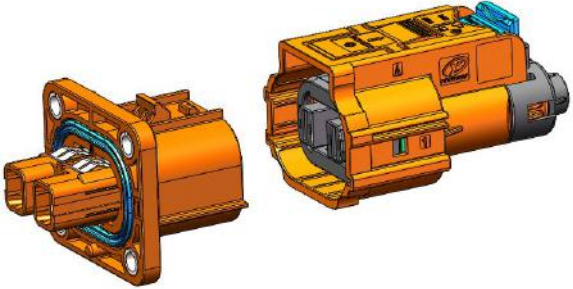


技术规格书A3.1/Technical Specification A3.1

YGEV2-2pin系列连接器/YGEV2-2Pin Series Electrical Connectors

产品概述/Product instruction



应用场景/Application
适用于电动汽车空调压缩机、PTC、充电机、DCDC、高压盒等的电气连接。
Suitable for electrical connections of electric vehicle components such as air conditioning compressors, PTC heaters, chargers, DC/DC converters, and high-voltage boxes.

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 key positions at both ends adopt 4 different combinations to realize the function of preventing wrong insertion;
- 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。
The plug and receptacle adopt terminal crimping.

订货信息/Ordering information

订货信息(总成)/Ordering information(assembly)						
键位/ Key position	A	B	A	B	A	B
产品名称/ Product name	YGEV2-S2PA-1 插头 YGEV2-S2PA-1 plug (2.5mm²)	YGEV2-S2PB-1 插头 YGEV2-S2PB-1 plug (2.5mm²)	YGEV2-S2PA-1 插头 YGEV2-S2PA-1 plug (4mm²)	YGEV2-S2PB-1 插头 YGEV2-S2PB-1 plug (4mm²)	YGEV2-S2PA-2 插头 YGEV2-S2PA-2 plug (6mm²)	YGEV2-S2PB-1 插头 YGEV2-S2PB-1 plug (6mm²)
产品编号/ Product code	111000407737	111000407740	111000407738	111000407741	111000407739	111000407742
对插端名称/ Receptacle name	YGEV2-P2RA-1 插座 YGEV2-P2RA-1 receptacle (2.5mm²)	YGEV2-P2RB-1 插座 YGEV2-P2RB-1 receptacle (2.5mm²)	YGEV2-P2RA-3 插座 YGEV2-P2RA-3 receptacle (4-6mm²)	YGEV2-P2RB-2 插座 YGEV2-P2RB-2 receptacle (4-6mm²)	YGEV2-P2RA-3 插座 YGEV2-P2RA-3 receptacle (4-6mm²)	YGEV2-P2RB-2 插座 YGEV2-P2RB-2 receptacle (4-6mm²)
对插端编号/ Receptacle code	111000504234	111000504235	111000504247	111000504248	111000504247	111000504248
键位/ Key position	A					

产品名称/ Product name	YGEV2-S2PNA 插头 YGEV2-S2PNA plug	YGEV2-S2PA-1 插头 YGEV2-S2PA-1 plug (6mm ²)	YGEV2-S2PA-1 插头 YGEV2-S2PA-1 plug (4mm ²)	YGEV2-S2PA-2 插头 YGEV2-S2PA-2 plug (6mm ²)	YGEV2-S2PNA-1 插头 YGEV2-S2PNA-1 plug (6mm ²)
产品编号/ Product code	111000406975	111000406972	111000407738	111000407739	111000407709
对插端名称/ Receptacle name	YGEV2-P2RA-3 插座 YGEV2-P2RA-3 receptacle (4-6mm ²)		YGEV2-P2RA1-1 插座 YGEV2-P2RA1-1 receptacle (4-6mm ²)		YGEV2-P2RNA-1 插座 YGEV2-P2RNA-1 receptacle (4-6mm ²)
对插端编号/ Receptacle code	111000504247		111000504236		111000504237

总成/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)
YGEV2-S2PA-1 插头 YGEV2-S2PA-1 plug (2.5mm ²)	111000407737	YGEV2-S2PA-1 插头组件 YGEV2-S2PA-1 plug assembly	112010107577	1	/	
		5.8×0.8 插孔 5.8×0.8 socket(2.5mm ²)	110010400999	2	2.5mm ² (LV216) Φ4.7(0, -0.5)mm	
		YG1467 屏蔽件-外-4 YG1467 shielding -outer- 4	114022500495	2		
		YGEV2 屏蔽件-内-2.5 YGEV2 shielding - inner -2.5	114022500523	2		
		YGEV2 挡板-1-Φ5 YGEV2 baffle-1-Φ5	114019801833	2		
		YGEV2-1 封线体-Φ2.6 YGEV2-1 cable seal-Φ2.6	114050502112	2		
		Φ5.1 尾盖(黑)-2 Φ5.1 rear cover (black)-2	114069805485	1		
YGEV2-S2PB-1 插头 YGEV2-S2PB-1 plug (2.5mm ²)	111000407740	YGEV2-S2PB-1 插头组件 YGEV2-S2PB-1 plug assembly	112010107578	1	/	
		5.8×0.8 插孔 5.8×0.8 socket(2.5mm ²)	110010400999	2	2.5mm ² (LV216) Φ4.7(0, -0.5)mm	
		YG1467 屏蔽件-外-4 YG1467 shielding -outer- 4	114022500495	2		
		YGEV2 屏蔽件-内-2.5 YGEV2 shielding - inner -2.5	114022500523	2		
		YGEV2 挡板-1-Φ5 YGEV2 baffle-1-Φ5	114019801833	2		
		YGEV2-1 封线体-Φ2.6	114050502112	2		

		YGEV2-1 cable seal-Φ2.6				
		Φ5.1 尾盖(黑)-2 Φ5.1 rear cover (black)-2	114069805485	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)
YGEV2-S2PA-1 插头 YGEV2-S2PA-1 plug (4mm ²)	111000407738	YGEV2-S2PA-1 插头组件 YGEV2-S2PA-1 plug assembly	112010107577	1	/	
		5.8×0.8 插孔 5.8×0.8 socket(4~6mm ²)	501021401790	2	4mm ² (LV216) Φ5.8(0, -0.5)mm	
		YG1467 屏蔽件-外-4 YG1467 shielding -outer-4	114022500495	2		
		YG1467 屏蔽件-内-4 YG1467 shielding -inner-4	114022500492	2		
		YGEV2 挡板-1-Φ6.1 YGEV2 baffle-1-Φ6.1	114019801830	2		
		YGEV2-1 封线体-Φ3.9 YGEV2-1 cable seal-Φ3.9	114050501799	2		
		Φ5.8 尾盖(黑)-2 Φ5.8 rear cover (black) -2	114069805482	1		
YGEV2-S2PB-1 插头 YGEV2-S2PB-1 plug (4mm ²)	111000407741	YGEV2-S2PB-1 插头组件 YGEV2-S2PB-1 plug assembly	112010107578	1	/	
		5.8×0.8 插孔 5.8×0.8 socket(4~6mm ²)	501021401790	2	4mm ² (LV216) Φ5.8(0, -0.5)mm	
		YG1467 屏蔽件-外-4 YG1467 shielding -outer- 4	114022500495	2		
		YG1467 屏蔽件-内-4 YG1467 shielding -inner- 4	114022500492	2		
		YGEV2 挡板-1-Φ6.1 YGEV2 baffle-1-Φ6.1	114019801830	2		
		YGEV2-1 封线体-Φ3.9 YGEV2-1 cable seal-Φ3.9	114050501799	2		
		Φ5.8 尾盖(黑)-2 Φ5.8 rear cover (black) -2	114069805482	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)

YGEV2-S2PA-2 插头 YGEV2-S2PA-2 plug (6mm ²)	111000407739	YGEV2-S2PA-1 插头组件 plug assembly	112010107577	1	/	
		5.8×0.8 插孔 5.8×0.8 socket(4~6mm ²)	501021401790	2	6mm ² (LV216) Φ6.5(0, -0.5)mm	
		YG1467 屏蔽件-外-6 YG1467 shielding -outer- 6	114022500496	2		
		YG1467 屏蔽件-内-6 YG1467 shielding - inner - 6	114022500494	2		
		YGEV2 挡板-1-Φ6.8 YGEV2 baffle-1-Φ6.8	114019801815	2		
		YGEV2-1 封线体-Φ4.8 YGEV2-1 cable seal-Φ4.8	114050501765	2		
		Φ6.5 尾盖(黑)-2 Φ6.5 rear cover (black) -2	114069805324	1		
YGEV2-S2PB-1 插头 YGEV2-S2PB-1 plug (6mm ²)	111000407742	YGEV2-S2PB-1 插头组件 YGEV2-S2PA-1 plug assembly	112010107578	1	/	
		5.8×0.8 插孔 5.8×0.8 socket(4~6mm ²)	501021401790	2	6mm ² (LV216) Φ6.5(0, -0.5)mm	
		YG1467 屏蔽件-外-6 YG1467 shielding -outer- 6	114022500496	2		
		YG1467 屏蔽件-内-6 YG1467 shielding - inner - 6	114022500494	2		
		YGEV2 挡板-1-Φ6.8 YGEV2 baffle-1-Φ6.8	114019801815	2		
		YGEV2-1 封线体-Φ4.8 YGEV2-1 cable seal-Φ4.8	114050501765	2		
		Φ6.5 尾盖(黑)-2 Φ6.5 rear cover (black) -2	114069805324	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)
YGEV2-S2PA-1 插头 YGEV2-S2PA-1 plug (6mm ²)	111000406972	YGEV2-S2PA-1 插头组件 plug assembly	112010107577	1	/	
		5.8×0.8 插孔 5.8×0.8 socket(4~6mm ²)	501021401790	1	6mm ² (LV216) Φ6.5(0, -0.5)mm	
		YG1467 屏蔽件-外-6 YG1467 shielding-outer-6	114022500496	1		
		YG1467 屏蔽件-内-6 YG1467 shielding-inner-6	114022500494	1		

		YGEV2 挡板-1-Φ6.8 YGEV2 baffle-1-Φ6.8	114019801815	2		
		YGEV2-1 封线体-Φ4.8 YGEV2-1 cable seal-Φ4.8	114050501765	1		
		Φ11.8x15.8 堵塞 Φ11.8x 1 5.8 cavity plug	114059801001	1		
		Φ6.5 尾盖(黑)-2 Φ6.5 rear cover (black) -2	114069805324	1		
YGEV2-S2PNA YGEV2-S2PNA plug	111000406975	/	/	/	堵头, 无需接线 Sealing plug, no wiring required	
YGEV2- S2PNA-1 插头 YGEV2- S2PNA-1plug (6mm ²)	111000407709	YGEV2-S2PNA-1 插头组件 YGEV2-S2PNA-1 plug assembly	112010107575	1	/	
		5.8×0.8 插孔 5.8×0.8 socket(4~6mm ²)	501021401790	2	6mm ² (LV216-1) Φ5.0(0, -0.4)mm	
		YGEV2-1 封线体-Φ2.6 YGEV2-1 cable seal-Φ2.6	114050502112	2		
		Φ5.1 尾盖(黑)-2 Φ5.1 rear cover (black)-2	114069805485	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)
YGEV2-P2RA-1 插座 YGEV2-P2RA-1 receptacle (2.5mm ²)	111000504234	YGEV2-P2RA-1 插座组件 YGEV2-P2RA-1 receptacle assembly	112020108344	1	/	
		5.8×0.8 插针(2.5mm ²) 5.8×0.8 pins (2.5 mm ²)	113020101581	2	Φ3.5±0.2mm(2.5mm ²)	
		YGEV2-Φ3.2 护线套 YGEV2-Φ3.2 cable sheath	114059801037	2	Φ3.5±0.2mm(2.5mm ²)	
		0.63×0.63 插针 0.63×0.63 pins	110010401011	2	Φ1.3±0.1mm (0.35mm ²)	
YGEV2-P2RB-1 插座 YGEV2-P2RB-1 receptacle (2.5mm ²)	111000504235	YGEV2-P2RB-1 插座组件 YGEV2-P2RB-1 receptacle assembly	112020108347	1	/	
		5.8×0.8 插针(2.5mm ²) 5.8×0.8 pins (2.5 mm ²)	113020101581	2	Φ3.5±0.2mm(2.5mm ²)	
		YGEV2-Φ3.2 护线套 YGEV2-Φ3.2 cable sheath	114059801037	2	Φ3.5±0.2mm(2.5mm ²)	
		0.63×0.63 插针 0.63×0.63 pins	110010401011	2	Φ1.3±0.1mm (0.35mm ²)	

YGEV2-P2RA-3 插座	111000504247	YGEV2-P2RA-1 插座组件 YGEV2-P2RA-1 receptacle assembly	112020108344	1	/	
YGEV2-P2RA-3 receptacle (4-6mm ²)		5.8×0.8 插针(4~6mm ²) 5.8×0.8 pins (4~6 mm ²)	113020101520	2	Φ4.5±0.2m(4mm ²) Φ4.9±0.2m(6mm ²)	
		0.63×0.63 插针 0.63×0.63 pins	110010401011	2	Φ1.3±0.1mm (0.35mm ²)	
YGEV2-P2RB-2 插座	111000504248	YGEV2-P2RB-1 插座组件 YGEV2-P2RA1-1 receptacle assembly	112020108347	1	/	
YGEV2-P2RB-2 receptacle (4-6mm ²)		5.8×0.8 插针(4~6mm ²) 5.8×0.8 pins (4~6 mm ²)	113020101520	2	Φ4.5±0.2m(4mm ²) Φ4.9±0.2m(6mm ²)	
		0.63×0.63 插针 0.63×0.63 pins	110010401011	2	Φ1.3±0.1mm (0.35mm ²)	
YGEV2-P2RA1-1 插座 (4-6mm ²)	111000504236	YGEV2-P2RA1-1 插座组件 YGEV2-P2RNA-1 receptacle assembly	112020108345	1	/	
		5.8×0.8 插针(4~6mm ²) 5.8×0.8 pins (4~6 mm ²)	113020101520	2	Φ4.5±0.2m(4mm ²) Φ4.9±0.2m(6mm ²)	
		0.63×0.63 插针 0.63×0.63 pins	110010401011	2	Φ1.3±0.1mm (0.35mm ²)	
YGEV2-P2RNA-1 插座	111000504237	YGEV2-P2RNA-1 插座组件 YGEV2-P2RNA-1 receptacle assembly	112020108346	1	/	
YGEV2-P2RNA-1 receptacle (4-6mm ²)		5.8×0.8 插针(4~6mm ²) 5.8×0.8 pins (4~6 mm ²)	113020101520	2	Φ4.5±0.2m(4mm ²) Φ4.9±0.2m(6mm ²) Φ5.0(0, -0.4)mm (6mm ² , LV216-1)	
		0.63×0.63 插针 0.63×0.63 pins	110010401011	2	Φ1.3±0.1mm (0.35mm ²)	

• 技术数据/Technical data

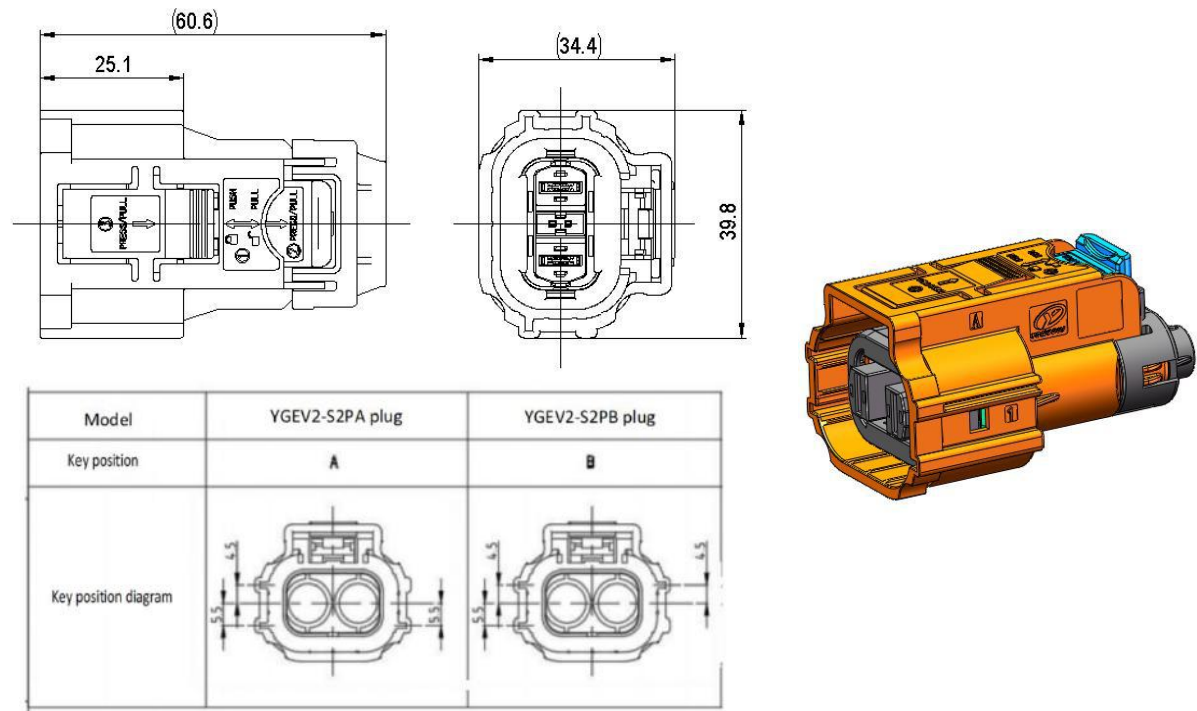
基本信息/Basic information	
PIN 距/PIN pitch	12.8mm
芯数/Numbers of pins	2pin
出线方向/Cable outlet direction	180°
壳体材质/Shell material	塑料/plastic
屏蔽功能/Shielding function	是/yes
电气性能/Electrical properties	
额定电压/Rated voltage	1000 V DC(功率/power), 24 V DC(信号/signal)
额定电流/Rated current	20A(2.5mm ²)、32A(4mm ²)、45A(6mm ²)
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 properties	
机械寿命 /Life cycles	≥50 次/Times
振动/Vibration	LV214 S2、USCAR V2
冲击/Shock	LV214 S2、USCAR V2
耐环境性能/Environmental resistance properties	
工作温度/Ambient temperature	-40℃ ~ +125℃
相对湿度/Humidity range	95%(40℃时/at 40℃)
盐雾/Salt spray	480h
防护等级/IP rating	IP68(1m 水深, 48h)、IP6K9K(头座对插) IP68 (1m water depth, 48h),IP6K9K (plug-receptacle mated)
污染等级/Pollution level	2
海拔要求/Altitude requirements	≤5000m
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/Environmental requirements	RoHS 2.0

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

1.YGEV2-S2P 系列插头总成外形(未注公差: ±0.5)

YGEV2-S2P series plug assembly outline (unspecified tolerance: ±0.5)



2.YGEV2-P2R 系列插座总成外形(未注公差: ±0.5)

YGEV2-P2R series receptacle assembly outline (unspecified tolerance: ±0.5)

型号 Model	X	Y	备注 Remarks
YGEV2-P2RA	0	-15.55	防错凸台孔位尺寸按图示(按平面直角坐标系, 原点为安装面板正中心) The dimension of the fool-proofing lugs shall be in accordance with the drawing (based on the Cartesian coordinate system, with the origin at the geometric center of the mounting panel).
YGEV2-P2RNA			
YGEV2-P2RA1	2.75	15.55	
YGEV2-P2RB	5.50	-15.55	

• 安装说明/Installation

专用工具/Special tools	
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)

• 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 $\leq 60\%$ 、温度在 $5\sim 30^{\circ}\text{C}$ 。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 $\leq 60\%$ 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.