

# Technical Data Sheet---YGEV2-3pin Series Electrical Connectors

#### • Product Overview



Applications
Suitable for electric vehicle air conditioning compressor, PTC, charger, DCDC, high voltage box and other electrical connections.

#### Advantages

- ✓ Full 360 degree shielding can be realized;
- ✓ Can realize secondary interlocking and unlocking;
- ✓ With delayed high voltage interlocking function;
- ✓ Different combinations of anti-dumbing key positions at both ends are adopted to realize the function of anti-wrong plugging;
- ✓ The plug and receptacle are connected in the form of straight plug locking;
- ✔ Plugs and receptacles are crimped with terminals.

### • Ordering Information

Ordering Information		
Keys	A	В
Product Name	YGEV2-S3PA Plug	YGEV2-S3PB Plug
Product Number	112010105975	112010105976
Pair of plug end name	YGEV2-P3RA Receptacle	YGEV2-P3RB Receptacle
Pair of plug end number	112020106779	112020106780



Ordering information (Plug assembly detail	ils, can be purchased separ	ately)	
Name	Part No.	Wiring specifications	Diagram (reference)
YGEV2-S3PA Plug assembly	112010105975	2.5mm <sup>2</sup> /4mm <sup>2</sup> /6mm <sup>2</sup>	
YGEV2-S3PB Plug assembly	112010105976	2.5mm/4mm/0mm	
5.8×0.8 Socket (2.5mm <sup>2</sup> )	110010101825		
YG1467 Shielding - Outside-4	114022500495	2.5mm² (LV216)	
YGEV2 Shielding-Inside-2.5	114022500523	Φ4.7 (0, -0.5) mm	
Φ4.9 Tailcap assembly-2.5	113990001598		
5.8×0.8 Socket (4~6mm <sup>2</sup> )	501021401790		
YG1467 Shielding - Outside-4	114022500495	4mm² (LV216)	
YG1467 Shielding-Inside-4	114022500492	Φ5.8 (0, -0.5) mm	
Φ6 Tailcap assembly-4	113990001597		
5.8×0.8 Socket (4~6mm <sup>2</sup> )	501021401790	6mm <sup>2</sup> (LV216) Φ6.5 (0, -0.5) mm	
YG1467 Shielding - Outside-6	114022500496		
YG1467 Shielding-Inside-6	114022500494		
Φ6.7 Tailcap assembly-6	113990001596		



Ordering Information (Receptacle assembly details, can be purchased separately)			
Name	Part No.	Wiring specifications Diagram (reference)	
YGEV2-P3RA Receptacle assembly	112020106779	2.5mm²/4mm²/6mm²	
YGEV2-P3RB Receptacle assembly	112020106780	2.5mm/4mm/6mm	
5.8×0.8 Pin (2.5mm <sup>2</sup> )	110010400760	Φ3.5±0.2mm (2.5mm <sup>2</sup> )	
5.8×0.8 Pin(4~6mm²)	501021401626	Φ4.5±0.2mm (4mm <sup>2</sup> ) Φ4.9±0.2mm (6mm <sup>2</sup> )	
0.63×0.63 Pin	110010400910	Φ1.3±0.2mm (0.35mm <sup>2</sup> )	

# • Technical Data

Basic Information	
PIN distance	10.7mm&9.6mm
Number of pins	3pin
Adaptive pinhole	Plugs - power sockets; Receptacles - power pins, signal pins
Outlet direction	180°

Electrical Performance	
Rated Voltage	1000 V ( Power) , 24 V ( Signal )
Rated current	20A (2.5mm <sup>2</sup> ) 、32A (4mm <sup>2</sup> ) 、40A (6mm <sup>2</sup> )
Insulation resistance	$\geq 100 M\Omega$ ( Power/ Signal) (1000V DV)
Withstanding Voltage	$3000\ V$ ( $Power)$ , $1000\ V$ ( $Signal)$ ( $50Hz\ AC\ Normal)$
Contact resistance	$\leq 1.17 m\Omega$ (2.5mm2 Power Contact) , $\leq 0.72 m\Omega$ (4mm2 Power Contact) , $\leq 0.68 m\Omega$ (6mm2 Power Contact) , $\leq 10 m\Omega$ (0.35mm2 Signal Contact)
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Electrical continuity between housings/shield contact resistance	Between cable shield and plug shield: $\leq 3m\Omega$ Between plug and receptacle: $\leq 4m\Omega$ Between receptacle and mounting panel: $\leq 2m\Omega$

Mechanical Performance	
Total pull-out force	≤75N
Insertion force	≤75N
Locking force	≥110N
Mechanical life	≥50 times
Vibration	V2 (USCAR 37)
Shock	V2 (USCAR 37)



Environmental Performance	
Working Temperature	-40°C∼+125°C
Relative Humidity	95% (40°C)
Salt spray	96h
Protection Grade	IP67&IP6K9K
Pollution level	2
Altitude	≤4000m

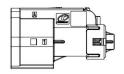
Material/Coating/Appearance	
Shells	PA66-GF25 (Orange)
Insulators	Plug: PA66-GF25 (black), Receptacle: PA66-GF25 (orange)
Pinhole Parts/Terminals	Power: Copper Alloy/Silver Plated, Signal: Copper Alloy/Silver Plated

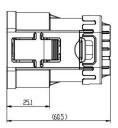
Standards & Certifications	
Flame retardant grade	UL94 V-0(Plastic), HB(Rubber)
Environmental Requirements	RoHS 2.0
Standard	USCAR 37

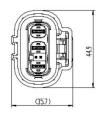


# • Product Size

# YGEV2-S3P Series-Plug Assembly Outline (Tolerance:±0.5)



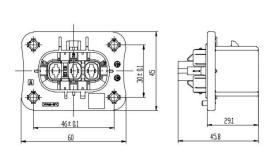


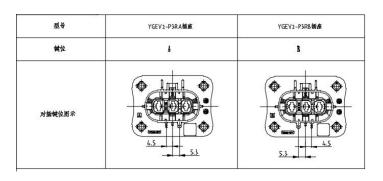




型号	YGEV2-S3PA插头	YGBV2-S3PB插头
键位	A	В
对插键位图示	53 4.5	4.5

YGEV2-P3R Series-Receptacle Assembly Outline (Tolerance:±0.5)

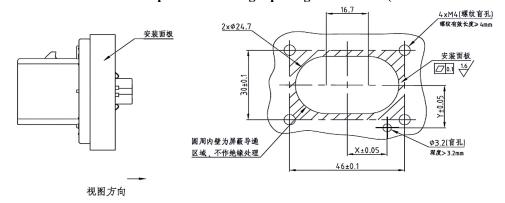








# YGEV2-P3R Series-Receptacle Mounting Opening Dimensions (Unnoted Tolerance: ±0.1)



推荐安装面板尺寸(厚度≥6mm) 螺钉拧紧力矩: 3±0.5N.m

型号	X	Y	备注
YGEV2-P3RA	16	-18.50	时供几人对公口上按阅二
YGEV2-P3RB	7.50	-18.50	- 防错凸台孔位尺寸按图示

#### • Installation Instructions

Specialized tools	
Removal Tools	Power Pin Removal Aid (532031201008) Power Socket Removal Aid (532031201010) Signal Pin Removal Aid (532031201009)
Needle Feeder Tool	
Crimping Tools	
Other Tools	

#### • Stored

Packaging and storage instructions	
Storage requirements	Contact (gold-plated, silver-plated) parts must be stored separately and kept neat, clean and ventilated. The storage environment should be controlled at a humidity of $\leq 60\%$ and a temperature of $5\sim30^{\circ}$ C. Reference storage period 6 months