

## 技术规格书A3/Technical Specification A3

### ESC-HPB120连接器 / ESC-HPB120 Connector

#### • 产品概述/Product instruction

 <p><b>应用场景/Application</b></p> <p>主要应用于箱式大储能、工商业储能、户用储能等领域，为储能系统的电池PACK、PCS等器件提供功率传输。</p> <p>Primarily used in fields such as large containerized energy storage, commercial &amp; industrial energy storage, and residential energy storage, providing power transmission for components like battery PACKs and PCS within the energy storage system.</p>	<p><b>优势/Advantages</b></p> <ul style="list-style-type: none"> <li>✓ 插合后可360°旋转，释放线缆应力 Allows 360° rotation after mating to provide cable strain relief.</li> <li>✓ 二次锁防止意外松脱 The secondary lock prevents accidental loosening.</li> <li>✓ 颜色/键位防呆 Color coding and keying for mis-mating prevention.</li> <li>✓ 一体式弯式端子，避免转接不良 One-piece angled terminal to prevent poor connections</li> </ul>
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#### • 订货信息/Ordering information

序号/ No.	产品名称/ Product name	产品编号/ Product code	颜色/ Color	线规/ Cable specification	备注/ Remarks
1	ESC-HPB120-025-PY 插头 ESC-HPB120-025-PY plug	115010064001	橙色/ Orange	25mm <sup>2</sup>	产品尺寸图及头座对插键位图详情见：产品尺寸图及安装开孔尺寸处/ For detailed product dimension drawings and plug-receptacle mating keying diagrams, please refer to: Product Dimension Drawings and Mounting Hole Dimensions
2	ESC-HPB120-025-PB 插头 ESC-HPB120-025-PB plug	115010064002	黑色/ Black		
3	ESC-HPB120-035-PY 插头 ESC-HPB120-035-PY plug	115010063601	橙色/ Orange	35mm <sup>2</sup>	
4	ESC-HPB120-035-PB 插头 ESC-HPB120-035-PB plug	115010063602	黑色/ Black		
5	ESC-HPB120-062-RY 插座 ESC-HPB120-062-RY receptacle	112040108817	橙色/ Orange	M6 螺纹孔/ M6 threaded hole	
6	ESC-HPB120-062-RB 插座 ESC-HPB120-062-RB receptacle	112040108818	黑色/ Black		

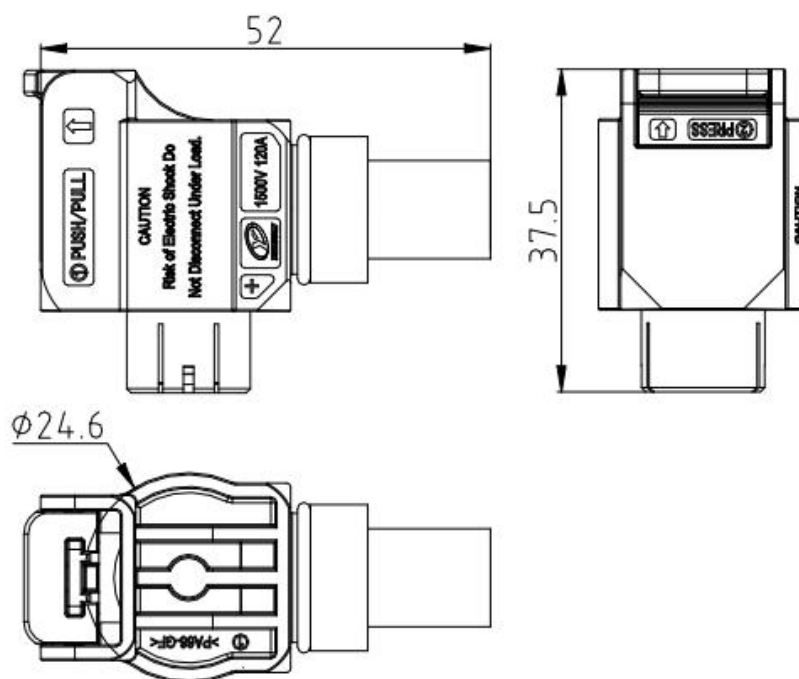
## • 技术数据/Technical data

基本信息/Basic information	
芯数/Numbers of pins	1
端子规格/Terminal specifications	Φ5.75
电气性能/Electrical specification	
额定电压/Rated voltage	1500V DC
额定电流/Rated current	120A
绝缘电阻/Insulation resistance	≥100MΩ
耐电压/Withstand voltage	6800V AC 50Hz
接触电阻 /Contact resistance	≤0.2mΩ
温升/Temperature rise	≤45K
端接方式 /Termination method	
端接方式/Termination method	插头：六方压接 插座：M6 螺钉锁紧 扭矩 5N•m-5.5N•m/ Plug: Hexagonal crimp Receptacle: M6 threaded locking, torque 5 N•m - 5.5 N•m
线缆规格/Cable specifications	10mm <sup>2</sup> /16mm <sup>2</sup> /25mm <sup>2</sup> /35mm <sup>2</sup>
线缆外径 OD/Cable outer diameter	6.7±0.2mm/ 8.1±0.2mm/ 10.2±0.2mm/ 11.5±0.2mm
机械性能/Mechanical specification	
机械寿命/Life cycle	≥100 次/cycles
振动/冲击 /Vibration and shock	QC/T 1067.1-2017 Vibration level V1
耐环境性能/Environmental resistance specification	
工作温度/Ambient temperature	-40°C ~ +125°C
相对湿度/Humidity range	5% ~ 95%
盐雾/Salt spray	96 H
防护等级/IP rating	IP67(对插后) / IP67(after mating)
材料/涂覆/外观/Materials/Finish/Outline	
绝缘体/Insulator	工程塑料/ Engineering plastic
橡胶件/Rubber part	硅橡胶/Silicone rubber
接触件 /Contacts	铜合金 镀银 / Copper alloy Silver-plated
标准及认证/Standards and certifications	
阻燃等级/Flame retardant rating	UL94 V0 (主体材料/ UL94 V0 (Main material )
环保要求/Environment requirements	RoHS 2.0
产品认证/certification	TUV、CE
参考标准 /Reference standard	UL4128、QC/T 1067.1-2017

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

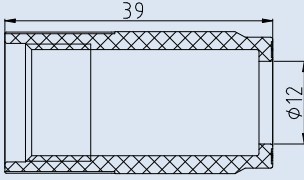
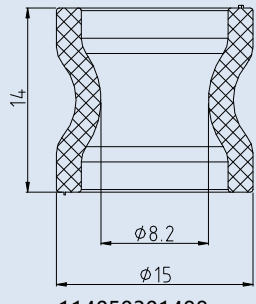
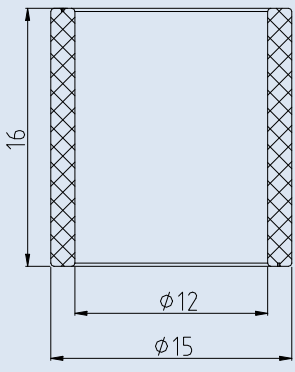
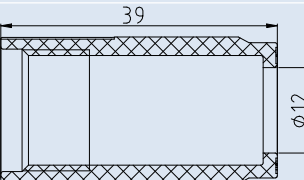
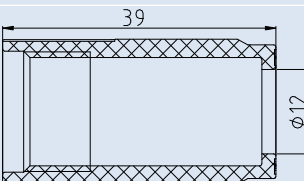
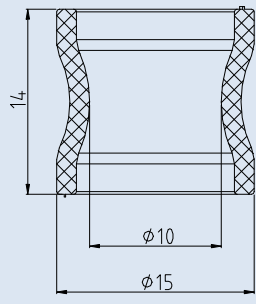
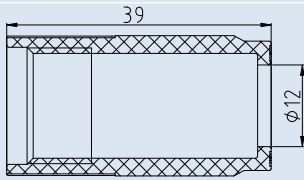
### 插头外形尺寸

#### Plug outline dimension:



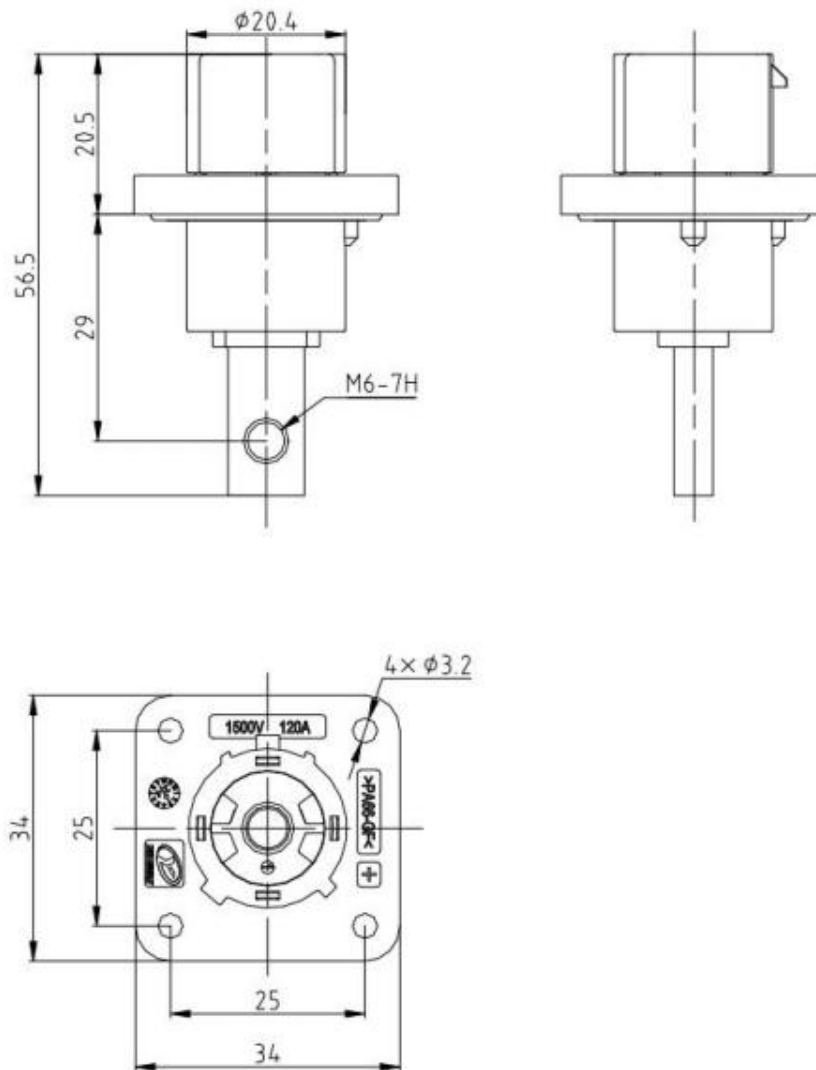
**插头配套发货零件尺寸:**

**Dimensions of parts shipped with plug:**

订货信息/ Ordering information	配套信息/ Supporting information		
产品名称/产品编号 Product name/Product number	M15 尾螺母 M15 Tail nut	封线体 Cable seal	Φ12 尾盖(黑)/ Φ12 Tail cover (black)
ESC-HPB120-025-PY 插头/ ESC-HPB120-025-PY plug 115010064001	 <p>114069806329(橙色/Orange)</p>	 <p>114050301488</p>	 <p>114069806331</p>
ESC-HPB120-025-PB 插头/ ESC-HPB120-025-PB plug 115010064002	 <p>114069806330(黑色/Black)</p>		
ESC-HPB120-035-PY 插头/ ESC-HPB120-035-PY plug 115010063601	 <p>114069806329(橙色/Orange)</p>	 <p>114050301482</p>	
ESC-HPB120-035-PB 插头/ ESC-HPB120-035-PB plug 115010063602	 <p>114069806330(黑色/Black)</p>		

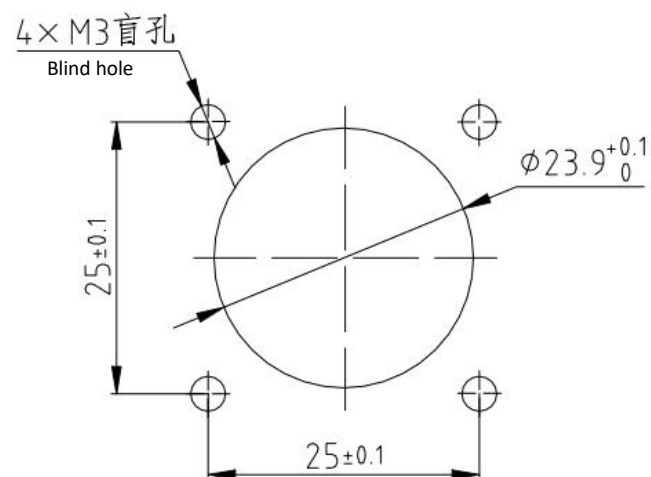
**插座外形尺寸:**

**Receptacle outline dimension:**



**安装开孔尺寸:**

**Mounting hole dimension:**



## • 包装/储存/使用/Packaging/Storage/Usage

包装储存说明 /Instructions for packaging and storage	
包装方式/ Packaging method	纸箱包装, 防潮处理. Carton packaging, moisture-proof treatment
存放要求/ Storage requirements	包装成箱的产品应在环境温度-10°C ~ +40°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 1 年, 注意尾数使用后请及时封存。 Products packed in boxes should be stored in a warehouse with an ambient temperature of -10°C ~ +40°C, a relative humidity of less than 80%, and no acidic, alkaline or other corrosive gases in the surrounding air. The storage period shall not exceed 1 year from the date of production. Please note that the remaining products should be sealed in time after use.
使用说明/ Instructions for use	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 provided technical parameter range and strictly in accordance with the product instruction manual for installation, use, and maintenance of the product.