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	Part NO.	/	Version	A3

# ESC-HP400 Energy storage connector


## Technical Specification

Edited by/Date     Keru Fei    2023.7.7

Audited by/Date     Jie Yao    2023.7.7

Approved by/Date     Hong Wu    2023.7.7

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Changes & Revisions

<input type="checkbox"/> Change <input type="checkbox"/> Revise	Date	Major items	Revised by	Approved by
<input type="checkbox"/> Change <input checked="" type="checkbox"/> Revise	2023.2.8	Adjust receptacle naming and add thread hole model	Keru Fei	Hong Wu
<input type="checkbox"/> Change <input checked="" type="checkbox"/> Revise	2023.3.10	Surface treatment adjustment	Keru Fei	Hong Wu
<input type="checkbox"/> Change <input checked="" type="checkbox"/> Revise	2023.7.7	Cancel IP2XB model, add 95mm <sup>2</sup> wiring specification model for plug	Keru Fei	Hong Wu

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## 1. 产品型号及编码 (Model and Order No)

类型 (Type)	序号 (No.)	产品型号 (Product Model)	产品编码 (Order No.)	端接形式 (Terminal Form)	备注 (Note)
插头 Plug	1	ESC-HP400-120-PY Plug	115010039401	120mm <sup>2</sup>	正极-橙色 Positive-Orange
	2	ESC-HP400-095-PY Plug	115010039402	95mm <sup>2</sup>	
	3	ESC-HP400-120-PB Plug	115010039601	120mm <sup>2</sup>	负极-黑色 Negative-Black
	4	ESC-HP400-095-PB Plug	115010039602	95mm <sup>2</sup>	
插座 Receptacle	1	ESC-HP400-081-RY Receptacle	112040106399	M8 Waist-shaped	正极-橙色 Positive-Orange
	2	ESC-HP400-082-RY Receptacle	115110034001	M8 Threaded hole	
	3	ESC-HP400-081-RB Receptacle	112040106410	M8 Waist-shaped	负极-黑色 Negative-Black
	4	ESC-HP400-082-RB Receptacle	115110034201	M8 Threaded hole	

## 2. 技术参数 (Specification)

### 2.1. 电气特性 (Electrical Characteristic):


芯数 Pins	1
端子规格 Terminal Specification	Φ14.5mm
额定电流 Rated Current	350A (95mm <sup>2</sup> ) / 400A (120mm <sup>2</sup> )
额定电压 Rated Voltage	1500V DC
耐电压 Voltage Proof	6800V AC 50Hz
接触电阻 Contact Resistance	≤0.2mΩ
绝缘电阻 Insulation Resistance	≥100MΩ
温升 Temperature Rise	≤45K

### 2.2. 机械特性 (Mechanical Characteristic):

机械寿命 Durability	≥100 Cycles
防护等级 Protection Class	IP67 (Mated)

### 2.3. 材料及表面处理 (Material and Finish):

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材料 Material	绝缘体 Insulator: 工程塑料 Engineering plastics 橡胶件 Rubber parts: 硅橡胶 Silicon rubber 接触件 Contact parts: 铜合金 Copper alloy
表面处理 Surface Treatment	镀银/镀锡 Silver/Tin
阻燃等级 Flame Rating	UL94 V0(Bulk Material)

#### 2.4. 工作环境(Environmental data):

工作温度 Operating Temperature	-40℃~+125℃
允许湿度 Relative Humidity	5%~95%
振动 Vibration/冲击 Shock	QC/T 1067.1-2017 Vibration Level VI

### 3. 物料简介(Introduction)


线缆规格 Cable specification	95mm <sup>2</sup> /120mm <sup>2</sup>
线缆外径 OD Cable Diameter OD	18.7±0.5mm/20.5±0.5mm
端接方式 Termination Method	插头 Plug: 双 B 型压接 Crimp Termination(Double “B”) 插座 Receptacle: 螺钉锁紧 M8 Thread Termination
安装方式 Installation Method	螺钉 (M4) Screw (M4)
安装扭矩 Installation Torque	2±0.2N•m
锁紧方式 Locking Method	锁扣锁紧 Spring Locking
防误插 Preventing Misinsertion	颜色防误 Color Preventing 机械防误 Mechanical Preventing

3.1. 执行标准(According To Standards): UL4128、QC/T 1067.1-2017

3.2. 环保信息(Environment Protect Data): RoHS 2.0

3.3. 安规信息(Security Authentication): TUV(PPP)、UL4128、CE

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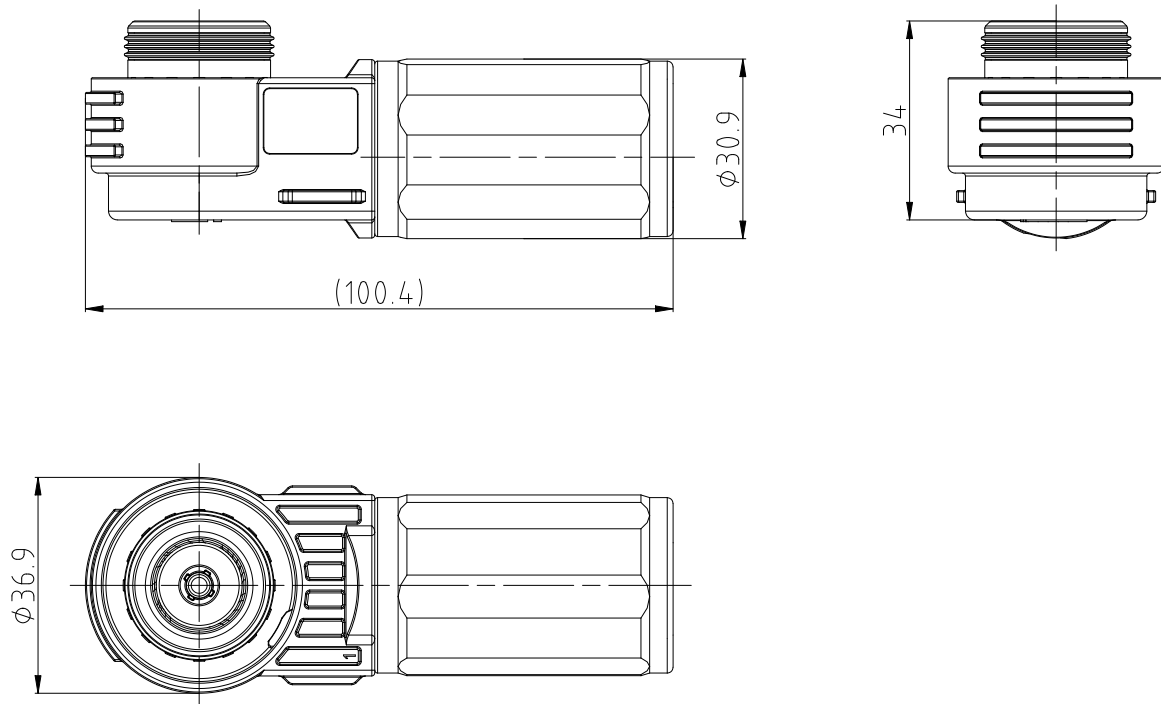
#### 4. 外形尺寸(Outline Dimension)

##### 4.1. 产品外形 Product Outline:




##### 4.2. 产品外形尺寸 Product Outline Dimension:

##### 4.2.1. 插头外形尺寸 Plug Outline Dimension

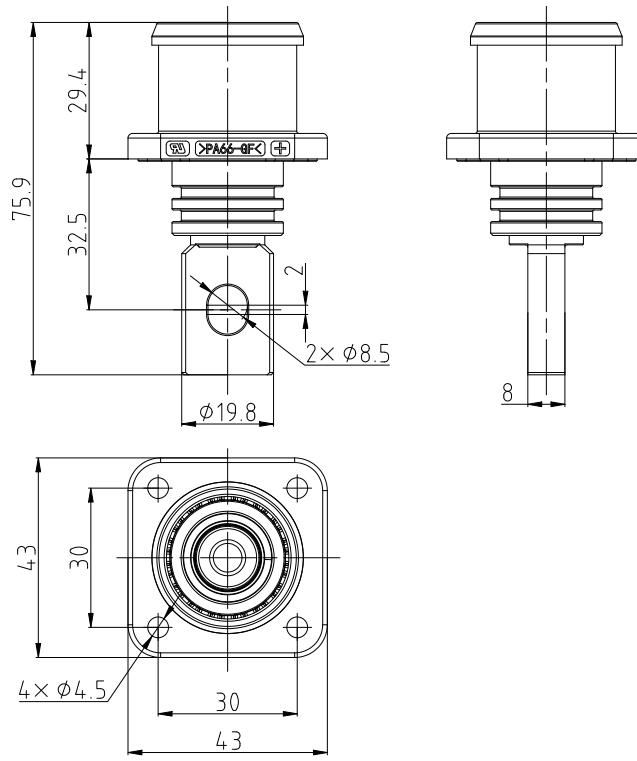


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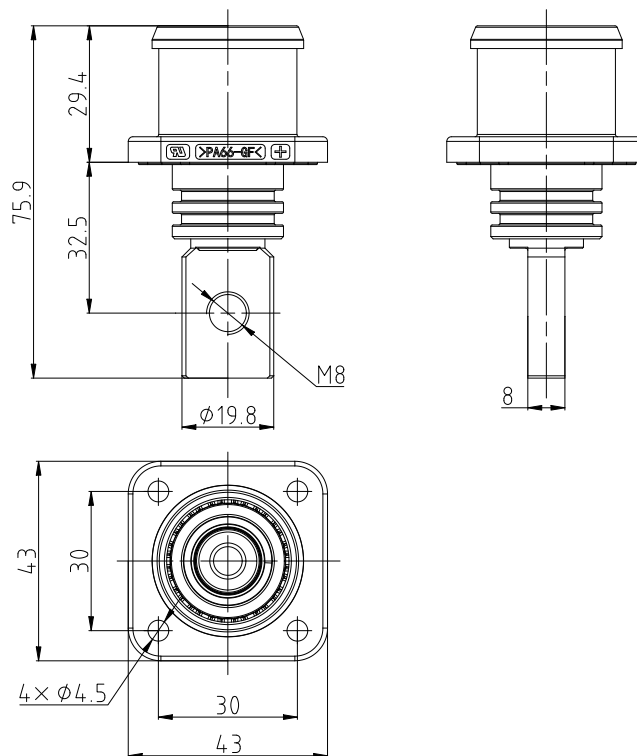
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#### 4.2.2. 插座外形尺寸 Receptacle Outline Dimension


##### 4.2.2.1. ESC-HP400-081 Series Receptacle (Take the positive electrode as an example)



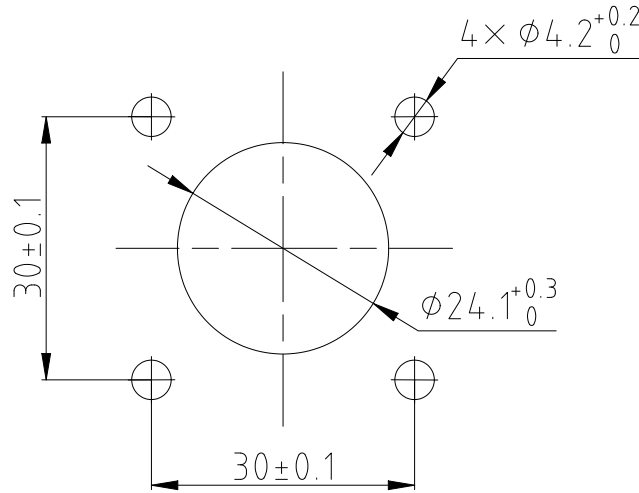
##### 4.2.2.2. ESC-HP400-082 Series Receptacle (Take the positive electrode as an example)



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#### 4.2.3. 安装开孔尺寸 Installing Holes Dimension



### 5. 说明及包装存储(Description and Packaging Storage)

5.1. 连接器应在提供的技术参数范围内使用，并严格遵照产品使用说明书，对产品进行安装、使用、维护。

Connectors should be used within the specification that provided,  
Install, use and maintain the products according to the documents.

5.2. 包装(Package): 防潮气泡袋及纸盒包装。

Packaging: moisture-proof bubble bag and carton.

5.3. 存储要求(Storage Spec):

包装成箱的产品应在环境温度 $-10^{\circ}\text{C} \sim +40^{\circ}\text{C}$ ，相对湿度80%以下，周围空气中无酸性，碱性或其它腐蚀性气体的库房里贮存，贮存期自生产日期不超过两年。

The packaged products shall be stored in the warehouse within the temperature of  $-10^{\circ}\text{C} \sim +40^{\circ}\text{C}$ , relative humidity less than 80%, and no acid, alkaline or other corrosive gases in the surrounding air. The storage period shall not exceed two years from the production date.

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