

STOCK CODE: 300351

CONNECTION TO FUTURE



YGC - ROLLING STOCK AND INDUSTRY CONNECTOR HANDBOOK



Content



External Vehicle Connector



Internal Vehicle Connector



Dual-Purpose Vehicle Connector



New Energy connectors

External Vehicle Connector

External Vehicle Connector Series



- E-Coupler Series
- External Power Supply Connector
- EMY Motor Connector Series
- GTC Series Electrical Connector
- Push-pull Series Electrical Connector
- CIR Series Electrical Connector
- Vehicle Heavy Loading Series Electrical Connector

External Vehicle Connector--E-Coupler Series



Product Series

City Railway: 32 pin, 40pin, 50 pin, 70 pin

EMU series : 75 pin, 98 pin, 140 pin, 196 pin

Applications

Applied to the re-connection between trains, which achieves:

- 1) Control signal transmission between trains;
- 2) Support 100M, 1000M and 10G Ethernet signal transmission;
- 3) Power transmission up to 350A.

External Vehicle Connector--External Power Supply Connector



Product Series

Direct Current : 350A, 400A, 450A, 530A

Alternating Current : 350A, 400A, 450A

Applications

Applied to the external power supply access during the repair and maintenance of rolling stock. It is suitable for the power supply system up to 1500VDC and 500VAC. According to customized requirements, cover protection, conduction confirmation or interlock protection is available as extra feature.

External Vehicle Connector--**EMY Motor Connector Series**



Product Series

Circular Series : 200A, 240A, 300A

Rectangular Series: 200A, 240A, 300A

Applications

The circular product employs a quick bayonet connection with a secondary locking mechanism, while the rectangular version utilizes a threaded connection. It is primarily used in the motors of various equipment, with a high current overload capacity and voltage resistance. The structure is reliable, and it offers excellent protective performance.

External Vehicle Connector--GTC Series



Product Series

5 pin – 85 pin GTCM Control Series

5 pin – 19 pin GTCF Fiber Series

100M, 1000M, 10G single/multiple pin GTCN network

Single/multiple pin GTCH HV Series

Applications

The product features a quick bayonet connection equipped with a secondary locking mechanism, ensuring high reliability and meeting the stringent requirements for use in harsh external vehicular environments.

External Vehicle Connector--Push-pull Series Electrical Connector



Product Series

TYL – Control Series, 2/3/4/5/7 pin

TYH – HV Series, 150A, 300A, 450A, 600A

Applications

Utilizing a push-pull quick-locking mechanism, it is suitable for connection and separation in confined spaces, with the high-voltage series capable of withstanding a maximum working voltage of up to 1500V.

External Vehicle Connector--CIR Series Electrical Connector



Product Series

5 pin, 10 pin, 17 pin, 26 pin

Applications

The product lineup complies with the specifications of MIL-5015, featuring a quick bayonet connection and an insulator made of rubber material, which ensures high reliability. It is particularly suitable for the connection and transmission of control signals that require potting.

External Vehicle Connector--Vehicle Heavy Loading Series



Product Series

18 pin, 24 pin, 27 pin, 35 pin, 37 pin

Applications

The product is designed for external heavy coupling connections between rail vehicles, enabling the transmission of control signals and network signals.

Internal Vehicle Connector

Internal Vehicle Connector Series



- DSC Series Electrical Connector
- DSL Series Electrical Connector
- CD4 Series Electrical Connector
- QX Series Electrical Connector
- D-SUB Series Electrical Connector
- DBK Board Connector
- DSN Series Electrical Connector
- QLE Series Electrical Connector

Internal Vehicle Connector--DSC Series Electrical Connector



Product Series

Power Type – 15 pin, 19 pin

Signal Type – 32 pin, 48 pin, 96 pin

Applications

Suitable for the connection and transmission of cabinet machine control signals.

Internal Vehicle Connector--DSL Series Electrical Connector

Product Series

V Series – VA, VB, VC, VE

B Series

Applications

Suitable for the connection and transmission of cabinet machine control signals.



Internal Vehicle Connector--CD4 Series Electrical Connector



Product Series

A Series – 27 pin, 8+26 pin, 44 pin, 50 pin

B Series – 30 pin, 44 pin

Applications

Suitable for the connection and transmission of cabinet machine control signals.

Internal Vehicle Connector--QX Series Electrical Connector



Product Series

32 pin, 52 pin

Applications

Suitable for the connection and transmission of cabinet machine control signals.

Internal Vehicle Connector--D-sub Series Electrical Connector

Product Series

Signal Series – 9 pin, 15 pin, 25 pin, 37 pin, 50 pin, etc

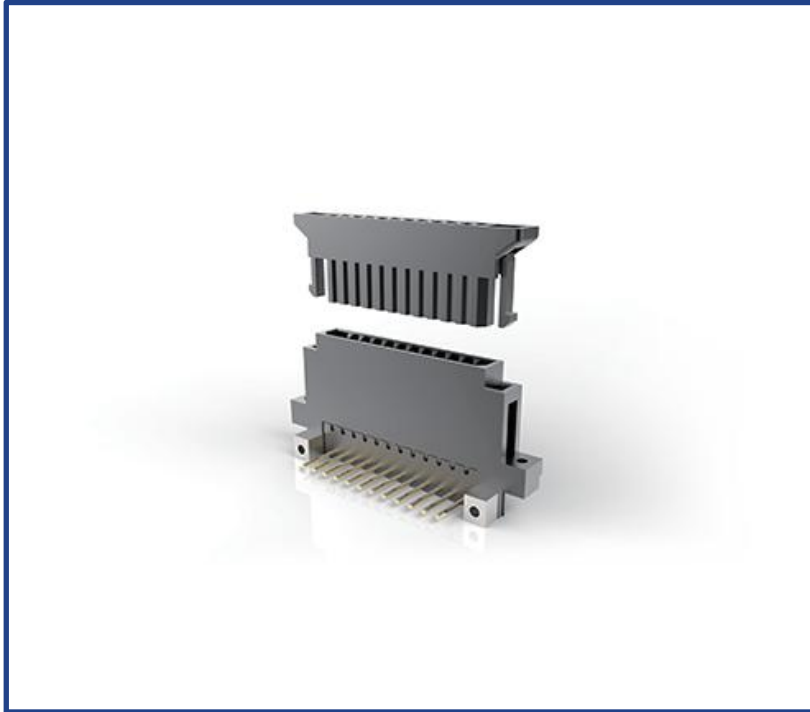
Power Series – 2W2, 3W3, 5W5

Applications

It features a variety of models and contact components, capable of meeting the connection and transmission needs for networks, signals, and power. It is applied in onboard signal equipment cabinets, PIS systems, and more.



Internal Vehicle Connector--DBK Board Connector



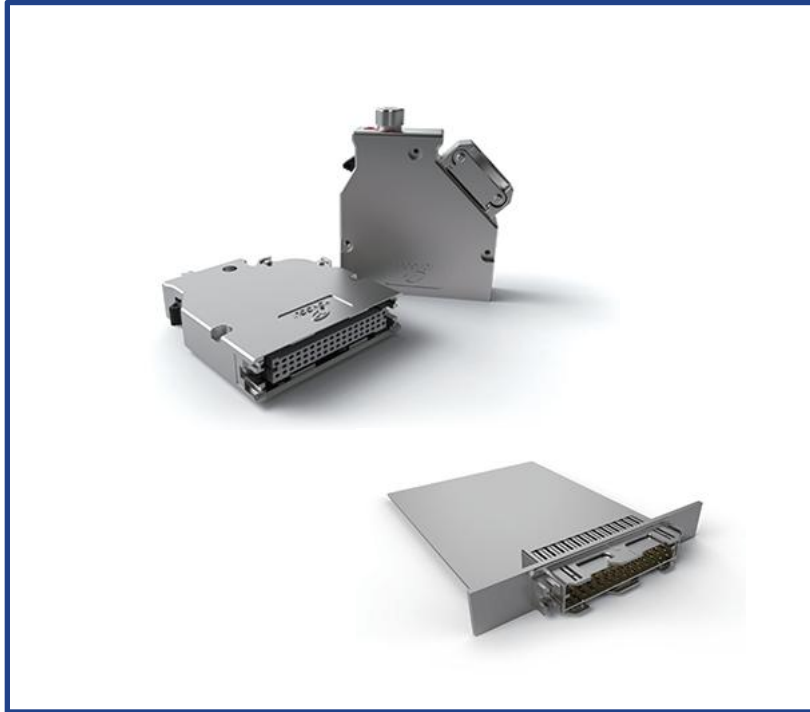
Product Series

4 pin, 8 pin, 12 pin

Applications

Suitable for power connections between wires and boards within cabinets, with the current not exceeding 10A.

Internal Vehicle Connector--DSN Series Electrical Connector



Product Series

41 pin, 52 pin

Applications

Suitable for the connection and transmission of cabinet machine control signals.

Internal Vehicle Connector--QLE Series Electrical Connector

Product Series

4 pin, 5 pin, 8 pin, 8X pin

Applications

Featuring a quick push-pull locking mechanism, the product range complies with the IEC 61076-2-101 standard. It is suitable for in-vehicle control and network connections and transmission, capable of supporting 100M, 1000M and 10G Ethernet applications.



Dual-Purpose Vehicle Connector

Dual-Purpose Vehicle Connector Series



- Vehicle Heavy-Duty Series Electrical Connector
- QAL Series Electrical Connector
- QS Series Electrical Connector
- QB Series Electrical Connector
- M23 Series Electrical Connector
- M40 Series Electrical Connector
- Fluid Connector
- M12 Series Electrical Connector

Dual-Purpose Vehicle Connector--HDC Series



Product Series

HDC-HQ, HDC-HD, HDC-HE, HDC-HM, etc, ranging from 2 pin to 216 pin.

Applications

The Heavy-Duty series connectors(HDC) are widely utilized in fields such as rail transportation, wind power generation, and industrial control. This series has robust modular capabilities, allowing for the integration of various functional components such as power, control, communication, fiber optics, gas, and fluid into a single unit as required.

Dual-Purpose Vehicle Connector--QAL Series



Product Series

3 pin, 6 pin, 7 pin, 10 pin, 12 pin, 14 pin, 19 pin, 37 pin,
60 pin, 85 pin

Applications

The product range complies with the MIL-5015 standard, featuring a quick bayonet connection, and is suitable for the connection and transmission of control signals throughout the vehicle.

Dual-Purpose Vehicle Connector--**QS Series**



Product Series

2 pin, 3 pin, 5 pin, 7 pin, 10 pin, 12 pin, 19 pin, etc

Applications

Featuring internal bayonet quick-lock mechanism. Suitable for the connection and transmission of low-current control signals.

Dual-Purpose Vehicle Connector--QB Series



Product Series

Φ1 Series – 3 pin, 7 pin, 9 pin, 19 pin

Φ1.6 Series – 3 pin, 5 pin, 7 pin, 9 pin

Φ2.4 Series – 2 pin, 4 pin

Applications

Featuring the bayonet quick-lock mechanism, with a five-key foolproof design. Suitable for the connection and transmission of power and control signals with currents less than 20A.

Dual-Purpose Vehicle Connector--M23 Series



Product Series

M23 Signal – 12 pin, 17 pin

M23 High Load – 4+3 pin

Applications

The products are mainly used in wind turbine pitch motor encoders, industrial robot signal communication, and wind turbine pitch motor power systems, etc. It features a compact size and simple operation.

Dual-Purpose Vehicle Connector--M40 Series



Product Series

4+3 pin

Applications

The products are primarily utilized in the field of wind power generation, serving as power connectors for wind turbine pitch motors. They are available in various configurations, including threaded connections and quick-lock mechanisms.

Dual-Purpose Vehicle Connector--M12 Series



Product Series

4 pin, 5 pin, 8 pin, 8X pin

Applications

Utilizing an M12 threaded locking connection, the product range complies with the IEC 61076-2-101 standard. It is suitable for in-vehicle control and network connections and transmission, capable of supporting 100M, 1000M and 10G Ethernet applications.

Dual-Purpose Vehicle Connector--Fluid Connector

Product Series

LTF/LTFP Series Blind-mate Connector

LTA/LTAX Series Bayonet Connector

LTC Series Push-pull Connector

Applications

To establish or disengage fluid communication. Enable the rapid connection and disconnection of fluid transmission channels (such as between pipelines, between boards, or between pipelines and equipment) without the need for tools, thereby offering dual sealing capabilities.



New Energy Products



- New Energy Connector
- Charging Product
- Energy Storage Connector

New Engergy Connectors — Connector Application Sketch

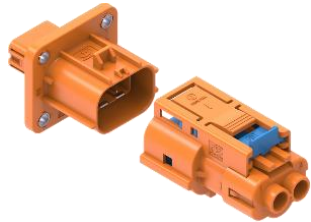
batteries/motors high current connectors



wire harness



OBC low current connector



MSD



PDU/BDU/junction box



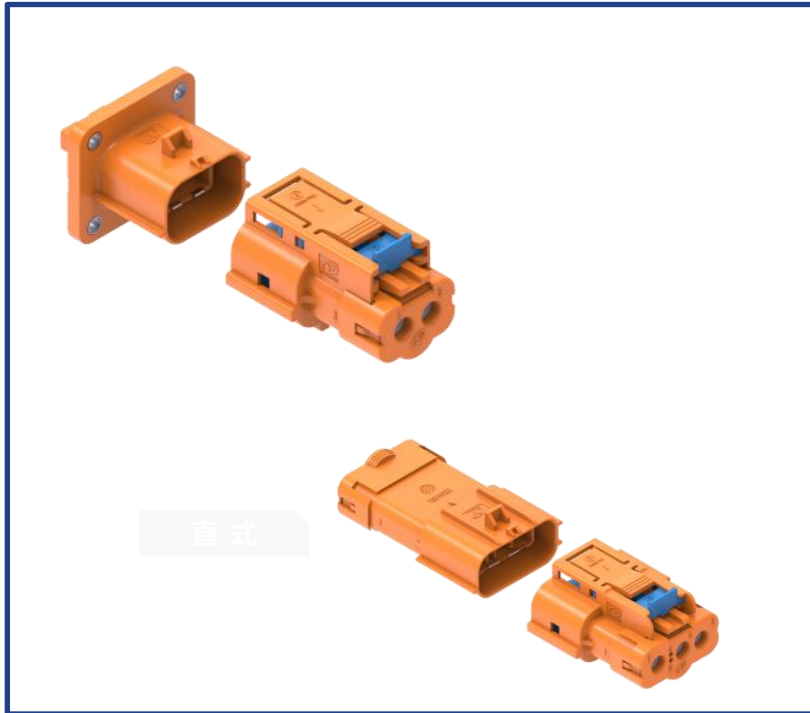
compressor/PTC connector



vehicle-mounted discharge panel



Typical New Energy Connector--YGEV2 Series



Rated Current

16-20A

Rated Voltage

800V

Ambient Temperature

-40-125℃

Protection Level

IP67&IP6K9K、 IPXXB

Circuits Number

2 - 3

Feature

360° Individual Shielding

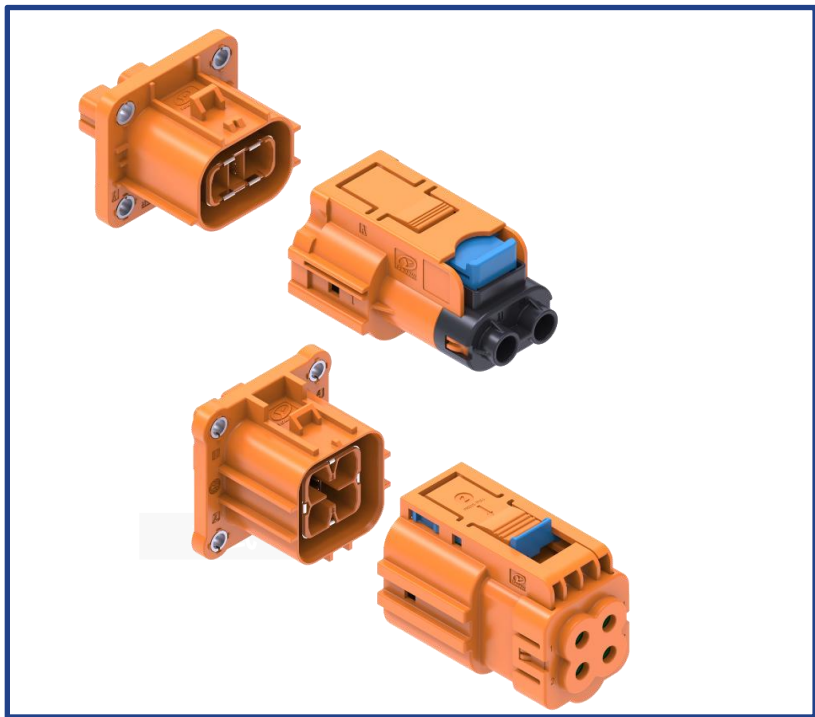
Stamping Contacts

2.5mm²、 4mm²、 6mm²

Application

**AC compressor、 PTC、
Charging Equipment、 DCDC、
HV Box/Cabinet**

Typical New Energy Connector--YGEV4 Series



Rated Current

16-40A

Rated Voltage

800V

**Ambient
Temperature**

-40-125℃

Protection Level

IP67&IP6K9K、 IPXXB

Circuits Number

2 - 4

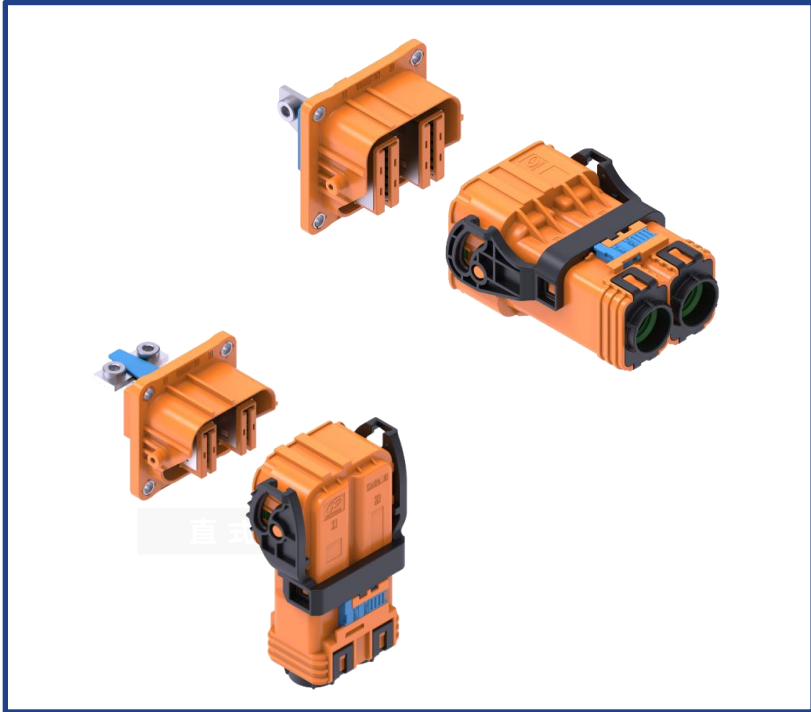
Feature

**360° Individual Shielding
Stamping Contacts
35mm²、 50mm²**

Application

**AC compressor、 PTC、
Charging Equipment、 DCDC、
HV Box/Cabinent**

Typical New Energy Connector--YGEV5 Series



Rated Current

200-300A

Rated Voltage

1000V

**Ambient
Temperature**

-40-140℃

Protection Level

IP67&IP6K9K、 IPXXB

Circuits Number

2

Feature

**360° Individual Shielding
Stamping Contacts
50mm²、 70mm²**

Application

**MCU, Battery pack,
high-voltage box, etc**

Typical New Energy Connector--YGEV6 Series



Rated Current

300-400A

Rated Voltage

1000V DC

**Ambient
Temperature**

-40-140℃

Protection Level

IP67&IP6K9K、 IPXXB

Circuits Number

2

Feature

**360° Individual Shielding
Stamping Contacts
70mm²、 95mm²**

Application

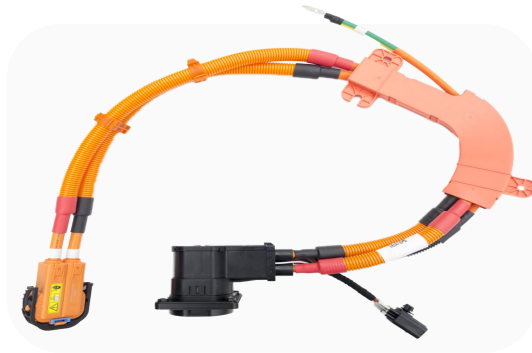
**MCU, Battery pack,
high-voltage box, etc**

Typical New Energy Connector--Customized Connector Cable Assembly

◆Customized Cable Assembly:



AC Vehicle Inlet Cable Assembly



DC Vehicle Inlet Cable Assembly



AC/DC Hybrid Vehicle Inlet Cable Assembly



DC Bus Cable Assembly



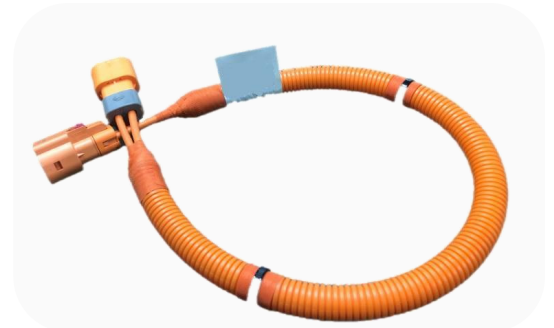
3-Phase Motor Cable Assembly



Air Conditioner Cable Assembly



MCU Cable Assembly



Heater Cable Assembly

Charging Products – Application Sketch

Inlet, sockets & accessories



DC Charger



AC Charger



Mode 2 charger with control box



Discharge series



Liquid cooling integrated system



Charging Product--MCS Charging System



Rated Current

1000-1500A DC

Rated Voltage

1000-1500V DC

Ambient Temperature

-30-50℃

Protection Level

IP44, IP54、IP67

Life Cycles

>10000

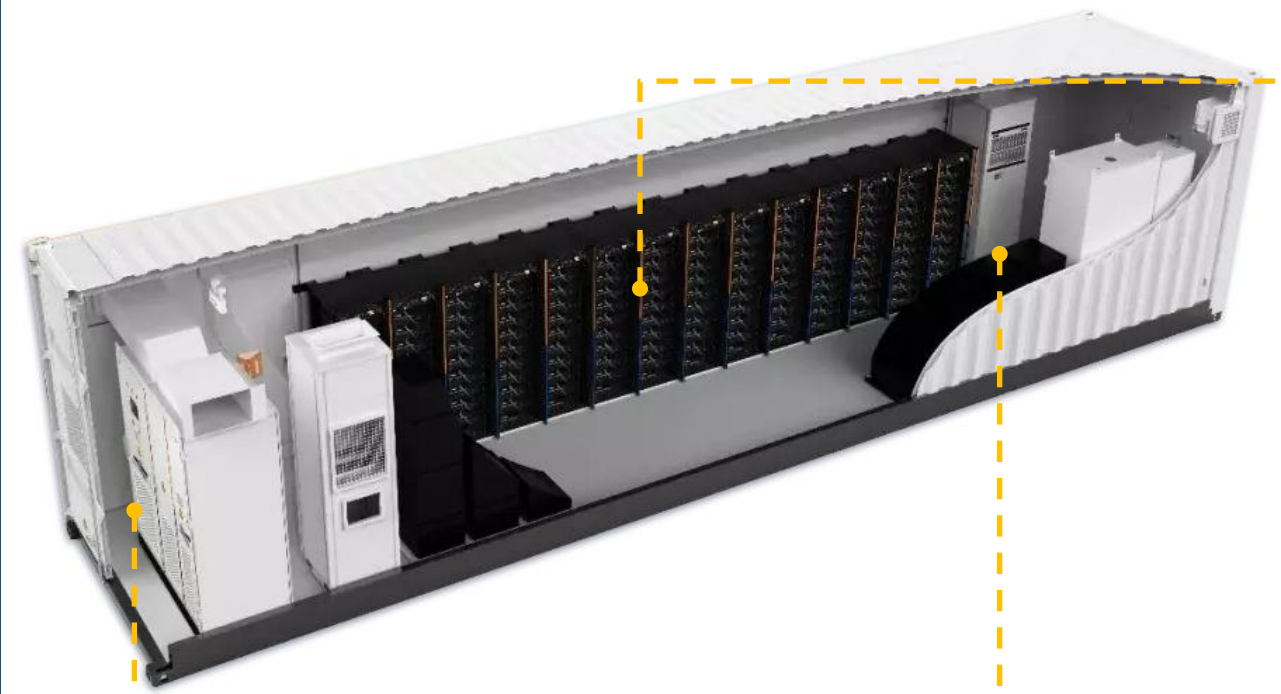
Feature

**Mode 4, Connection Type C
UL94-V0, Liquid Cooling**

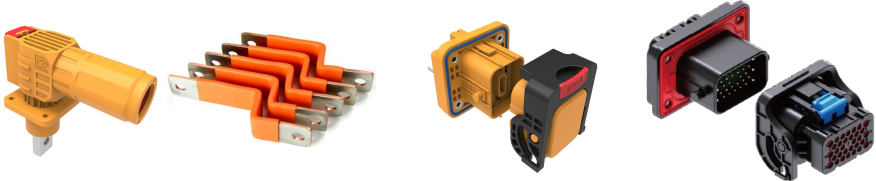
Application

**Track, Vessel, Mining Machinery,
Railway etc.**

Energy Storage Connectors -- Application Sketch



Cell Pack & BMS



EMS



PCS



Typical Energy Storage Connector--ESS HP



Rated Current

80-400A

Rated Voltage

AC 1500V

Dielectric Strength

6800V AC

Protection Level

IP67 & IP54

Temperature Rising

30 K

Feature

**360° Mating /
Rapid Unmating / Low Cost**

Application

**Power transmission of energy
storage battery module**

Typical Energy Storage Connector--ESC-TB



Rated Current

200-350A

Rated Voltage

AC 800 *1500V

Dielectric Strength

AC 3000--6800V AC

Protection Level

IP20

Temperature Rising

45 K

Feature

**Thread Locking, Rapld to
connctt to wire**

Application

**Power transmission of energy
storage battery module**

YONGGUI

CONNECTION TO FUTURE