

Technical Specifications YGC1017 Series Electrical Connectors

Product Overview



Application Scenario

This series of connectors are mainly used for electrical connections of electric vehicle chargers, oil pump controllers, air pump controllers, high-voltage boxes, etc.

Advantages

- ✓ This product can achieve 360-degree full shielding
- → This product can realize secondary interlocking and unlocking
- → This product has a delayed high voltage interlocking function
- ✓ The key positions at both ends use 4 different combinations to prevent wrong insertion
- ✓ The connection between the plug and the receptacle is straight-insertion locking
- ✓ Plug and receptacle adopt terminal crimping

• Ordering Information

Ordering Info	ormation			
Key position	I	П	III	IV
Product Name	YGC1017-EV-S3P plug	YGC1017-EV-S3PB plug	YGC1017-EV-S3PC plug	YGC1017-EV-S3PD plug
Part No.	112010102206	112020102603	112010103470	112010103471



Product Name	YGC1017-EV-P3R receptacle	YGC1017-EV-P3RA receptacle (moveable receptacle)	YGC1017-EV-P3RB receptacle	YGC1017-EV-P3RC receptacle	YGC1017-EV-P3RD receptacle
Part No.	112020102439	112020102876	112020102602	112020103808	112020103809

Ordering information (pinhole parts, purchased separately)				
Corresponding plug&receptacle	Plug	Receptacle		
Product Name	YG939 power socket	YG939 power pin	YG939 signal socket (choose one)	
Part No.	501021400357	501021400216	501021600128 /501021401859	
Wiring specifications	2.5mm2 /Φ5.8±0.3mm (shielded cable)	2.5mm2 /Φ3.5±0.2mm (unshielded cable)	0.5mm2/Φ1.5±0.2mm	
Diagram (reference)				

• Technical Data

Basic Information	
PIN distance	/
Number of cores	3pin
Cable specifications	Plug end: 2.5mm2/Φ5.8±0.3mm (shielded cable) receptacle end: Power: 2.5mm2/Φ3.5±0.2mm (unshielded cable) Signal: 0.5mm2/Φ1.5±0.2mm
Outlet direction	180°

Electrical properties	
Rated voltage	800 V (power), 24 V (signal)
Rated current	16A (2.5mm2)
Insulation resistance	≥100MΩ (power/signal) (1000V DC)
Withstand voltage	3000 V (power), 1000 V (signal) (50Hz AC normal)
Contact resistance	≤5m Ω (power component), ≤10m Ω (signal component)
HVIL (Y/N)	Υ
Shield (Y/N)	Υ

Mechanical properties	
Mechanical life	≥50 times



Environmental resistance	
Operating temperature	-40°C ~ +125°C
Relative humidity	95% (at 40°C)
Salt spray level	48h
Protection level	IP67&IP6K9K(header plug-in)
Altitude requirements	Below 4000m

Material/Coating/Appearance

See Parts Drawing

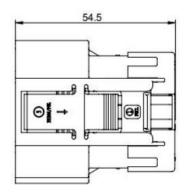
Standards and Certification	
Flame retardant grade	UL94 V-0 (plastic), HB (rubber)
Environmental requirements	RoHS 2.0
Implementation Standards	QC/T 1067.1

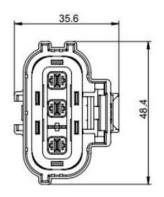
For other technical data, please refer to the DV/PV test report



Dimensions

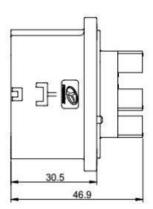
YGC1017-EV-S3P series plug (tolerance not specified: ±0.5)

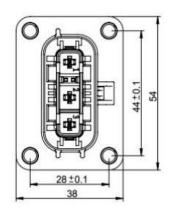






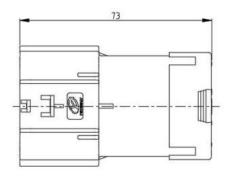
YGC1017-EV-P3R series receptacle(unmarked tolerance : ±0.5)

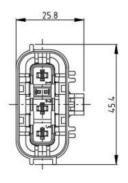






YGC1017-EV-P3RA receptacle (moveable) (tolerance not specified: ±0.5)

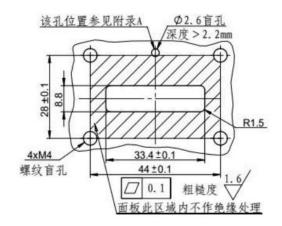








YGC1017-EV-P3R series receptacle installation hole dimensions (tolerance not specified: ±0.1)



附录 A 连接器头座对插可选防呆键位图示

防呆键位 型号	I型	Ⅱ型	III型	IV型
连接器插头视图				
连接器插座视图				
插座安装 防呆孔位 置尺寸	♣♦♦♦	⊕ ⊕ ⊕ ⊕ ⊕	⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕<	 ♦ ♦ ♦ ♦



• Installation Introduction

Special tools	
Removal tools	Power socket: GZ939-01-01-00 Removal tool
	Power pin: RTSCC-04 (2.8×0.8) removal tool
	Signal terminal: GZ939-02-03-00 Disassembly tool
Needle feeding	
tool	
Crimping tools	
Other Tools	



• Store

Packaging and storage instructions		
Storage requirements	Contact parts (gold-plated, silver-plated) must be stored separately, kept neat, clean and ventilated. The storage environment should be controlled at a humidity of $\leq 60\%$ and a temperature of $5\sim 30^{\circ}$ C. Reference shelf life 6 months	
Transshipment requirements	The terminals should be protected from collision, contact with corrosive gases and liquids, and direct contact with hands during packaging, transportation, transfer, production, and assembly to ensure that the terminal contact surface is in good condition.	