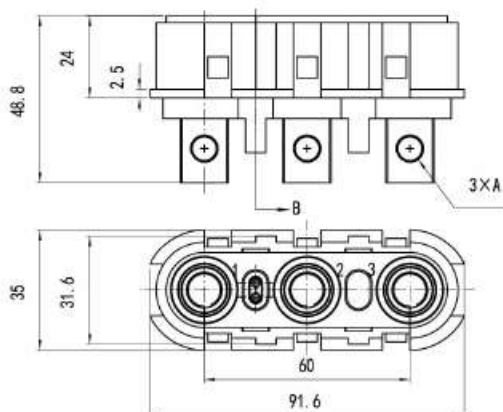
### Socket [GYHA-3-200Z,GYHA-3-200Z-01]



The Tolerance Unlabeled is:±0.5

Model	A
GYHA-3-200Z	M8
GYHA-3-200Z-01	M6

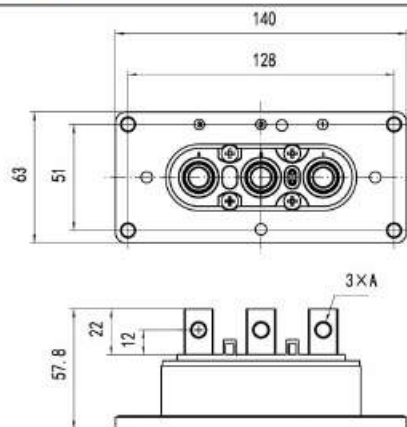
### Socket [GYHA-3-200Z-02]



The Tolerance Unlabeled is:±0.5

Model	A
GYHA-3-200Z-02	M8

### Socket [GYHA-3-200Z-04]

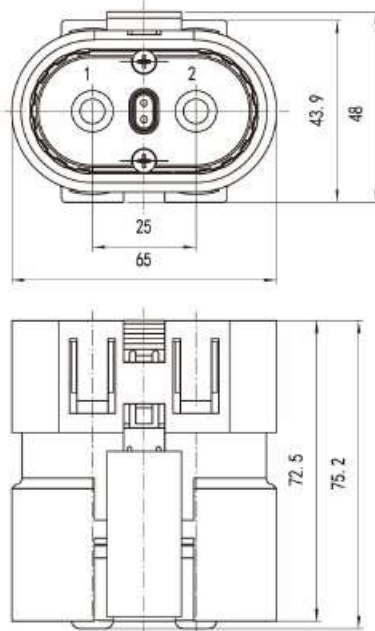


The Tolerance Unlabeled is:±0.5

Model	A
GYHA-3-200Z-04	M8



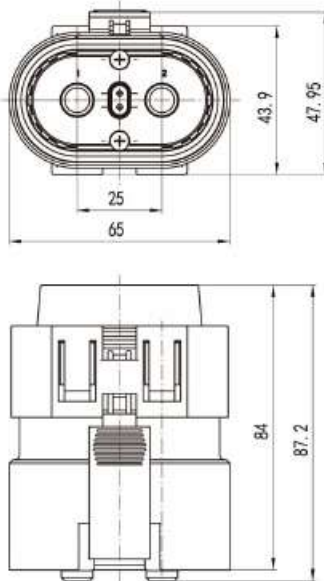
**Plug [GYHD-2-150T G001,GYHD-2-150T G002,GYHD-2-150T G004]**



The Tolerance Unlabeled is:±0.5

Model	Applicable Cable
GYHD-2-150T G001	35
GYHD-2-150T G002	25
GYHD-2-150T G004	25

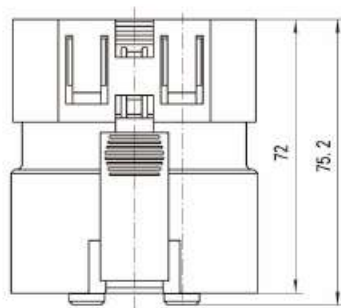
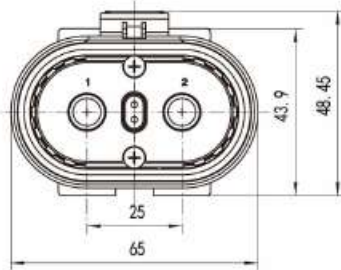
**Plug [GYHD-2-150T G002(5S)]**



The Tolerance Unlabeled is:±0.5

Model	Applicable Cable
GYHD-2-150T G002(5S)	50

### Plug [GYHD-2-150T G003]

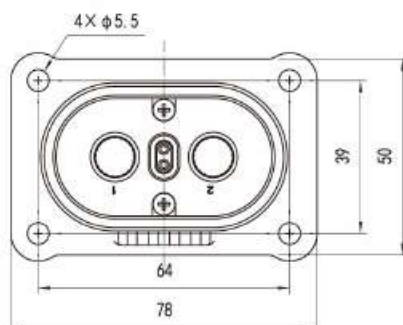
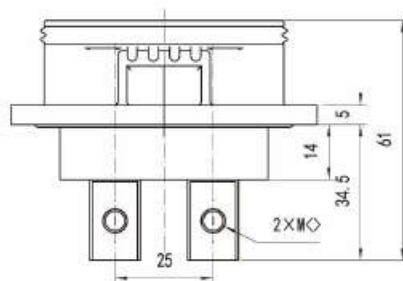


The Tolerance Unlabeled is:  $\pm 0.5$



Model	Applicable Cable
GYHD-2-150T G003	10 (Unshielded Cable)

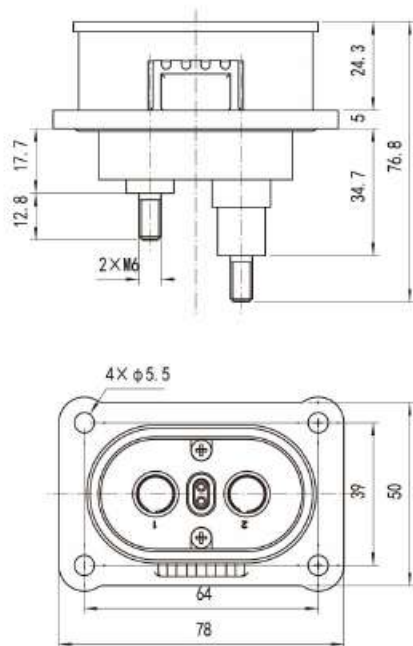
### Socket [GYHD-2-150T, GYHD-2-150Z(5S)]



The Tolerance Unlabeled is:  $\pm 0.5$



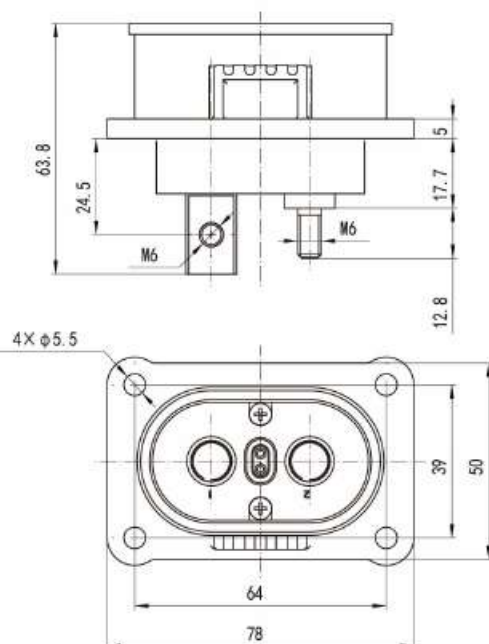
### Socket [GYHD-2-150Z G001]



The Tolerance Unlabeled is:  $\pm 0.5$



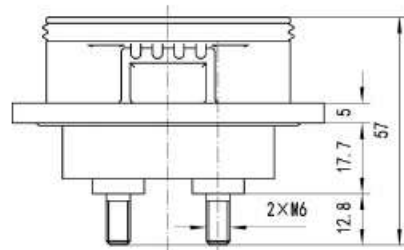
### Socket [GYHD-2-150Z G002, GYHD-2-150Z G002(5S)]



The Tolerance Unlabeled is:  $\pm 0.5$

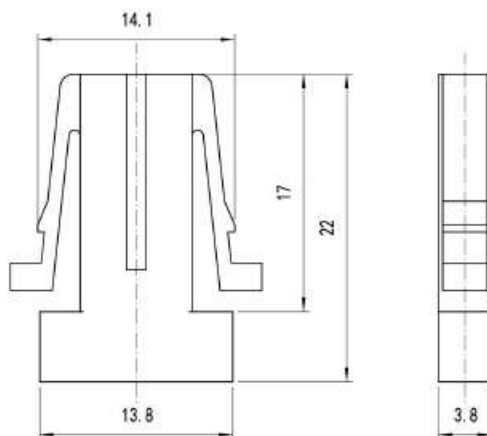


### Socket [GYHD-2-150Z G003]



The Tolerance Unlabeled is:  $\pm 0.5$

### [Interlocking Plug GYHT-2T]



The Tolerance Unlabeled is:  $\pm 0.5$



## CT63-01 Series Circular Electrical Connectors

### Products Introduction

- Bayonet quick connection design for easy use
- The terminating method is crimping
- To achieve a single hole seal
- 3 Kinds of shell number, 3 kinds of contact arrangement
- Great performance of environment resistance (waterproof, shield, salt spray resistance)
- Product protection degree up to IP67
- Products meet ROHS requirements
- Implementation of enterprise standards: Q / 21EJ623



### Usage

As a interface to import low-voltage signal and small current, it widely used in control box equipment of new energy electric vehicle ,the main locations include the DC / DC controller, motor and so on.

### Application

With waterproof, dustproof and weather resistance performance to be used in outdoor for long-term, to meet the current and voltage requirement for equipment signal import.

### Main Technical Specification

#### [ Mechanical Performance ]

- Shell: Aluminum alloy or copper alloy
- Insulator: PBT flammability rating UL94-V0
- Contact: Copper alloy with silver or gold plated
- Vibration: Frequency 10~500Hz Acceleration: 100 m/s<sup>2</sup>
- Durability: 500 times

#### [ Electrical Performance ]

- Rated operating current: 13A
- Contact resistance: ≤ 3mΩ
- Insulation resistance: ≥ 5000MΩ (Room temperature)
- Withstand voltage: 2000V AC
- Electromagnetic shielding: 80DB 1MHz

#### [ Environmental Performance ]

- Operating temperature: -40°C~+125°C
- Salt spray: 96 Hours
- Protection degree: IP67

### Model Name

Series Name	CT63	-14	12	Z	J	(BK)/N	-01
Shell Number	12, 14, 16						
Contact Arrangement	See "Contact Arrangement" Chart						
Structure Type	T-Plug      Z-Square Flange Socket						
Contacts	J-Male Pin    K-Female Pin						
Color / Key	(BK)-Black, (GR)-Green, (BL)-Blue, (RE)-Red, (YE)-Yellow or N, A, B, C, D Five Kinds of Key Positions						
Modified Code	01, 02,.....						

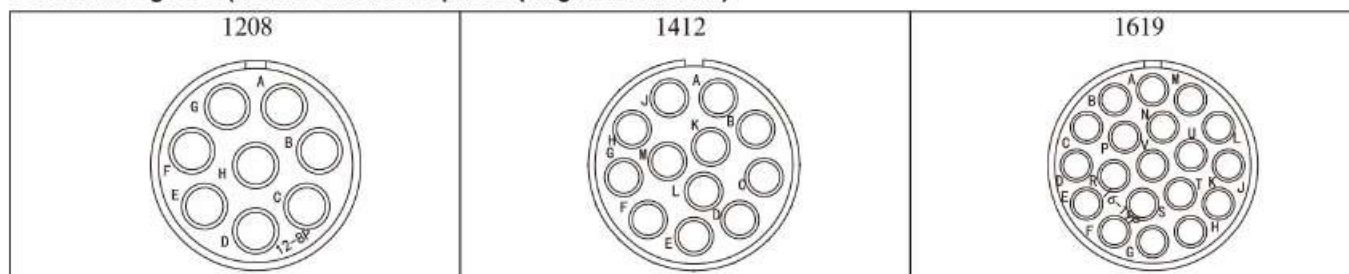
#### [ Example of Model Number ]

For Example: CT63-01 Series No. 12 Shell 08 Type Hole, Female Pin, Male Pin, Black Color, Then The Socket Order Number is CT63-1208ZJ(BK)-01, The Plug Order Number is CT63-1208TK(BK)-01.

## Ordering Method

- 1.Plugs, sockets need to be separately ordered: The plug, socket order model number please refer to model name part ;
- 2.The removal device and crimping tools for the products should also be ordered separately;
- 1)The corresponding removal device model is QX-02;
- 2)The corresponding crimping pliers model is YDXY-02(The corresponding positioner:DWQ-35).

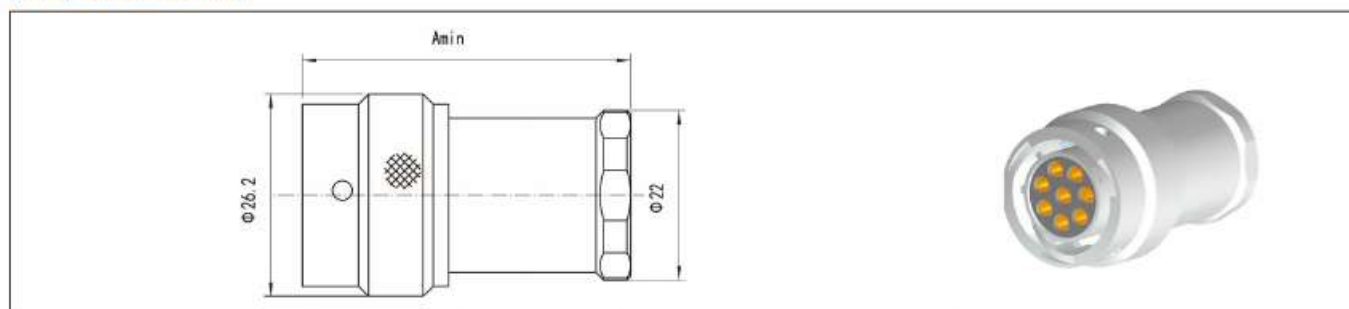
### Contact arrangement(Insulator for female pin coupling insertion view)



**Note:** This series of basic CT63 connector (Optional accessories should be ordered separately,non-single-hole sealed connector) have 10 kinds of contact arrangement, for other contact arrangement, please consult the technical staff

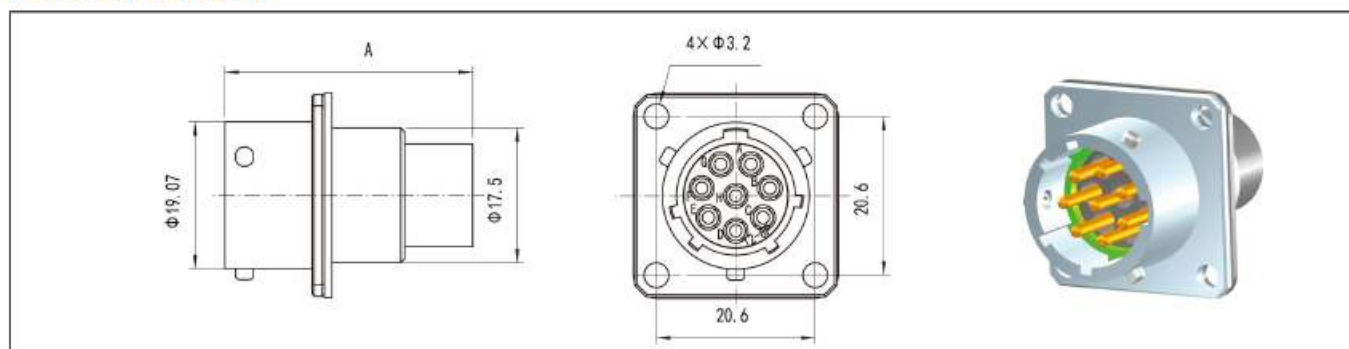
## Dimensions

### [ Plug CT63-1208TK ]



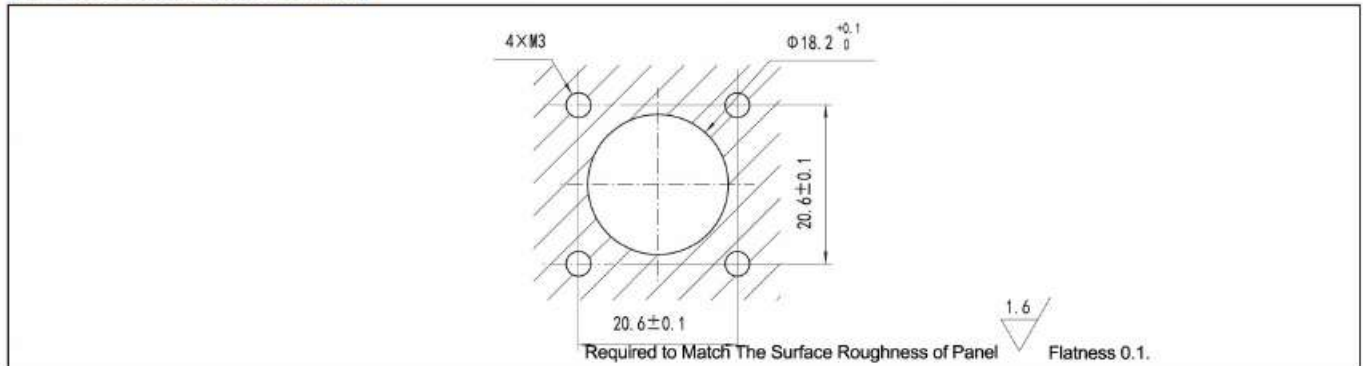
Model	A	Applicable Wire Specification	Remarks
CT63-1208TK(XX)-01	42.6	0.5mm <sup>2</sup> ~0.75mm <sup>2</sup>	Include Contacts(Gold Plating)
CT63-1208TK(XX)-02	42.6	0.5mm <sup>2</sup> ~0.75mm <sup>2</sup>	Not Include Contacts
CT63-1208TK(XX)-04	42.6	0.5mm <sup>2</sup> ~0.75mm <sup>2</sup>	Include Contacts(Silver Plating)
CT63-1208TK(XX)-04 A001	42.6	0.5mm <sup>2</sup> ~0.75mm <sup>2</sup>	Not Include Contacts
CT63-1208TK(XX)-05	32.6	0.5mm <sup>2</sup> ~0.75mm <sup>2</sup>	Include Contacts(Silver Plating)

### [ Socket CT63-1208ZJ ]

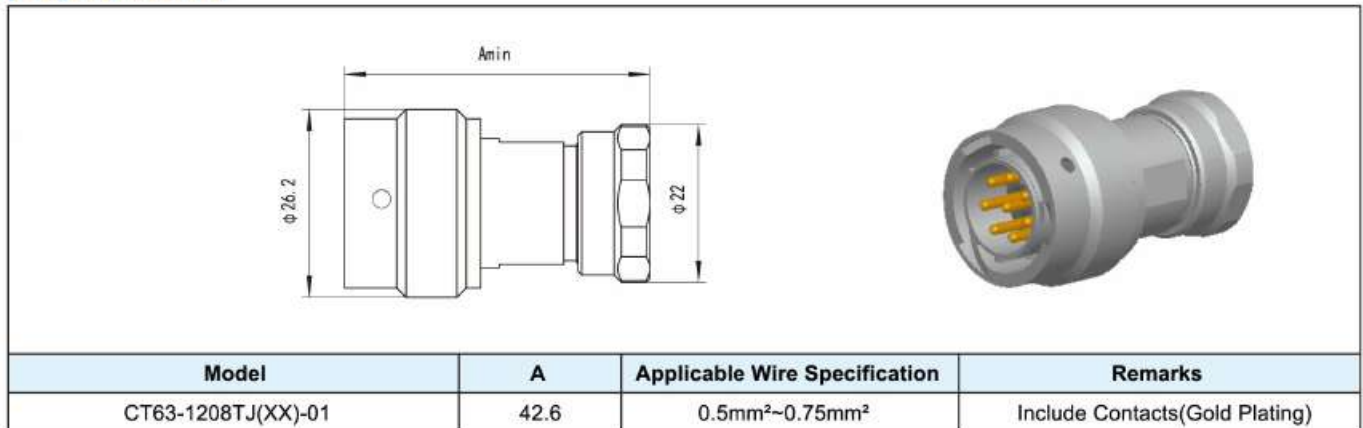


Model	A	Applicable Wire Specification	Remarks
CT63-1208ZJ(XX)-01	32.15	0.5mm <sup>2</sup> ~0.75mm <sup>2</sup>	Include Contacts(Gold Plating)
CT63-1208ZJ(XX)-02	32.15	0.5mm <sup>2</sup> ~0.75mm <sup>2</sup>	Not Include Contacts

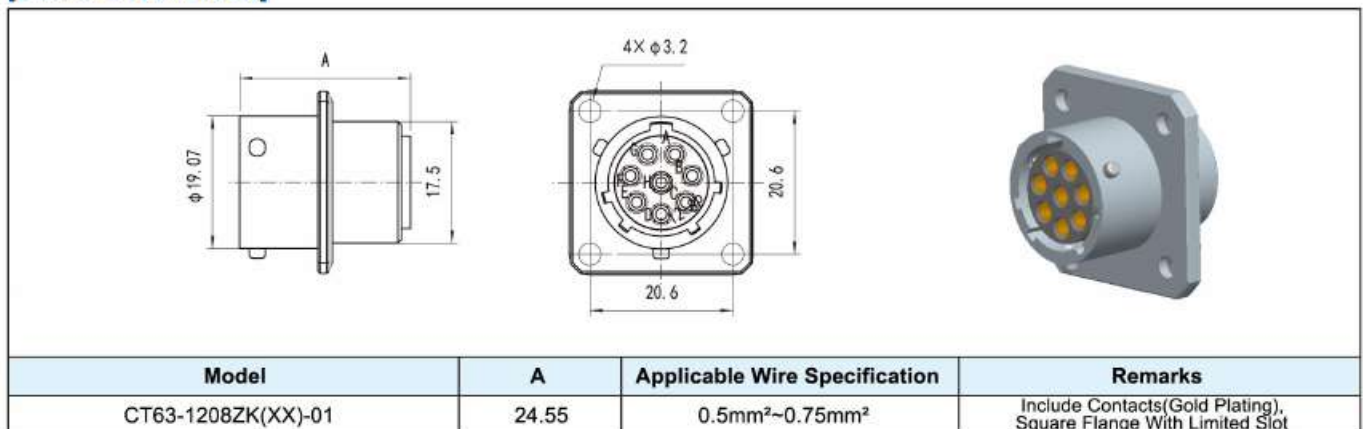
**[Recommended Panel Hole Size]**



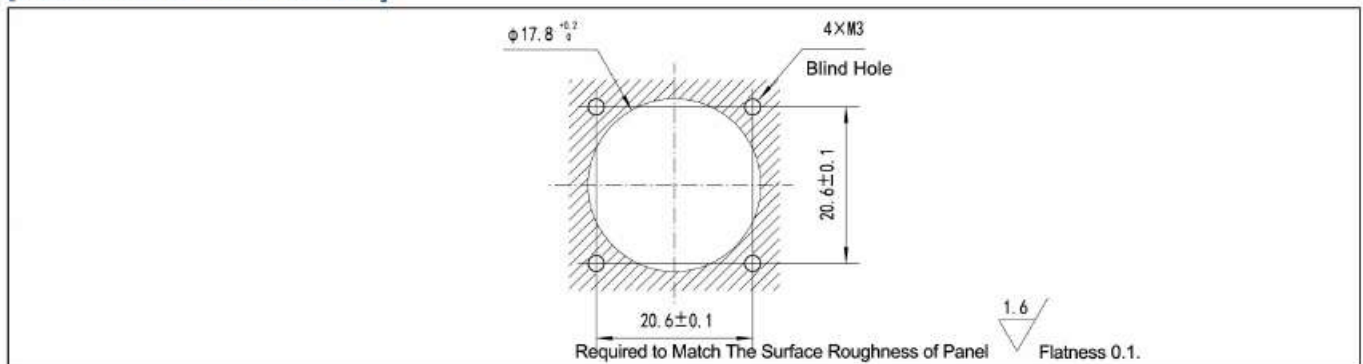
**[Plug CT63-1208TJ]**



**[Socket CT63-1208ZK]**

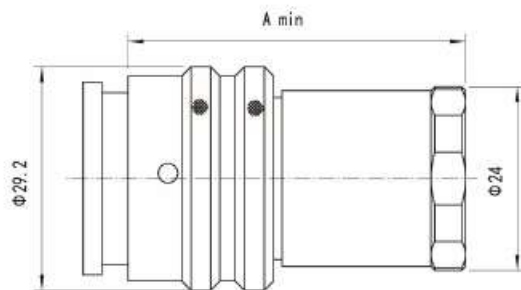


**[Recommended Panel Hole Size]**



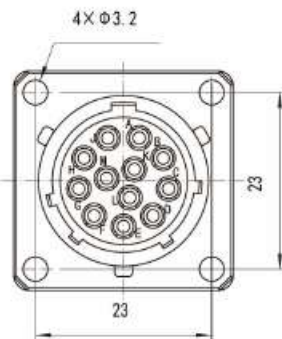
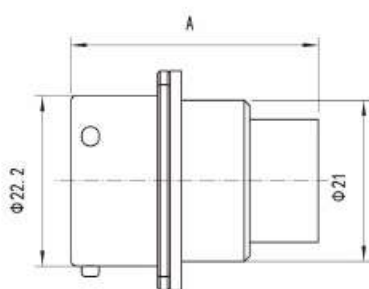


### [Plug CT63-1412TK]



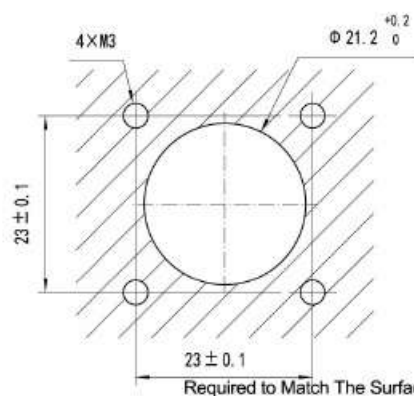
Model	A	Applicable Wire Specification	Remarks
CT63-1412TK(XX)-01	44.1	0.5mm <sup>2</sup> ~0.75mm <sup>2</sup>	Include Contacts(Gold Plating)
CT63-1412TK(XX)-03	44.1	0.5mm <sup>2</sup> ~0.75mm <sup>2</sup>	Not Include Contacts
CT63-1412TK(XX)-04	44.1	Applicable Wire for L and M 1.0mm <sup>2</sup> ~1.5mm <sup>2</sup> ; Applicable Wire for The Rest Position 0.5mm <sup>2</sup> ~0.75mm <sup>2</sup> ;	Include Contacts(Gold Plating)
CT63-1412TK(XX)-05	44.1	0.5mm <sup>2</sup> ~0.75mm <sup>2</sup>	Include Contacts(Silver Plating)

### [Socket CT63-1412ZJ]



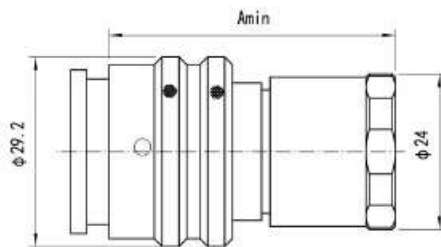
Model	A	Applicable Wire Specification	Remarks
CT63-1412ZJ(XX)-01	32.2	0.5mm <sup>2</sup> ~0.75mm <sup>2</sup>	Include Contacts(Gold Plating)
CT63-1412ZJ(XX)-02	32.2	0.5mm <sup>2</sup> ~0.75mm <sup>2</sup>	Not Include Contacts
CT63-1412ZJ(XX)-04	32.2	Applicable Wire for L and M 1.0mm <sup>2</sup> ~1.5mm <sup>2</sup> ; Applicable Wire for The Rest Position 0.5mm <sup>2</sup> ~0.75mm <sup>2</sup> ;	Include Contacts(Gold Plating)

### [Recommended Panel Hole Size]



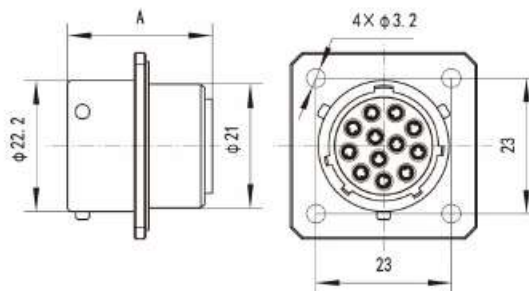


### [Plug CT63-1412TJ]



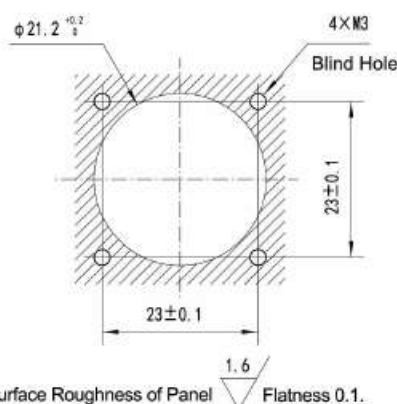
Model	A	Applicable Wire Specification	Remarks
CT63-1412TJ(XX)-01	42.1	0.5mm <sup>2</sup> ~0.75mm <sup>2</sup>	Include Contacts(Silver Plating)

### [Socket CT63-1412ZK]



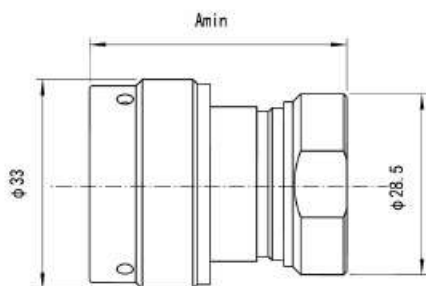
Model	A	Applicable Wire Specification	Remarks
CT63-1412ZK(XX)-01	24.55	0.5mm <sup>2</sup> ~0.75mm <sup>2</sup>	Include Contacts(Gold Plating), Square Flange With Limited Slot

### [Recommended Panel Hole Size]



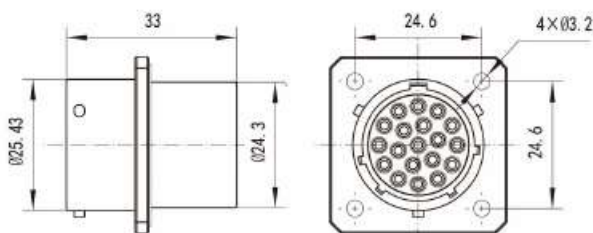
Required to Match The Surface Roughness of Panel Flatness 0.1.

### [Plug CT63-1619TK]



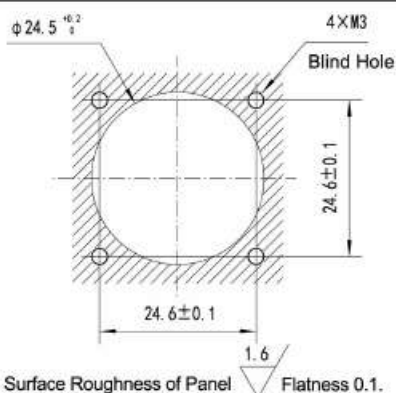
Model	A	Applicable Wire Specification	Remarks
CT63-1619TKN-01	40.5	0.5mm <sup>2</sup> ~0.75mm <sup>2</sup>	Include Contacts(Gold Plating)

### [Socket CT63-1619ZJ]



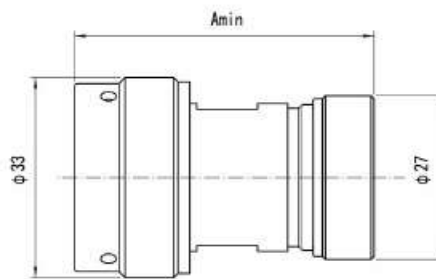
Model	A	Applicable Wire Specification	Remarks
CT63-1619ZJN-01	33	0.5mm <sup>2</sup> ~0.75mm <sup>2</sup>	Include Contacts(Gold Plating), Square Flange With Limited Slot

### [Recommended Panel Hole Size]



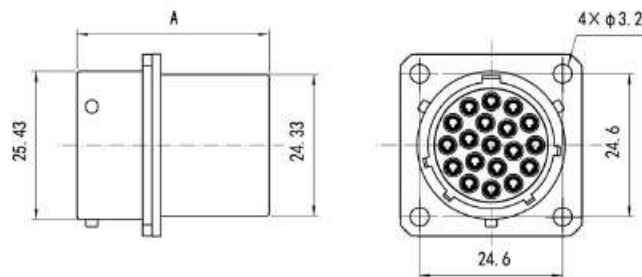
Required to Match The Surface Roughness of Panel Flatness 0.1.

### [ Plug CT63-1619TJ ]



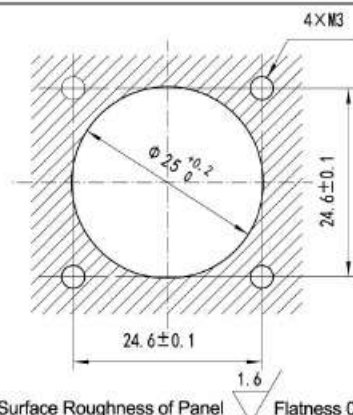
Model	A	Applicable Wire Specification	Remarks
CT63-1619TJN-01	49.33	0.5mm <sup>2</sup> ~0.75mm <sup>2</sup>	Include Contacts(Gold Plating)
CT63-1619TJN-03	49.33	0.5mm <sup>2</sup> ~0.75mm <sup>2</sup>	Include Contacts(Silver Plating)
CT63-1619TJN-01 A001	49.33	0.5mm <sup>2</sup> ~0.75mm <sup>2</sup>	Not Include Contacts

### [ Socket CT63-1619ZK ]



Model	A	Applicable Wire Specification	Remarks
CT63-1619ZKN-01	33	0.5mm <sup>2</sup> ~0.75mm <sup>2</sup>	Include Contacts(Gold Plating)
CT63-1619ZKN-02	33	0.5mm <sup>2</sup> ~0.75mm <sup>2</sup>	Include Contacts(Silver Plating)
CT63-1619ZKN-03	33	0.5mm <sup>2</sup> ~0.75mm <sup>2</sup>	Include Contacts(Gold Plating),Rear Mount
CT63-1619ZKN-04	33	0.5mm <sup>2</sup> ~0.75mm <sup>2</sup>	Include Contacts
CT63-1619ZKN-01 A001	33	0.5mm <sup>2</sup> ~0.75mm <sup>2</sup>	Not Include Contacts

### [ Recommended Panel Hole Size ]



Required to Match The Surface Roughness of Panel Flatness 0.1.

**[Contact Type Selection]**

Order Model Name	Numbering	Coating	Applicable Wire Specification	Picture
No. 16 Crimp Male Pin Component	21E6-570-1101-B1	Gold Plating	0.5mm <sup>2</sup> ~0.75mm <sup>2</sup>	
No. 16 Crimp Male Pin Component	21E6-570-1101-003-L22	Silver Plating	0.5mm <sup>2</sup> ~0.75mm <sup>2</sup>	
No. 16 Crimp Female Pin Component	21E6-571-1997-B1	Gold Plating	0.5mm <sup>2</sup> ~0.75mm <sup>2</sup>	
No. 16 Crimp Female Pin Component	21E6-571-1997-004-L22	Silver Plating	0.5mm <sup>2</sup> ~0.75mm <sup>2</sup>	
No. 16 Crimp Male Pin Component	21E6-570-1100-B1	Gold Plating	1.0mm <sup>2</sup> ~1.5mm <sup>2</sup>	
No. 16 Crimp Male Pin Component	21E6-570-1100-003-L22	Silver Plating	1.0mm <sup>2</sup> ~1.5mm <sup>2</sup>	
No. 16 Crimp Female Pin Component	21E6-571-1996-B1	Gold Plating	1.0mm <sup>2</sup> ~1.5mm <sup>2</sup>	
No. 16 Crimp Female Pin Component	21E6-571-1996-003-L22	Silver Plating	1.0mm <sup>2</sup> ~1.5mm <sup>2</sup>	



## C105 Series Push-pull Signal Connectors

### Products Introduction

- The plug, socket termination method is crimping
- Five key positions are available for choice to prevent incorrect insertion
- Highly reliable wire spring hole to make the connection soft and the contact resistance small
- Straight push-pull fast connection
- Implementation of the standard: Q / 21EJ1032



### Usage

Used for current transmission of electric vehicle internal high voltage system.

### Application

Applicable to electrical connection of wet, rain environment for electric vehicles.

### Main Technical Specification

#### [ Mechanical Performance ]

- Shell: Aluminum alloy shell oxidation
- Insulator: PBT
- Sealing line part and sealing ring: Silicone rubber
- Contact: Copper alloy with gold plated, for heavy current power supply contacts, it's copper alloy with silver plated
- Vibration: Frequency 10~2000Hz Acceleration: 196 m/s<sup>2</sup>
- Impact: Acceleration: 980 m/s<sup>2</sup>
- Durability: 500 Times

#### [ Environmental Performance ]

- Operating temperature: -55°C~+110°C
- Relative humidity: 40°C, UP to 95%
- Protection degree: IP67 (May effected by customer installation)
- Environmental resistance performance: 48 hours

#### [ Electrical Performance ]

—— Rated voltage, withstand voltage and insulation resistance

Contacts Number	Rated Voltage V (Room Temperature)	Withstand Voltage V (Room Temperature)	Insulation Resistance MQ (Room Temperature)
2 Pin	600 AC	2500 AC	≥5000
3 Pin	600 AC	2500 AC	≥5000
4 Pin	600 AC	2500 AC	≥5000
5 Pin	600 AC	2400 AC	≥5000
6 Pin	500 AC	2000 AC	≥5000
7 Pin	600 AC	3000 AC	≥5000
8 Pin	600 AC	2500 AC	≥5000
9 Pin	500 AC	2400 AC	≥5000

**Note:** The rated voltage, withstand voltage of multi-pin products is the high current contact voltage, the voltage between the signal contact please consult the engineers

—— Rated voltage, withstand voltage and insulation resistance

Contact Specification mm	Contact Resistance MQ	Rated Current A	Applicable Wire mm <sup>2</sup>
20#	5	7	0.5mm <sup>2</sup>
16#	3	13	1.3mm <sup>2</sup>
φ2.0	1.25	20	12AWG
φ3.0	0.75	15	1.3mm <sup>2</sup>
		40	4-5mm <sup>2</sup>

**Note:** The current is effected by the applicable wire, detailed requirements subject to specifications

## Signal and Power Supply Series

### Model Name

Series Name	C105	14	N	1	-02	-1	-2	G00X
Shell Number	14 16 18							
Key Position	N W X Y Z							
Coating	1-Nickel Plating 2-Satin Nickel 40-Stainless Steel							
Number of Contacts	-01-1Pin -02-2Pin -03-3Pin -04-4Pin -05-5Pin -06-6Pin -07-7Pin -08-8Pin -09-9Pin							
Plug and Socket	-1-Normal Plug -3-Square Flange Socket -4-Bulkhead Socket -5-Circular Flange Socket							
Contacts and Finish	1-Male Pin With Gold Plated 2-Female Pin With Gold Plated							
Modification Code	G00X The Cable Outlet is Different or The Diameter of The Crimp Ferrule is Different X On Behalf of The Arabic Numerals 1,2,3...							

**Note: 250A Product Coating is Silver; The Above Model Name is The Naming Norms, Please Contact for The Specific Models.**

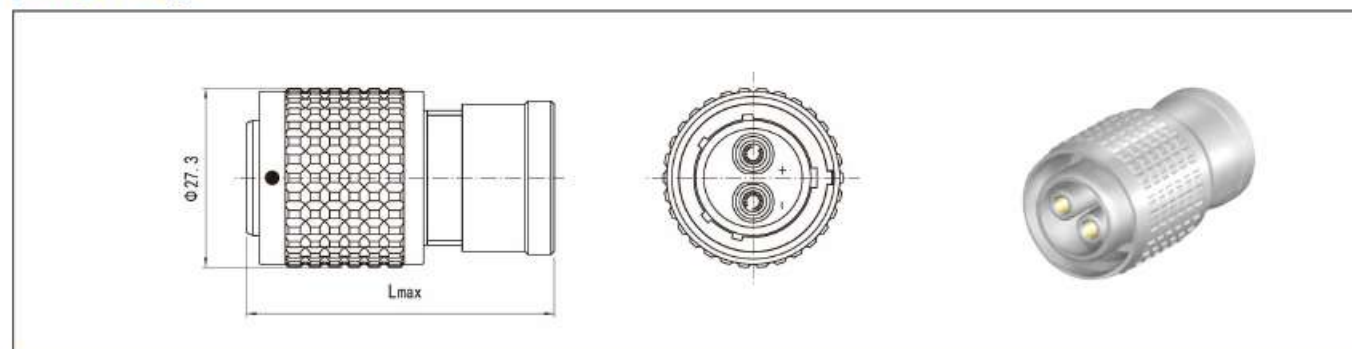
### [Example of Model Number]

**C10514N1-02-1-2 G001**

**C105 Series Push-pull Plug, Shell Number is 14, Shell Key Position N, Finish is Nickel Plating, 2 Female Pin With Gold Plating.**

### Dimensions

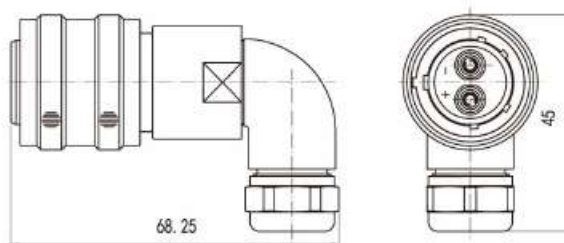
#### [Straight Plug]



Model	Size L	Applicable Wire(mm)	Recommended Wire Diameter	Supporting Sealing Method
C10514N1-02-1-2	44.8	4-5	φ3.1~3.9	Single Wire
C10514N1-02-1-2 G001	46.8	1-1.5	φ3.1~3.9	Single Wire
C10514N1-02-1-2 G002	44.9	φ3.6	φ4.5~6.5	Single Wire
C10514N1-02-1-2 G017	44.8	φ3.6	φ2.3~3.9	Single Wire
C10514N1-02-1-2 G018	44.9	2.5	φ8.5~9.8	Assembled Cable
C10514N1-02-1-2 G020	44.9	4-5	φ4~5.3	Single Wire
C10514N1-02-1-2 G021	44.9	2.5	φ4~5.3	Single Wire
C10514N1-02-1-2 G022	44.9	4-5	φ5-6.2	Single Wire

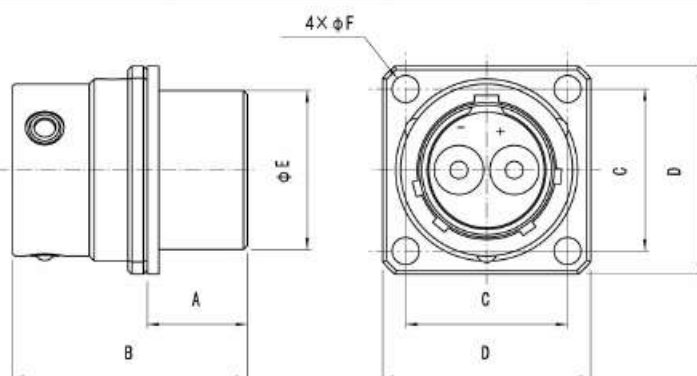
**Note: C10514N1-02-1-2 G017 Ribbon Mark Available, The Specific Data Refer to The Specification File.**

### [Angled Plug]



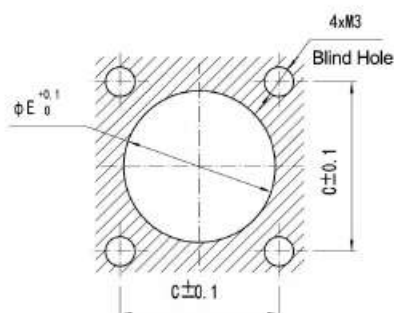
Model	Applicable Wire(mm)	Recommended Wire Diameter	Supporting Sealing Method
C10514N1-02-1-2 G010	4-5	$\phi 8.5 \sim 9.8$	Assembled Cable
C10514N1-02-1-2 G014	4-5	$\phi 3.2 \sim 4.2$	Single Wire

### [Square Flange Socket]



Model	A	B	C	D	E	F	Applicable Wire(mm <sup>2</sup> )
C10514N1-02-3-1 G001	13	30.5	21	27	21.2	3.5	1-1.5
C10514N1-02-3-1 G004	13	30.5	21	27	21.2	3.5	4-5
C10514N1-02-3-1 G012	13	30.5	23	31	20.6	3.5	4-5
C10514N1-02-3-1 G015	11.5	29	22	29	19.5	3.5	4-5
C10514N1-02-3-1 G020	13	30.5	21	27	21.2	3.5	4-5

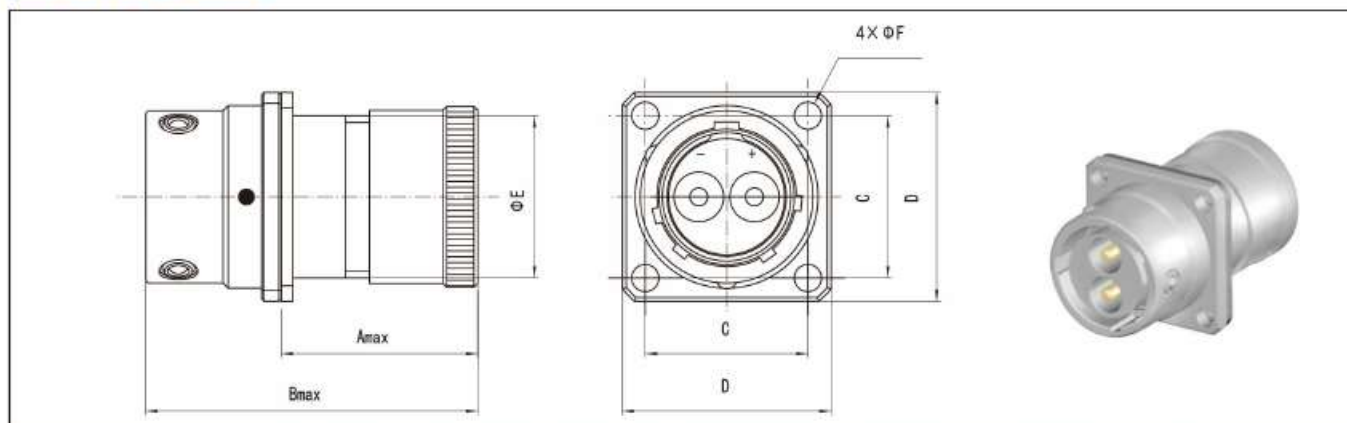
### [Recommended Panel Hole Size]



Note: Recommended Installation Panel Flatness Under 0.1, Roughness Under 3.2.

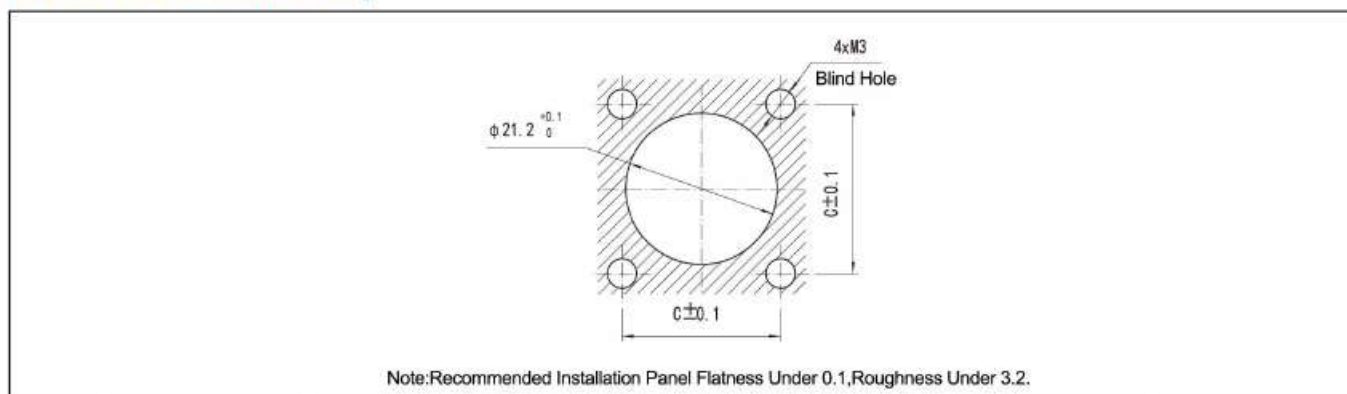


### [Square Flange Socket]

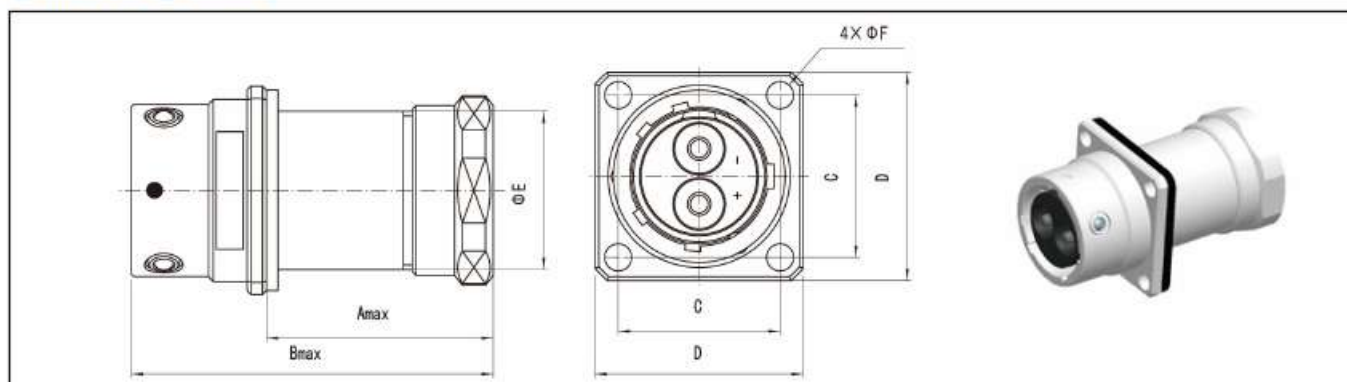


Model	A	B	C	D	E	F	Applicable Wire (mm <sup>2</sup> )	Recommended Wire Diameter	Supporting Sealing Method
C10514N1-02-3-1	25.4	42.9	21	27	23.4	3.5	4-5	φ3.1~3.9	Single Wire
C10514N1-02-3-1 G002	25.4	42.9	21	27	23.4	3.5	4-5	φ5~5.3	Single Wire
C10514N1-02-3-1 G003	25.4	42.9	21	27	20.6	3.5	4-5	φ6.5	Single Wire
C10514N1-02-3-1 G018	25.4	42.9	21	27	23.4	3.5	4-5	φ4~5.3	Single Wire
C10514N1-02-3-1 G019	25.4	42.9	21	27	23.4	3.5	2.5	φ4~5.3	Single Wire

### [Recommended Panel Hole Size]



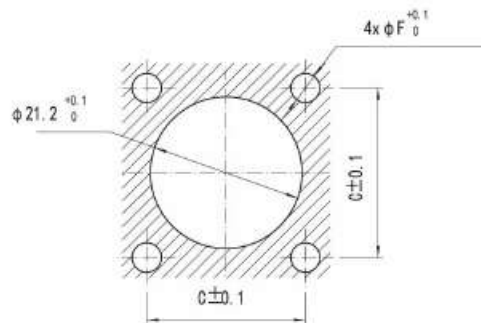
### [Square Flange Socket]



Model	A	B	C	D	E	F	Applicable Wire (mm <sup>2</sup> )	Recommended Wire Diameter	Supporting Sealing Method
C10514N1-02-3-1 G009	29.4	46.9	21	27	20.6	3.5	4-5	φ8.5~9.8	Assembled Cable
C10514N1-02-3-1 G014	29.4	46.9	26	35	20.6	4.5	4-5	φ8.5~9.8	Assembled Cable

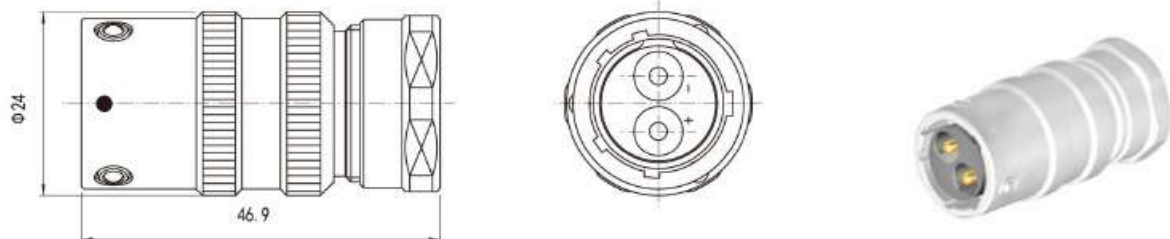


### [Recommended Panel]Hole Size

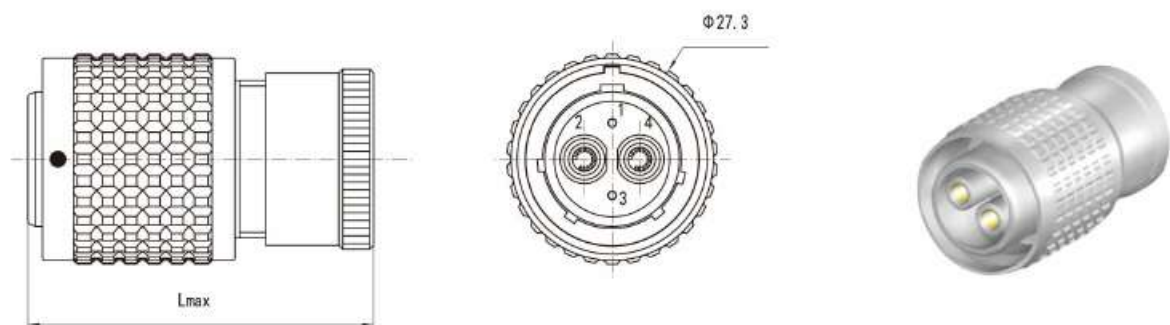


Note: Recommended Installation Panel Flatness Under 0.1, Roughness Under 3.2.

### [Circular Flange Socket C10514N1-02-5-1]

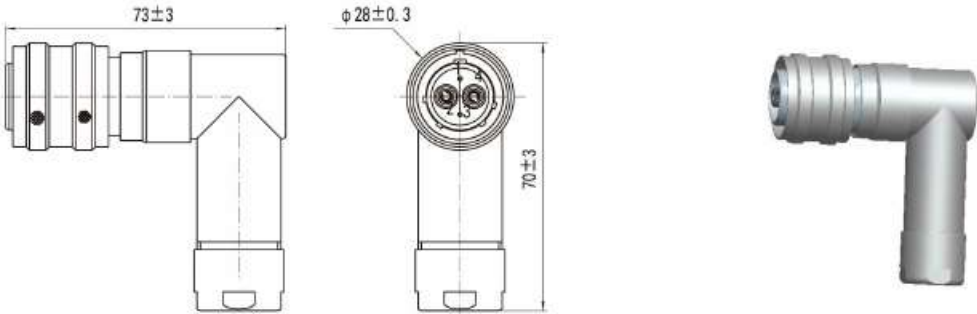


### [Straight Plug]

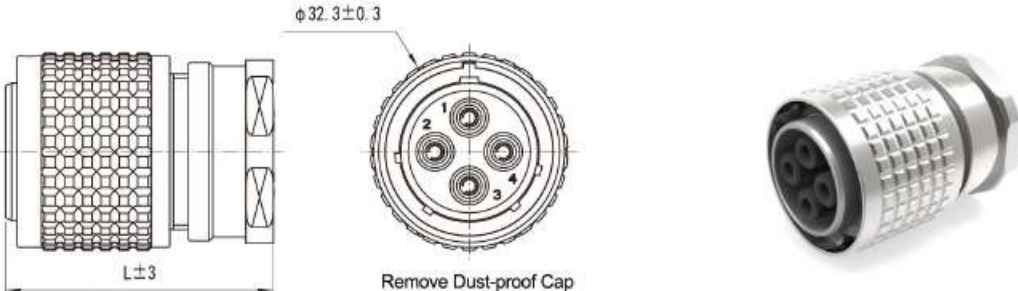


Model	Size L	Applicable Wire(mm <sup>2</sup> )		Recommended Wire Diameter		Supporting Sealing Method
C10514N1-04-1-2	44.9	4-5	0.5	$\phi 3.1 \sim 3.9$	$\phi 2 \sim 2.9$	Single Wire
C10514N1-04-1-2 G001	46.9	4-5	0.5	$\phi 4.0 \sim 5.0$	$\phi 2 \sim 3.3$	Single Wire

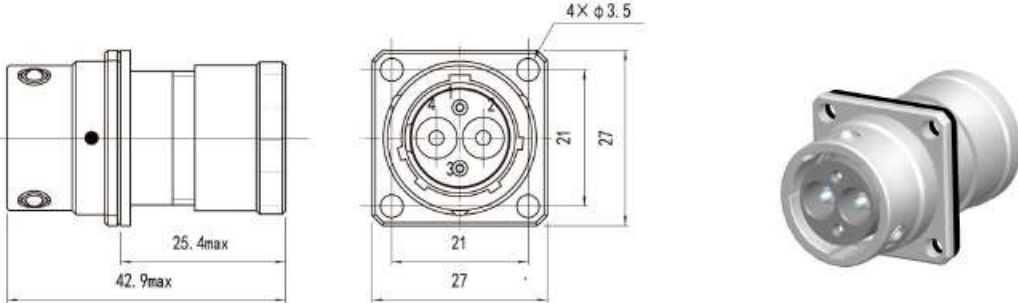
### [Angled Plug]

					
Model	Size L	Applicable Wire(mm <sup>2</sup> )		Recommended Wire Diameter	Supporting Sealing Method
C10514N1-04-1-2 G005	73	4-5	0.5	φ10.5~13.5	Assembled Cable

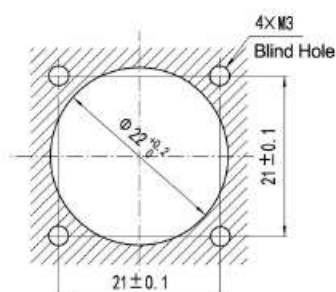
### [Straight Plug]

					
Model	Size L	Applicable Wire(mm <sup>2</sup> )		Recommended Wire Diameter	Supporting Sealing Method
C10518N1-04-1-2	43.9	2.5		φ3.4~4.0	Single Wire
C10514N1-04-1-2 G001	43.9	4		φ3.6~4.2	Single Wire
C10514N1-04-1-2 G002	43.9	6		φ4.7~5.2	Single Wire

### [Square Flange Socket]

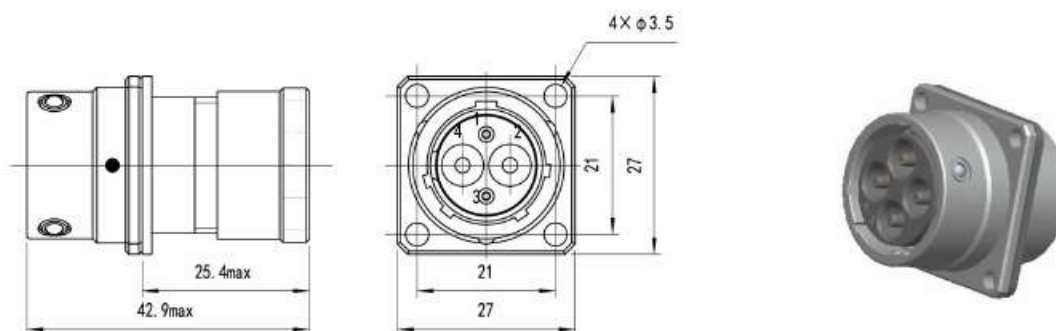
					
Model	Applicable Wire(mm <sup>2</sup> )		Recommended Wire Diameter		Supporting Sealing Method
C10514N1-04-3-1	4-5	0.5	φ3.1~3.9	φ2~2.9	Single Wire
C10514N1-04-1-2 G001	4-5	0.5	φ4~5.0	φ2~3.3	Single Wire

### [ Recommended Panel Hole Size ]



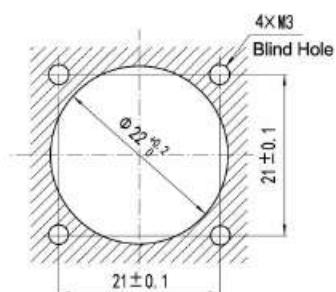
Note: Recommended Installation Panel Flatness Under 0.1, Roughness Under 3.2.

### [ Square Flange Socket ]



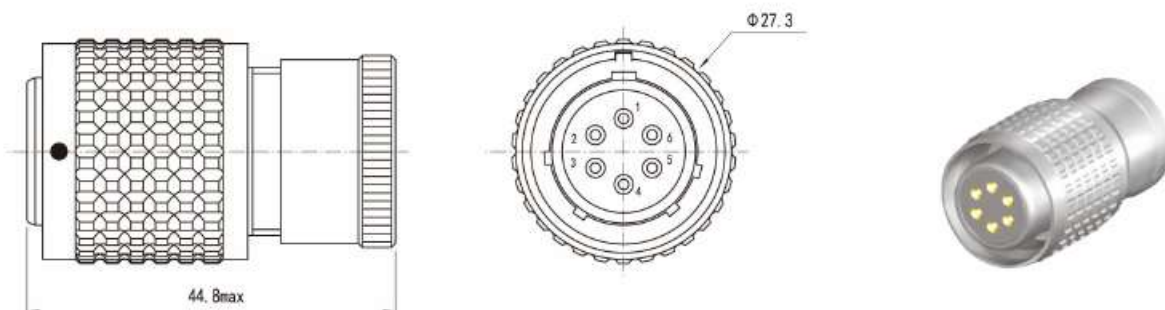
Model	Applicable Wire(mm <sup>2</sup> )	Recommended Wire Diameter	Supporting Sealing Method
C10518N1-04-3-1	2.5	< $\phi 5.3\text{mm}$	Single Wire
C10518N1-04-1-2 G001	4-6	< $\phi 5.3\text{mm}$	Single Wire

### [ Recommended Panel Hole Size ]



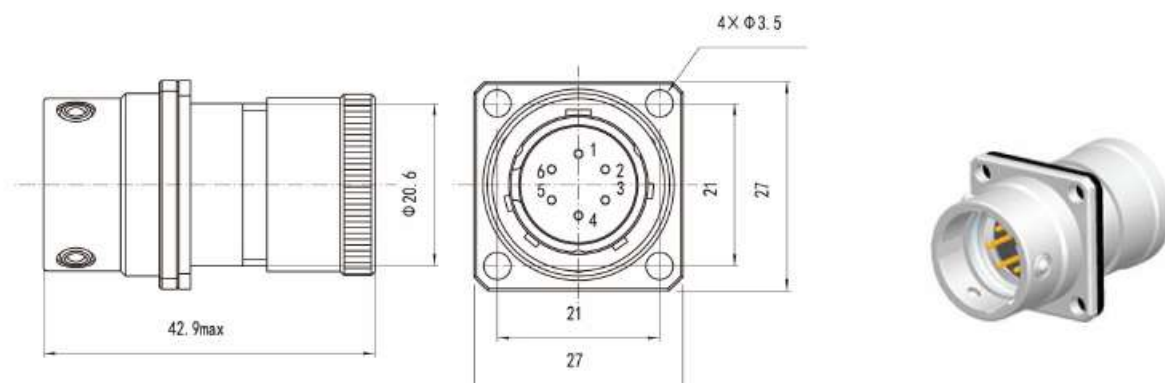
Note: Recommended Installation Panel Flatness Under 0.1, Roughness Under 3.2.

### [Straight Plug]



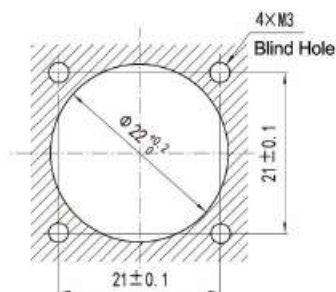
Model	Applicable Wire(mm²)	Recommended Wire Diameter	Supporting Sealing Method
C10514N1-06-1-2	0.5	φ2~2.9	Single Wire
C10514N1-06-1-2 G002	0.5	φ2~3.3	Single Wire
C10514N1-06-1-2 G004	0.5	φ1.5~2.2	Single Wire,Tail Punctured

### [Square Flange Socket]



Model	Applicable Wire(mm²)	Recommended Wire Diameter	Supporting Sealing Method
C10514N1-06-3-1	0.5	φ2~2.9	Single Wire
C10514N1-06-3-1 G001	0.5	φ2±0.2	Single Wire,Tail Punctured
C10514N1-06-3-1 G002	0.5	φ2~3.3	Single Wire

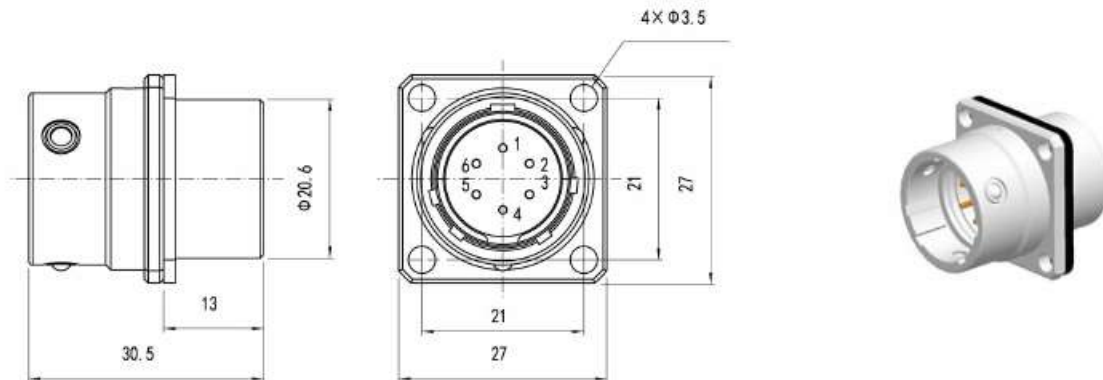
### [Recommended Panel Hole Size]



Note:Recommended Installation Panel Flatness Under 0.1,Roughness Under 3.2.

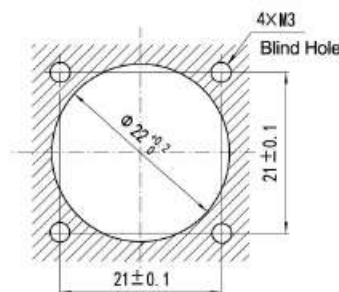


### [ Square Flange Socket ]



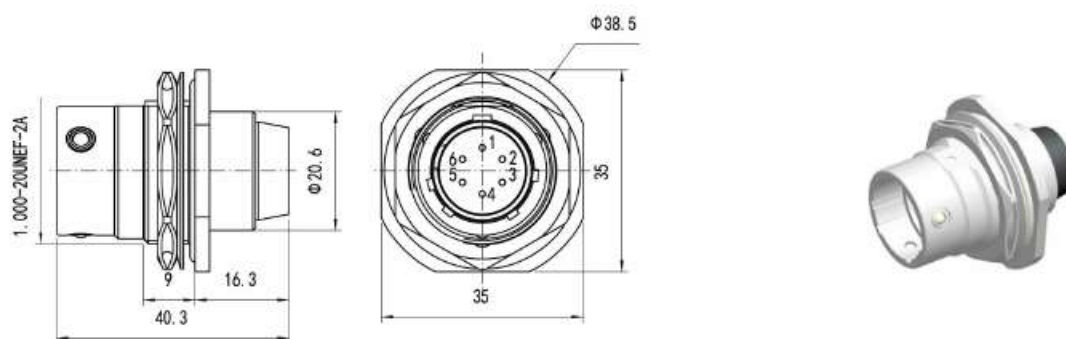
Model	Applicable Wire(mm <sup>2</sup> )
C10514N1-06-3-1 G001	0.5

### [ Recommended Panel Hole Size ]



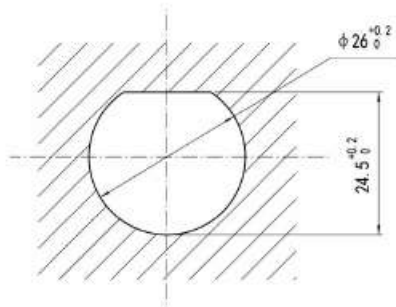
Note: Recommended Installation Panel Flatness Under 0.1, Roughness Under 3.2.

### [ Bulkhead Socket ]



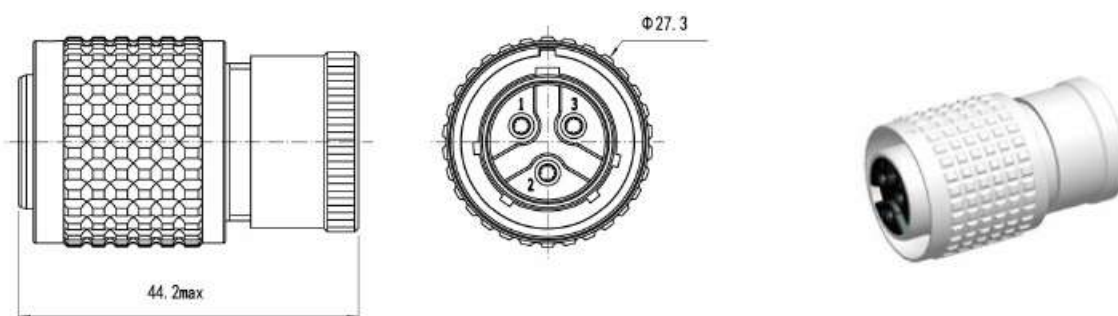
Model	Applicable Wire(mm <sup>2</sup> )
C10514N1-06-4-1 G001	0.5

### [ Recommended Panel Hole Size ]



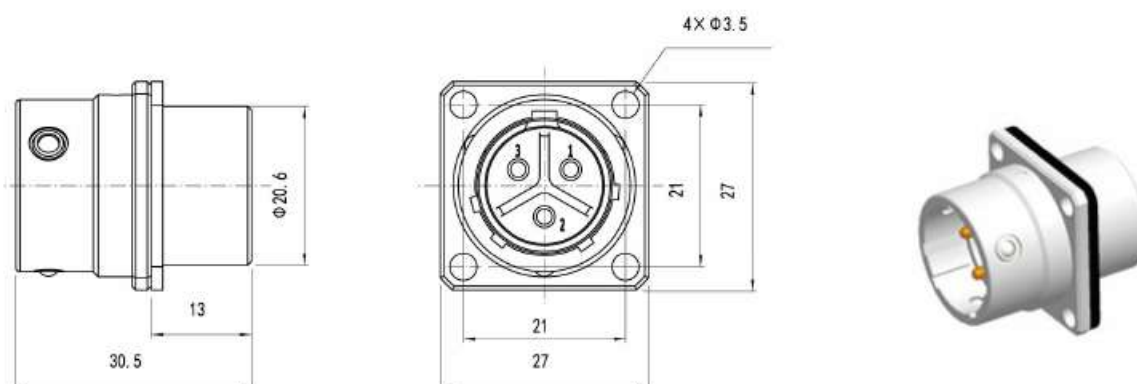
Recommended Socket Installed Panel Hole Size  
Panel Thickness:  $0.5\text{mm} \leq t \leq 3.5\text{mm}$

### [ Straight Plug ]



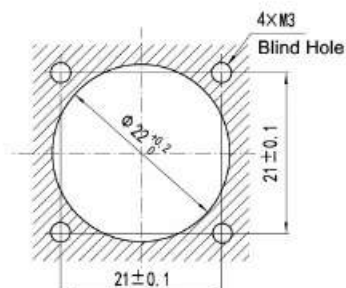
Model	Applicable Wire(mm <sup>2</sup> )	Recommended Wire Diameter	Supporting Sealing Method
C10514N1-03-1-2	2.5	$\phi 3.4 \sim 4.5$	Single Wire

### [ Square Flange Socket ]



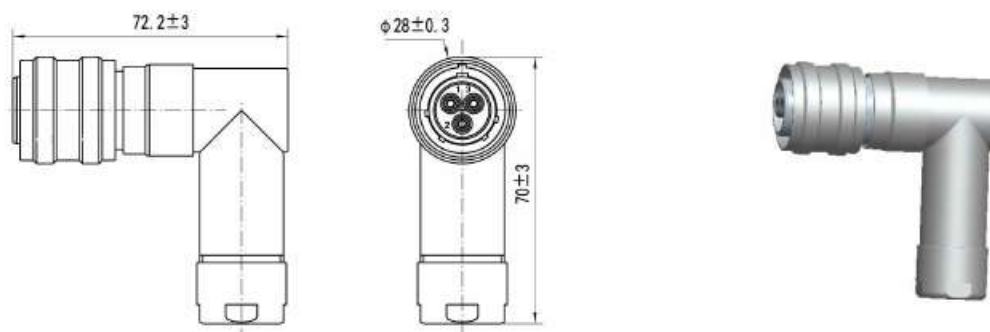
Model	Applicable Wire(mm <sup>2</sup> )
C10514N1-03-3-1	2.5

### [Recommended Panel Hole Size]



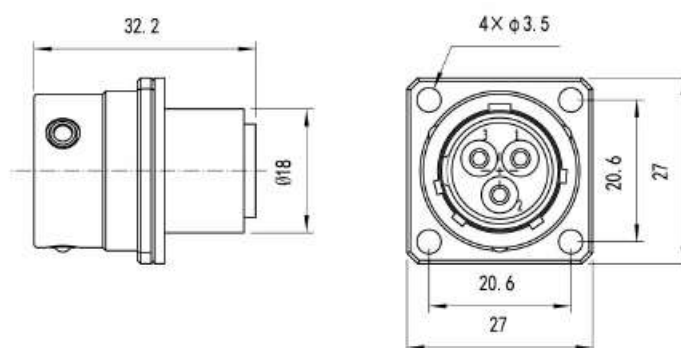
**Note:** Recommended Installation Panel Flatness Under 0.1, Roughness Under 3.2.

### [Angled Plug]



Model	Applicable Wire(mm <sup>2</sup> )	Recommended Wire Diameter	Supporting Sealing Method
C10514N1-03-1-2(YZYT)	2.5	φ10.5~13.5	Assembled Cable

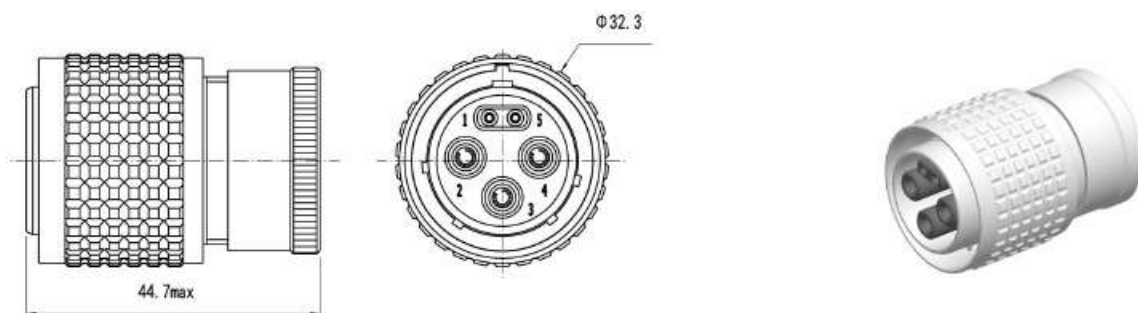
### [Square Flange Socket]



Model	Applicable Wire(mm <sup>2</sup> )
C10514N1-03-3-1(YTZY)	2.5

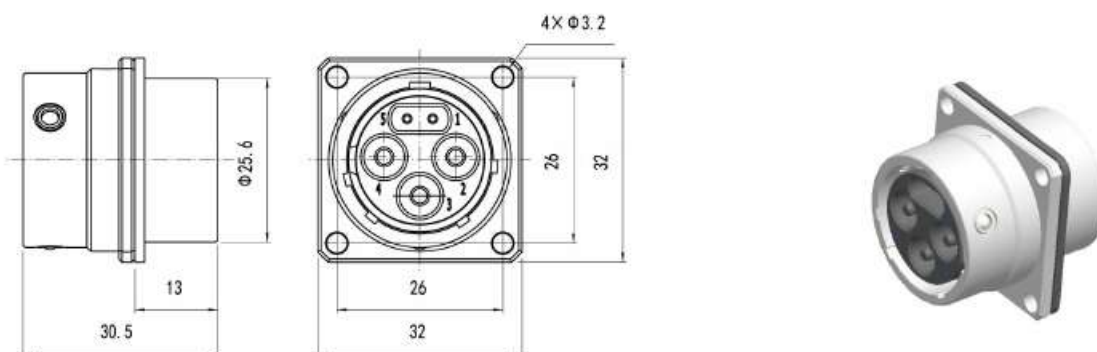
**Note:** C1054N1-03-1-2(YTZY) Only With C10514n1-03-3-1(YTZY) Docking

### [Straight Plug]



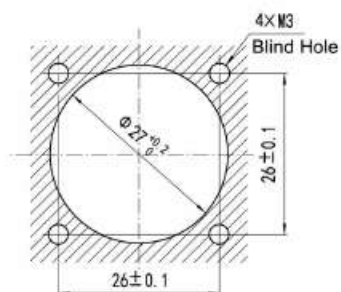
Model	Applicable Wire(mm <sup>2</sup> )		Recommended Wire Diameter		Supporting Sealing Method
C10518N1-05-1-2	4-5	0.5	$\phi 3.8 \pm 0.2$	$\phi 2.3 \pm 0.2$	Single Wire

### [Square Flange Socket]



Model	Applicable Wire(mm <sup>2</sup> )	
C10518N1-05-3-1	4-5	0.5

### [Recommended Panel Hole Size]



Note: Recommended Installation Panel Flatness Under 0.1, Roughness Under 3.2.



**[ Straight Plug ]**

Model	Applicable Wire(mm²)		Recommended Wire Diameter		Supporting Sealing Method
C10516N1-07-1-2	4-5	0.5	φ4~5.0	φ1.8~2.5	Single Wire

**[ Square Flange Socket ]**

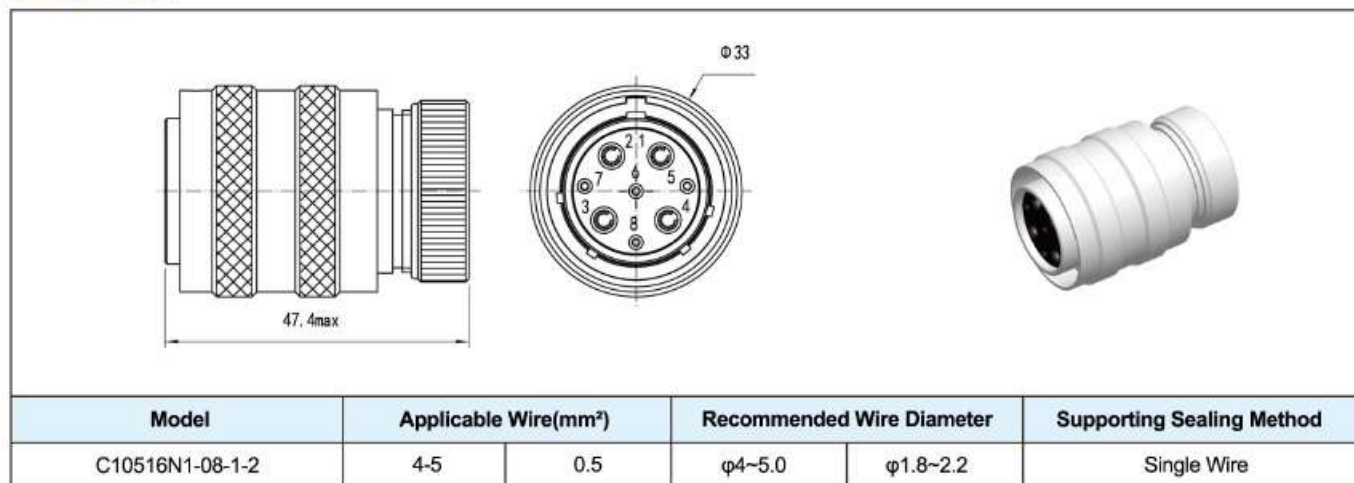
Model	Applicable Wire(mm²)	
C10516N1-07-3-1	4-5	0.5

**[ Recommended Panel Hole Size ]**

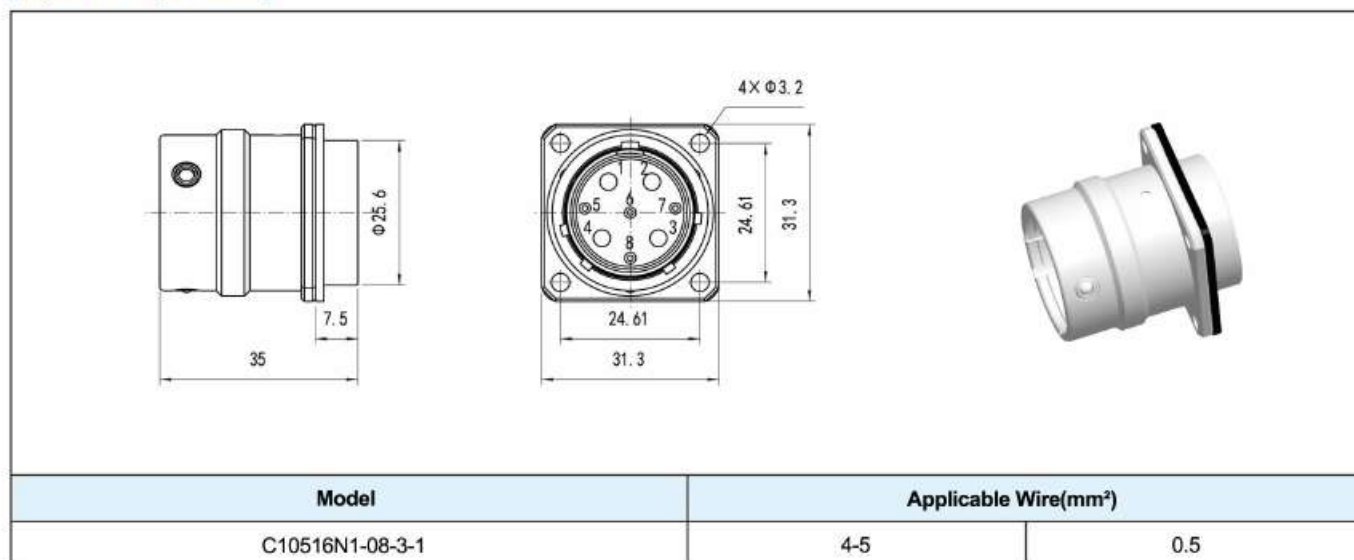
Note: Recommended Installation Panel Flatness Under 0.1, Roughness Under 3.2.



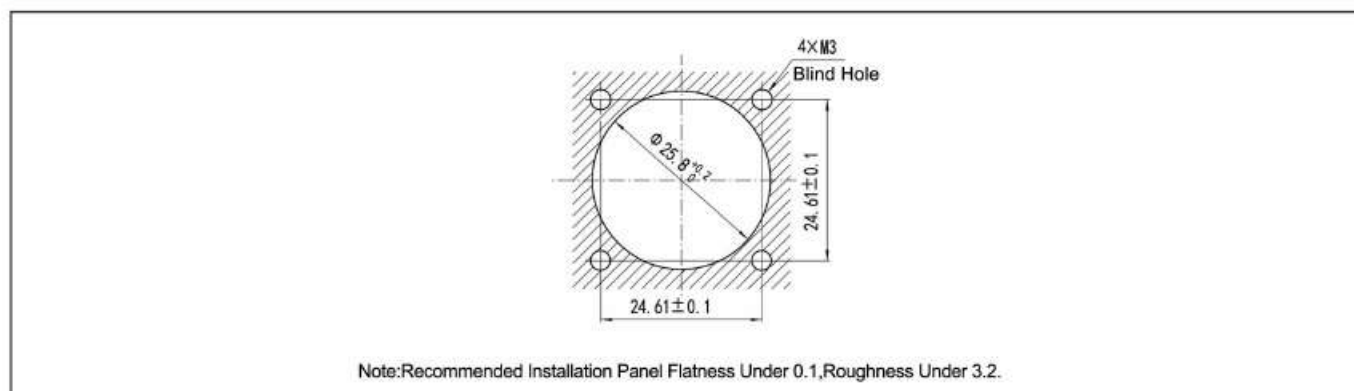
### [Straight Plug]



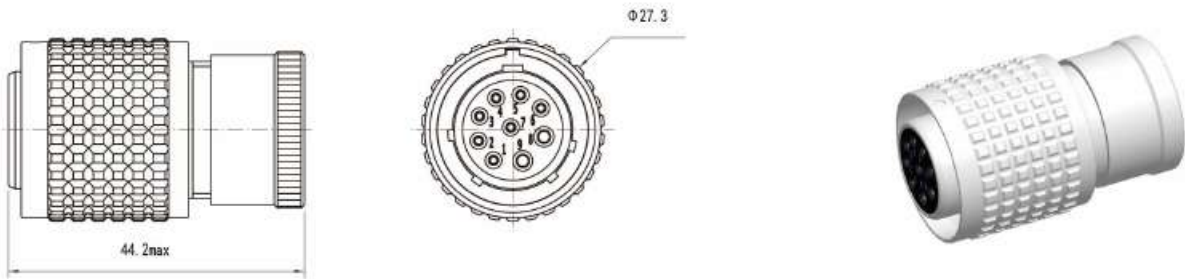
### [Square Flange Socket]



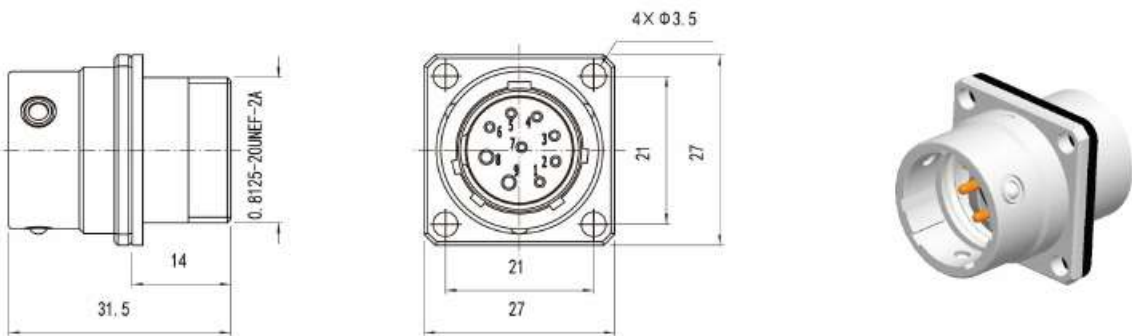
### [Recommended Panel Hole Size]



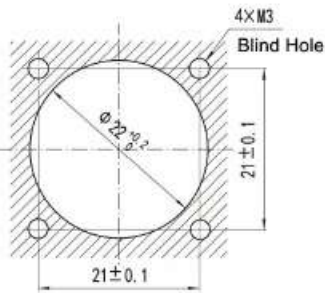
### [ Straight Plug ]

					
Model	Applicable Wire(mm²)		Recommended Wire Diameter		Supporting Sealing Method
C10514N1-09-1-2	1.3	0.5	$\phi 2.8 \pm 0.2$	$\phi 2.3 \pm 0.2$	Single Wire

### [ Square Flange Socket ]

		
Model	Applicable Wire(mm²)	
C10514N1-09-3-1	1.3	0.5

### [ Recommended Panel Hole Size ]


Note: Recommended Installation Panel Flatness Under 0.1, Roughness Under 3.2.





## DLQ1 Series of Electric Vehicle Manual Circuit Breakers

### Products Introduction

- Applicable to electrical connection of wet, rain environment for electric vehicles.
- With function of main circuit fast cut off, fuse quick replacement.
- Interlock in high voltage environment
- Built-in micro switch can be used for control circuit of the main circuit
- Implementation of the standard: Q / 21EJ2656-201
- IP protective degree: IP67 (May effected by customer installation)

### Usage

Products used for the protection of electric vehicles inner main circuit circuit, to prevent too heavy current. Meanwhile, disconnecting the main circuit current in an emergency.

### Application

The product is used in electric vehicle high pressure box or battery box.

### Main Technical Specification

#### [Environmental Performance]

- Operating temperature: -40°C~+85°C
- Relative humidity: 40°C, UP to 93%
- Protection degree: IP67(May effected by customer installation)
- Environmental resistance performance: 48 hours

#### [Electrical Performance]

Model	Rated Voltage V (Room Temperature)	Withstand Voltage V (Room Temperature)	Insulation Resistance MΩ (Room Temperature)
T200	600 DC	6000 AC	≥5000
T250	600 DC	6000 AC	≥5000
T315	600 DC	6000 AC	≥5000
T400	600 DC	6000 AC	≥5000
T500	600 DC	6000 AC	≥5000
T630	600 DC	6000 AC	≥5000

Note: When the circuit breaker is inserted, the micro switch is closed, and when it is pulled out, switch disconnected, the blue and black wire from switch is regardless of positive and negative. The relation of the control wire micro-switch's operating current and voltage is show as below:

Rated Voltage	Rated Current
125V AC	0.1 A
12V DC	2 A
24V DC	1 A
42V DC	0.5 A

#### [Mechanical Performance]

- Contact: Copper alloy
- Insulator: Nylon PA66
- Seals: Silicone rubber
- Mounting bushing: Stainless steel
- Vibration: 10~25Hz, 1.2mm Amplitude
- Impact: 25~500Hz, 30 m/s²
- Durability: 500 times
- Contact resistance and rated current

Contact Specification mm	Contact Resistance MΩ	Rated Current A	Applicable Wire mm²
φ10	0.5	300	/

Note: Rated current depending on the supporting fuse, detailed requirements subject to specifications.



## Signal and Power Supply Series

### Model Name

Series Name	DLQ	1	-T	500
Modification Code	1			
Product Type	T-Circuit breaker	Z-Circuit breaker socket		
Rated Current	(Not for circuit breaker socket) Circuit breaker rated current 200A, 250A, 315A, 400A, 500A, 630A			

Note: The above model name is the naming norms, please contact for the specific models.

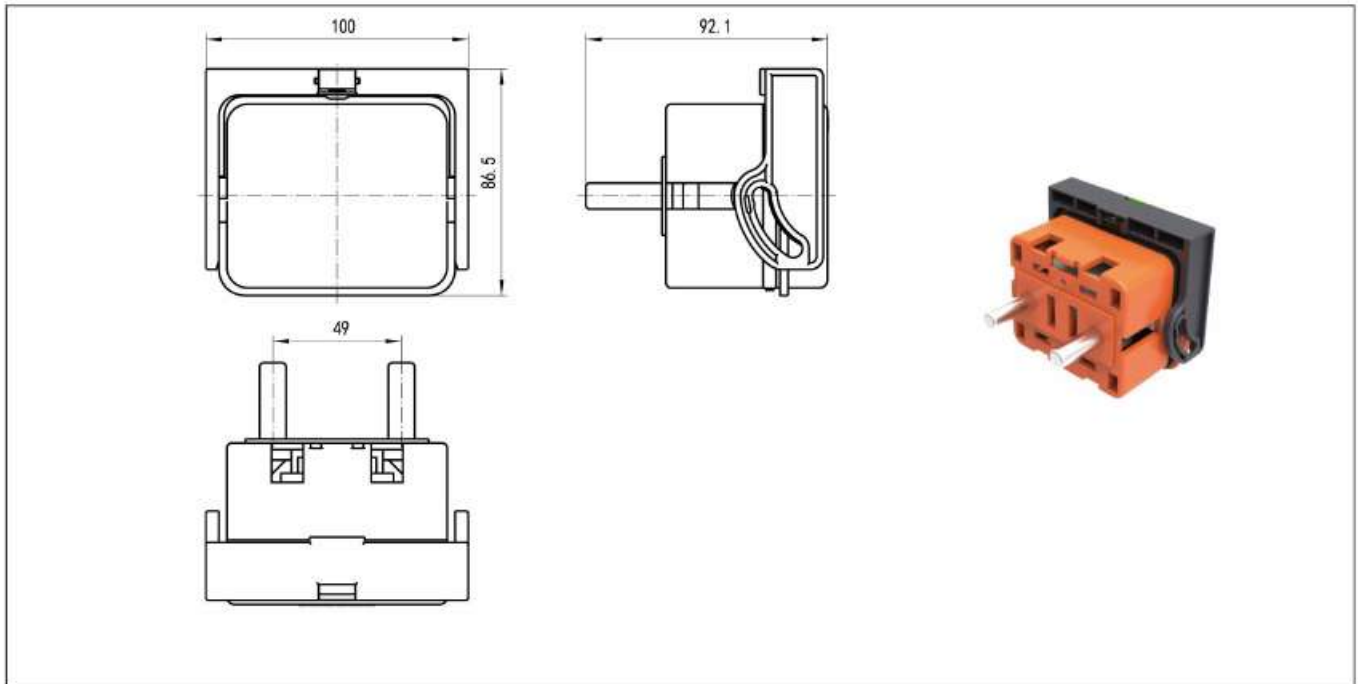
#### [Example of Model Number]

DLQ1-T500 Means DLQ1 Series manual circuit breakers, rated current is 500A

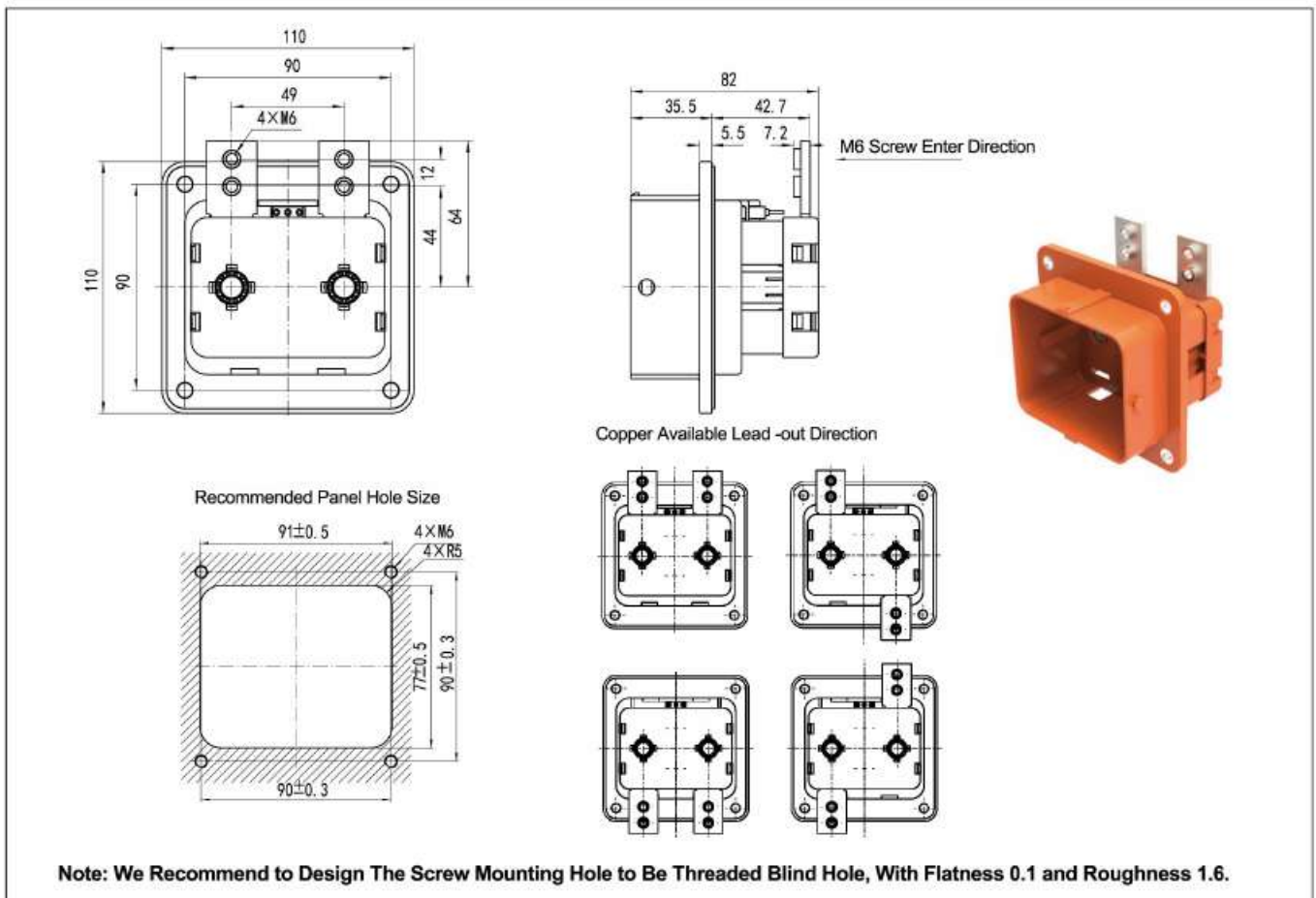


## Dimensions

[ Circuit Breaker DLQ1-T200, DLQ1-T250, DLQ1-T315, DLQ1-T400, DLQ1-T500, DLQ1-T630 ]



[ Circuit Breaker Socket DLQ1-Z ]





## DLQ2 Series of Electric Vehicle Manual Circuit Breakers

### Products Introduction

- Applicable to electrical connection of wet, rain environment for electric vehicles.
- With function of main circuit fast cut off, fuse and copper quick replacement.
- With handle pull-pull locking structure.
- With a secondary locking function to prevent accidental disconnection caused by accidental operation.
- Implementation of the standard: Q / 21EJ2656
- IP protective degree: IP67 (May effected by customer installation)



### Usage

Products used for the protection of electric vehicles inner main circuit current, to prevent too heavy current. Meanwhile, disconnecting the main circuit current in an emergency.

### Application

The product is used in electric vehicle high pressure box or battery box.

### Main Technical Specification

#### [ Mechanical Performance ]

- Contact: Copper alloy
- Insulator: Nylon PA66
- Seals: Silicone rubber
- Vibration: 10~25Hz, 1.2mm Amplitude
- Impact: 25~500Hz, 30 m/s<sup>2</sup>
- Durability: 500 times

#### [ Electrical Performance ]

—— Rated voltage, withstand voltage and insulation resistance

Model	Rated Voltage V (Room Temperature)	Withstand Voltage V (Room Temperature)	Insulation Resistance MΩ (Room Temperature)
T250	500 DC	5000 AC	≥5000
T315	500 DC	5000 AC	≥5000
T350	500 DC	5000 AC	≥5000
T400	500 DC	5000 AC	≥5000

**Note:** Rated voltage 660V AC

#### [ Environmental Performance ]

- Operating temperature: -40°C~+85°C
- Relative humidity: 40°C, UP to 93%
- Protection degree: IP67 (May effected by customer installation)
- Environmental resistance performance: 48 hours

—— Contact resistance and rated current

Contact Specification mm	Contact Resistance MΩ	Rated Current A	Applicable Wire mm <sup>2</sup>
φ10	0.5	300	/

**Note:** Rated current depending on the supporting fuse, detailed requirements subject to specifications.

### Model Name

Series Name	DLQ	2	-T	400	G001
Modification Code	1				
Product Type	T-Circuit breaker	Z-Circuit breaker socket			
Rated Current	(Not for circuit breaker socket) Circuit breaker rated current 250A, 315A, 350A, 400A				
Retrofit	G001, G002.....				

**Note:** The above model name is the naming norms, please contact for the specific models.

[ Example of Model Number ]

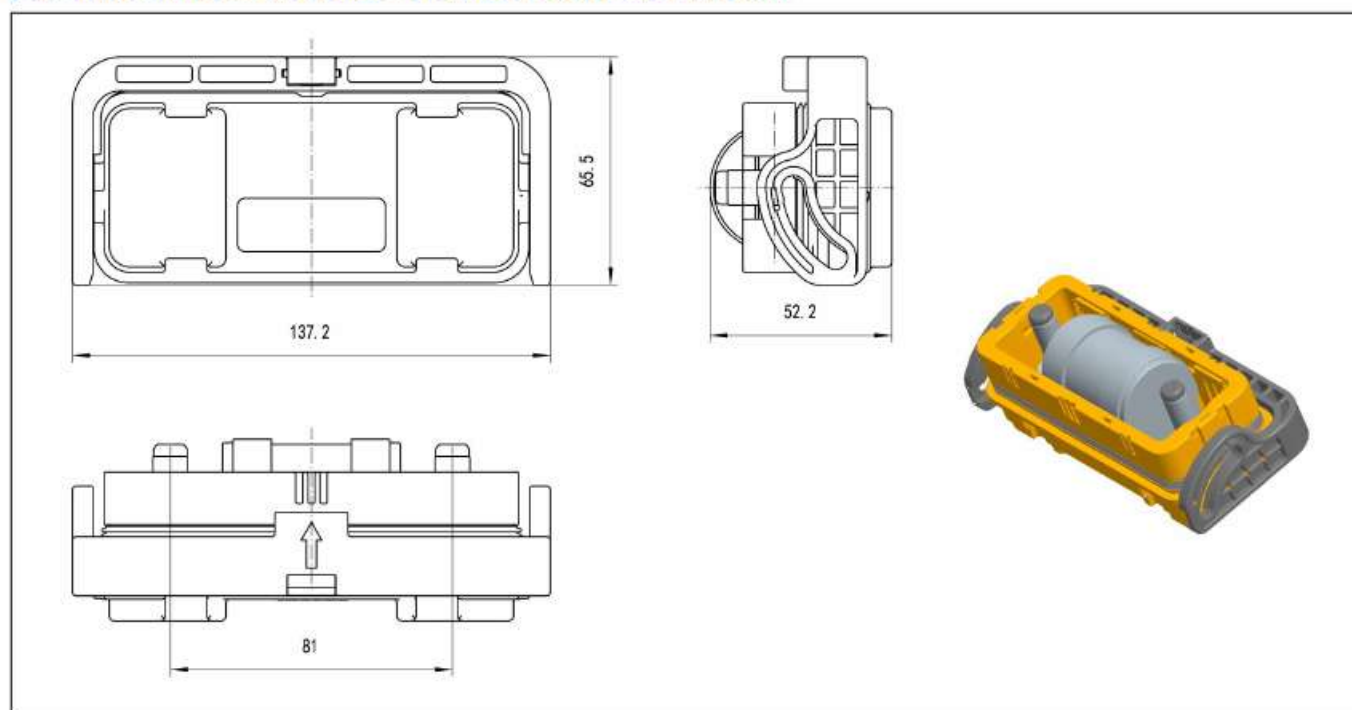
**DLQ2-T250**

**DLQ2 Series Manual Circuit Breakers, Rated Current is 250A**

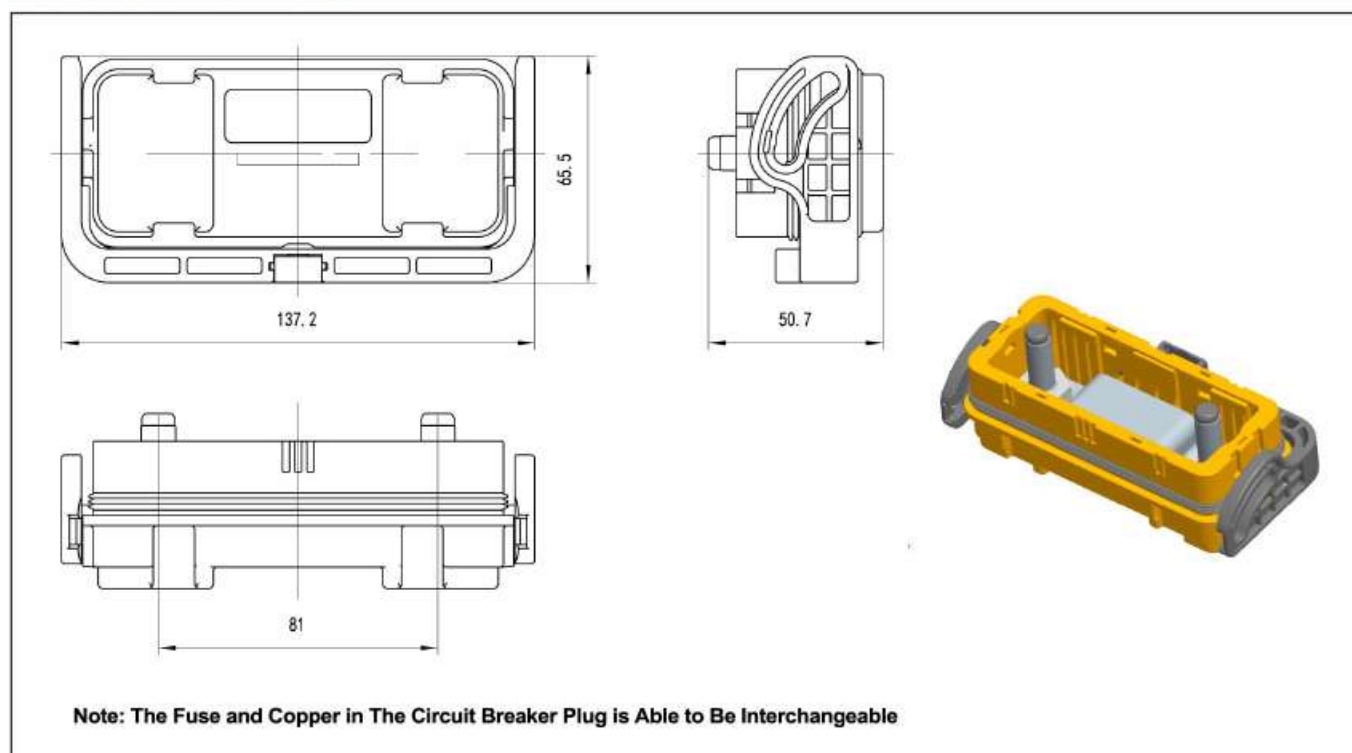
**Product Dimensions and Installation Dimensions**

The Tolerance Unlabeled is  $\pm 1$

[ Circuit Breaker DLQ2-T250, DLQ2-T315, DLQ2-T350, DLQ2-T400 G001 ]

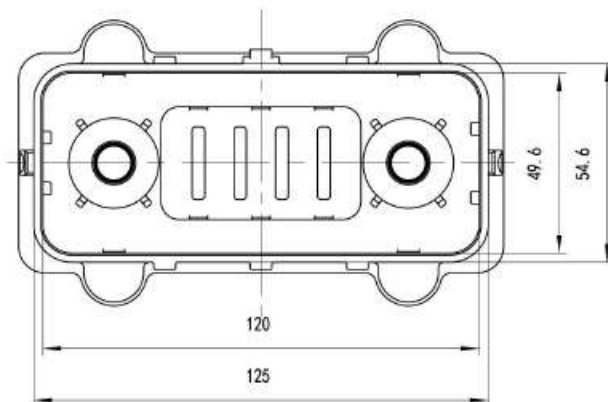
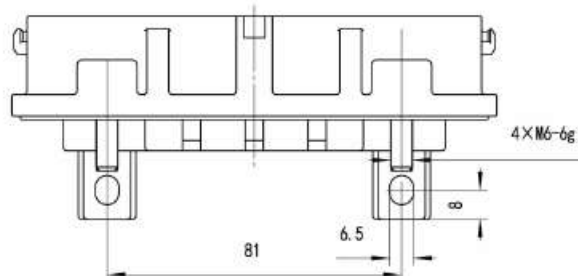
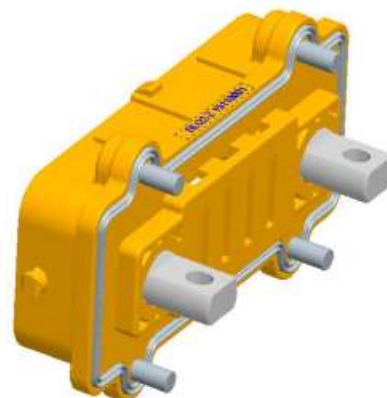
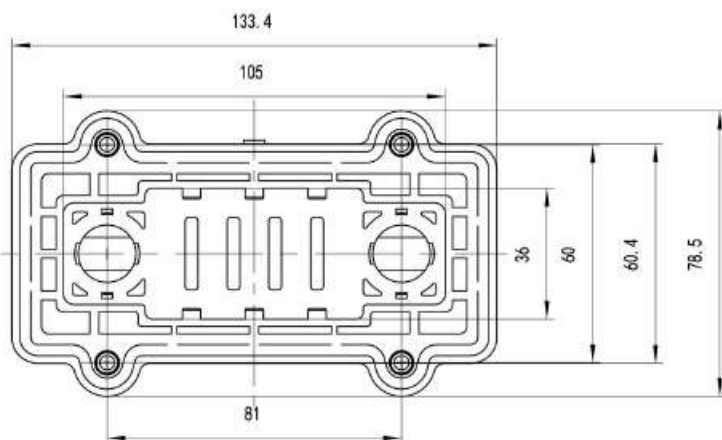


[ Circuit Breaker DLQ2-T G001 ]

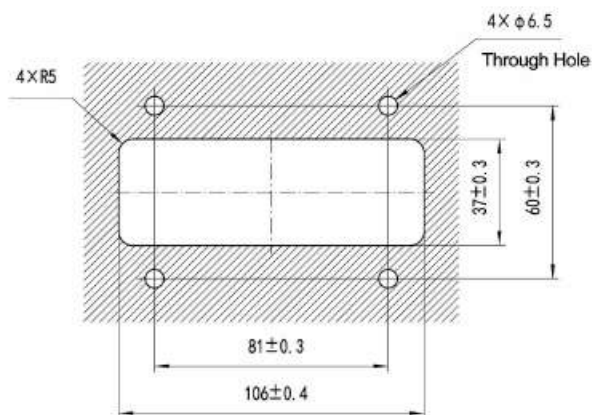




[Circuit Breaker Socket DLQ2-Z]



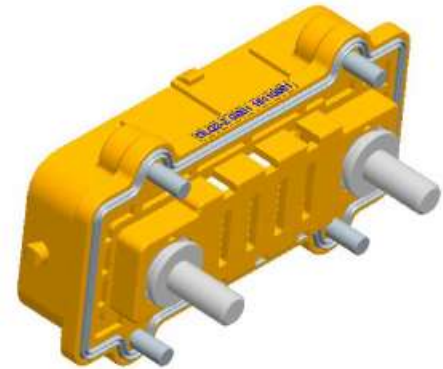
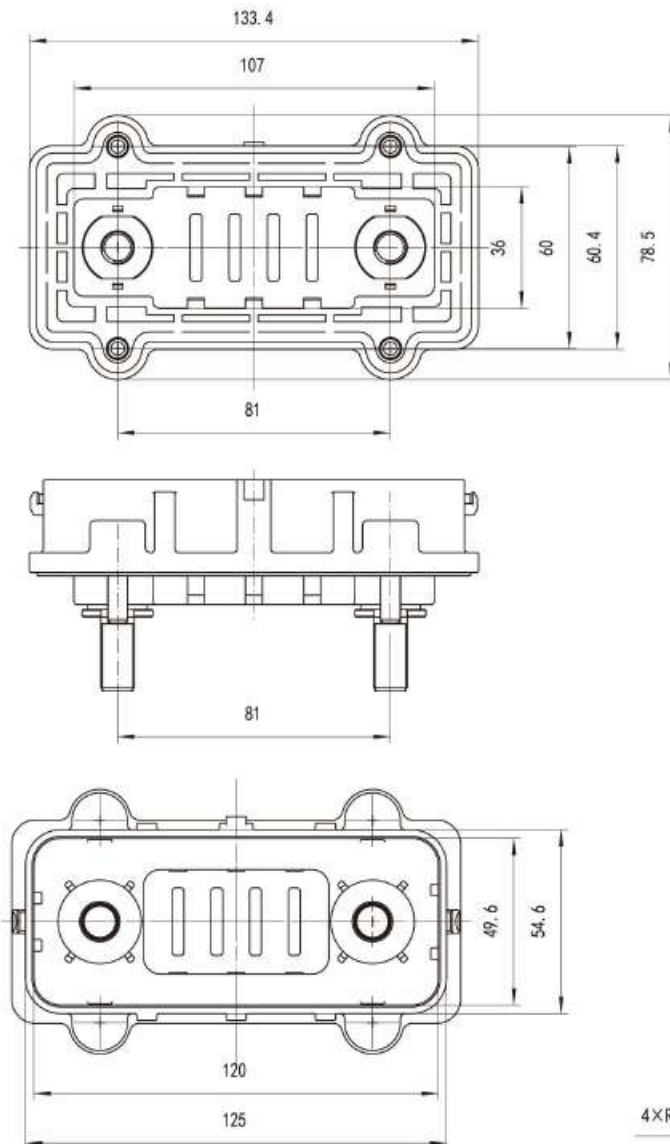
**Recommended Panel Hole Size**



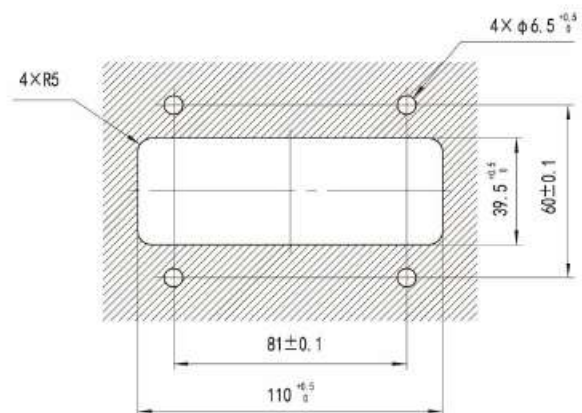
Recommended Panel Hole Size  
Installation Panel Flatness≤0.1, Surface Roughness≤3.2



[Circuit Breaker Socket DLQ2-Z G001]



**Recommended Panel Hole Size**



**Recommended Panel Hole Size**

Installation Panel Flatness  $\leq 0.1$ , Surface Roughness  $\leq 3.2$

## DLQ4 Series of Electric Vehicle Manual Circuit Breakers

### Products Introduction

- Applicable to electrical connection of wet, rain environment for electric vehicles.
- With function of main circuit fast cut off.
- Using copper for connection, without fuses.
- High voltage interlock connection design
- With handle pull-pull locking structure
- With a secondary locking function to prevent accidental disconnection caused by accidental operation.
- Implementation of the standard: Q / 21EJ2656
- IP Protective degree: IP67 (May effected by customer installation)



### Usage

Products used for the protection of electric vehicles inner main circuit circuit, to prevent too heavy current. Meanwhile, disconnecting the main circuit current in an emergency.

### Application

The product is used in electric vehicle high pressure box or battery box.

### Main Technical Specification

#### [ Mechanical Performance ]

- Contact: Copper Alloy
- Insulator: Nylon PA66
- Seals: Silicone Rubber
- Mounting Bushing: Stainless Steel
- Vibration: 10~25Hz, 1.2mm Amplitude
- Impact: 25~500Hz, 30 m/s<sup>2</sup>
- Durability: 500 Times

#### [ Environmental Performance ]

- Operating Temperature: -40°C~+85°C
- Relative Humidity: 40°C, UP to 93%
- Protection Degree: IP67 (May effected by customer installation)
- Environmental Resistance Performance: 48 Hours

#### [ Electrical Performance ]

—— Rated voltage, withstand voltage and insulation resistance

working Environment	Rated Voltage V (Room Temperature)	Withstand Voltage V (Room Temperature)	Insulation Resistance MΩ (Room Temperature)
Room Temperature	500 DC	5000 AC	≥5000

—— Contact resistance and rated current

Contact Specification mm	Contact Resistance MΩ	Rated Current A	Applicable Wire mm <sup>2</sup>
φ10	0.5	300	/

### Model Name

Series Name	DLQ	4	-T
Modification Code	4		
Product Type	T-Circuit Breaker	Z-Circuit Breaker Socket	

**Note:** The above model name is the naming norms, please contact for the specific models.

#### [ Example of Model Number ]

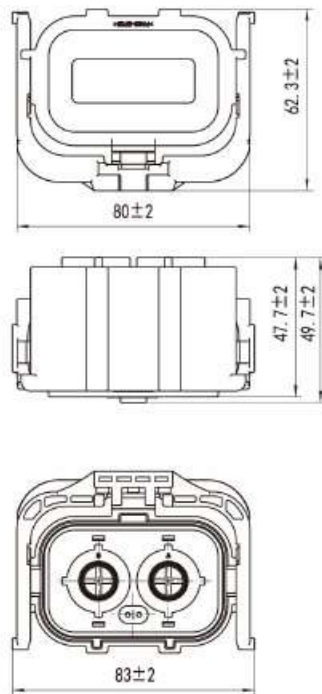
DLQ4-T

DLQ4 Series Manual Circuit Breakers

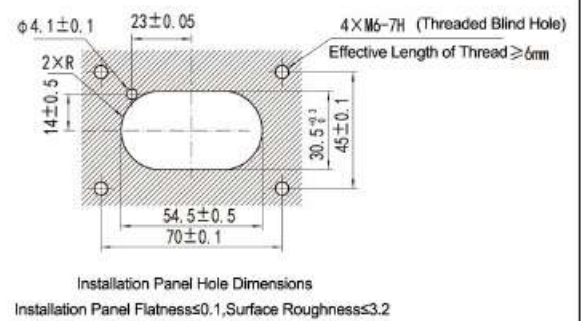
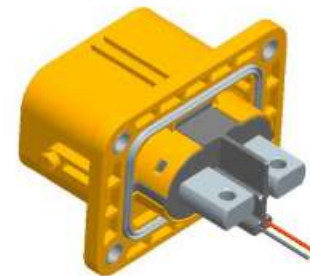
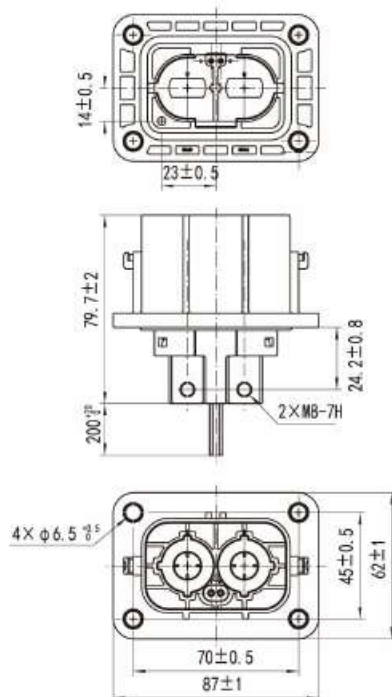
## Product Dimensions and Installation Dimensions

(The Tolerance Unlabeled is  $\pm 1$ )

### [DLQ4-T]



### [DLQ4-T]





## High-Voltage Distribution Box (Customized By Customers Principles and Models)

### Power Distribution Box

#### Products Introduction

- The box is the distribution box from battery to the PTC heater, motor control, air conditioning compressor and DC / DC power.
- PDU for current distribution, short circuit and overload protection using.
- There is a micro-switch in box cover and box combining part, the control cable lead-out to the car control system through the cable connector.
- high voltage protection worked once lid opened.
- IP protective degree: IP66



#### Usage

Products used for current distribution, safety protection and high voltage interlock inside the electric vehicle.

#### Application

The product is used inside the front hood.

#### Product Model

BX1-178 BX-219

#### Main Technical Specification

- Operating temperature: -40°C~100°C
- Vibration: According to QC/T413-2002
- Frequency: 25~500Hz
- Z Direction acceleration 30m/s<sup>2</sup>, Amplitude 1.2mm
- Y Direction acceleration 15m/s<sup>2</sup>, Amplitude 0.6mm
- X Direction acceleration 15m/s<sup>2</sup>, Amplitude 0.6mm; Each direction 8h. (The box installation direction is Z direction.)
- Salt spray: 48h



## High-Voltage Box

### Products Introduction

- High-voltage control box used for charge control, motor control and pre-charge control. Each control circuit has a fuse for safety protection and also use a high-voltage relay for loop control. During driving, the motor controller and loop relay works, charging and pre-charging loop relay disconnected. And during charging, the charging control loop relay worked, with layered structure design maintenance cover for easy installation and maintenance.
- Discharge and charging with interlocking connection performance, hall current sensor inside the power distribution box battery positive loop, used for current inductive detection of battery main circuit, and also use the insulation detector for insulation detection of the entire power distribution system (Relay can be used for high voltage of 750VDC).



### Usage

Applied to high pressure protection of electric vehicles and low pressure control of high pressure.

### Application

The product is used inside the front hood or chassis of EV.

### Product Model

BX1-250 BX1-244

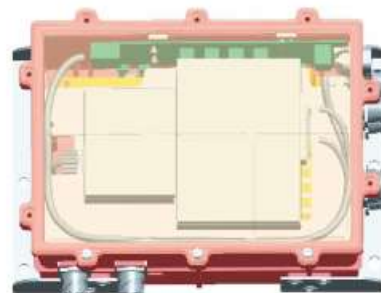
### Main Technical Specification

- IP protective degree: IP66
- Operating temperature: -40°C~100°C
- Vibration: According to QC/T413-2002
- Frequency: 25~500Hz
  - Z Direction acceleration 30m/s<sup>2</sup>, amplitude 1.2mm
  - Y Direction acceleration 15m/s<sup>2</sup>, amplitude 0.6mm
  - X Direction acceleration 15m/s<sup>2</sup>, amplitude 0.6mm; Each direction 8h.(The box installation direction is Z direction.)
- Salt Spray: 48h

## Central Box

### Products Introduction

- To control strong power by weak power using relay control, and central box will be used for battery charge protection. When the circuit overloads or passes high current, the fuse inside the central box will disconnect to protect the electric vehicle. Meanwhile, the central box is also used for CAN wire transmission and high voltage sampling, etc.
- It's a low-voltage control integrated product with high-pressure control box and BMS box. PCB integrated controller inside for low-voltage control circuit.
- IP protection degree: IP66



### Usage

Applied to high pressure protection of electric vehicles and low pressure control of high pressure. with BMS box and high-voltage box inside.

### Application

The product is used inside the front hood or chassis of EV.

### Product Model

BX1-161

### Main Technical Specification

- Operating temperature: -40°C~100°C
- Vibration: According to QC/T413-2002
- Frequency: 25~500Hz
  - Z Direction acceleration 30m/s<sup>2</sup>, amplitude 1.2mm
  - Y Direction acceleration 15m/s<sup>2</sup>, amplitude 0.6mm
  - X Direction acceleration 15m/s<sup>2</sup>, amplitude 0.6mm; Each direction 8h.(The box installation direction is Z direction.)
- Salt Spray: 48h

## JX49 Terminal Block Series

### Products Introduction

- Terminal blocks for easy use
- Can be shielded
- Product protection degree: IP66 (JX49-25 models meet IP67 standard, please consult the designer for selection)

### Usage

Applicable to electric vehicle motor controller box, as a replacement of metal shield plug.

### Application

Used in the inside of electric vehicles to meet the shield, sealing requirements of EV.

### Model Name

Series name	JX49	-50/35/25	-01	A
Applicable cable:				
50——50mm <sup>2</sup> Single-core shielded cable				
35——35mm <sup>2</sup> Single-core shielded cable				
25——25mm <sup>2</sup> Single-core shielded cable				
Modification code	01			
Indicates the error-proof angle				
A: (Currently only JX49-35-01 has three error-proof angle, model number is JX49-35-01A, JX49-35-01B, JX49-35-01C)				

### Main Technical Specification

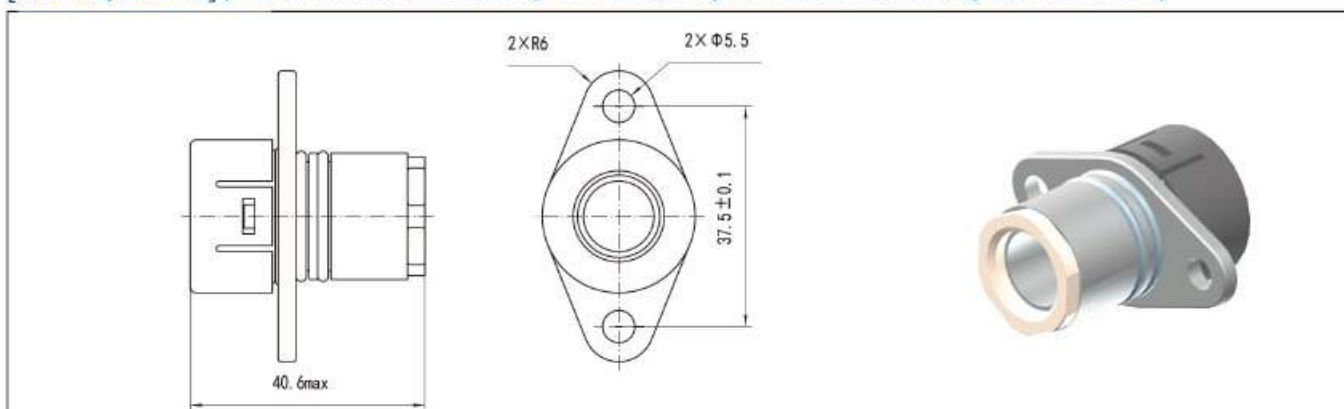
- Operating temperature: -40°C~+125°C
- Salt spray: 144h

### [ Example of Model Number ]

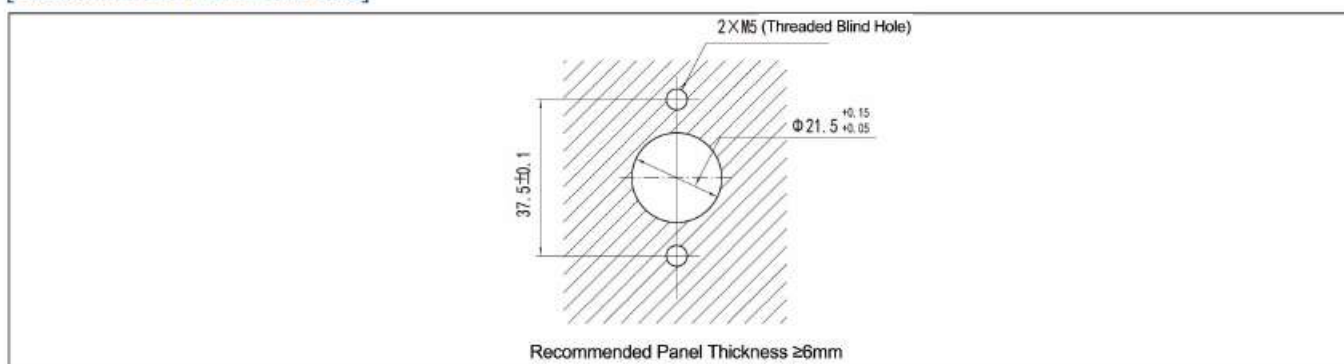
For example: JX49 series for 1 \* 35mm<sup>2</sup> single-core shielded cable, with error-proof, the order model is JX49-35-01A Or JX49-35-01B Or JX49-35-01C.

### Dimensions

[ JX49-25, JX49-35 ] (Both Dimensions are Exactly The Same, Only The Outlet Sealed Ring Size is Different)

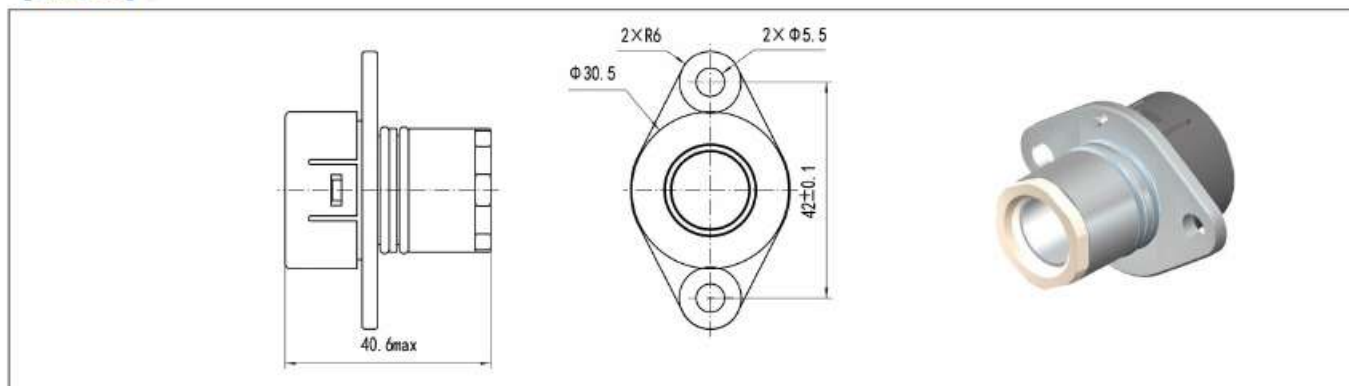


### [ Recommended Panel Hole Size ]

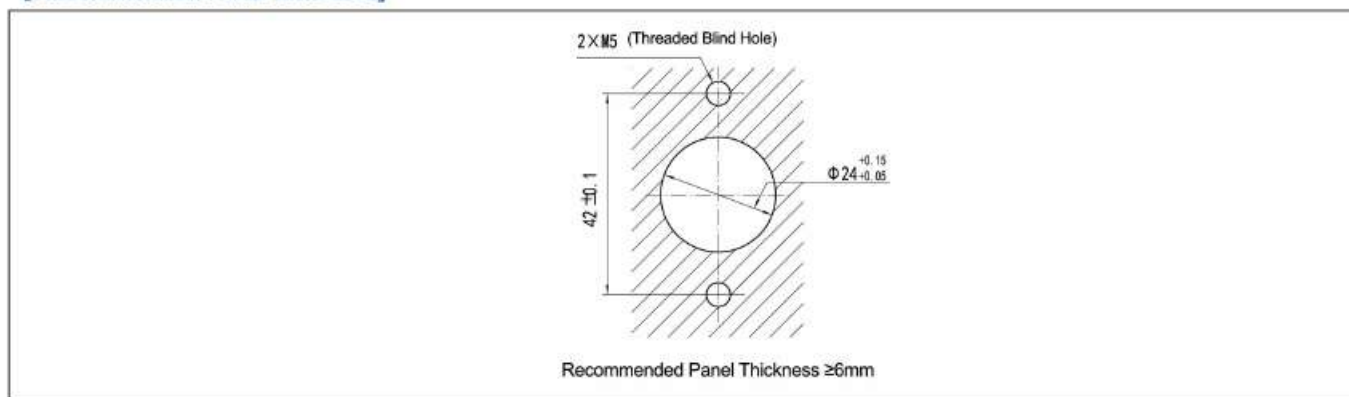




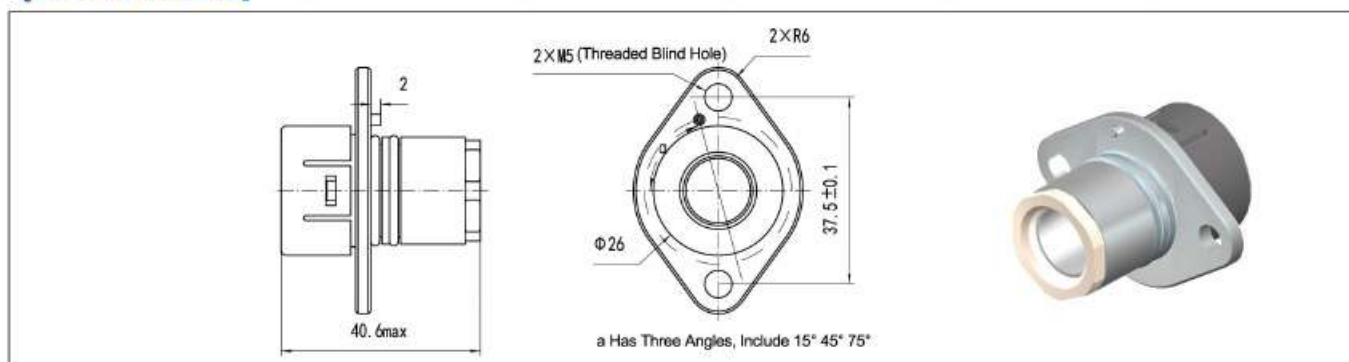
[ JX49-50 ]



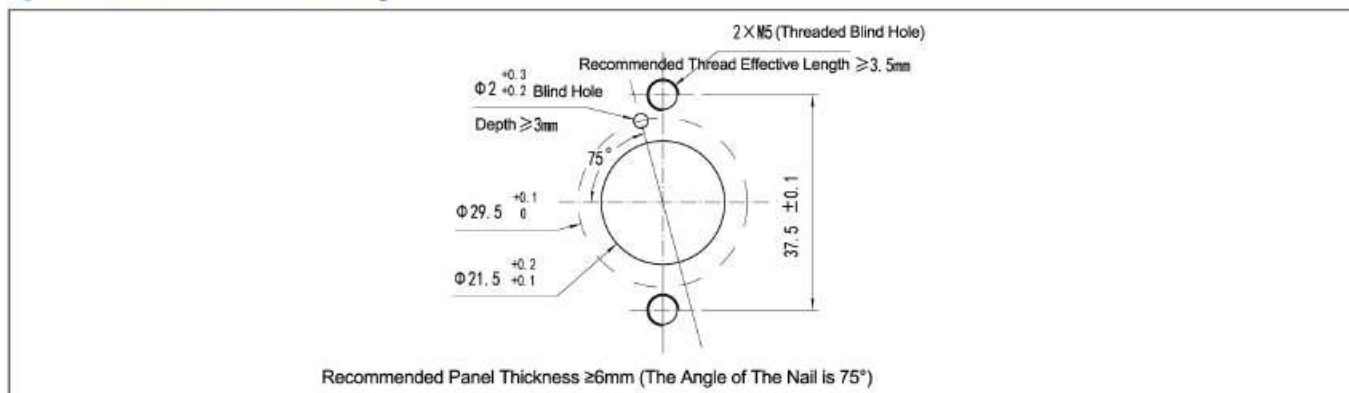
[ Recommended Panel Hole Size ]



[ JX49-35-01A/B/C ]



[ Recommended Panel Hole Size ]





## JX59 Terminal Block Series

### Products Introduction

- Terminal blocks for easy use
- Product protection degree: IP66

### Usage

Applicable to interconnection of electric car battery box and high voltage box, easy to install.

### Application

Used in the inside of electric vehicles to meet the shield, sealing requirements of EV.

### Model Name

Series name	JX59	-1M8	-50/70	(RE)
Screw spec supporting copper using				
Applicable cable specifications				
Ribbon color				

### Main Technical Specification

- Operating temperature: -40°C~+125°C
- Salt spray: 144h

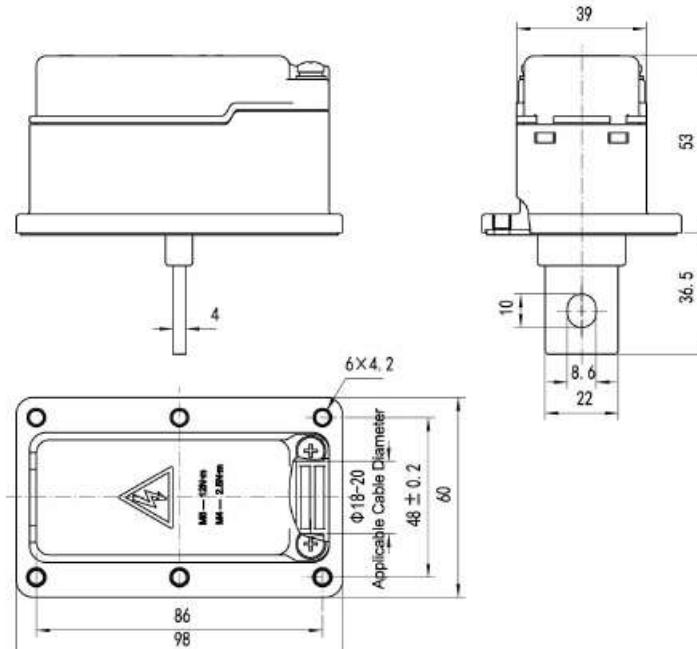
### [Example of Model Number]

JX59-1M8-50/70(RE)

Description: Red terminal blocks for M8 nuts copper and 50,70 square cable.

### Dimensions

[ JX49-25, JX49-38 ] (Both Dimensions are Exactly The Same, Only The Outlet Sealed Ring Size is Different)

	
Product Number	Note
JX59-1M8-50/70(RE)	Ribbon is Red
JX59-1M8-50/70(BK)	Ribbon is Black



## EV Cable Assemblies

### Products Introduction

In the electric vehicles system, cable assembly achieve the function of electrical and signal transmission our company developed cable assemblies special for electric vehicles based on the traditional cable assembly manufacturing technology and special requirements of EV. The main characteristics include:

- **High voltage, high current:** Designed for high-voltage power connection system of electric vehicles to satisfy the power transmission requirements in actual using .
- **High insulation:** To avoid the electric shock risk in using and protect users.
- **Integration:** There are large current circuit and small current circuit in electric vehicles, then we need integrated design to meet the current transmission requirements for a variety of current.
- **High reliability:** Considering the influence of electric vehicles failure to normal life, we attaches great importance on the products reliability.
- **A wide range of environmental adaptability:** As electric vehicles using in complex driving environment, we need to ensure that electric vehicles can travel in a variety of environments.
- **Good shielding performance:** As the electromagnetic interference of electric vehicles to surroundings in high-current transmission, we try our best to make the interference of EV to the.
- **Good protection:** EV will be used in a variety of weather conditions, so we products have great performance on dust and rain resistance.

### High Current Cable Specifications

—— We make many kinds of cable assemblies for electric vehicles heavy current components as follow.

Nominal Area mm <sup>2</sup>	20°C Maximum Resistance MΩ/M	Insulated Outer Diameter mm	Diameter of Each Braided Shield φ	Sleeve OD mm
15	1.2	8.1	T x 0.15	11.2±0.4
20	0.907	9.2	T x 0.15	12.4±0.4
25	0.743	9.9	T x 0.15	13.1±0.4
35	0.554	11.4	T x 0.15	14.8±0.4
50	0.386	13.5	T x 0.15	17.1±0.4
70	0.272	15.5	T x 0.15	19.2±0.4

Note: 1.You can increase the specifications according to user needs.

2.Complete specifications of small current wire we offered not listed here one by one.

## Main Structure

[ We Provide High-voltage Cable Components, Signal Cable Assembly Products and Vehicle Wiring Solutions ]



[ Interconnection Cable Assembly for High Voltage Equipment ]



[ Charging Connection Cable Assemblies ]



## Cable Assembly Processing Technology and Related Equipment

### Inserting Winding and Stripping:

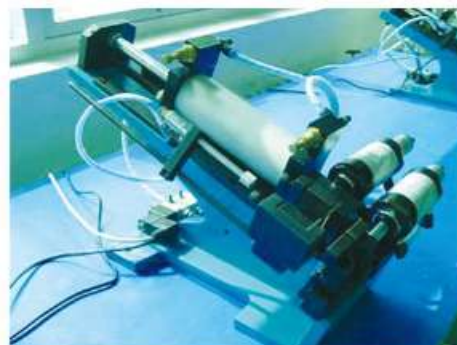
Use the automatic computer inserting winding and stripping machine, to cutting and stripping cable according to required cable length and stripping length .



For small wire, we use thermal stripper to strip the wire fine to 0.07mm<sup>2</sup> to prevent wire damage.



Pneumatic stripping machine for thicker wire and wire with thicker skin (maximum diameter to 300mm<sup>2</sup>).





### **Crimp:**

Automatic terminal crimping machine to crimping different type of terminals with related crimping mould.



### **Solder:**

Adjustable temperature control soldering iron choose iron tip with different diameter to solder different kinds of wire



### **Stranded Contact Tip Welding:**

The contact tip welding machine to welding the contact tip of stranded female pin.



## Cable Assembly Inspection Equipment

### Automatic Cable Detector:

Usage: supporting the use of junction box to test electrical parameters of voltage resistance, insulation, continuity of complex multi-end cable, and also for electrical performance testing of electrical connectors. With fast and accurate features.



### LCD Electronic Tensile Testing Machine:

Usage: For the terminals and contacts after crimping and soldering, we make tensile test to ensure the products meet the tensile requirements.



### Contact Resistance Tester:

Usage: Test the contact resistance after crimping and soldering and the contact resistance after coupling.



## High Insulation Leakage Current Measuring Instrument

(Insulation Resistance Tester):

Usage: Test insulation between the cables, contacts, and also between the contact and the connector housing.

Use the automatic computer inserting winding and stripping machine, to cutting and stripping cable according to required cable length and stripping length .



## Voltage Resistance Tester:

Usage: Test voltage resistance between the cables, contacts, and also between the contact and the connector housing.



## Coaxial Microscope:

Usage: used to check the welding and soldering quality of stranded contact tip and wire solder joint.



## Electric Car Production Line





## Appendix

### Silver-plated Products Protection Requirements

#### 1.Storage Requirements

- During storage, please keep the silver-plated products away from light, and we also recommend you to wrap them in a black plastic bags;
- The silver-plated products should keep sealed before delivery.
- No sulfur in the storage environment.

#### 2.Assembly Requirements

- Avoid sun exposure to the silver-plated parts when assembly.
- Try to avoid long-term air exposure when assembly; if the production cycle is too long (more than 1 week), necessary air isolation is required during interval time between different process;
- Sulfur-containing items (such as leather, hard rubber, etc.) not allowed in Assembly and using place. The table laying pads, sealing tape, turnover box should be inspected and confirm to be sulfur-free;
- Avoid scratching the silver-plated products during assembly, pay attention to avoid bumping other components, dragging parts and rubbing parts.
- When you need to solder the silver-plated products during assembly, it is recommended to clean the soldering flux immediately, and take safeguard disposal to the silver plating. (apply a electrical contact protective lubricant coat to the contact place, and then apply defending coating to other place at the same time of PCB treatment.)

#### 3.Using Requirements

- Silver-plated layer can not used as ferrous metal protective layer under atmospheric conditions;
- Forbid contact to sulfur-containing rubber or other sulfur-containing non-metallic materials;
- Don't use bare hands to contact to the silver-plated place during production, assembly and storage;
- Performance of Contact pin will not affected by light discolouration, it also can be used normally;
- If further packing is required for products to be sent out to next user, we recommend to pack it with black, sulfur-free plastic bags sealed and tightly first before other packing.