

技术规格书A1/Technical Specification A1
 YG1017 系列电连接器/YG1017 Series Electrical Connector

• 产品概述/Product instruction

应用场景/Application 适用于电动汽车充电机、油泵控制器、气泵控制器、高压盒等的电气连接。 Suitable for electrical connections in electric vehicle chargers, oil pump controllers, air pump controllers, high-voltage boxes, etc.	优势/Advantages ✓ 该产品可实现 360 度全屏蔽； The product can achieve 360-degree full shielding; ✓ 该产品可实现二次互锁及解锁； The product can realize secondary interlocking and unlocking; ✓ 该产品具有延时高压互锁功能； The product has a delayed high voltage interlocking function; ✓ 两端防呆键位采用 4 种不同组合实现防错插功能； The foolproof key positions at both ends adopt 4 different combinations to achieve the anti-mating function; ✓ 插头与插座连接形式为直插锁紧； The plug and receptacle utilize a direct plug-in locking mechanism for connection. ✓ 插头插座采用端子压接。 Plugs and receptacles adopt terminal crimping.
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• 订货信息/Ordering information

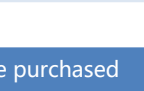
订货信息/Ordering information					
键位 Key position	I		II	III	IV
产品名称/ Product name	YGC1017-EV-S3P 插头/ YGC1017-EV-S3P plug		YGC1017-EV-S3PB 插头/ YGC1017-EV-S3PB plug	YGC1017-EV-S3PC 插头/ YGC1017-EV-S3PC plug	YGC1017-EV-S3PD 插头/ YGC1017-EV-S3PD plug
产品编号/ Product code	112010102206		112020102603	112010103470	112010103471
对插端名称/ Receptacle name	YGC1017-EV-P3R 插座/ YGC1017-EV-P3R receptacle	YGC1017-EV-P3RA 插座（移动式插座）/ YGC1017-EV-P3RA receptacle (Portable receptacle)	YGC1017-EV-P3RB 插座/ YGC1017-EV-P3RB receptacle	YGC1017-EV-P3RC 插座/ YGC1017-EV-P3RC receptacle	YGC1017-EV-P3RD 插座/ YGC1017-EV-P3RD receptacle
对插端编号/ Receptacle code	112020102439	112020102876	112020102602	112020103808	112020103809

注：端子需单独采购，具体采购信息见下针孔件订货信息表/

Note: Terminals need to be purchased separately. Refer to the Contacts Ordering Information table below for details.

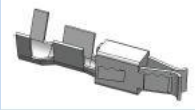
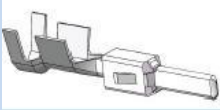
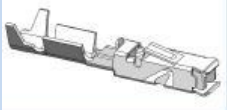
订货信息（总成）/Ordering information (assembly)		订货信息（零部件明细，可单独采购）/Ordering information (parts details, can be purchased separately)				
		产品名称/ Product name	产品编码/ Product code	数量/ Qty	接线规格/ Wiring specification	图示（参考）/ Diagram (for reference)
YGC1017-EV-S3P 插头/ YGC1017-EV-S3P plug	112010102206	YGC1017-EV-S3P 插头组件/ YGC1017-EV-S3P plug assembly	/	1	/	
		YG582 内套管/ YG582 inner sleeve	114022500004	3	2.5mm ² Φ5.8±0.3mm	
		YG582 外套管/ YG582 outer sleeve	114022500006	3		
		YG582A 挡板/ YG582A baffle	114060101118	2		
		YG582A 封线体/ YG582A cable seal	114050500140	1		
		YG1017 尾夹/ YG1017 cable clamp	114060101898	1		
YGC1017-EV-S3PB 插头/ YGC1017-EV-S3PB plug	112020102603	YGC1017-EV-S3PB 插头组件/ YGC1017-EV-S3PB plug assembly	/	1	/	
		YG582 内套管/ YG582 inner sleeve	114022500004	3	2.5mm ² Φ5.8±0.3mm	
		YG582 外套管/ YG582 outer sleeve	114022500006	3		
		YG582A 挡板/ YG582A baffle	114060101118	2		
		YG582A 封线体/ YG582A cable seal	114050500140	1		
		YG1017 尾夹/ YG1017 cable clamp	114060101898	1		
YGC1017-EV-S3PC 插头/ YGC1017-EV-S3PC plug	112010103470	YGC1017-EV-S3PC 插头组件/ YGC1017-EV-S3PC plug assembly	/	1	/	
		YG582 内套管/ YG582 inner sleeve	114022500004	3	2.5mm ² Φ5.8±0.3mm	
		YG582 外套管/ YG582 outer sleeve	114022500006	3		
		YG582A 挡板/ YG582A baffle	114060101118	2		
		YG582A 封线体/ YG582A cable seal	114050500140	1		

		YG1017 尾夹/ YG1017 cable clamp	114060101898	1		
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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)				
		产品名称/ Product name	产品编码/ Product code	数量/ Qty	接线规格/ Wiring specification	图示 (参考) / Diagram (for reference)
YGC1017-EV-S3PD 插头/ YGC1017-EV-S3PD plug	112010103471	YGC1017-EV-S3PD 插头组件/ YGC1017-EV-S3PD plug assembly	/	1	/	
		YG582 内套管/ YG582 inner sleeve	114022500004	3	2.5mm ² Φ5.8±0.3mm	
		YG582 外套管/ YG582 outer sleeve	114022500006	3		
		YG582A 挡板/ YG582A baffle	114060101118	2		
		YG582A 封线体/ YG582A cable seal	114050500140	1		
		YG1017 尾夹/ YG1017 cable clamp	114060101898	1		

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)				
		产品名称/ Product name	产品编码/ Product code	数量/ Qty	接线规格/ Wiring specification	图示 (参考) / Diagram (for reference)
YGC1017-EV-P3R 插座/ YGC1017-EV-P3R receptacle	112020102439	YGC1017-EV-P3R 插座/ YGC1017-EV-P3R receptacle	112020102439	1	/	
YGC1017-EV-P3RB 插座/ YGC1017-EV-P3R receptacle	112020102602	YGC1017-EV-P3RB 插座/ YGC1017-EV-P3RB receptacle	112020102602	1	/	
YGC1017-EV-P3RC 插座/ YGC1017-EV-P3RC receptacle	112020103808	YGC1017-EV-P3RC 插座/ YGC1017-EV-P3RC receptacle	112020103808	1	/	
YGC1017-EV-P3RD 插座/ YGC1017-EV-P3RD receptacle	112020103809	YGC1017-EV-P3RD 插座/ YGC1017-EV-P3RD receptacle	112020103809	1	/	

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)				
		产品名称/ Product name	产品编码/ Product code	数量/ Qty	接线规格/ Wiring specification	图示 (参考) / Diagram (for reference)
YGC1017-EV-P3RA 插座 (移动式插座) / YGC1017-EV-P3RA receptacle (portable receptacle)	112020102876	YGC1017-EV-P3RA 插座组件/ YGC1017-EV-P3RA receptacle assembly	/	1	/	
		YG582 内套管 YG582 inner sleeve	114022500004	3	2.5mm ² Φ5.8±0.3mm	
		YG582B 屏蔽件-外/ YG582B outer shielding	114022600064	3		
		YG582A 挡板/ YG582A baffle	114060101118	2		
		YG582A 封线体/ YG582A cable seal	114050500140	1		
		YG1017A 尾夹/ YG1017A cable clamp	114060201831	1		

订货信息 (针孔件, 需单独采购) /Order information (Contacts, need to be purchased separately)			
对应头座/ Plug & Receptacle	插头端/ Plug	插座端/ Receptacle	
产品名称/ Product name	YG939 功率插孔/ YG939 power socket	YG939 功率插针/ YG939 power pin	YG939 信号插孔/ YG939 signal socket
产品编号/ Product code	501021400357	501021400216	501021600128
接线规格/ Wiring specification	2.5mm ² /Φ5.8±0.3mm (屏蔽线缆) Φ5.5±0.3mm (shielded cable)	2.5mm ² /Φ3.5±0.2mm (非屏蔽线缆) Φ3.5±0.2mm (unshielded cable)	0.5mm ² /Φ1.5±0.2mm
图示 (参考) / Diagram (for reference)			

• 技术数据/Technical data

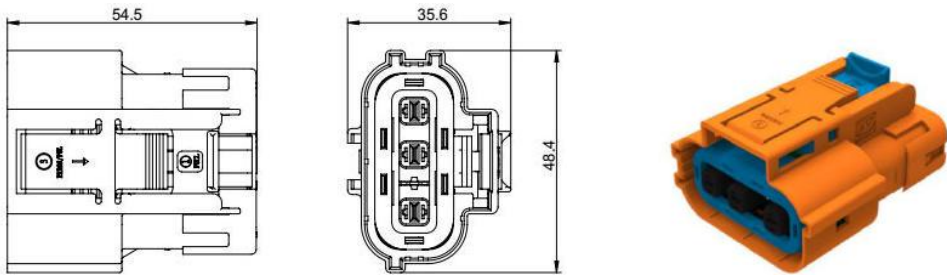
基本信息/Basic information	
PIN 距/PIN pitch	/
芯数/Numbers of pins	3pin
出线方向/Cable outlet direction	180°
壳体材质/Shell material	塑料/Plastic
屏蔽功能/Shielding function	是/Yes
电气性能/Electrical specification	
额定电压/Rated voltage	800 V DC (功率/power) , 24 V DC (信号/signal)

额定电流/Rated current	16A (2.5mm²)
绝缘电阻/Insulation resistance	≥100MΩ
耐电压/Withstand voltage	3000 V AC (功率/power) , 1000 V AC (信号/signal)
HVIL	是/Yes
机械性能/Mechanical specification	
机械寿命/Life cycle	≥50 次/Times
振动/Vibration	QC/T417.1-2001 中 4.11/QC/T 417.1-2001, Clause 4.11
冲击/Shock	QC/T417.1-2001 中 4.11/QC/T 417.1-2001, Clause 4.11
耐环境性能/Environmental resistance specification	
工作温度/Ambient temperature	-40℃ ~ +125℃
相对湿度/Humidity range	95% (40℃时) /95% (at 40℃)
盐雾/Salt spray	48h
防护等级/IP rating	IP67、IP6K9K (头座对插) / IP67, IP6K9K (When plug and receptacle mated)
污染等级/Pollution level	2
海拔高度/Altitude	≤4000m
材料/涂覆/外观/Materials/Finish/Outline	
壳体/Shell	PA66-GF
屏蔽/Shielding	铜合金/Copper alloy
标准及认证/Standards and certifications	
阻燃等级/Flame retardant rating	UL94 V-0(塑料/plastic)、HB(橡胶/rubber)
环保要求/Environment requirements	RoHS 2.0

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

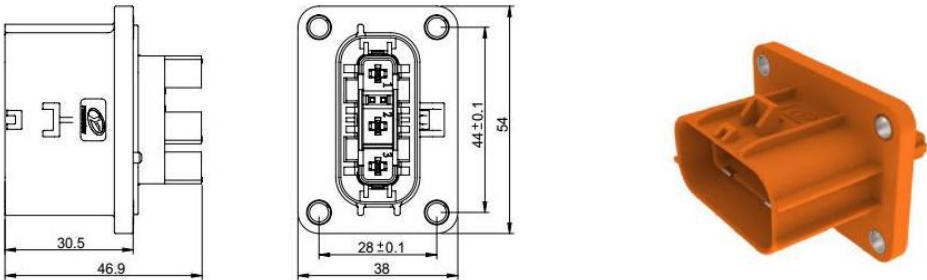
1.YGC1017-EV-S3P系列插头外形(未注公差：±0.5)

YGC1017-EV-S3P series plug shape (unspecified tolerance: ±0.5)



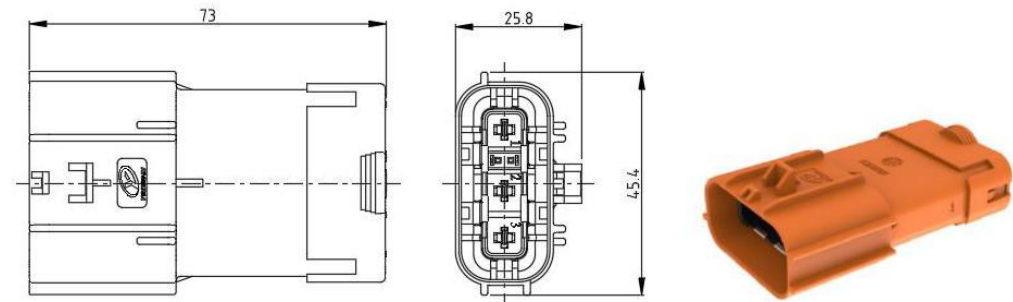
2.YGC1017-EV-P3R 系列插座总成外形(未注公差：±0.5)

YGC1017-EV-P3R series receptacle assembly outline (unspecified tolerance: ±0.5)



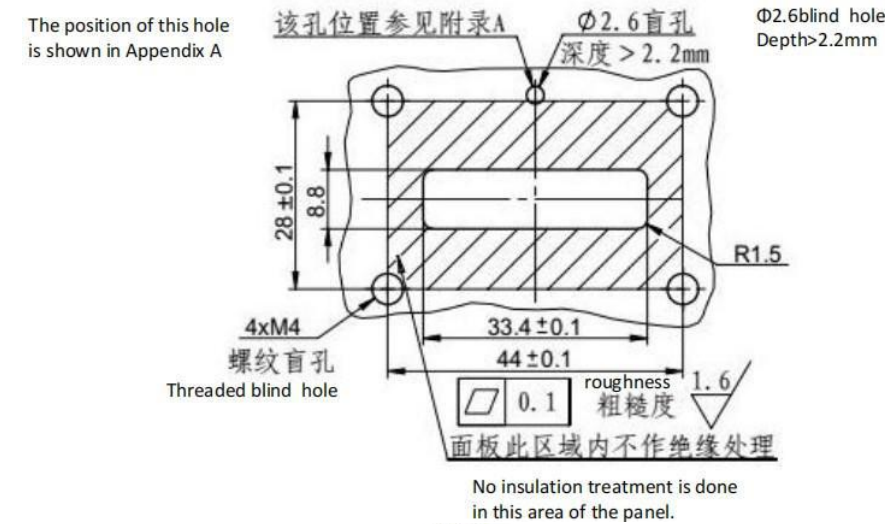
3.YGC1017-EV-P3RA 系列插座总成外形(未注公差：±0.5)

YGC1017-EV-P3RA series receptacle assembly outline (unspecified tolerance: ±0.5)



4.YGC1017-EV-P3R系列插座安装开孔尺寸(未注公差：±0.1)

Mounting hole dimensions for YGC1017-EV-P3R series receptacle (unspecified tolerance: ±0.1)



附录 A
Appendix A

连接器插座对插可选防呆键位图示
Connector plug and receptacle fool-proof key position diagram

防呆键位 型号 Fool-proof key position model	I 型 Model I	II 型 Model II	III 型 Model III	IV 型 Model IV
连接器插 头视图 Plug diagram				
连接器插 座视图 Receptacle diagram				
插座安装 防呆孔位 置尺寸 Receptacle mounting fool-proof hole position dimensions				

• 安装说明/Installation

专用工具/Special tools	
拆卸工具/ Disassembly tool	功率插孔拆卸辅助工具 (GZ939-01-01-00 拆卸工具) /Power socket disassembly tool (GZ939-01-01-00 disassembly tool)
	功率插针拆卸辅助工具 (RTSCC-04(2.8×0.8)拆卸工具) /Power pin disassembly tool (RTSCC-04(2.8×0.8) disassembly tool)
	信号插针拆卸辅助工具 (GZ939-02-03-00 拆卸工具) /Signal pin disassembly tool (GZ939-02-03-00 disassembly tool)

• 储存/Storage

包装储存&转运说明/Storage& transportation	
存放要求/ Storage requirement	接触件（镀金、镀银）类零部件必须单独保存，保持整洁、干净、通风。存储环境应控制在湿度≤60%、温度在5~30℃。参考保存期 6 个月。 Components with contact elements (gold-plated, silver-plated) must be stored separately, kept clean, tidy and in a well-ventilated environment. The storage environment shall be controlled with a humidity of ≤60% and a temperature ranging from 5°C to 30°C. The reference storage period is 6 months.
运输要求/ Transportation requirement	端子在包装、运输、转运和生产、装配过程中应避免碰撞、接触腐蚀性气体和液体、以及手直接接触等，以保证端子接触表面良好。 During packaging, transportation, transfer, production, and assembly processes, terminals shall be protected from collisions, contact with corrosive gases and liquids, and direct hand contact, so as to ensure the good condition of the terminal contact surfaces.