



Suzhou Yihang Electronic Science and Technology Co.,Ltd.

Instruction Manual for Standard Electric Vehicle (EV)

Charging Cables.

Introduction

Thank you for purchasing a Suzhou Yihang Electronic Science and Technology Co., Ltd charging cable for electric vehicles. We are certain you will be delighted with your purchase.

In order to help you use our product correctly, safely and quickly, please read this instruction manual carefully before charging or using it.



Product Description

Product Name: EV charging Cable 16A/32A type 2 AC Female connector to 16A/32A type 2 Male connector

Product Name: EV charging Cable 16A/32A type 1 AC Female connector to 16A/32A type 2 Male connector

Product rated parameters

Application Standard IEC 62196-1-2016/IEC 62196-2-2016

Electrical Performance

Rated current: 16A/32A

Operation voltage: 240V/480V

Insulation resistance: > 1000MΩ(DC500V)

Terminal temperature rise: < 50K

Withstand voltage: 2000V

Contact Resistance: 0.5mΩ max

Mechanical Properties

Mechanical life: plug in/out > 10000 times

Coupled insertion force: 45N < F < 100N

Impact of external force: the product can withstand a 1 metre height drop and the weight of a 2-ton vehicle.

Temperature Performance

Operating temperature window: -30°C to +50°C

Material Properties

Case material: thermoplastic, flame retardant grade UL94 V-0

Electrical Terminals: copper alloy, silver plating

1 Safety Instructions

1. **WARNING** If the cable or cable connectors are damaged in any way, isolate the power source immediately. Once the power source is isolated, remove the cable from both the electric vehicle and the power source. There is a risk of fire and electric shock that could result in fatal injury. Do not use the cable until inspected by a qualified electrical engineer. **NEVER TOUCH EXPOSED WIRES OR ELECTRICAL CONTACTS.**
2. **WARNING** Damaged or worn charging contacts can overheat. There is a risk of fire and electric shock that could result in fatal injury.
3. **WARNING** Incompatible charging cables or unsuitable charging stations can cause the cable to overheat. Always charge at the rated AMP for the cable. There is a risk of fire and electric shock that could result in fatal injury.
4. **WARNING** The cables are not designed for full immersion in water. There is a risk of fire and electric shock that could result in fatal injury.
5. **CAUTION** The cables are rated to operate in rain and damp conditions but are not advised for use during extremely heavy rain fall or exceptionally inclement weather conditions.
6. **CAUTION** The cables should not be operated by anyone under the age of 18 years.
7. **CAUTION** The cables should be stored and used in a safe manner to prevent trips and injury.
8. **CAUTION** Never place fingers or other body parts into the connectors. Never attempt to insert foreign objects into the connectors.
9. **CAUTION** In addition to these instructions, observe all safety information provided by the electric vehicle manufacturer and electric vehicle supply equipment instructions.

2 Charging Cable Connectors

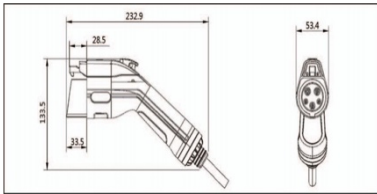
The charging cable is supplied with a cable and connectors at each end of the cable. Details of each of the connector types are given below:

Electric Vehicle Connector

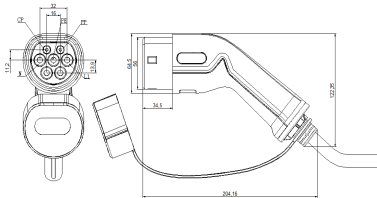
Type 2 AC male connector (to be plugged/inserted into the electric vehicle). This is the larger of the two ends of the

cable and is shown below:

Type 1 Connector

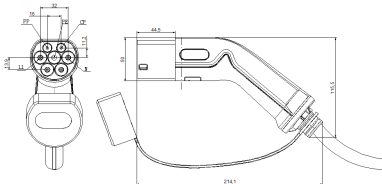


Type 2 Connector



Electric Vehicle Supply Equipment (EVSE) Connector

Type 2 AC Female connector (to be plugged into the electric vehicle supply equipment (EVSE) or power source). This is the smaller of the two connectors:



1. Prior to use of the cable, remove the protective rubber cap from the connectors at the ends of the cable.
2. Connect the cable. The sequence for connecting the cable will be determined by the electric vehicle manufacturers' instructions and guidelines. In the absence of any instructions, it is recommended that the electric vehicle end of the cable is connected first and the electric vehicle supply equipment (EVSE) end of the cable second.
3. Insert the cable correctly, the ends of the cable should be inserted into the respective electric vehicle or electric vehicle supply equipment (EVSE) socket. Please check the socket into which you are inserting the cable to ensure there is no damage or foreign objects present.
4. The connector should be inserted cleanly and directly into the sockets. As far as practically possible, avoid inserting the cable connector into the sockets at an angle. Excessive insertion of the cable from an angle will result in damage to the cable connectors.
5. Charge the vehicles for as long as required. Refer to Vehicle Manufacturers instructions for further details
6. Disconnecting the cable. The sequence for disconnecting the cable will be determined by the electric vehicle manufacturers instructions and guidelines. In the absence of any instructions, it is

recommended that the electric vehicle supply equipment (EVSE) end of the cable is disconnected first and the Electric Vehicle end of the cable second.

7. Store the cable safely in a manner to avoid trips and hazards. Store the cable connectors face downwards to avoid water ingress whilst not in use.
8. Replace the rubber protective cap on the connectors whilst not in use. Failure to replace the rubber cap will result in premature degradation of the contacts within the cable and ultimately cable failure.
9. Should the cable connectors become excessively damp or wet, with the cable fully disconnected, wipe the cable connectors with a dry cloth before use.

3 Care and maintenance

1. It is recommended that at least once per week, with the cable fully disconnected, the cable is visually inspected for damage, breaks or cuts in either the cable or the connectors. If the cable or the connectors are in anyway damaged, please do not use the cable until inspected by a qualified electrical engineer.
2. Should the cable cease to work, first visually inspect the cable as above. Should no damage be found, with the cable fully disconnected, clean the contacts within the connectors lightly using a dry cotton earbud or, if available, compressed air removing any dirt or foreign objects. Ensure the cotton bud is fully removed prior to re-use of the cable and no foreign objects are present. Beyond this intervention, the cable does not contain user repairable parts. Please do not try to repair and maintain. Please the contact the company or the dealer for repair or replacement.
3. Whilst the cable connectors are robust and will withstand the weight of a 2000KG vehicle driven over them at low speed, repeated dropping from height or vehicle runovers is likely to damage the cable. This should be avoided.
4. Avoid excessive pulling or bending of the cable. In particular avoid knots in the cable.

4 Reference standards

IEC62196-1 2016
IEC62196-2 2016
IEC62196-3 2016
ISO 9001 & 14001
SAEJ1772

5 Guarantee

Please refer to the separate guarantee terms.