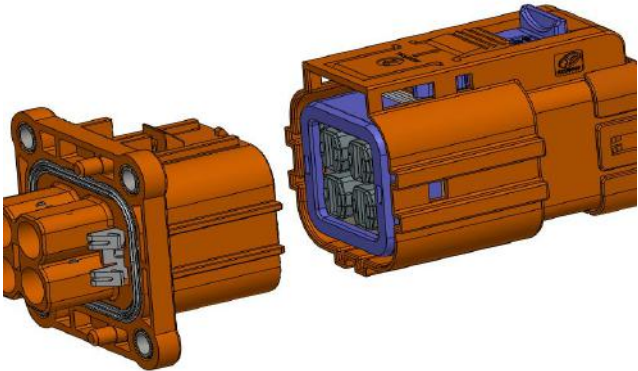


技术规格书 A0/Technical Specification A0

YGC1174BB系列连接器/YGC1174BB Series Connectors

产品概述/Product instruction



应用场景/Application

适用于电动汽车 DCDC、PTC、压缩机、高压盒等的电气连接。
Suitable for electrical connections of electric vehicle components such as chargers, DC/DC converters, and high-voltage boxes.

优势/Advantages

- 该产品可实现 360 度全屏蔽;
This 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.
- 两端防呆键位采用不同组合实现防错插功能
The two-end foolproof key positions adopt two different combinations to achieve the error-proof insertion function.
- 插头与插座连接形式为直插锁紧;
The connection between the plug and the receptacle is a straight plug-in locking structure.
- 插头插座采用端子压接。
The plug and receptacle adopt terminal crimping.

订货信息/Ordering information

订货信息/Ordering information		
键位/Key position	A	B
产品名称/Product name	YGC1174-EV-S(4+2)PBB 插头 YGC1174-EV-S(4+2)PBB plug	YGC1174-EV-S(4+2)PBC 插头 YGC1174-EV-S(4+2)PBC plug
产品编号/Product code	112010103232	112010104369
产品名称/Product name	YGC1174-EV-P(4+2)RBB 插座 YGC1174-EV-P(4+2)RBB receptacle	YGC1174-EV-P(4+2)RBD 插座 YGC1174-EV-P(4+2)RBD receptacle
产品编号/Product code	112020103527	113069800570

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)

YGC1174-EV-S(4+2)PBB 插头 YGC1174-EV-S(4+2)PBB plug (4mm ²)	产品编号/ Product no.	YGC1174-EV-S(4+2)PBB 插头 YGC1174-EV-S(4+2)PBB plug	112010103232	1	/	
		5.8×0.8 插孔 5.8×0.8 socket (4~6mm ²)	501021401790	4	4mm ² (LV216) Φ5.8 (0, -0.5) mm	
		YG1163A 屏蔽套 YG1163A shielding sleeve	114022600252	4		
		YG1174B 功率端子挡板-4 平方 (216) YG1174B power terminal baffle - 4 sq (216)	115980034302	1		
		YG1174D 插头封线体 YG1174D plug cable seal	114050501309	1		
		YG1174B/2 插头尾夹 YG1174B/2 plug tail clamp	115980032002	1		
YGC1174-EV-S(4+2)PBB 插头 YGC1174-EV-S(4+2)PBB plug (6mm ²)	产品编号/ Product no.	YGC1174-EV-S(4+2)PBB 插头 YGC1174-EV-S(4+2)PBB plug	112010103232	1	/	
		5.8×0.8 插孔 5.8×0.8 socket (4~6mm ²)	501021401790	4	6mm ² (LV216) Φ6.5 (0, -0.5) mm	
		YG1163B 屏蔽套 YG1163B shielding sleeve	114022600253	4		
		YG1174B 功率端子挡板-6 平方 (216) YG1174B power terminal baffle - 6 sq (216)	115980034301	1		
		YG1174B 插头封线体 YG1174B plug cable seal	114050501290	1		
		YG1174B/1 插头尾夹 YG1174B/1 plug tail clamp	115980032001	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)
YGC1174-EV-P(4+2)RBB 插座 YGC1174-EV-P(4+2)RBB receptacle (4-6mm ²)	产品编号/ Product no.	YGC1174-EV-P(4+2)RBB 插座 YGC1174-EV-P(4+2)RBB receptacle	112020103527	1	/	
		5.8×0.8 插针 5.8×0.8 pins (4~6mm ²)	501021401626	4	Φ4.5±0.2mm (4mm ²) Φ4.9±0.2mm (6mm ²)	
		0.63×0.63 插针 0.63×0.63 pins	501021400215	2	Φ1.6±0.1mm (0.5mm ²)	

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))
YGC1174-EV-S(4+2)PBC 插头 YGC1174-EV-S(4+2) PBC plug (4mm ²)	产品编号/ Product no.	YGC1174-EV-S(4+2)PBC 插头 YGC1174-EV-S(4+2) PBC plug	112010104369	1	/	
		5.8×0.8 插孔 5.8×0.8 socket(4~6 mm ²)	501021401790	4	4mm ² (LV216) Φ5.8 (0, -0.5) mm	
		YG1163A 屏蔽套 YG1163A shielding sleeve	114022600252	4		
		YG1174B 功率端子挡板-4 平方 (216) YG1174B power terminal baffle - 4 sq (216)	115980034302	1		
		YG1174D 插头封线体 YG1174D plug cable seal	114050501309	1		
		YG1174B/2 插头尾夹 YG1174B/2 plug tail clamp	115980032002	1		
YGC1174-EV-S(4+2)PBC 插头 YGC1174-EV-S(4+2) PBC plug (6mm ²)	产品编号/ Product no.	YGC1174-EV-S(4+2)PBC 插头 YGC1174-EV-S(4+2) PBC plug	112010104369	1	/	
		5.8×0.8 插孔 5.8×0.8 socket (4~6mm ²)	501021401790	4	6mm ² (LV216) Φ6.5 (0, -0.5) mm	
		YG1163B 屏蔽套 YG1163B shielding sleeve	114022600253	4		
		YG1174B 功率端子挡板-6 平方 (216) YG1174B power terminal baffle - 6 sq (216)	115980034301	1		
		YG1174B 插头封线体 YG1174B plug cable seal	114050501290	1		
		YG1174B/1 插头尾夹 YG1174B/1 plug tail clamp	115980032001	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))
YGC1174-EV-P(4+2)RBD 插座 YGC1174-EV-P(4+2)RBD	产品编号/ Product no.	YGC1174-EV-P(4+2)RBD 插座 YGC1174-EV-P(4+2)RBD receptacle	113069800570	1	/	
		5.8×0.8 插针 5.8×0.8 pins (4~6mm ²)	501021401626	4	Φ4.5±0.2mm (4mm ²)	

receptacle (4-6mm ²)					Φ4.9±0.2mm (6mm ²)	
		0.63×0.63 插针 0.63×0.63 pins	501021400215	2	Φ1.6±0.1mm (0.5mm ²)	

• 技术数据/Technical data

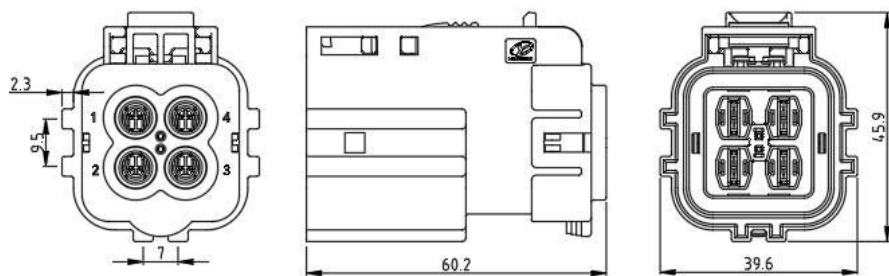
基本信息/Basic information	
PIN 距/PIN distance	功率: 10*10 / Power: 10*10
适配壳体/Compatible shell	/
出线方向/Cable outlet direction	90 °
出线口数量/Numbers of cable outlet	4
端接方式 (可选项) /Termination method (optional)	
端接方式/Termination method	/
配线规格/Wiring specifications	/
适配线缆/Compatible cable	4mm ² /6mm ² (LV216 屏蔽) 插头 插座: 焊板式/ 4mm ² /6mm ² (LV216 shielded) plugs Receptacle: soldering type
电气性能/Electrical performance	
额定电压/Rated voltage	800V(功率) 24V(信号) / 800V (power) 24V (signal)
额定电流/Rated current	30A(4mm ²); 40A(6mm ²)
绝缘电阻/Insulation resistance	≥2000MΩ (功率) , ≥1000MΩ (信号) (常态) / ≥2000MΩ (power) , ≥1000MΩ (signal) (normal)
耐电压/Withstand voltage	3000 V (功率) , 1000 V (信号) (50Hz AC 常态) / 3000 V (power) , 1000 V (signal) (50Hz AC normal)
接触电阻/Contact resistance	0.64mm 连接端子接触电阻≤40mΩ; 5.8mm 端子接触电阻≤1.5m Ω/ The contact resistance of the 0.64mm connector terminal is ≤40mΩ; 5.8mm terminal contact resistance ≤1.5mΩ
HVIL	是/Yes
外壳间电连续性/屏蔽接触电阻/ Shell-to-shell electrical continuity/shielding contact resistance	电缆屏蔽层与插头屏蔽之间: ≤3mΩ;插头与插座之间: ≤4mΩ;插座与安装面板之间: ≤2mΩ/ The resistance between the cable shield and the plug shield is ≤3mΩ; ≤4mΩ between plug and receptacle;≤2mΩ between receptacle and mounting panel
机械性能/Mechanical performance	
总拔力/Withdraw force	≤75N
插入力/Insertion force	≤75N
锁止力/Locking force	锁止结构≥100N(端子规格 > 0.28mm)/ Locking structure ≥100N (terminal specification >0.28mm)
机械寿命/Life cycle	>50 次/>50 times
振动//Vibration	V2
冲击/Shock	V2
耐环境性能//Environmental resistance performance	
环境温度/Ambient temperature	-40℃~+125℃
相对湿度/Humidity range	95% (40℃时) /95 % (at 40℃)
盐雾/Salt spray	96h
防护等级/IP rating	IP67&IP6K9K(头座对插) /IP67 & IP6K9K Plug and receptacle are mating.

污染等级/Pollution level	2
海拔要求/Altitude requirements	≤2000m
材料/涂覆/外观/Materials/Finish/Outline	
参见零部件图纸/Refer to the component drawing.	
标准及认证/Standards and certification	
阻燃等级/Flame retardant rating	UL94 V-0(塑料)、HB(橡胶) / UL94 V-0 (plastic), HB (rubber)
环保要求/Environmental requirements	ROHS 2.0
执行标准/Implementation standard	QC/T 1067.1
其它技术数据参见 DV/PV 测试报告/For other technical data, refer to the DV/PV test report.	

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

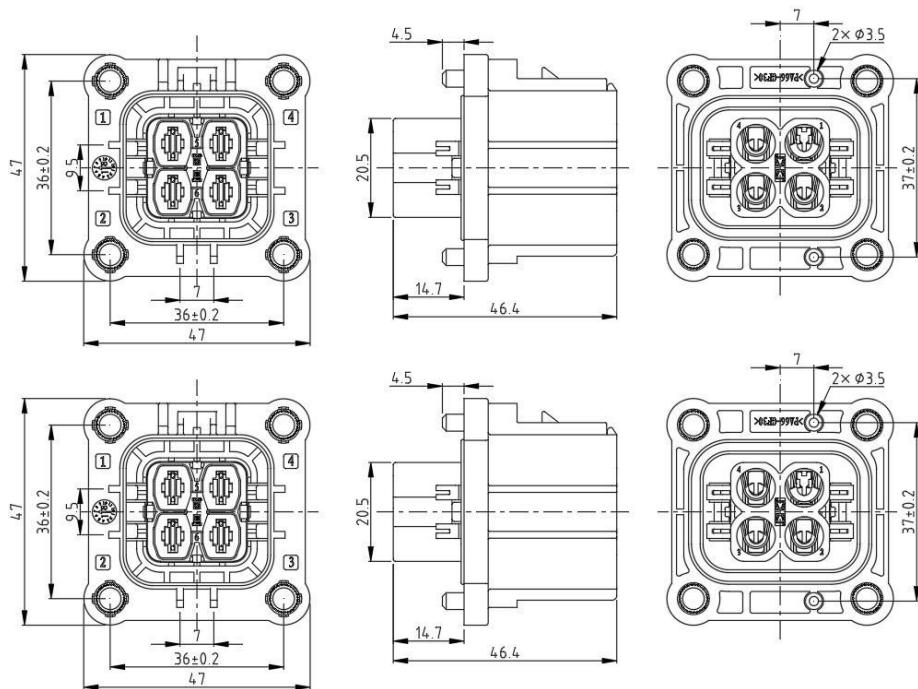
YGC1174-EV-S(4+2)PBB插头总成外形(未注公差: ±0.5)

YGC1174-EV-S(4+2) PBB plug assembly outline (unspecified tolerance: ±0.5)



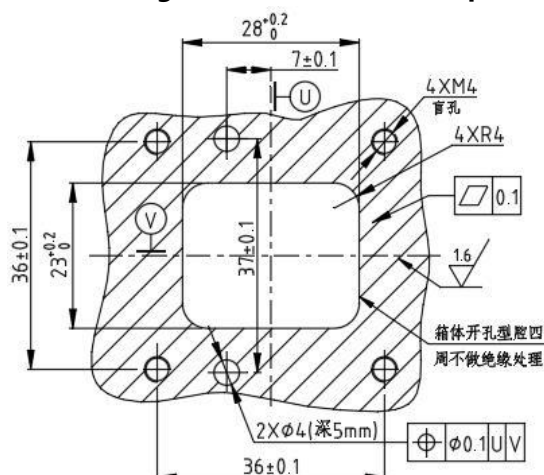
YGC1174-EV-P(4+2)RBB插座总成外形(未注公差: ±0.5)

YGC1174-EV-P(4+2)RBB receptacle assembly outline (unspecified tolerance: ±0.5)



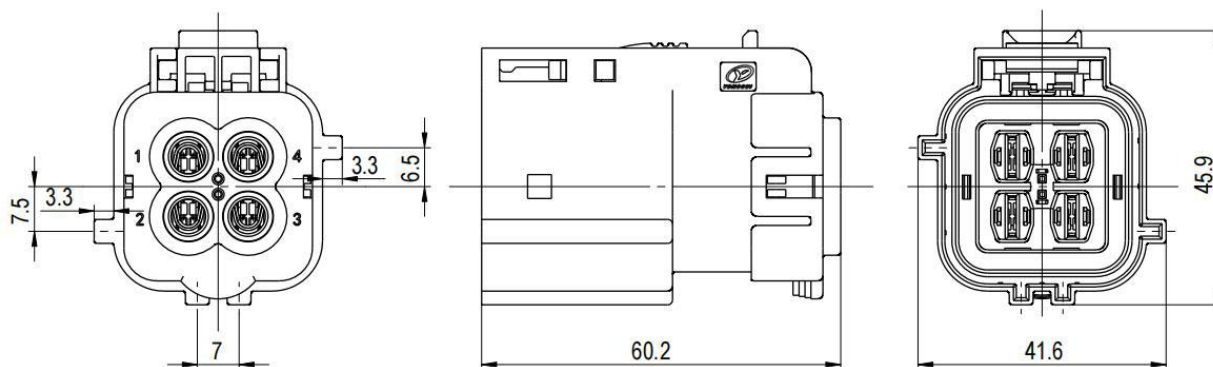
YGC1174-EV-P(4+2)RBB插座安装开孔尺寸(未注公差: ±0.1)

YGC1174-EV-P(4+2)RBB receptacle mounting hole dimensions (unspecified tolerance: ± 0.1)



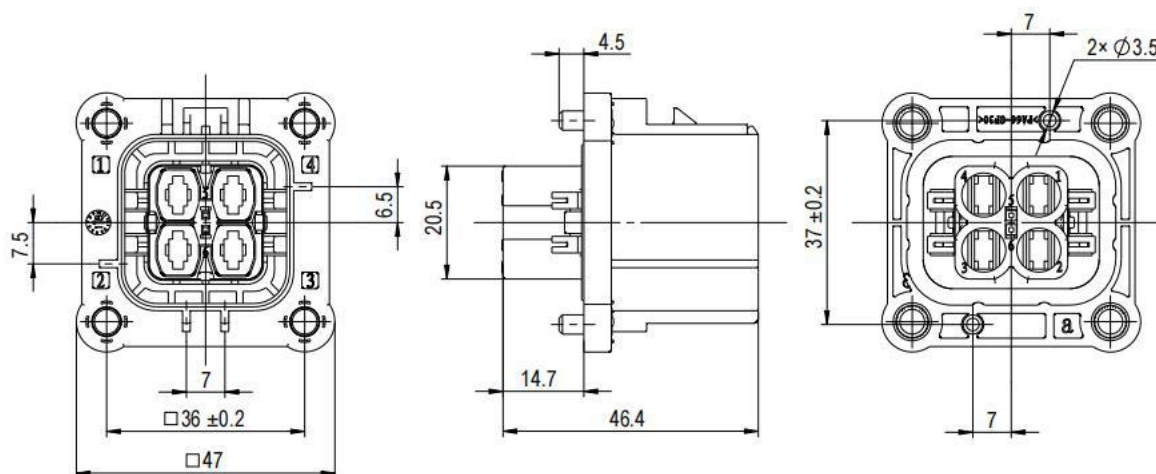
YGC1174-EV-S(4+2)PBC插头总成外形(未注公差: ± 0.5)

YGC1174-EV-S(4+2) PBC connector assembly outline (unspecified tolerance: ± 0.5)



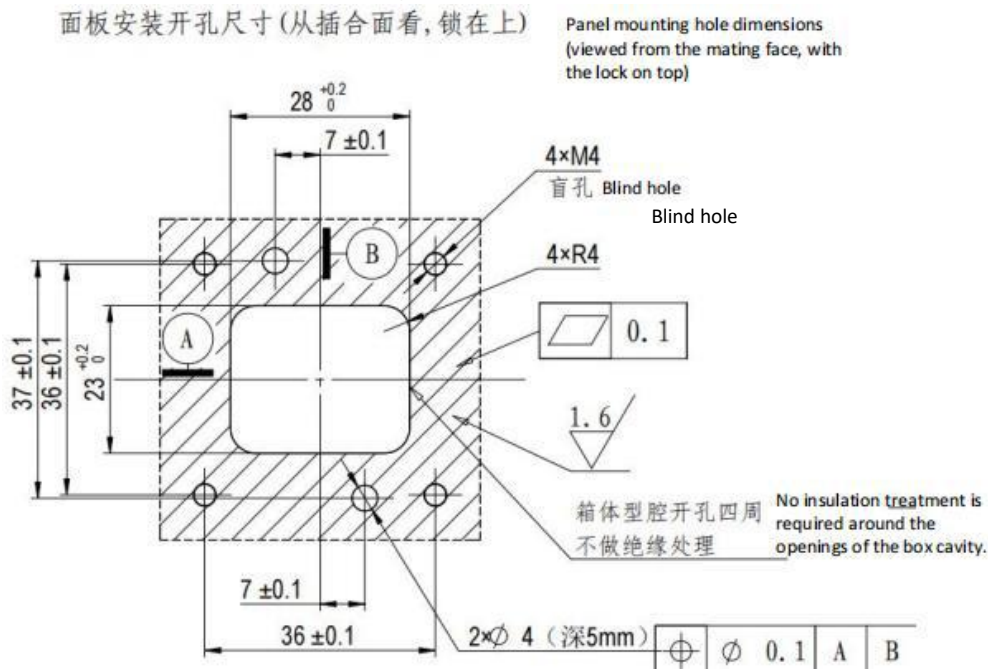
YGC1174-EV-P(4+2)RBD插座总成外形(未注公差: ± 0.5)

YGC1174-EV-P(4+2) RBD receptacle assembly outline (unspecified tolerance: ± 0.5)



YGC1174-EV-P(4+2)RBD插座安装开孔尺寸(未注公差: ± 0.1)

YGC1174-EV-P(4+2) RBD receptacle mounting hole dimensions (unspecified tolerance: ±0.1)



• 安装说明/Installation

专用工具/Crimping tool	
拆卸工具/Disassembly tool	功率插针拆卸辅助工具 (532031201008) Power pin disassembly tool (532031201008) 功率插孔拆卸辅助工具 (532031201010) Power socket disassembly tool (532031201010) 信号插针拆卸辅助工具 (532031201009) Signal pin disassembly tool (532031201009)
送针工具/Needle feeding tool	/
压接工具压接工具/Crimping tool	/
其他工具其他工具/Other 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.