

技术规格书A5/Technical SpecificationA5

YGEV3-2pin系列连接器/YGEV3-2pin Series Connector

• 产品概述/Product instruction

 应用场景/Application 适用于电动汽车的电池包，MCU，高压盒等高压电气连接。 Applicable to high-voltage electrical connections of high-voltage components in electric vehicles, such as battery packs, MCUs, 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； This product can achieve secondary interlocking and unlocking; ✓ 该产品具有延时高压互锁功能； This product has a time-delay high-voltage interlock function; ✓ 两端防呆键位采用2种不同组合实现防错插功能； The foolproof key positions at both ends adopt two different combinations to prevent incorrect mating . ✓ 插座采用永贵自主研发大功率端子，此端子接触点数目多，载流能力强的优点； The receptacle uses self-developed high-power terminals by Yonggui, which feature a large number of contact points and strong current-carrying capacity. ✓ 插头有直式、弯式多种规格型号可选。 The plug is available in multiple specifications and models, including straight and angled types.
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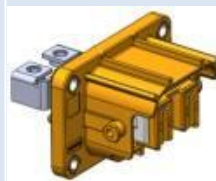
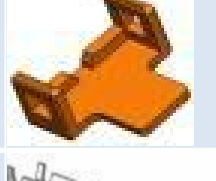
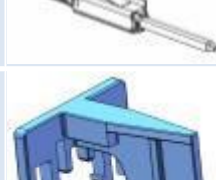
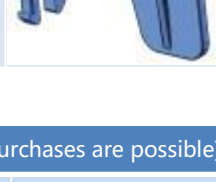
• 订货信息/Ordering information

订货信息（总成）/Ordering Information (Assembly)

键位 Key position	Code A			Code B		
产品名称/ Product name	YGEV3-S2RA 插座/ receptacle	YGEV3-S2RA6 插座/ receptacle	YGEV3-S2RA7 插座/ receptacle	YGEV-S2RB 插座/ receptacle	YGEV-S2RB6 插座/ receptacle	YGEV-S2RB7 插座/ receptacle
产品编号/ Product code	111000503497	111000504092	111000504114	111000503509	TBD	111000504115
对插端名称/ Plug &receptacle name	YGEV3-P2PHA 插头/plug YGEV3-P2PWA 插头/plug			YGEV3-P2PHB 插头/plug YGEV3-P2PWHB 插头/plug		
对插端编号/ Plug &receptacle code	111000406673/112010107117			111000406715/112020207118		

注：产品名称末位字母代表防呆键位，头座型号的末位字母一致即可对插，末尾数字代表不同的铜排形式扩型，不影响对插。

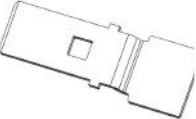
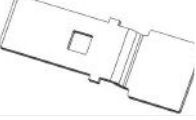
Note: The last letter in the product name indicates the foolproof key position. The last letters of the head and base models are the same and can be mated. The last number represents different copper busbar types and expansions, which do not affect mating.

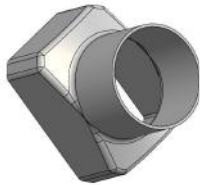
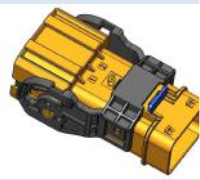
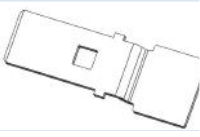
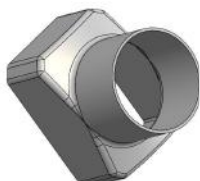
订货信息 (总成) / Ordering information (Assembly)		订货信息 (零部件明细, 可单独采购) Ordering information (parts list, individual purchases are possible)				
		产品名称/ Product name	产品编号/ Product code	数量/ Qty	接线规格/ Wiring specification	图示 (参考) / Diagram (reference)
YGEV3-S2RA 插座/ YGEV3-S2RA receptacle YGEV3-S2RB 插座/ YGEV3-S2RB receptacle	111000504146 111000504147	YGEV3-S2RA 插座组件 YGEV3-S2RB 插座组件 (任一型号) YGEV3-S2RA6 receptacle assembly YGEV3-S2RB6 receptacle assembly (any model)	111000503497 111000503509	1	/	
		YG1266A 信号针护套 YG1266A signal pin sheath	114060202333	1	/	
		YG1266A 信号针 TPA YG1266A signal pin TPA	114060202334	1	/	
		82-0.63×0.63-H25~H35T 插针 82-0.63×0.63-H25~H35T pin	110010401011	2	Φ(1.2-1.3)±0.1 (0.25-0.35mm ²)	
		YGEV3-S2RA 挡块 YGEV3-S2RA baffle	114060400283	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 list, individual purchases are possible)				
		产品名称/ Product name	产品编号/ Product code	数量/ Qty	接线规格/ Wiring specification	图示 (参考) / Diagram (reference)
YGEV3-S2RA6 插座/ YGEV3-S2RA6 receptacle	111000504148	YGEV3-S2RA6 插座组件 YGEV3-S2RB6 插座组件 (任一型号) YGEV3-S2RA6 socket assembly YGEV3-S2RB6 socket assembly (any model)	111000504092 /	1	/	

YGEV3-S2RB6 插座/ YGEV3-S2RB6 receptacle		YG1266A 信号针护套 YG1266A signal pin sheath	114060202333	1	/	
		YG1266A 信号针 TPA YG1266A signal pin TPA	114060202334	1	/	
		82-0.63×0.63-H25~H35T 插针 82-0.63×0.63-H25~H35T pin	110010401011	2	Φ(1.2-1.3)±0.1 (0.25-0.35mm²)	
		YGEV3-S2RA 挡块 GEV3-S2RA baffle	114060400283	1	/	
YGEV3-S2RA7 插座/ YGEV3-S2RA7 receptacle YGEV3-S2RB7 插座/ YGEV3-S2RB7 receptacle	111000504196 111000504197	YGEV3-S2RA7 插座组件 YGEV3-S2RB7 插座组件 (任一型号) YGEV3-S2RA7 receptacle t assembly YGEV3-S2RB7 receptacle assembly (any model)	111000504114 111000504115	1	/	
		YG1266A 信号针护套 YG1266A signal pin sheath	114060202333	1	/	
		YG1266A 信号针 TPA YG1266A signal pin TPA	114060202334	1	/	
		82-0.63×0.63-H25~H35T 插针 82-0.63×0.63-H25~H35T pin	110010401011	2	Φ(1.2-1.3)±0.1 (0.25-0.35mm²)	
		YGEV3-S2RA 挡块 YGEV3-S2RA baffle	114060400283	1	/	

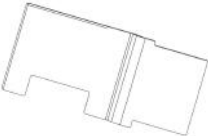
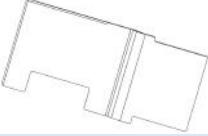
订货信息 (总成) / Ordering information (Assembly)		订货信息 (零部件明细, 可单独采购) Ordering information (parts list, individual purchases are possible)				图示 (参考) / Diagram (reference)
		产品名称/ Product name	产品编号/ Product code	数量/ Qty	接线规格/ Wiring specification	

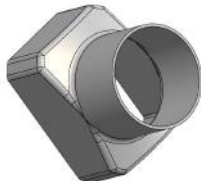
YGEV3-P2PHA 插头 (10mm ²) / YGEV3-P2PHA plug (10mm ²) YGEV3-P2PHB 插头 (10mm ²) YGEV3-P2PHB plug (10mm ²)	111000407537 111000407539	YGEV3-P2PHA 插头组件 YGEV3-P2PHB 插头组件 (任一型号) YGEV3-P2PHA plug assembly YGEV3-P2PHB plug assembly (any model)	111000406673 111000406715	1	/	
		11×1.5NAU001-025SW 针端子 11×1.5NAU001-025SW pin terminals	114020101539	2		
		YGEV3-P2PHA 屏蔽件-内-10 YGEV3-P2PHA shield - inner - 10	114022600546	2		
		YGEV3-P2PHA 屏蔽件-外-10 YGEV3-P2PHA shield- outer - 10	114022600597	2		
		φ12.5×1.5 垫片 φ12.5×1.5washer	114069806326	1		
		线夹组件 R4.5(YGEV3) Cable clamp assembly R4.5 (YGEV3)	113990002314	1		
		φ9 尾盖(黑) φ9 rear cover (black)	114069806370	1		
					10mm ² (LV216) Φ8.2mm~Φ8.8mm	
YGEV3-P2PHA 插头 (16mm ²) / YGEV3-P2PHA plug (16mm ²) YGEV3-P2PHB 插头 (16mm ²)/ YGEV3-P2PHB plug (16mm ²)	111000407536 111000407540	YGEV3-P2PHA 插头组件 YGEV3-P2PHB 插头 (任一型号) YGEV3-P2PHA plug assembly YGEV3-P2PHB plug assembly (any model)	111000406673 111000406715	1	/	
		11×1.5NAU001-025SW 针端子 11×1.5NAU001-025SW pin terminals	114020101539	2		
		YGEV3-P2PHA 屏蔽件-内-16 YGEV3-P2PHA shield - inner - 16	114022600545	2		
					16mm ² (LV216) Φ9.6mm~Φ10.2mm	

		YGEV3-P2PHA 屏蔽件-外-16 YGEV3-P2PHA shield - outer- 16	114022600596	2		
		φ12.5×1.5 垫片 φ12.5×1.5 washer	114069806326	1		
		线夹组件 R5.2(YGEV3) Cable clamp assembly R5.2 (YGEV3)	113990002313	1		
		φ10.4 尾盖(黑) φ10.4 rear cover (black)	114069806369	1		
YGEV3-P2PHA 插头 (25mm²) / YGEV3-P2PHA plug (25mm²) YGEV3-P2PHB 插头 (25mm²)/ YGEV3-P2PHB plug (25mm²)	111000407538 111000407541	YGEV3-P2PHA 插头组件 YGEV3-P2PHB 插头组件 (任一型号) YGEV3-P2PHA plug assembly YGEV3-P2PHB plug assembly (any model)	111000406673 111000406715	1	/	
		11×1.5NAU001-025SW 针端子 11×1.5NAU001-025SW pin terminals	114020101539	2	25mm² (LV216) Φ11.6mm~Φ12.2mm	
		YGEV3-P2PHA 屏蔽件-内-25 YGEV3-P2PHA shield - inner - 25	114022600543	2		
		YGEV3-P2PHA 屏蔽件-外-25 YGEV3-P2PHA shield- outer - 25	114022600544	2		
		φ12.5×1.5 垫片 φ12.5×1.5washer	114069806326	1		
		线夹组件 R6.2(YGEV3) Cable clamp assembly R6.2 (YGEV3)	113990002315	1		

		φ12.4 尾盖(黑) φ12.4 rear cover (black)	114069806321	1		
YGEV3-P2PWHA 插头 (10mm²) / YGEV3-P2PWHA plug (10mm²) YGEV3-P2PWHA 插头 (10mm²)/ YGEV3-P2PWHA plug(10mm²)	111000407542 111000407545	YGEV3-P2PWHA 插头组件 YGEV3-P2PWHA 插头组件 (任一型号) YGEV3-P2PWHA plug assembly YGEV3-P2PWHA plug assembly (any model)	112010107117 112010107118	1	/	
		16.2×1.5NAU001-025SW 针端子 16.2×1.5NAU001-025SW pin terminal	114020101578	2		
		YGEV3-P2PHA 屏蔽件-内-10 YGEV3-P2PHA shield - inner - 10	114022600546	2		
		YGEV3-P2PHA 屏蔽件-外-10 YGEV3-P2PHA Shield - outer - 10	114022600597	2		
		φ12.5×1.5 垫片 φ12.5×1.5 washer	114069806326	1		
		线夹组件 R4.5(YGEV3) Cable clamp assembly R4.5 (YGEV3)	113990002314	1		
		φ9 尾盖(黑) φ9 rear cover (black)	114069806370	1		
					10mm² (LV216) Φ8.2mm~Φ8.8mm	

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 list, individual purchases are possible)				
		产品名称/ Product name	产品编号/ Product code	数量/ Qty	接线规格/ Wiring specification	图示 (参考) / Diagram (reference)
YGEV3-P2PWHA 插头 (16mm²) / YGEV3-P2PWHA plug(16mm²)	111000407543 111000407546	YGEV3-P2PWHA 插头组件 YGEV3-P2PWHA 插头组件 (任一型号) YGEV3-P2PWHA plug assembly YGEV3-P2PWHA plug assembly	112010107117 112010107118	1	/	

YGEV3-P2PWHB 插头(16mm²)/ YGEV3-P2PWHB plug(16mm²)		(any model)				
		16.2×1.5NAU001-025SW 针端子 16.2×1.5NAU001-025SW pin terminal	114020101578	2	16mm² (LV216) Φ9.6mm~Φ10.2mm	
		YGEV3-P2PHA 屏蔽件-内-16 YGEV3-P2PHA shield - inner - 16	114022600545	2		
		YGEV3-P2PHA 屏蔽件-外-16 YGEV3-P2PHA shield - outer - 16	114022600596	2		
		φ12.5×1.5 垫片 φ12.5×1.5 washer	114069806326	1		
		线夹组件 R5.2(YGEV3) Cable clamp assembly R5.2 (YGEV3)	113990002313	1		
		φ10.4 尾盖(黑) φ10.4 rear cover(black)	114069806369	1		
YGEV3-P2PWHA 插头 (25mm²) / YGEV3-P2PHA plug(10mm²) YGEV3-P2PWHB 插头 (25mm²)/ YGEV3-P2PHB plug(10mm²)	111000407544 111000407548	YGEV3-P2PWHA 插头组件 YGEV3-P2PWHB 插头组件 (任一型号) YGEV3-P2PHA plug assembly YGEV3-P2PHB plug assembly (any model)	112010107117 112010107118	1	/	
		16.2×1.5NAU001-025SW 针端子 16.2×1.5NAU001-025SW pin terminal	114020101578	2	25mm² (LV216) Φ11.6mm~Φ12.2mm	
		YGEV3-P2PHA 屏蔽件-内-25 YGEV3-P2PHA shield - inner - 25	114022600543	2		

		YGEV3-P2PHA 屏蔽件-外-25 YGEV3-P2PHA shield - outer - 25	114022600544	2		
		φ12.5×1.5 垫片 φ12.5×1. washer	114069806326	1		
		线夹组件 R6.2(YGEV3) Cable clamp assembly R6.2 (YGEV3)	113990002315	1		
		φ12.4 尾盖(黑) φ12.4 rear cover (black)	114069806321	1		

• 技术数据/Technical data

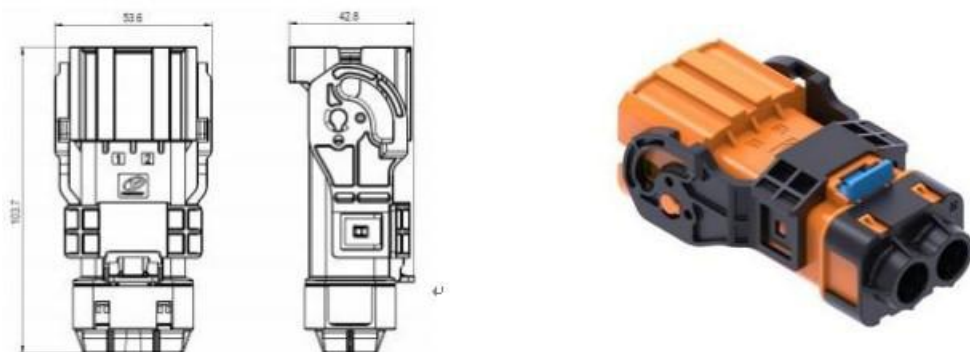
基本信息/Basic information	
Pin 距/Pin distance	15.7mm
芯数/Number of cores	2PIN
线缆规格/Wire specification	10mm ² (Φ8.2-Φ8.8mm) 16mm ² (Φ9.6mm~Φ10.2mm) 25mm ² (Φ11.6mm~Φ12.2mm)
出线方向/Cable outlet direction	90°、180°
屏蔽功能/Shielding function	是/yes
电气性能/Electrical specification	
额定电压/Rated voltage	1000V DC (功率/power) , 24 V (信号/signal)
额定电流/Rated current	60A (10mm ²) 、80A (16mm ²) 、125A (25mm ²)
绝缘电阻/Insulation resistance	≥100MΩ (功率/信号 power/signal) (1000V DC)
耐电压/Withstand voltage	3000 V (功率/power) , 1000 V (信号/signal) (50Hz AC 常态/normal)
HVIL	是/yes
机械性能/Mechanical specification	
机械寿命/Life cycle	≥50 次/times
振动等级/Vibration level	USCAR V2
冲击等级/Shock level	USCAR V2
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/at 40℃)
盐雾/Salt spray	96h
防护等级/IP rating	IP68&IP6K9K (头座对插 mating)
污染等级/Pollution level	2
海拔高度/Altitude requirements	≤5000m
材料/涂覆/外观材料/涂覆/外观/Materials/Finishing/Outline	

壳体壳体/Shell	PA66-GF
屏蔽/Shield	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
其它技术数据参见 DV/PV 测试报告 For other technical data, please refer to the DV/PV test report.	

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

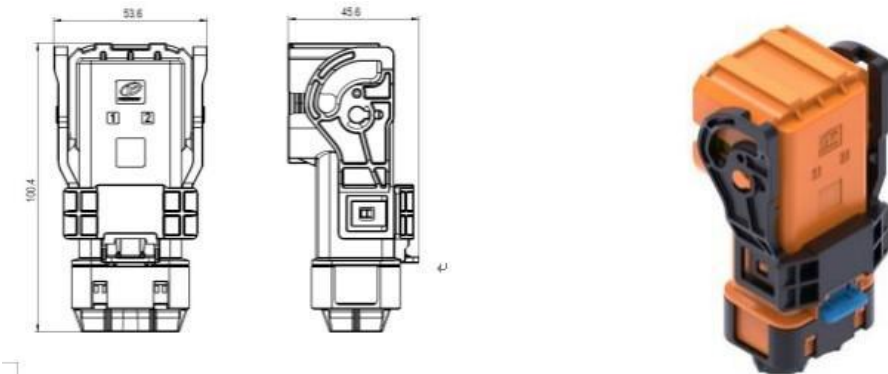
1.YGEV3-P2PH 系列插头总成外形(未注公差: ± 0.5)

YGEV3-P2PH series plug assembly outline (tolerances not specified: ± 0.5)



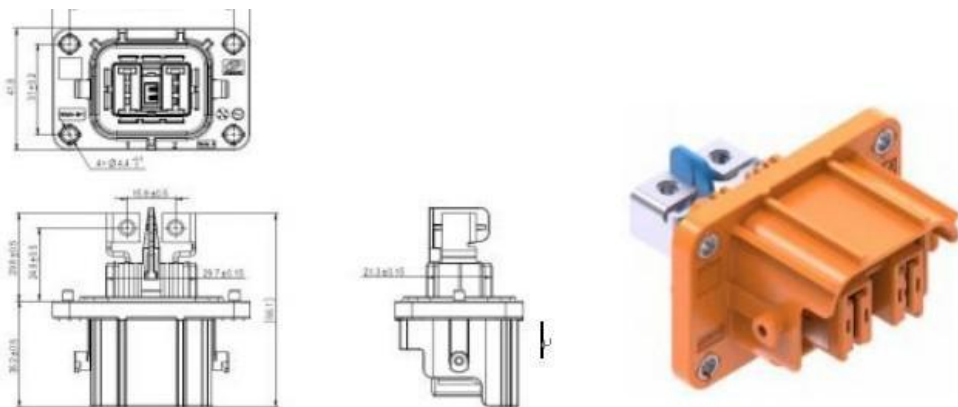
2.YGEV3-P2PWH 系列插头总成外形(未注公差: ± 0.5)

YGEV3-P2PWH series plug assembly outline (tolerances not specified : ± 0.5)



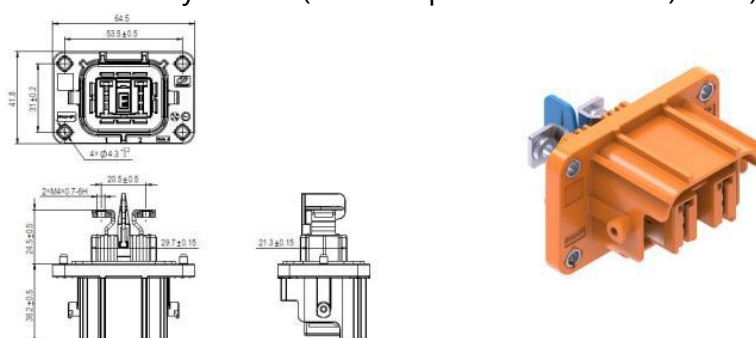
3.YGEV3-S2RA 系列插座总成外形(未注公差: ± 0.5)

YGEV3-S2RA series socket assembly outline (tolerances not specified: ± 0.5)



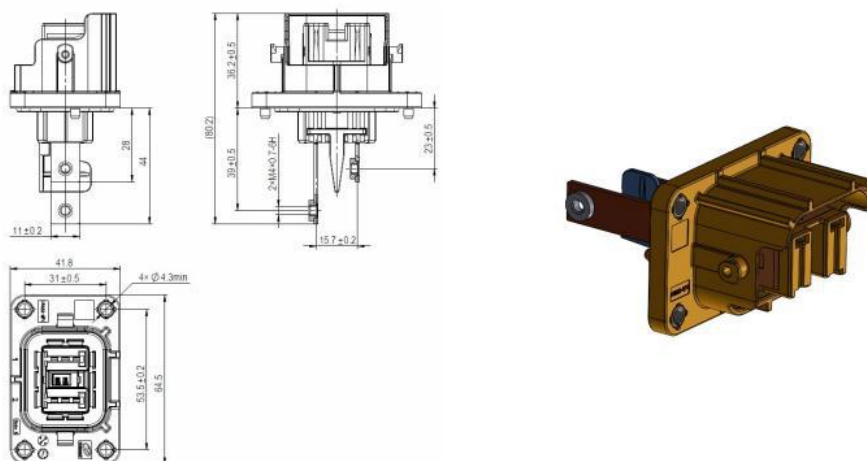
4. YGEV3-S2RA6 系列插座总成外形(未注公差: ± 0.5)

YGEV3-S2RA6 series receptacle assembly outline (without specified tolerances): ± 0.5



5. YGEV3-S2RA7 系列插座总成外形(未注公差: ± 0.5)

YGEV3-S2RA7 series receptacle assembly outline (tolerances not specified : ± 0.5)

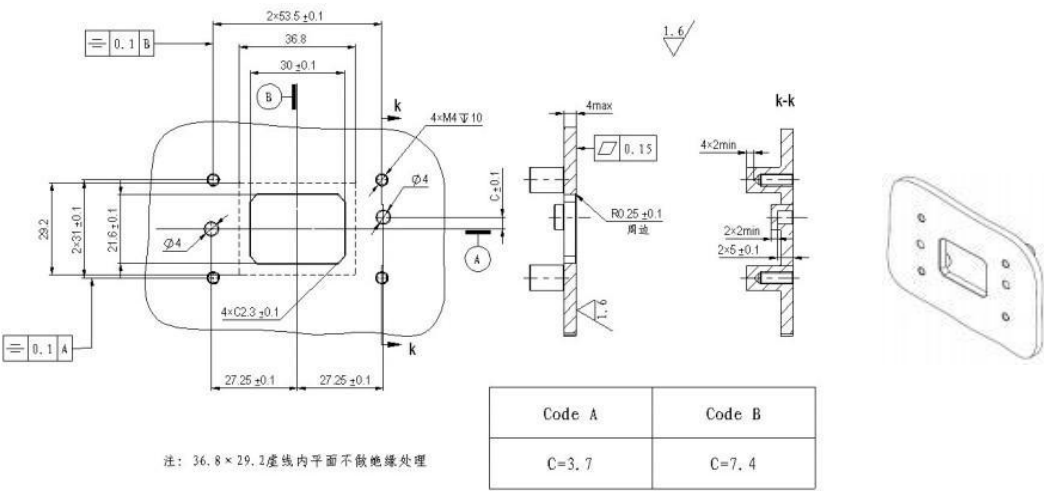


6. 插座安装开孔尺寸

Receptacle mounting hole dimension

注: 推荐法兰锁紧螺钉: M4 组合螺钉, 锁紧扭矩 $3 \pm 0.5 \text{ N} \cdot \text{M}$

Note: Recommended flange locking screws: M4 combination screws, locking torque $3 \pm 0.5 \text{ N} \cdot \text{M}$



• 安装说明/Installation instructions

专用工具/Tools	
拆卸工具/Disassembly tool	/
送针工具/Pin-feeding tool	/
压接工具/Crimping tool	/
其他工具/Other tool	/

• 储存/Store

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.