

# Technical Data Sheet---YGEV5 Series Electrical Connectors

#### • Product Overview



Application Suitable for electrical connection of MCU, battery pack, high voltage box, etc. of electric vehicles.

### Advantages

- ✓ 360 degree full shielding;
- ✓ Secondary interlocking and unlocking;
- ✓ Counter-insertion and installation of antidumbing;
- ✔ Handle locking;
- ✓ Ultrasonic welding of plug terminals.

## • Ordering Information——TBD

#### • Technical Data

Basic Information	
Number of pins	2pin
Cable Specifications	Plugs - power pins; Receptacles - power sockets, signal pins
Outlet direction	90°

Electrical Performance	
Rated Voltage	1000 V ( Power) , 24 V ( Signal )
Rated current	300A (70mm2) 、200A (50mm2)
Insulation resistance	$\geq 100 M\Omega$ ( Power/ Signal) (1000V DV)
Withstanding Voltage	$3000~V~(\mbox{ Power})$ , $~1000~V~(\mbox{ Signal})~(50\mbox{Hz AC Normal})$
Contact resistance	$\leq$ 0.32m $\Omega$ (70mm2 Power Contact) 、 $\leq$ 0.36m $\Omega$ (50mm2 Power Contact) 、 $\leq$ 10m $\Omega$ (0.35mm2 Signal Contact)
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Electrical continuity between shells/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)

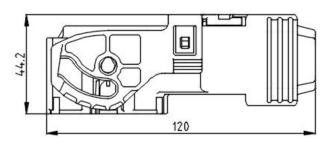
Environmental Performance	
Working Temperature	-40°C∼+125°C
Relative Humidity	95% (40°C)
Salt spray	96h
Protection Grade	IP67&IP6K9K
Pollution level	2
Altitude	≤4000m

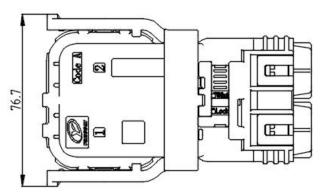
Material/Coating/Appearance	
Shells	PA66-GF25 (Orange)
Insulators	Plug end: PA66-GF25 (black)
Pinhole Parts/Terminals	Power parts: Copper alloy/Silver plated, Signal parts: Copper alloy/Silver plated

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

# • Product Size

# YGEV5 Series-Plug Assembly Outline (Tolerance:±0.5)



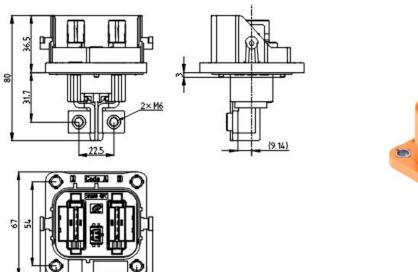




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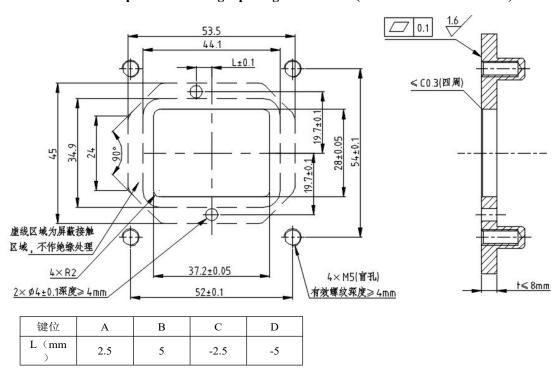


### YGEV5 Series-Receptacle Assembly Outline (Tolerance:±0.5)





### YGEV5 Series-Receptacle Mounting Opening Dimensions (Unnoted Tolerance: ±0.1)



#### • Installation Instructions

Specialized tools	
Removal Tools	
Needle Feeder Tool	/



Crimping Tools	
Other Tools	