

## Multi POS High Current Plastic Shell Connector with Shield (REG1)



### Features/Application

- REG1 series connectors provide stable high voltage power transmission among EV/HEV systems.
- Outer shell is molded in thermoplastics with excellent flame-retardant and high temperature resistant ability. This REG1 series has many options (straight and right angle), and comparing same sized metal connectors, it has lighter weight, small size and easy installation.
- Locking handle and secondary locking structure. This connector requires smaller operation space, especially for those application environment with limited space.
- Current rating range 125A-250A, contact specification  $\Phi 9.1\text{mm}$ , supporting cable from  $25\text{mm}^2 \sim 70\text{mm}^2$  (section) to meet various electrical performance. Multi anti-misplug key position avoiding mistakes when same series connectors are applied on same devices.

### Technical Specification

#### Electrical Property

Current rating:

| Contact             | Cable Range     | Current Rating | Cable type                       | Shielding Line Diameter | Non-Shielding Line Diameter |
|---------------------|-----------------|----------------|----------------------------------|-------------------------|-----------------------------|
| $\Phi 9.1\text{mm}$ | $25\text{mm}^2$ | 120A           | Shield or Non-Shield is optional | $\phi 12.2 \pm 0.3$     | $\phi 11.1 \pm 0.3$         |
|                     | $35\text{mm}^2$ | 180A           | Shield or Non-Shield is optional | $\phi 14.5 \pm 0.3$     | $\phi 12.2 \pm 0.3$         |
|                     | $50\text{mm}^2$ | 220A           | Shield or Non-Shield is optional | $\phi 15.9 \pm 0.3$     | $\phi 14.5 \pm 0.3$         |
|                     | $70\text{mm}^2$ | 250A           | Shield or Non-Shield is optional | $\phi 18.5 \pm 0.3$     | $\phi 15.9 \pm 0.3$         |

Voltage Rating: 1000V DC  
 Withstand Voltage: 5000V AC  
 Insulation Resistance:  $5000\text{m}\Omega/1000\text{V DC}$   
 Shielding: optional  
 HIVL: YES (HVIL is normal,  
 Non-HVIL is optional)

#### Environmental Property

Working Temperature:  $-40^\circ\text{C} \sim +125^\circ\text{C}$   
 Relative Humidity: 95%(40°C)  
 Salt spray: 500h(NaCl 5%)  
 Sealing: IP68B in mated condition, plug  
 and jack meet IPXXB separately  
 Flame Retardant Grade: UL94-V0

#### Mechanical Property

Mating Cycle:  $\geq 100$  times  
 Vibration: 10~80Hz, amplitude 0.75  
 81~500Hz, 20g  
 500~2000Hz, 18g

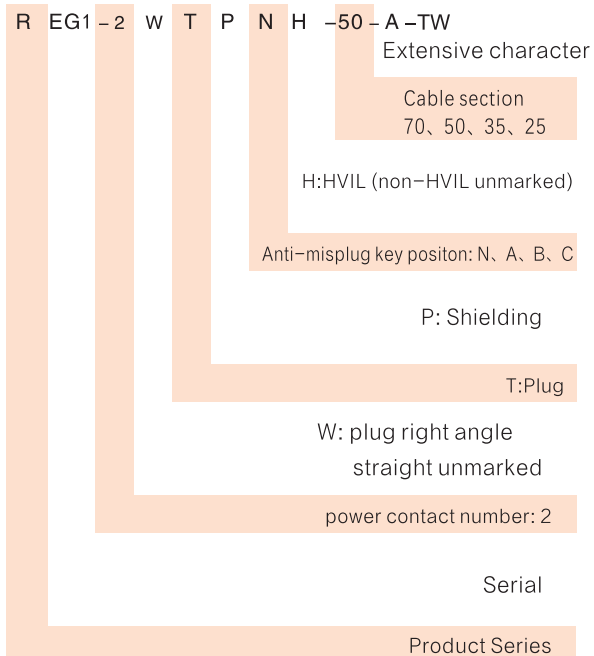
#### Material

Shell: thermoplastic flame-retardant  
 Contact: copper alloy silver plated  
 Seal: rubber or elastomer



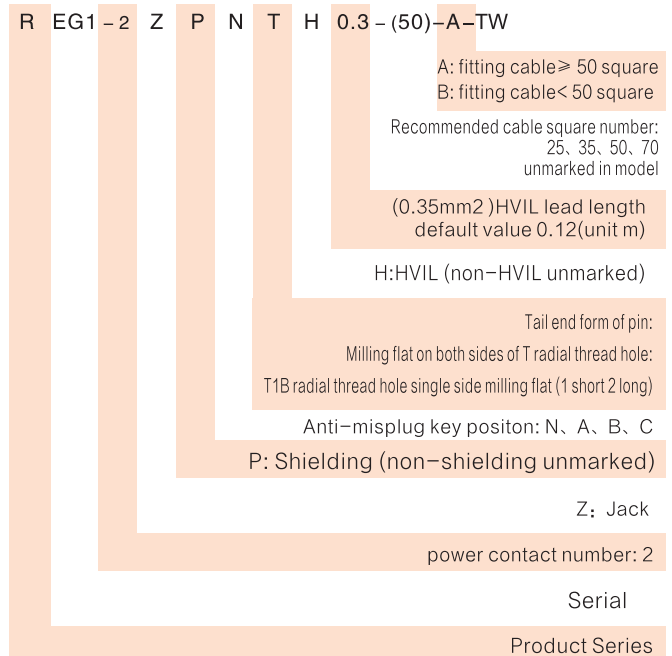
## Ordering Information

### Plug



NOTE: Plug type is empty plug type without wiring. If you need to purchase wiring components, contact our company technical department before confirming the details of components so as to give the material number of wiring harness components.

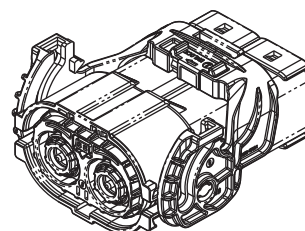
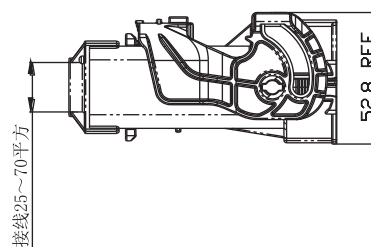
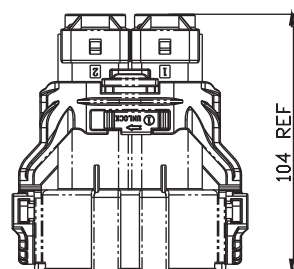
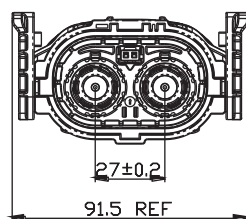
### Jack

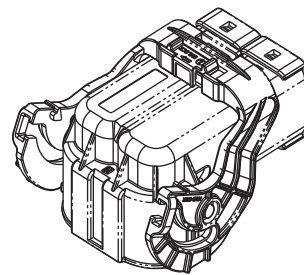
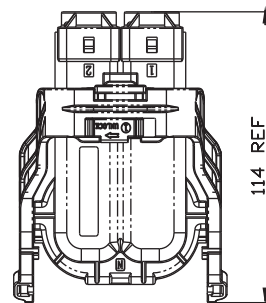
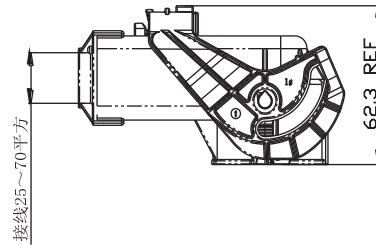
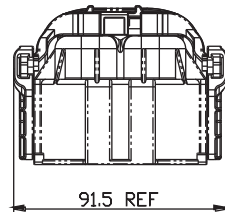


NOTE: Model (50) is not included in the model. In the tail end connection mode of the pin on the socket, T means that the pin on the socket of the connector is in the form of two-sided milling flat (Fig. 3). T1B means that the pin for position 1 is a short pin, while the 2 pin is a long pin, which is flattened on the side (Fig. 4).

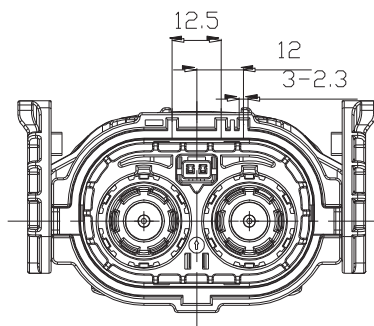
## Size

### 2 POS Straight Plug

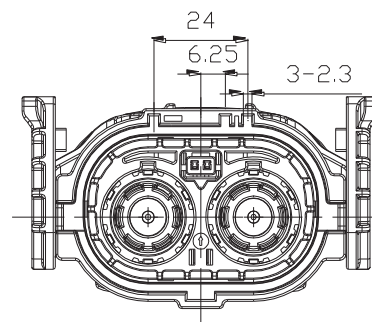




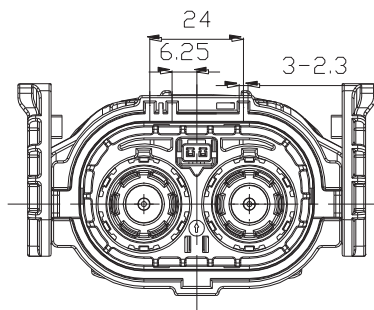
Instruction according to the key position of the plug.



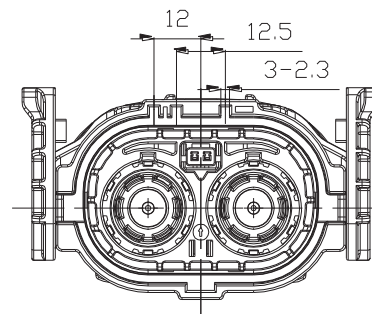
CODE N



CODE A



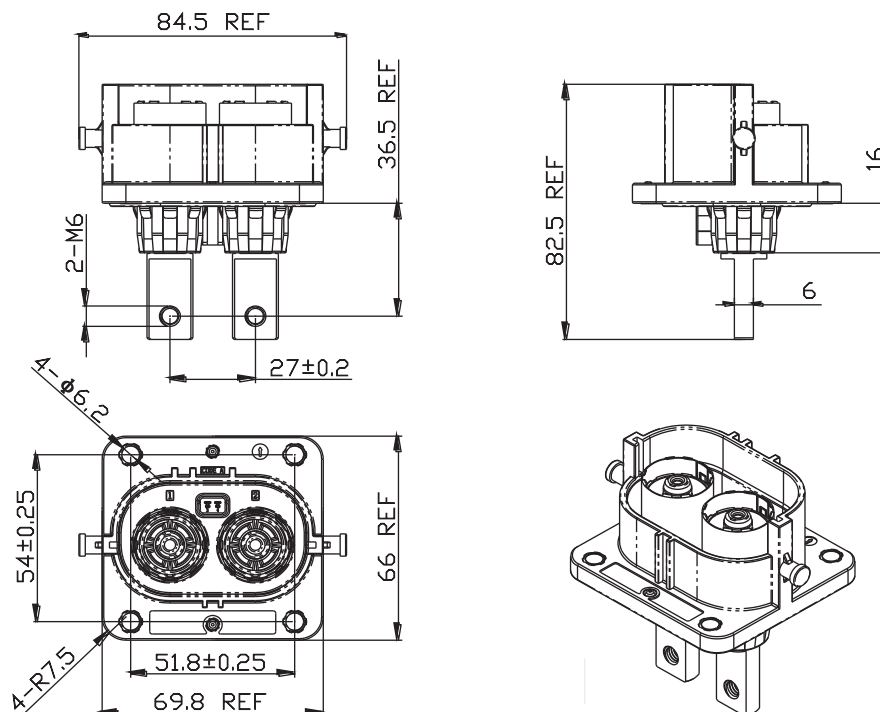
CODE B



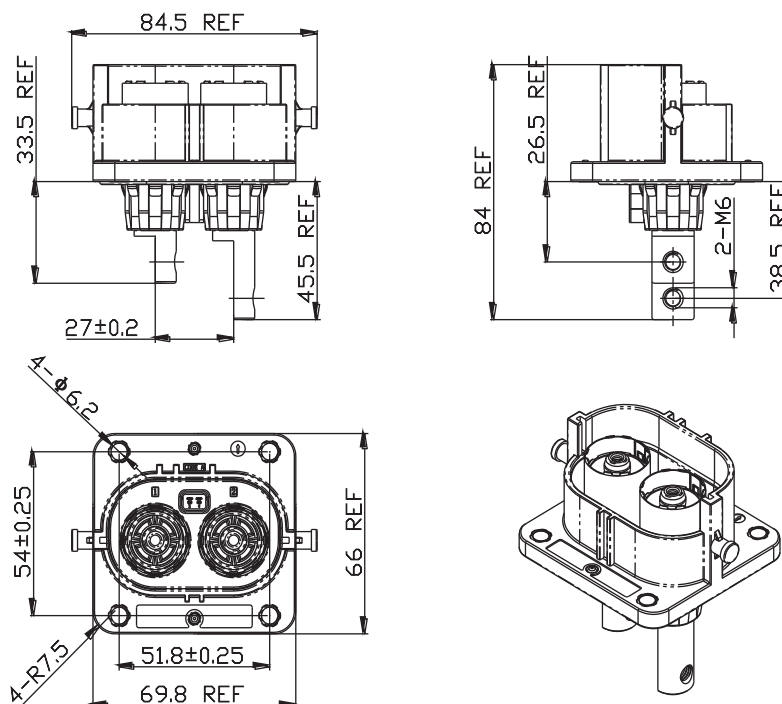
CODE C



## 2 POS jack T

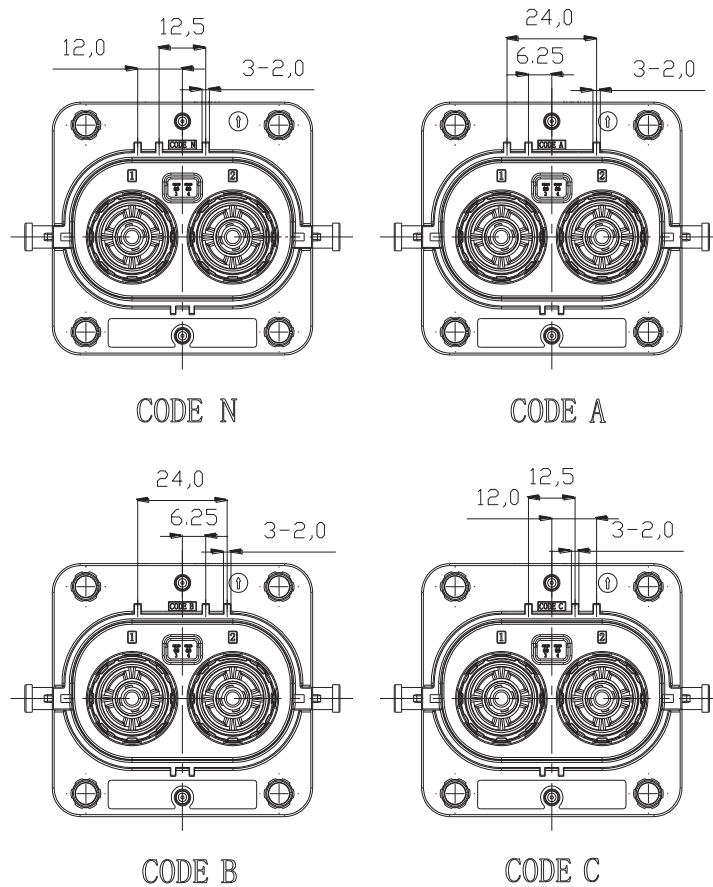


## 2 POS jack T1B



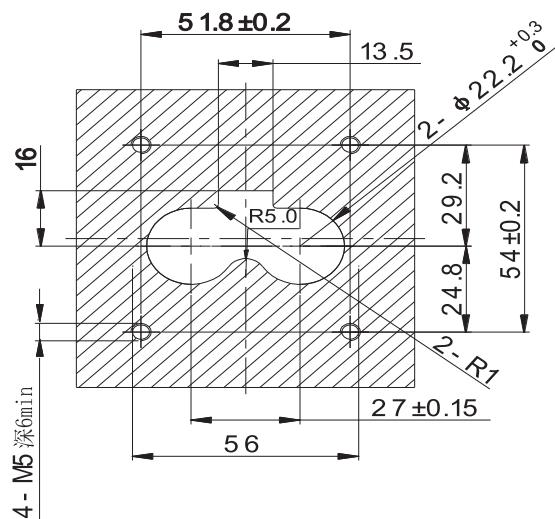


Instruction according to the key position of the socket.



### Mounting hole dimension

2 POSJack(mounting hole dimension when make mistake without panel)



### NOTE

1. In order to ensure IP68 protective performance, the roughness of the panel should not be less than 1.6mm, flatness 0.4mm, and the recommended panel thickness should not be less than 3mm.
2. The hole of 4-M5 thread should be blind.