

## 技术规格书A0/Technical Specification A0

### YGEV4-2pin系列连接器/YGEV4-2pin Series Electrical Connectors

#### • 产品概述/Product instruction

|   |  |
|---|--|
|  <p><b>应用场景/Application</b><br/>电动汽车配电系统、电机、电机控制器等部位。<br/>For use in electric vehicle power distribution systems, motors, motor controllers, and related components.</p> | <p><b>优势/Advantages</b></p> <ul style="list-style-type: none"> <li>✓ 该产品可实现 360 度全屏蔽;<br/>The product can achieve 360-degree full shielding;</li> <li>✓ 该产品具有延时高压互锁功能;<br/>The product has a delayed high voltage interlocking function;</li> <li>✓ 两端防呆键位采用不同组合实现防错插功能;<br/>The key positions at both ends adopt different combinations to realize the function of preventing wrong insertion;</li> <li>✓ 插头与插座的连接形式为拉杆锁紧;<br/>The plug and receptacle utilize a lever-actuated locking mechanism for connection.</li> <li>✓ 插头采用端子焊接。<br/>The plug uses terminal soldering.</li> </ul> |
|---|--|

#### • 订货信息/Ordering information

| 订货信息 (总成) /Ordering information(assembly)   |  |  |  |  |  |  |
|---|--|--|--|--|--|--|
| 键位/<br>Key position   | I  |  |  |  |  |  |
| 产品名称/<br>Product name   | YGEV4-S2PWHA 插头<br>YGEV4-S2PWHA plug<br>(35mm <sup>2</sup> ) | YGEV4-S2PWHA 插头<br>YGEV4-S2PWHA plug<br>(50mm <sup>2</sup> ) | YGEV4-S2PHA 插头<br>YGEV4-S2PHA plug<br>(35mm <sup>2</sup> ) | YGEV4-S2PHA 插头<br>YGEV4-S2PHA plug<br>(50mm <sup>2</sup> ) |  |  |
| 产品编号/<br>Product code   | 111000405874   | 111000405875   | 111000405919   | 111000405920   |  |  |
| 对插端名称/<br>Receptacle name   | YGEV4-P2RA1<br>插座<br>YGEV4-P2RA1<br>receptacle               | YGEV4-P2RA2<br>插座<br>YGEV4-P2RA2<br>receptacle               | YGEV4-P2RA4<br>插座<br>YGEV4-P2RA4<br>receptacle             | YGEV4-P2RA5<br>插座<br>YGEV4-P2RA5<br>receptacle             | YGEV4-P2RA6<br>插座<br>YGEV4-P2RA6<br>receptacle | YGEV4-P2RA7<br>插座<br>YGEV4-P2RA7<br>receptacle |
| 对插端编号/<br>Receptacle code   | 111000100596   | 111000100597   | 111000502903   | 111000503391   | 111000100728                                   | 111000100731                                   |
| 注: 所有型号插头均可与所有型号插座对插适配<br>Note: All types of plugs can be mated and adapted with all types of receptacles.. |  |  |  |  |  |  |

### 1. 插头屏蔽产品物料清单/Bill of materials for shielded plugs :

| 总成/Assembly   |              | 订货信息 (零部件明细, 可单独采购) /Ordering information (parts details, can be purchased separately) |                       |            |   |   |
|---|--------------|--|-----------------------|------------|---|---|
|   |              | 产品名称/<br>Product name  | 产品编码/<br>Product code | 数量/<br>Qty | 接线规格/<br>Wiring specification                   | 图示 (参考) /<br>Diagram (for reference)  |
| YGEV4-S2PWHA 插头/<br>YGEV4-S2PWHA plug(35mm <sup>2</sup> ) | 111000405874 | YGEV4-S2PWHA 插头组件<br>YGEV4-S2PWHA plug assembly  | 112010105663          | 1          | 35mm <sup>2</sup><br>(LV216)<br>Φ14.1±<br>0.3mm |    |
|   |              | YGEV4WA-1 绝缘体 1<br>YGEV4WA-1 insulator 1   | 114060103317          | 2          |   |    |
|   |              | YGEV4WA-1 绝缘体 2<br>YGEV4WA-1 insulator 2   | 114060103318          | 2          |   |    |
|   |              | YGEV4WA 屏蔽环-外-35<br>YGEV4WA shielding ring - external- 35                              | 114022600423          | 2          |   |    |
|   |              | YGEV4WA 屏蔽环-内-35<br>YGEV4WA shielding ring - inner - 35                                | 114022600422          | 2          |   |    |
|   |              | YGEV4WA 屏蔽件<br>YGEV4WA shielding   | 114022600412          | 2          |   |   |
|   |              | 18×2 插孔<br>18×2 socket   | 114020101218          | 2          |   |  |
|   |              | φ14.8 尾盖组件(黑)<br>φ14.8 rear assembly (black)   | 113990001498          | 2          |   |  |
| YGEV4-S2PWHA 插头/<br>YGEV4-S2PWHA plug(50mm <sup>2</sup> ) | 111000405875 | YGEV4-S2PWHA 插头组件<br>YGEV4-S2PWHA plug assembly  | 112010105663          | 1          | 50mm <sup>2</sup><br>(LV216)<br>Φ15.5±<br>0.3mm |  |
|   |              | YGEV4WA-1 绝缘体 1<br>YGEV4WA-1 insulator 1   | 114060103317          | 2          |   |  |
|   |              | YGEV4WA-1 绝缘体 2<br>YGEV4WA-1 insulator 2   | 114060103318          | 2          |   |  |
|   |              | YGEV4WA 屏蔽环 2<br>YGEV4WA shielding ring 2  | 114022600406          | 2          |   |  |
|   |              | YGEV4WA 屏蔽环 1<br>YGEV4WA shielding ring 1  | 114022600405          | 2          |   |  |
|   |              | YGEV4WA 屏蔽件<br>YGEV4WA shielding   | 114022600412          | 2          |   |  |
|   |              | 18×2 插孔<br>18×2 socket   | 114020101218          | 2          |   |  |

|  |  |  |                       |            |                                     |   |
|--|--|--|-----------------------|------------|-------------------------------------|---|
|  |  | φ16.2 尾盖组件(黑)<br>φ16.2 rear cover(black)                 | 113069800540          | 2          |                                     |    |
| 总成/Assembly                                | 订货信息 (零部件明细, 可单独采购) /Ordering information (parts details, can be purchased separately) |  |                       |            |                                     |   |
|  |  | 产品名称/<br>Product name                                    | 产品编码/<br>Product code | 数量/<br>Qty | 接线规格/<br>Wiring specification       | 图示 (参考) /<br>Diagram (for reference)  |
| YGEV4-S2PHA 插头/<br>YGEV4-S2PHA plug(35mm²) | 111000405919   | YGEV4-S2PHA 插头组件<br>YGEV4-S2PHA plug assembly            | 112010106424          | 1          | 35mm²<br>(LV216)<br>Φ14.1±<br>0.3mm |    |
|  |  | 18×2 插孔<br>18×2 socket                                   | 113020602021          | 2          |                                     |    |
|  |  | YGEV4A-1 绝缘体组件<br>YGEV4A-1 insulator assembly            | 113990001888          | 2          |                                     |    |
|  |  | YGEV4A 屏蔽环-内-35<br>YGEV4A shielding ring - inner - 35    | 114029801976          | 2          |                                     |    |
|  |  | YGEV4A 屏蔽环-外-35<br>YGEV4A shielding ring - external - 35 | 114029801999          | 2          |                                     |   |
|  |  | φ14.8 尾盖组件(黑)<br>Φ14.8 rear cover(black)                 | 13990001498           | 2          |                                     |  |
| YGEV4-S2PHA 插头/<br>YGEV4-S2PHA plug(50mm²) | 111000405920   | YGEV4-S2PHA 插头组件<br>YGEV4-S2PHA plug assembly            | 112010106424          | 1          | 50mm²<br>(LV216)<br>Φ15.5±<br>0.3mm |  |
|  |  | 18×2 插孔<br>18×2 socket                                   | 113020602021          | 2          |                                     |  |
|  |  | YGEV4A-1 绝缘体组件<br>YGEV4A-1 insulator assembly            | 113990001888          | 2          |                                     |  |
|  |  | YGEV4A 屏蔽环-内-50<br>YGEV4A shielding ring - inner - 50    | 114029801975          | 2          |                                     |  |
|  |  | YGEV4A 屏蔽环-外-50<br>YGEV4A shielding ring - external - 50 | 114029802000          | 2          |                                     |  |
|  |  | φ16.2 尾盖组件(黑)<br>φ16.2 rear cover(black)                 | 113069800540          | 2          |                                     |  |

## 2.插座屏蔽产品物料清单/Bill of materials for receptacle shielding products:

|             |  |       |     |       |           |
|-------------|--|-------|-----|-------|-----------|
| 总成/Assembly | 订货信息 (零部件明细, 可单独采购) /Ordering information (parts details, can be purchased separately) |       |     |       |           |
|             | 产品名称/  | 产品编码/ | 数量/ | 接线规格/ | 图示 (参考) / |

|   |                  | Product name   | Product code     | Qty | Wiring specification                        | Diagram (for reference) |
|---|------------------|--|------------------|-----|---|-------------------------|
| YGEV4-P2RA1<br>插座/<br>YGEV4-P2RA1<br>receptacle | 111000100<br>596 | YGEV4-P2RA1 插座组件<br>YGEV4-P2RA1receptacle assembly   | 1120201064<br>45 | 1   | Φ1.2-1.3<br>(0.25-<br>0.35mm <sup>2</sup> ) |                         |
|   |                  | 0.63×0.63 插针<br>0.63×0.63 pin                        | 5010214002<br>15 | 2   |   |                         |
|   |                  | YGEV4 插座防护盖-P<br>YGEV4 receptacle protective cover-P | 1140698060<br>99 | 1   |   |                         |
|   |                  | YGEV4-P2RA2 插座组件<br>YGEV4-P2RA2 receptacle assembly  | 1120201064<br>46 | 1   |   |                         |
| YGEV4-P2RA2<br>插座/<br>YGEV4-P2RA2<br>receptacle | 111000100<br>597 | 0.63×0.63 插针<br>0.63×0.63 pin                        | 5010214002<br>15 | 2   | Φ1.2-1.3<br>(0.25-<br>0.35mm <sup>2</sup> ) |                         |
|   |                  | YGEV4 插座防护盖-P<br>YGEV4 receptacle protective cover-P | 1140698060<br>99 | 1   |   |                         |
|   |                  | YGEV4-P2RA4 插座组件<br>YGEV4-P2RA receptacle assembly   | 1120201071<br>77 | 1   |   |                         |
|   |                  | 0.63×0.63 插针<br>0.63×0.63 pin                        | 5010214002<br>15 | 2   |   |                         |
| YGEV4-P2RA4<br>插座/<br>YGEV4-P2RA4<br>receptacle | 111000502<br>903 | YGEV4 插座防护盖-P<br>YGEV4 receptacle protective cover-P | 1140698060<br>99 | 1   | Φ1.2-1.3<br>(0.25-<br>0.35mm <sup>2</sup> ) |                         |
|   |                  | YGEV4A4 密封件<br>YGEV4A4 seal                          | 1140505019<br>13 | 1   |   |                         |
|   |                  | YGEV4-P2RA5 插座组件<br>YGEV4-P2RA5 receptacle assembly  | 1139900019<br>57 | 1   |   |                         |
|   |                  | 0.63×0.63 插针<br>0.63×0.63 pin                        | 5010214002<br>15 | 2   |   |                         |
| YGEV4-P2RA5<br>插座/<br>YGEV4-P2RA5<br>receptacle | 111000503<br>391 | YGEV4 插座防护盖-P<br>YGEV4 receptacle protective cover-P | 1140698060<br>99 | 1   | Φ1.2-1.3<br>(0.25-<br>0.35mm <sup>2</sup> ) |                         |
|   |                  | YGEV4-P2RA6 插座组件<br>YGEV4-P2RA6 receptacle assembly  | 1139900019<br>57 | 1   |   |                         |
|   |                  | 0.63×0.63 插针<br>0.63×0.63 pin                        | 5010214002<br>15 | 2   |   |                         |
| YGEV4-P2RA6<br>插座/<br>YGEV4-P2RA6<br>receptacle | 111000100<br>728 | YGEV4 插座防护盖-P<br>YGEV4 receptacle protective cover-P | 1140698060<br>99 | 1   | Φ1.2-1.3<br>(0.25-<br>0.35mm <sup>2</sup> ) |                         |
|   |                  | YGEV4-P2RA7 插座组件<br>YGEV4-P2RA7 receptacle assembly  | 1120201079<br>30 | 1   |   |                         |
|   |                  | 0.63×0.63 插针<br>0.63×0.63 pin                        | 5010214002<br>15 | 2   |   |                         |
| YGEV4-P2RA7<br>插座/<br>YGEV4-P2RA7<br>receptacle | 111000100<br>731 | YGEV4 插座防护盖-P<br>YGEV4 receptacle protective cover-P | 1140698060<br>99 | 1   | Φ1.2-1.3<br>(0.25-<br>0.35mm <sup>2</sup> ) |                         |

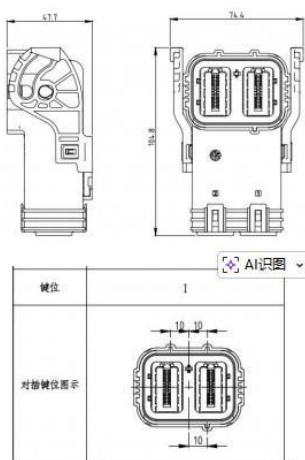
|  |  |
|--|--|
| 订货信息 (总成) /Ordering information (assembly) | 订货信息 (零部件明细, 可单独采购) /Ordering information (parts details, can be purchased separately) |
| 基本信息/Basic information                     |  |
| Pin 距/Pin distance                         | 24mm   |
| 芯数/Numbers of pins                         | 2  |
| 出线方向/Cable outlet direction                | 90°、180°   |

|   |   |
|---|---|
| 壳体材质/Shell material                       | 塑料/plastic  |
| 屏蔽功能/Shielding function                   | 是/yes   |
| 电气性能/Electrical properties                |   |
| 额定电压/Rated voltage                        | 1000V DC  |
| 额定电流/Rated current                        | 150A(35mm <sup>2</sup> )、220A(50mm <sup>2</sup> ) |
| 绝缘电阻/Insulation resistance                | ≥100MΩ  |
| 耐电压/Withstand voltage                     | 3000 V  |
| HVIL                                      | 是/yes   |
| 机械性能/Mechanical properties                |   |
| 振动/Vibration                              | USCAR V2  |
| 冲击/Shock                                  | USCAR V2  |
| 耐环境性能/Environmental resistance properties |   |
| 工作温度/Ambient temperature                  | -40°C ~ +125°C                                    |
| 相对湿度/Humidity range                       | 95% (40°C时/at 40 °C)                              |
| 盐雾/Salt spray                             | 96h   |
| 防护等级/IP rating                            | IPX8,IP6K9K                                       |
| 污染等级/Pollution level                      | 2   |
| 海拔要求/Altitude requirement                 | ≤5000m  |
| 材料/涂覆/外观/Material /Finish/Outline         |   |
| 壳体/Shell                                  | PA66  |
| 屏蔽/Shielding                              | 铜合金/copper alloy                                  |
| 标准及认证/Standard & Identification           |   |
| 阻燃等级/Flame retardant rating               | UL94 V-0(塑料/plastic)、HB(橡胶/rubber)                |
| 环保要求/Environmental requirements           | RoHS 2.0  |

## • 产品尺寸图及安装开孔尺寸/Product size & mounting hole dimension

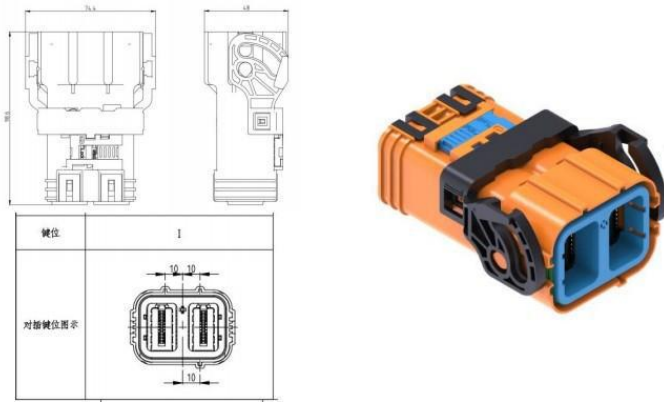
### 1.YGEV4-S2PW 系列插头总成外形(未注公差: ±0.5)

YGEV4-S2PW series plug assembly outline (unspecified tolerance: ±0.5)



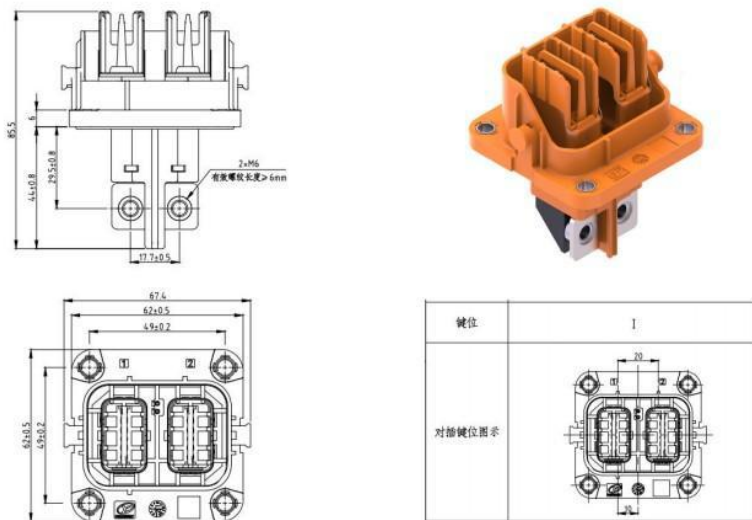
### 2.YGEV4-S2P 系列插头总成外形(未注公差: ±0.5)

YGEV4-S2P series plug assembly outline (unspecified tolerance: ±0.5)



### 3.YGEV4-P2RA1 系列插座总成外形(未注公差: $\pm 0.5$ )

YGEV4-P2RA1 series receptacle assembly outline (unspecified tolerance:  $\pm 0.5$ )

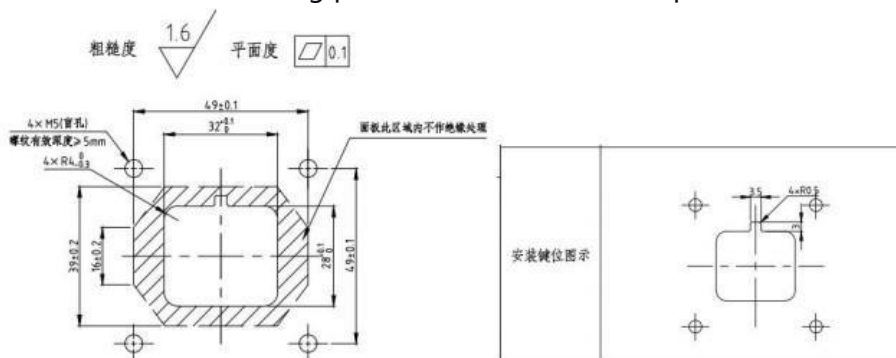


### YGEV4-P2RA1 系列插座安装开孔尺寸(未注公差: $\pm 0.1$ )

YGEV4-P2RA1 series receptacle mounting hole dimensions (unspecified tolerance:  $\pm 0.1$ )

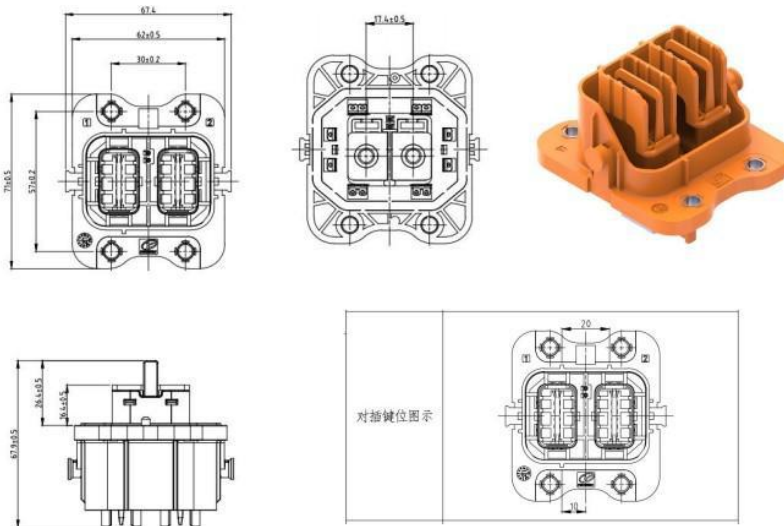
推荐安装面板尺寸:  $2\text{mm} \leq \text{面板厚度} \leq 5\text{mm}$

Recommended mounting panel dimensions:  $2\text{mm} \leq \text{panel thickness} \leq 5\text{mm}$ .



### 4.YGEV4-P2RA2 系列插座总成外形(未注公差: $\pm 0.5$ )

YGEV4-P2RA2 series receptacle assembly outline (unspecified tolerance:  $\pm 0.5$ )

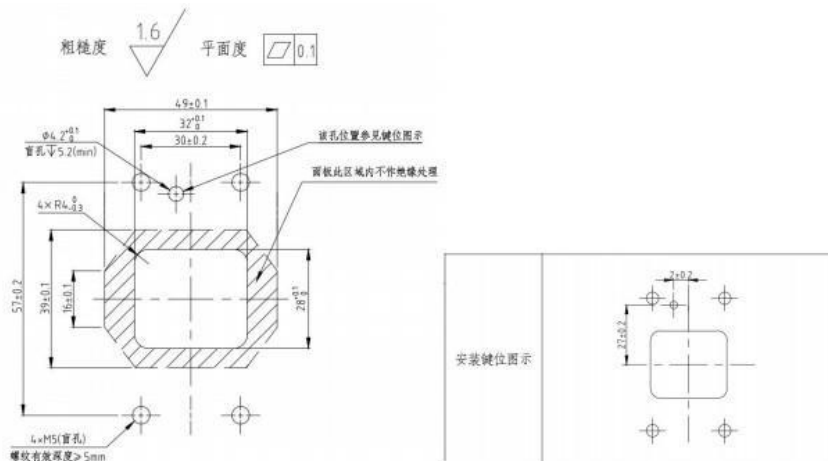


**YGEV4-P2RA2系列插座安装开孔尺寸(未注公差: ±0.1)**

**YGEV4-P2RA2 series receptacle mounting hole dimensions (unspecified tolerance: ±0.1)**

推荐安装面板尺寸: 2mm ≤ 面板厚度 ≤ 5mm

Recommended mounting panel dimensions: 2mm ≤ panel thickness ≤ 5mm.



**5.YGEV4-P2RA4 系列插座总成外形(未注公差: ±0.5)**

**YGEV4-P2RA4 Series receptacle assembly outline (unspecified tolerance: ±0.5)**

