

技术规格书A8/Technical Specification A8

ESC-HP120连接器/ESC-HP120 Connector

• 产品概述/Product instruction

 <p>应用场景/Application</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 & industrial energy storage, and residential energy storage, providing power transmission for components like battery PACK and PCS within the energy storage system.</p>	<p>优势/Advantages</p> <ul style="list-style-type: none"> ✓ 可 360°旋转对插，释放线缆应力 360° rotatable mating to release cable stress. ✓ 颜色/键位防呆 Color/key position error-proofing. ✓ 一体式弯式端子，避免转接不良 One-piece right-angle terminal to prevent poor connections.
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• 订货信息/Ordering information

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-HP120-016-PB 插头/ ESC-HP120-016-PB plug	111000405145	黑色 / Black	16mm ²	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 key position diagrams, please refer to: Product dimension drawings & Mounting hole dimensions
2	ESC-HP120-016-PY 插头/ ESC-HP120-016-PY plug	111000405106	橙色 / Orange		
3	ESC-HP120-025-PB 插头/ ESC-HP120-025-PB plug	111000405148	黑色 / Black	25mm ²	
4	ESC-HP120-025-PY 插头/ ESC-HP120-025-PY plug	111000405150	橙色 / Orange		
5	ESC-HP120-051-RB 插座/ ESC-HP120-051-RB receptacle	111000502630	黑色 / Black	M5 通孔/ M5 through hole	
6	ESC-HP120-051-RY 插座/ ESC-HP120-051-RY receptacle	111000502632	橙色 / Orange		
7	ESC-HP120-052-RB 插座/ ESC-HP120-052-RB receptacle	111000502633	黑色 / Black	M5 螺纹孔/ M5 threaded hole	
8	ESC-HP120-052-RY 插座/ ESC-HP120-052-RY receptacle	111000502635	橙色 / Orange		

9	ESC-HP120-052-RB 插座(带防尘帽)/ ESC-HP120-052-RB receptacle (with dust cap)	111000502811	黑色 / Black		
10	ESC-HP120-052-RY 插座(带防尘帽)/ ESC-HP120-052-RY receptacle (with dust cap)	111000502810	橙色 / Orange		

• 可选配套零件 Optional accessories

可选配套零件/Optional accessories					
序号/ No.	产品名称/ Product name	产品编号/ Product code	颜色/ Color	尺寸示意图/ Dimension diagram	安装示意/ Installation diagram
1	ESC-HP120(FPECD20-20)防尘帽(红)/ ESC-HP120(FPECD20-20) dust cap (red)	501021705762	红色/ Red		

• 技术数据/Technical data

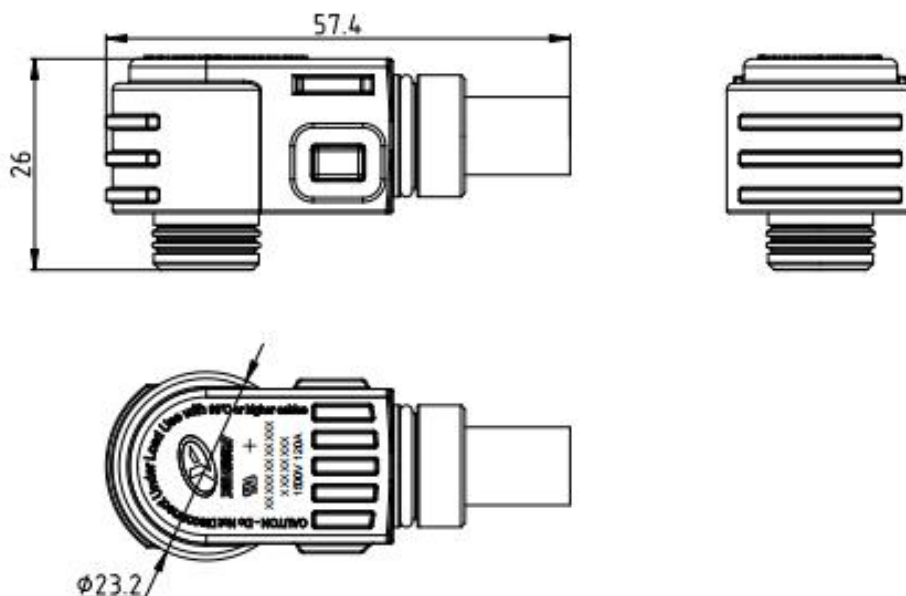
基本信息/Basic information	
芯数/Numbers of pins	1
端子规格/Terminal specifications	Φ5.75
电气性能/Electrical specification	
额定电压/Rated voltage	1500V DC
额定电流/Rated current	80A(16mm ²)/120A(25mm ²)
绝缘电阻/Insulation resistance	≥100MΩ
耐电压/Withstand voltage	6800V AC 50Hz
接触电阻/Contact resistance	≤0.5mΩ
温升/Temperature rise	≤45K
端接方式 /Termination method	
端接方式/Termination method	插头: 双 B 型压接或六方压接/ Plug: Double B-type crimp or hexagonal crimp 插座: M5 螺钉锁紧 扭矩 3N•m-3.5N•m/ Receptacle: Threaded locking M5, Torque 3N•m-5N•m
安装方式/Installation method	螺钉 (M3) 扭矩 0.6~0.8N•m Screw (M3) Torque 0.6~0.8 N•m
线缆规格/Cable specifications	16mm ² / 4AWG/ 25mm ²
线缆外径 OD/Cable outer diameter	8.1±0.2mm/10.2±0.3mm/10.2±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℃ ~ +125℃
相对湿度/Humidity range	5% ~ 95%
盐雾/Salt spray	96 H

防护等级/IP rating	IP67(对插后/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/锡 Copper alloy Silver-plated/Tin-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/Product certification	CE、UL4128
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

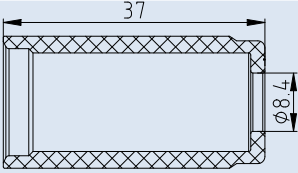
插头外形尺寸:

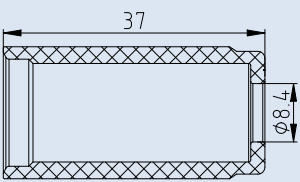
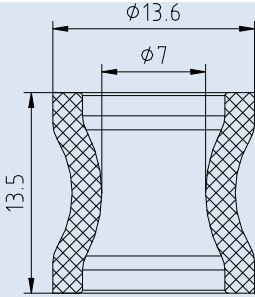
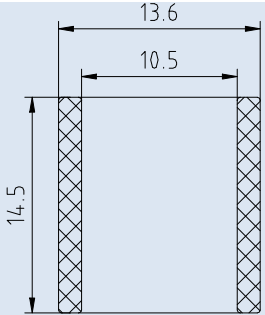
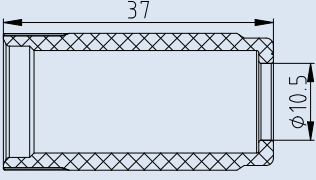
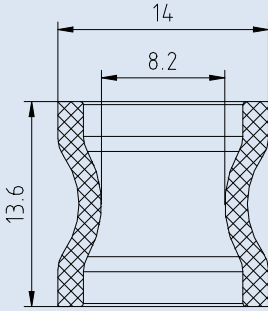
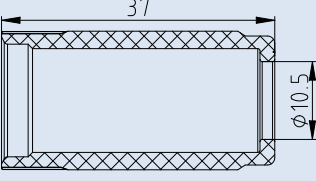
Plug outline dimensions:



插头配套发货零件尺寸:

Plug accessory and dimensions

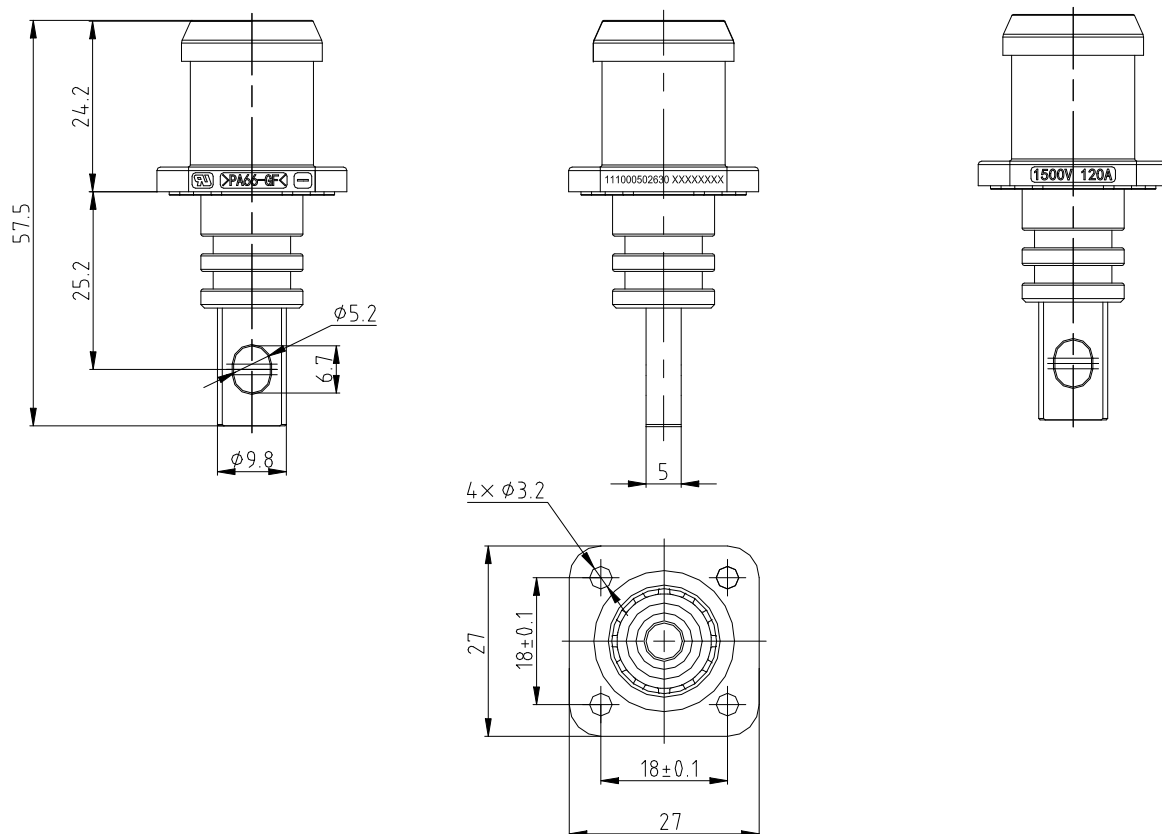
订货信息/ Ordering information	配套信息/ Supporting information		
产品名称/产品编号 Product name/Product number	M15 尾螺母 M15 Tail nut	封线体 Cable seal	Φ10.5 尾盖(黑)/ Φ10.5 Tail cover (black)
ESC-HP120-016-PB 插头/ ESC-HP120-016-PB plug 111000405145	 114069805194(黑色/Black)		

<p>ESC-HP120-016-PY 插头/ ESC-HP120-016-PY plug 111000405106</p>	 <p>114069805216(橙色/Orange)</p>	 <p>114050501699</p>	 <p>114069805187</p>
<p>ESC-HP120-025-PB 插头/ ESC-HP120-025-PB plug 111000405148</p>	 <p>114069805193(黑色/Black)</p>	 <p>114050501648</p>	
<p>ESC-HP120-025-PY 插头/ ESC-HP120-025-PY plug 111000405150</p>	 <p>114069805190(橙色/Orange)</p>		

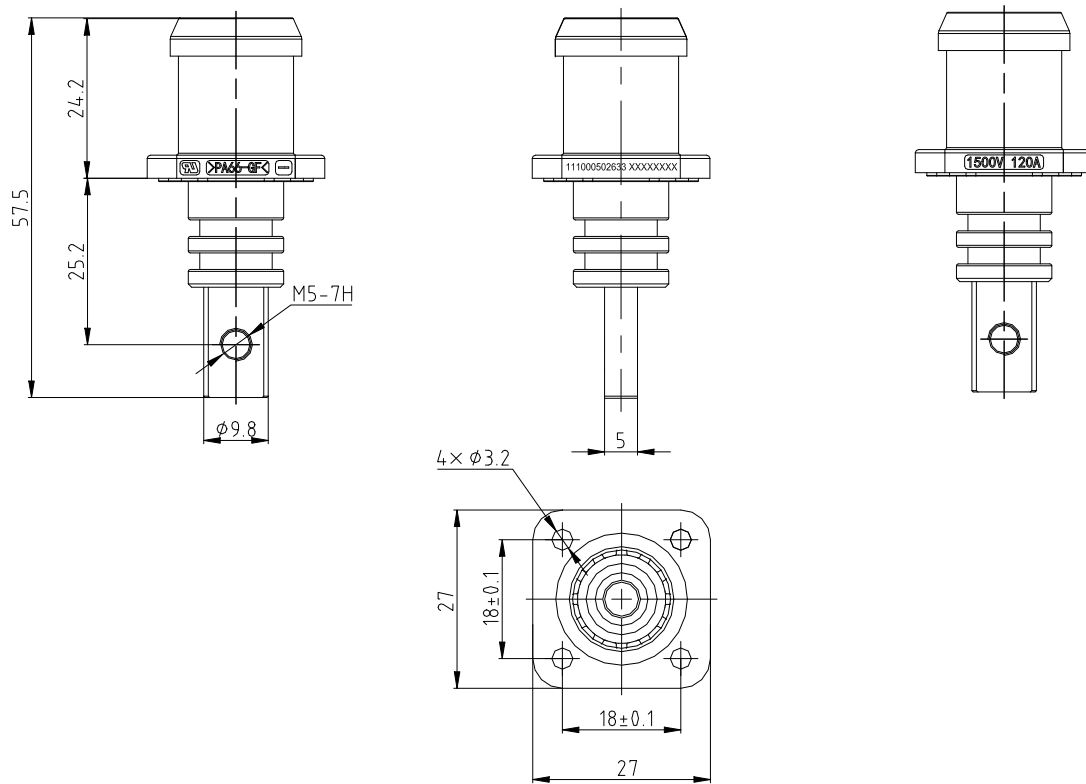
插座外形尺寸:

Receptacle outline dimension:

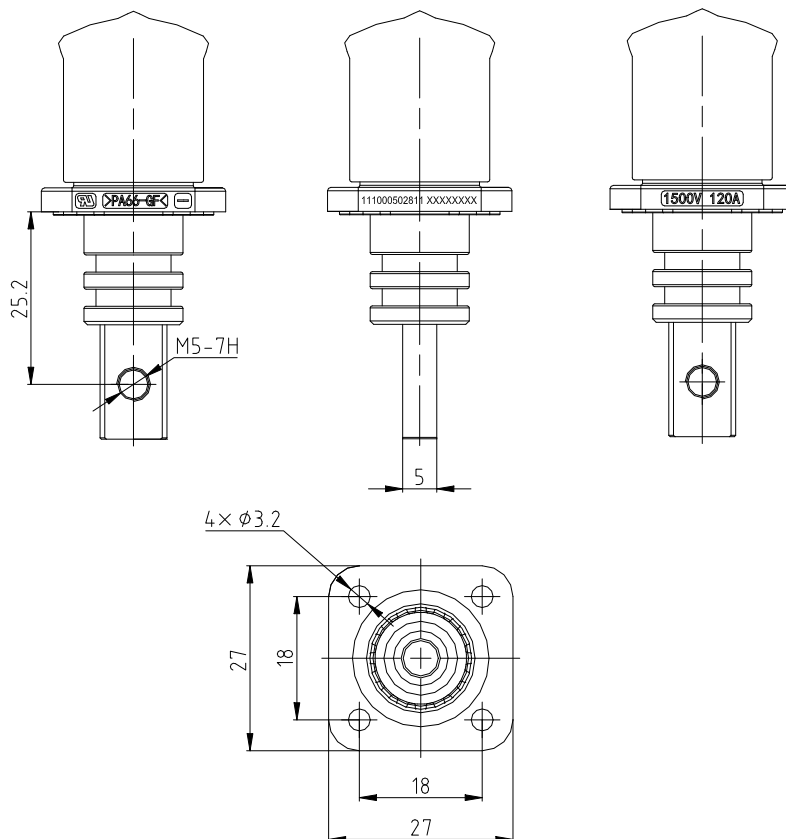
(1).ESC-HP120-051 插座系列
ESC-HP120-051 receptacle series



(2).ESC-HP120-052 插座系列
ESC-HP120-052 receptacle series

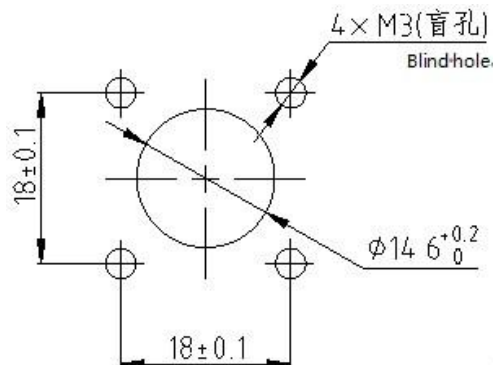


(3).ESC-HP120-052 插座带防尘帽系列
ESC-HP120-052 receptacle with dust cap



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.