

技术规格书B0/Technical Specification B0

ESC-HPB300连接器/ESC-HPB300 Connector

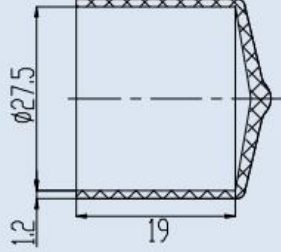
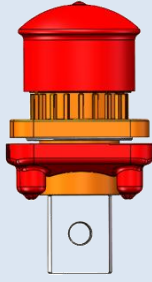
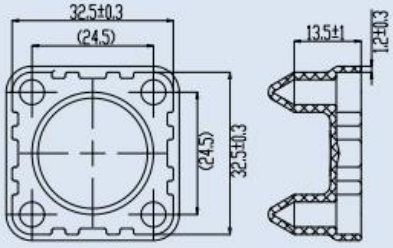
• 产品概述/Product instruction

 <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 ✓ 二次锁防止意外松脱 Secondary lock prevents accidental disconnection loosening. ✓ 颜色/键位防呆 Color/key position error-proofing
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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	对插键位/ Mating key position	线规/ Cable specification	备注/ Remarks
1	ESC-HPB300-050-PY 插头/ ESC-HPB300-050-PY plug	112030107648	橙色 / Orange	40°	50mm ²	产品尺寸图及键位图 详情见：产品尺寸图 及安装开孔尺寸处/ or detailed product dimension drawings and key position diagrams, please refer to: Product dimension drawings & Mounting hole dimensions
2	ESC-HPB300-050-PB 插头/ ESC-HPB300-050-PB plug	112030107647	黑色 / Black	70°		
3	ESC-HPB300-070-PY 插头/ ESC-HPB300-070-PY plug	112030107412	橙色 / Orange	40°	70mm ²	
4	ESC-HPB300-070-PB 插头/ ESC-HPB300-070-PB plug	112030107411	黑色 / Black	70°		
5	ESC-HPB300-095-PY 插头/ ESC-HPB300-095-PY plug	112030107414	橙色 / Orange	40°	95mm ²	
6	ESC-HPB300-095-PB 插头/ ESC-HPB300-095-PB plug	112030107413	黑色 / Black	70°		
7	ESC-HPB300-082-RY 插座/ ESC-HPB300-082-RY receptacle	112040107682	橙色 / Orange	40°	M8 螺纹孔/ M8 threaded hole	
8	ESC-HPB300-082-RB 插座/ ESC-HPB300-082-RB receptacle	112040107681	黑色 / Black	70°		

• 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	FPEC27.5-19(1.2)防尘盖(红)/ FPEC27.5-19(1.2) dust cover (red)	501021706323	红色/ Red		
2	FPECF32.5-32.5-13.5(1.2)护套(红)/ FPECF32.5-32.5-13.5(1.2) sheath (red)	501021300722	红色/ Red		

• 技术数据/Technical data

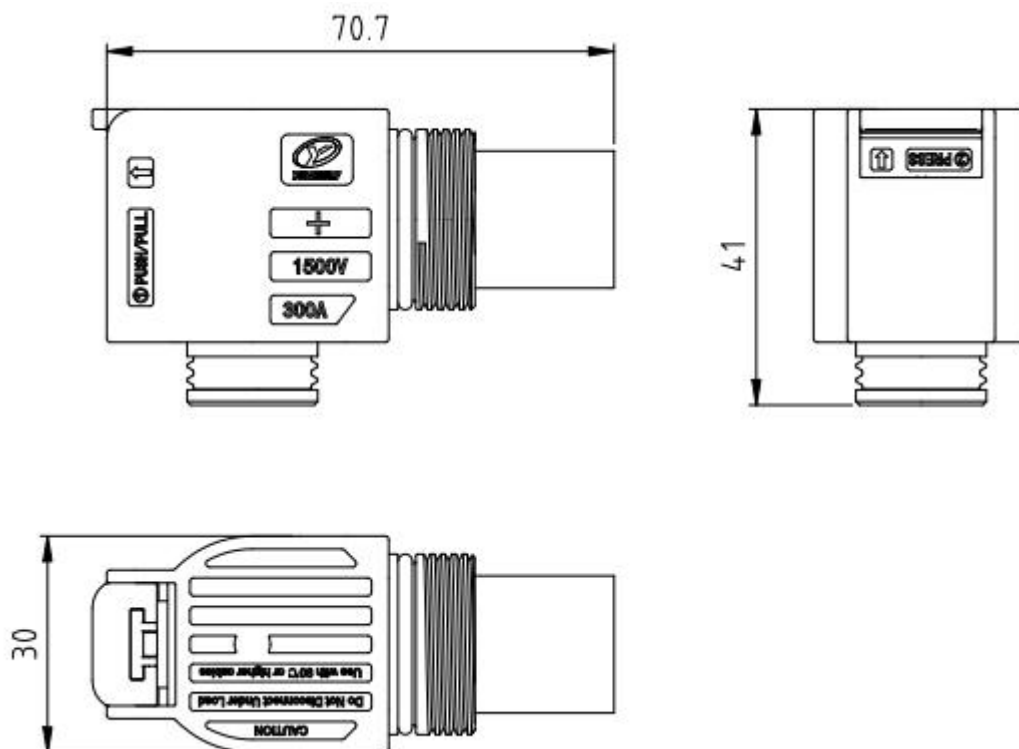
基本信息/Basic information	
芯数/Numbers of pins	1
端子规格/Terminal specifications	φ10.5mm
电气性能/Electrical specification	
额定电压/Rated voltage	1500V DC
额定电流/Rated current	200A(50mm ²)/ 250A(70mm ²)/ 300A(95mm ²)
绝缘电阻/Insulation resistance	≥100MΩ
耐电压/Withstand voltage	6800V AC 50Hz
接触电阻/Contact resistance	≤0.25mΩ
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: 螺纹锁紧 M8 扭矩 10N•m-12N•m/ Receptacle: Threaded locking M8 Torque 10N•m-12N•m;
线缆规格/Cable specifications	50mm ² 、1/0AWG; /70mm ² 、2/0AWG; /95mm ² 、3/0AWG
线缆外径 OD/Cable outer diameter	13.5±0.3mm/ 15.5±0.3mm/ 18.7±0.5mm
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	96H(5% NaCl 溶液 插合安装后)/ 96H (5% NaCl solution, after mating and installation)
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/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/certification	CE、UL4128、TUV
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

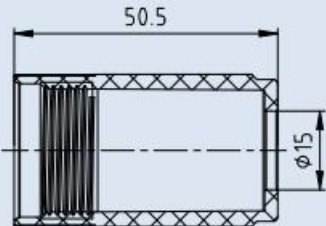
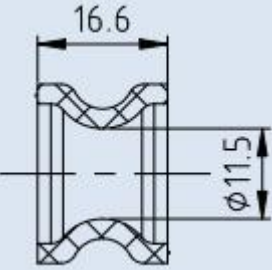
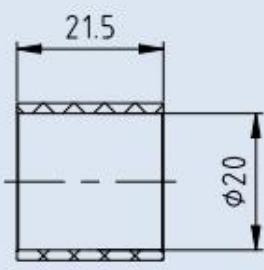
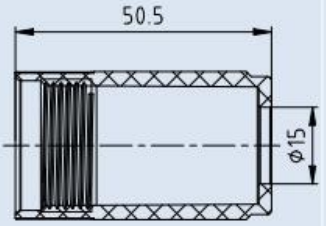
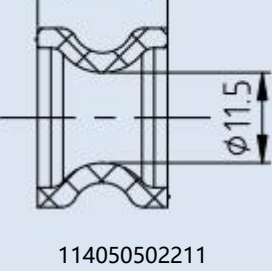
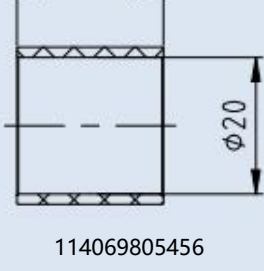
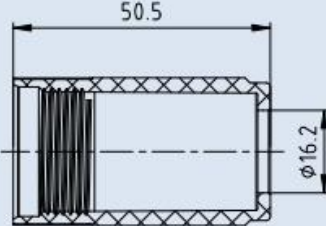
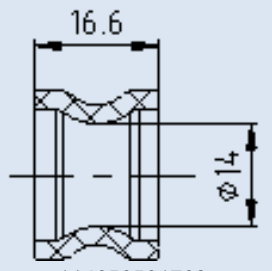
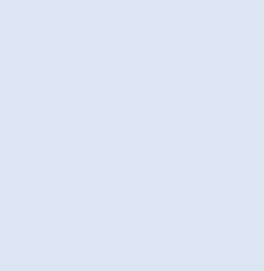

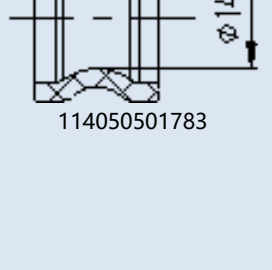
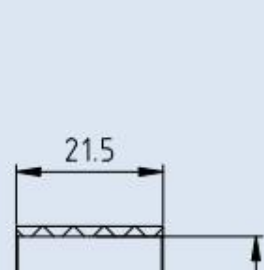
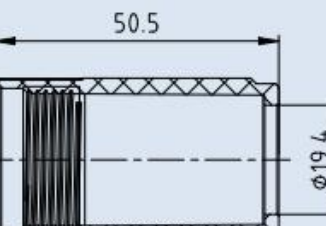
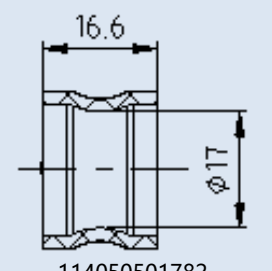
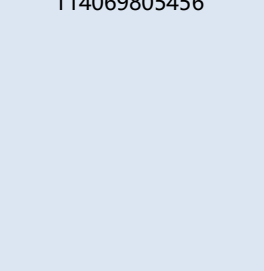
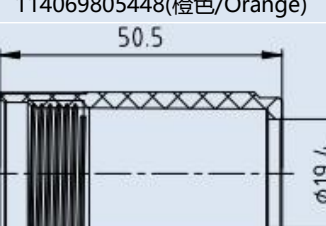
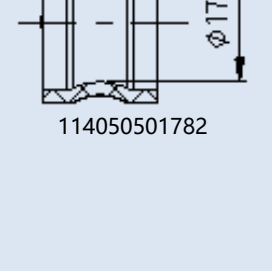
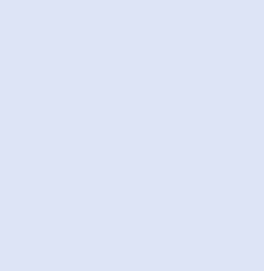
插头外形尺寸:

Plug outline dimensions:



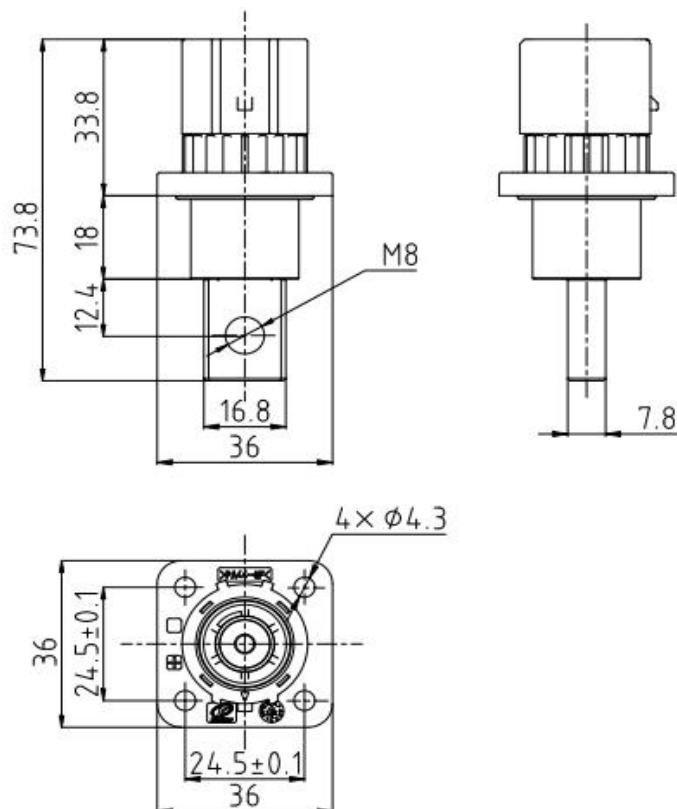
插头配套发货零件尺寸:

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	M25 尾螺母 M25 Tail nut	封线体 Cable seal	Φ20 尾盖(黑)/ Φ20 Tail cover (black)
ESC-HPB300-050-PY 插头/ ESC-HPB300-050-PY plug 112030107648	 114069805448(橙色/Orange)	 114050502211	 114069805456
ESC-HPB300-050-PB 插头/ ESC-HPB300-050-PB plug 112030107647	 114069806308(黑色/Black)	 114050502211	 114069805456
ESC-HPB300-070-PY 插头/ ESC-HPB300-070-PY plug 112030107412	 114069805449(橙色/Orange)	 114050501783	 114069805456
ESC-HPB300-070-PB 插头/ ESC-HPB300-070-PB plug 112030107411	 114069805481(黑色/Black)	 114050501783	 114069805456
ESC-HPB300-095-PY 插头/ ESC-HPB300-095-PY plug 112030107414	 114069805448(橙色/Orange)	 114050501782	 114069805456
ESC-HPB300-095-PB 插头/ ESC-HPB300-095-PB plug 112030107413	 114069805480(黑色/Black)	 114050501782	 114069805456

插座外形尺寸:

Receptacle outline dimension:

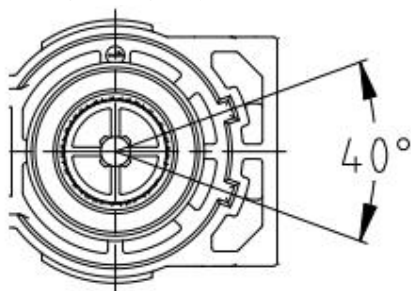


对插键位尺寸:

Mating key position dimension:

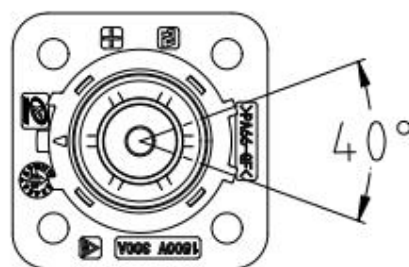
(1) 橙色插头键位 40°

Orange plug key position 40°



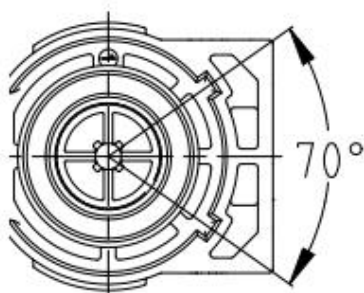
(2) 橙色插座键位 40°

Orange receptacle key position 40°



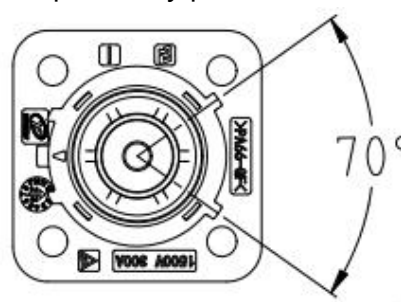
(3) 黑色插头键位 70°

Black plug key position 70°



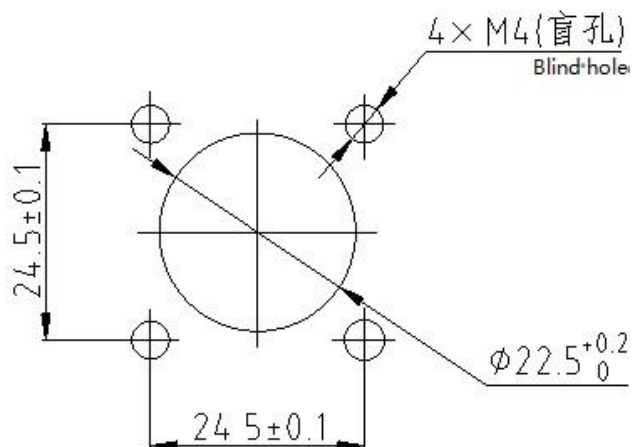
(4) 黑色插头键位 70°

Black receptacle key position 70°



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.