Q-FLEX
www.q-flex.fi info@q-flex.fi
+358 2 4894 500

DEGSON

Solar storage solutions

DEGSON website

LINKEDIN

DEGSON TECHNOLOGY CO.,LTD.

Add：No.1585.Xiaolin Road.Cixi.Ningbo China
P.C.：315321
www.degson.com

Tel：+86-574-63510770
E-mail：sale@degson.com

The catalog is for reference purpose only and details are base on company's specifications

ES & PV24-E01

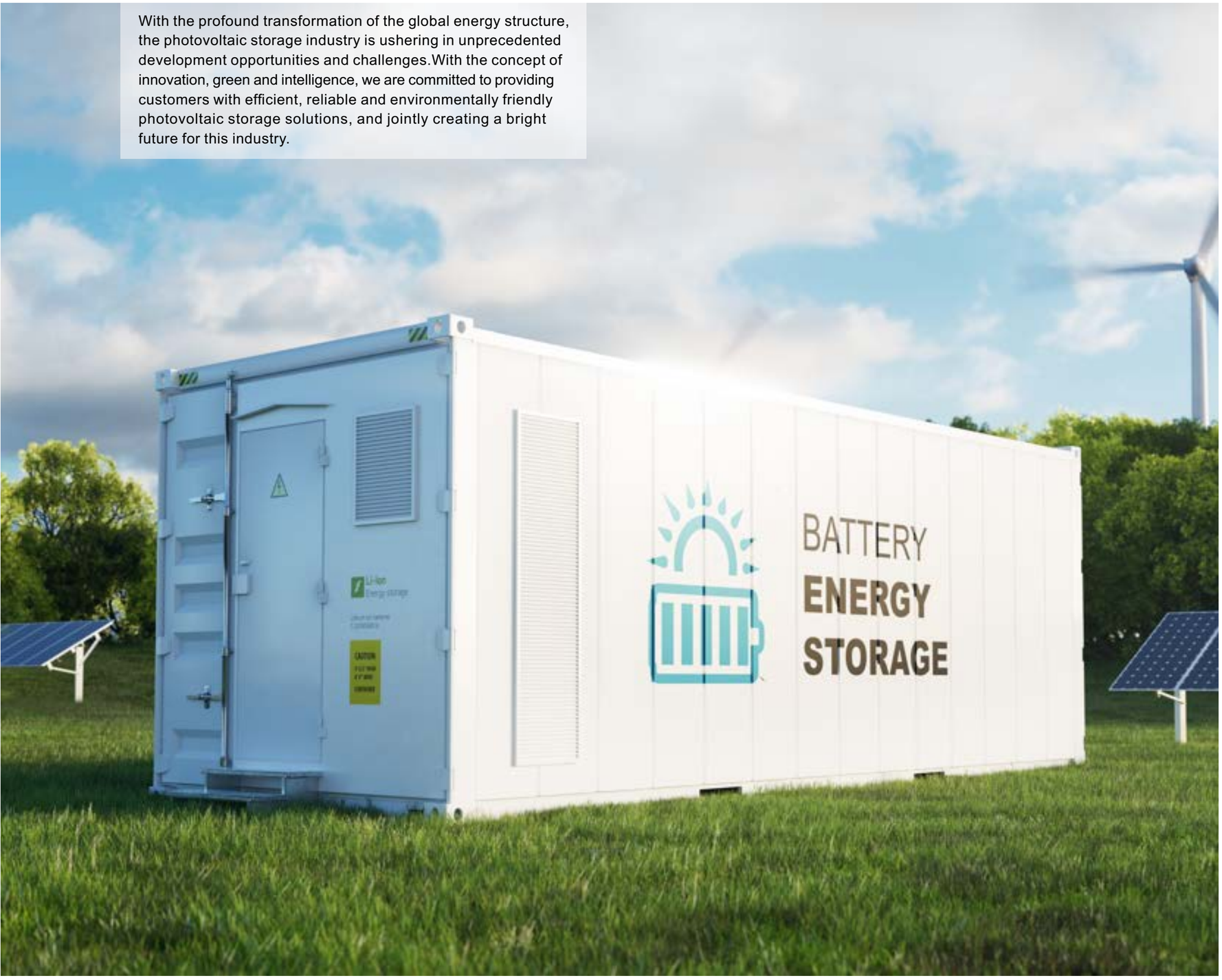
DEGSON

# SOLAR STORAGE SOLUTIONS

ISO9001 ISO14001 ISO45001 ISO80079-34 ISO/TS22163 IATF16949 RoHS REACH

DEGSON

With the profound transformation of the global energy structure, the photovoltaic storage industry is ushering in unprecedented development opportunities and challenges.With the concept of innovation, green and intelligence, we are committed to providing customers with efficient, reliable and environmentally friendly photovoltaic storage solutions, and jointly creating a bright future for this industry.




# CONTENTS

Industry overview ····· 01-02
Energy storage connectors part number ····· 04
High protection connector ····· 05-18
Product mounting size ····· 19
8-24 Cores waterproof signal connector ····· 20-22
MSD ····· 23
Low protection connector ····· 24-26
Communication connector ····· 27-28
Coding principles for photovoltaic connectors ····· 30
Photovoltaic DC connector ····· 31-34
Photovoltaic communication connector ····· 35-40
Photovoltaic AC connector ····· 41-48
Signal transmission connection ····· 49-50
Barrier terminals ····· 51-52
Power terminals ····· 53-56
Through-wall terminal blocks ····· 57
Matel parts ····· 58
Sucessful applications ····· 59-60

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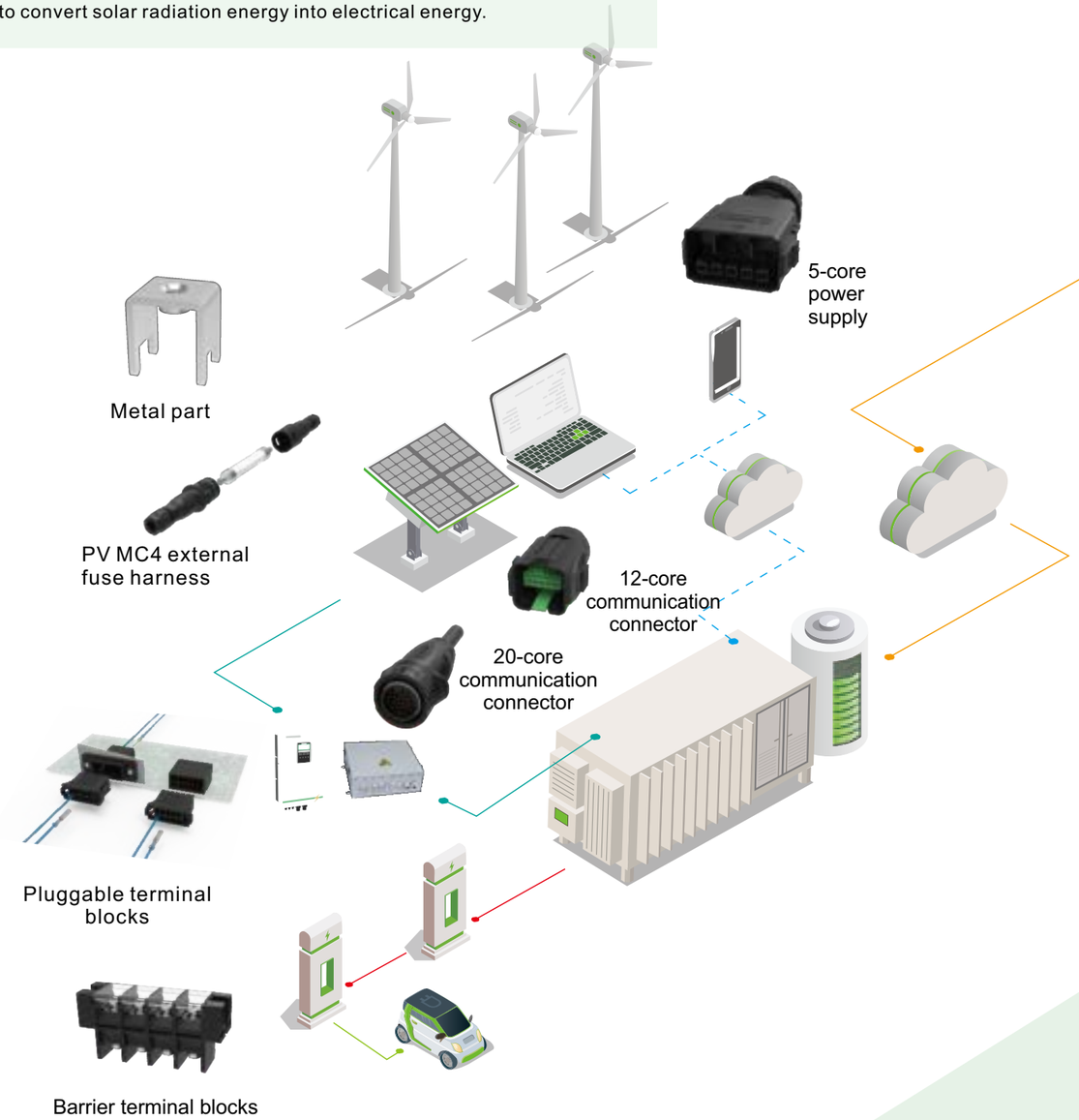
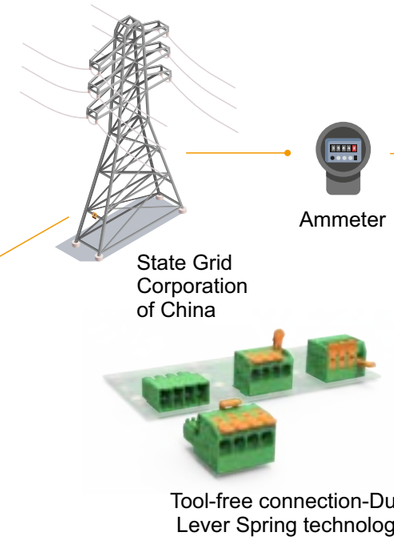
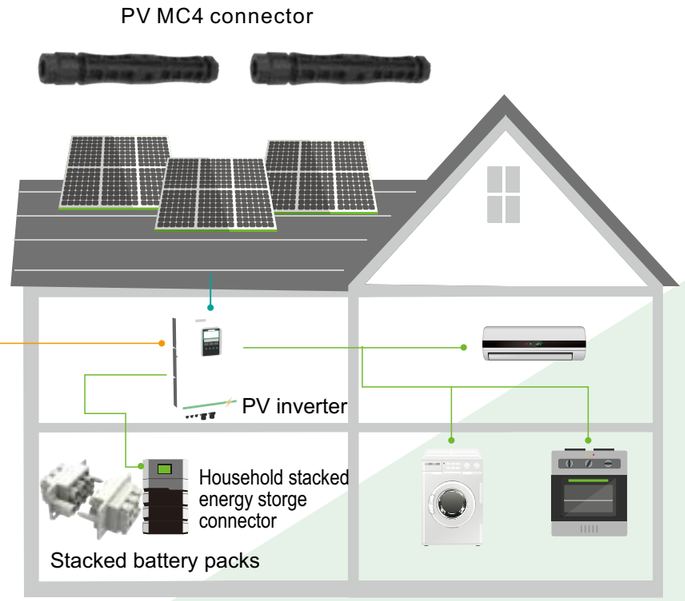
The photovoltaic energy storage system is a power generation system composed of PV and energy storage devices. Energy storage refers to the storage of electrical energy. With the rise of new energy vehicles and PV, energy storage has become a hot emerging industry in recent years. PV refer to the use of the photovoltaic effect of semiconductors to convert solar radiation energy into electrical energy.



Degson has launched 50A~600A Energy storage connectors for modular ES battery. The connectors comply with the standard UL4128 and offer safer, faster and more reliable connection for ES industry.

## The features of ES connector: Degson's exclusive patents

- Endure 1500V DC voltage
- IP67 protection
- Special design with color-coded and mechanical coded for + and - polarity avoding misplug and short circuit
- The socket is with hand-proof protection
- The plug can rotate 360° after assembled and fulfill different cabling requirement
- The socket is with four connection types: Busbar, screw,crimp,copper screw

color-coded and mechanical coded | hand-proof protection | 360°rotation

Optional connection Methods:
Busbar,screw,crimp,copper screw

## Market

The markets and applications for the ES connectors include but are not limited to the following:

Solar and wind energy

Charging station

Data center

Giant (colossal) electric vehicle





## Energy storage Connectors Part Number

### Energy storage Connectors Part Number Reference

E □ – □ – □□□A – □□□ – □ □□ – □□

**Current**
- □ 70---70A
- □ 120---120A
- □ 200---200A
- □ 250---250A
- □ 300---300A
- □ 350---350A
- □ 400---400A

**Connection**
- □ S- Screw
- □ C- Crimp
- □ B- Busbar+Elliptical hole
- □ B/S-Busbar+Screw
- □ SO- Solder
- □ D- Default

**Color**
- □ OR— Orange
- □ BK--- Black
- □ RD--- Red

**Types**
- □ P---Plug
- □ S---Socket
- □ D---Default

**Wiring data**

High protection:
- □ 06 —6mm² ——50A
- □ 10 —10mm² ——70A
- □ 16 —16mm² ——100A
- □ 25 —25mm² ——120A
- □ 35 —35mm² ——150A
- □ 50 —50mm² ——200A
- □ 70 —70mm² ——250A
- □ 95 —95mm² ——300A
- □ 120—120mm² ——350A

Low protection、MSD :
- □ B70---70mm² (250A) Cable cross-sectional area
- □ B95---95mm² (300A) Cable cross-sectional area

…

Layer series、
Transmission series:
- □ P12---Signal PIN:16
- □ P10---Signal PIN:10

…

**Serial number**
- □ 00 : No meaning
- □ XX : Other feature references

**Series**
- □ Quick insertion high protection
- □ Genderless low protection
- □ Layer series
- □ M-MSD Manual switch
- □ Transmission series

For example:

ESP-300A-95-BK-00, **Quick plug high protection insertion, 300A, connected to 95mm ² wire, black**

# ES-50A

- Rated voltage: 1000V
- Rated current: 50A

## Technical parameters

| Plug type: ESP-50A | | | |
|---|---|---|---|
| Insertion force | 55N MAX | Material of O-ring | Silicon |
| Withdrawal force | 10N≤X≤55N | Mechanical life | >100 |
| Rated voltage | 1000V | External cable diameter | 4.9-6.0mm |
| Rated current | 50A | Cross section of wire | 6mm² |
| Contact resistance | <0.5mΩ | Stripping length of wire | 7-8mm |
| Insulation resistance | >5000MΩ | Connection method | Crimp |
| Color | Orange/Black/Red | Degree of protection | IP67（1m,30min） |
| Material of contact | Copper alloy | Ambient temperature (operation) | -40℃+125℃ |
| Insulation material | PA | Flammability rating according to UL 94 | V0 |
| Material of seal | Silicon | Certification | UL4128 and TUV2PFG2740 |
| **Socket type: ESS-50A** | | | |
| Connection method | Busbar,Crimp,Screw,Copper screw | Layout torque | M4/0.4-0.7N.m |

## Ordering information

| Product series | Type | | Rated current | Cross section of wire | | Connection method | | Color | | Series | | Product description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ES | P | Plug | 50A | 06 | 6mm² | / | | BK | Black | 00 | Standard | ESP-50A-06-BK-00 |
| | | | | | | | | OR | Orange | | | ESP-50A-06-OR-00 |
| | | | | | | | | RD | Red | | | ESP-50A-06-RD-00 |
| | S | Socket | 50A | 06 | 6mm² | B | Busbar | BK | Black | 00 | Standard | ESS-50A-06-B-BK-00 |
| | | | | | | | | OR | Orange | | | ESS-50A-06-B-OR-00 |
| | | | | | | | | RD | Red | | | ESS-50A-06-B-RD-00 |
| | | | | | | S | Screw | BK | Black | 00 | Standard | ESS-50A-06-S-BK-00 |
| | | | | | | | | OR | Orange | | | ESS-50A-06-S-OR-00 |
| | | | | | | | | RD | Red | | | ESS-50A-06-S-RD-00 |
| | | | | | | C | Crimp | BK | Black | 00 | Standard | ESS-50A-06-C-BK-00 |
| | | | | | | | | OR | Orange | | | ESS-50A-06-C-OR-00 |
| | | | | | | | | RD | Red | | | ESS-50A-06-C-RD-00 |
| | | | | | | B/S | Busbar/ Screw | BK | Black | 00 | Standard | ESS-50A-06-B/S-BK-00 |
| | | | | | | | | OR | Orange | | | ESS-50A-06-B/S-OR-00 |
| | | | | | | | | RD | Red | | | ESS-50A-06-B/S-RD-00 |





# ES-70A

- Rated voltage: 1000V
- Rated current: 70A

## Technical parameters

| Plug type: ESP-70A | | | |
|---|---|---|---|
| Insertion force | 55N MAX | Material of O-ring | Silicon |
| Withdrawal force | 10N≤X≤55N | Mechanical life | >100 |
| Rated voltage | 1000V | External cable diameter | 6.5-7.5mm |
| Rated current | 70A | Cross section of wire | 10mm² |
| Contact resistance | <0.5mΩ | Stripping length of wire | 7-8mm |
| Insulation resistance | >5000MΩ | Connection method | Crimp |
| Color | Orange/Black/Red | Degree of protection | IP67（1m,30min） |
| Material of contact | Copper alloy | Ambient temperature (operation) | -40℃+125℃ |
| Insulation material | PA | Flammability rating according to UL 94 | V0 |
| Material of seal | Silicon | Certification | UL4128 and TUV2PFG2740 |
| **Socket type: ESS-70A** | | | |
| Connection method | Busbar,Crimp,Screw,Copper screw | Layout torque | M4/0.4-0.7N.m |

## Ordering information

| Product series | Type | | Rated current | Cross section of wire | | Connection method | | Color | | Series | | Product description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ES | P | Plug | 70A | 10 | 10mm² | / | | BK | Black | 00 | Standard | ESP-70A-10-BK-00 |
| | | | | | | | | OR | Orange | | | ESP-70A-10-OR-00 |
| | | | | | | | | RD | Red | | | ESP-70A-10-RD-00 |
| | S | Socket | 70A | 10 | 10mm² | B | Busbar | BK | Black | 00 | Standard | ESS-70A-10-B-BK-00 |
| | | | | | | | | OR | Orange | | | ESS-70A-10-B-OR-00 |
| | | | | | | | | RD | Red | | | ESS-70A-10-B-RD-00 |
| | | | | | | S | Screw | BK | Black | 00 | Standard | ESS-70A-10-S-BK-00 |
| | | | | | | | | OR | Orange | | | ESS-70A-10-S-OR-00 |
| | | | | | | | | RD | Red | | | ESS-70A-10-S-RD-00 |
| | | | | | | C | Crimp | BK | Black | 00 | Standard | ESS-70A-10-C-BK-00 |
| | | | | | | | | OR | Orange | | | ESS-70A-10-C-OR-00 |
| | | | | | | | | RD | Red | | | ESS-70A-10-C-RD-00 |
| | | | | | | B/S | Busbar/ Screw | BK | Black | 00 | Standard | ESS-70A-10-B/S-BK-00 |
| | | | | | | | | OR | Orange | | | ESS-70A-10-B/S-OR-00 |
| | | | | | | | | RD | Red | | | ESS-70A-10-B/S-RD-00 |

# ES-100A

- Rated voltage: 1500V
- Rated current: 100A

## Technical parameters

| Plug type: ESP-100A | | | |
|---|---|---|---|
| Insertion force | 60N MAX | Material of O-ring | Silicon |
| Withdrawal force | 10N≤X≤60N | Mechanical life | >100 |
| Rated voltage | 1500V | External cable diameter | 7.5-9mm |
| Rated current | 100A | Cross section of wire | 16mm² |
| Contact resistance | <0.5mΩ | Stripping length of wire | 13-14mm |
| Insulation resistance | >5000MΩ | Connection method | Crimp |
| Color | Orange/Black/Red | Degree of protection | IP67（1m,30min） |
| Material of contact | Copper alloy | Ambient temperature (operation) | -40℃+125℃ |
| Insulation material | PA | Flammability rating according to UL 94 | V0 |
| Material of seal | Silicon | Certification | UL4128 and TUV2PFG2740 |
| **Socket type: ESS-100A** | | | |
| Connection method | Busbar,Crimp,Screw,Copper screw | Layout torque | M4/0.4-0.7N.m |

## Ordering information

| Product series | Type | | Rated current | Cross section of wire | | Connection method | | Color | | Series | | Product description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ES | P | Plug | 100A | 16 | 16mm² | / | | BK | Black | 00 | Standard | ESP-100A-16-BK-00 |
| | | | | | | | | OR | Orange | | | ESP-100A-16-OR-00 |
| | | | | | | | | RD | Red | | | ESP-100A-16-RD-00 |
| | S | Socket | 100A | 16 | 16mm² | B | Busbar | BK | Black | 00 | Standard | ESS-100A-16-B-BK-00 |
| | | | | | | | | OR | Orange | | | ESS-100A-16-B-OR-00 |
| | | | | | | | | RD | Red | | | ESS-100A-16-B-RD-00 |
| | | | | | | S | Screw | BK | Black | 00 | Standard | ESS-100A-16-S-BK-00 |
| | | | | | | | | OR | Orange | | | ESS-100A-16-S-OR-00 |
| | | | | | | | | RD | Red | | | ESS-100A-16-S-RD-00 |
| | | | | | | C | Crimp | BK | Black | 00 | Standard | ESS-100A-16-C-BK-00 |
| | | | | | | | | OR | Orange | | | ESS-100A-16-C-OR-00 |
| | | | | | | | | RD | Red | | | ESS-100A-16-C-RD-00 |
| | | | | | | B/S | Busbar/ Screw | BK | Black | 00 | Standard | ESS-100A-16-B/S-BK-00 |
| | | | | | | | | OR | Orange | | | ESS-100A-16-B/S-OR-00 |
| | | | | | | | | RD | Red | | | ESS-100A-16-B/S-RD-00 |





# ES-120A

- Rated voltage: 1500V
- Rated current: 120A

## Technical parameters

| Plug type: ESP-120A | | | |
|---|---|---|---|
| Insertion force | 60N MAX | Material of O-ring | Silicon |
| Withdrawal force | 10N≤X≤60N | Mechanical life | >100 |
| Rated voltage | 1500V | External cable diameter | 9-10.5mm |
| Rated current | 120A | Cross section of wire | 25mm² |
| Contact resistance | <0.5mΩ | Stripping length of wire | 13-14mm |
| Insulation resistance | >5000MΩ | Connection method | Crimp |
| Color | Orange/Black/Red | Degree of protection | IP67(1m,30min) |
| Material of contact | Copper alloy | Ambient temperature (operation) | -40℃+125℃ |
| Insulation material | PA | Flammability rating according to UL 94 | V0 |
| Material of seal | Silicon | Certification | UL4128 and TUV2PFG2740 |
| **Socket type: ESS-120A** | | | |
| Connection method | Busbar,Crimp,Screw,Copper screw | Layout torque | M4/0.4-0.7N.m |

## Ordering information

| Product series | Type | | Rated current | Cross section of wire | | Connection method | | Color | | Series | | Product description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ES | P | Plug | 120A | 25 | 25mm² | / | | BK | Black | Right angle | 00 | ESP-120A-25-BK-00(or ST) |
| | | | | | | | | OR | Orange | | | ESP-120A-25-OR-00(or ST) |
| | | | | | | | | RD | Red | Straight | ST | ESP-120A-25-RD-00(or ST) |
| | S | Socket | 120A | 25 | 25mm² | B | Busbar | BK | Black | Screw hole spacing 21mm | 00 | ESS-120A-25-B-BK-00(or 01) |
| | | | | | | | | OR | Orange | | | ESS-120A-25-B-OR-00(or 01) |
| | | | | | | | | RD | Red | | | ESS-120A-25-B-RD-00(or 01) |
| | | | | | | S | Screw | BK | Black | | | ESS-120A-25-S-BK-00(or 01) |
| | | | | | | | | OR | Orange | | | ESS-120A-25-S-OR-00(or 01) |
| | | | | | | | | RD | Red | | | ESS-120A-25-S-RD-00(or 01) |
| | | | | | | C | Crimp | BK | Black | Screw hole spacing 18mm | 01 | ESS-120A-25-C-BK-00(or 01) |
| | | | | | | | | OR | Orange | | | ESS-120A-25-C-OR-00(or 01) |
| | | | | | | | | RD | Red | | | ESS-120A-25-C-RD-00(or 01) |
| | | | | | | B/S | Busbar/ Screw | BK | Black | | | ESS-120A-25-B/S-BK-00(or 01) |
| | | | | | | | | OR | Orange | | | ESS-120A-25-B/S-OR-00(or 01) |
| | | | | | | | | RD | Red | | | ESS-120A-25-B/S-RD-00(or 01) |

# ES-120A ( Straight )

- Rated voltage: 1000V
- Rated current: 120A
- Compatible with 70A cables and IP67 compliant

## Technical parameters

| Plug type: ESP-120A ( Straight ) | | | |
|---|---|---|---|
| Insertion force | 60N MAX | Material of O-ring | Silicon |
| Withdrawal force | 10N≤X≤60N | Mechanical life | >100 |
| Rated voltage | 1000V | External cable diameter | 9-10.5mm |
| Rated current | 120A | Cross section of wire | 16mm² |
| Contact resistance | <0.5mΩ | Stripping length of wire | 13-14mm |
| Insulation resistance | >5000MΩ | Connection method | Crimp |
| Color | Orange/Black/Red | Degree of protection | IP67（1m,30min) |
| Material of contact | Copper alloy | Ambient temperature (operation) | -40℃+125℃ |
| Insulation material | PA | Flammability rating according to UL 94 | V0 |
| Material of seal | Silicon | Certification | TUV 2PFG2740 |
| **Socket type: ESS-120A** | | | |
| Connection method | Busbar,Crimp,Screw,Copper screw | Layout torque | M4/0.4-0.7N.m |

## Ordering information

| Product series | Type | | Rated current | Cross section of wire | | Connection method | | Color | | Series | | Product description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ES | P | Plug | 120A | 25 | 25mm² | / | | BK | Black | Right angle | 00 | ESP-120A-25-BK-00(or ST) |
| | | | | | | | | OR | Orange | | | ESP-120A-25-OR-00(or ST) |
| | | | | | | | | RD | Red | Straight | ST | ESP-120A-25-RD-00(or ST) |
| | S | Socket | 120A | 25 | 25mm² | B | Busbar | BK | Black | Screw hole spacing 21mm | 00 | ESS-120A-25-B-BK-00(or 01) |
| | | | | | | | | OR | Orange | | | ESS-120A-25-B-OR-00(or 01) |
| | | | | | | | | RD | Red | | | ESS-120A-25-B-RD-00(or 01) |
| | | | | | | S | Screw | BK | Black | | | ESS-120A-25-S-BK-00(or 01) |
| | | | | | | | | OR | Orange | | | ESS-120A-25-S-OR-00(or 01) |
| | | | | | | | | RD | Red | | | ESS-120A-25-S-RD-00(or 01) |
| | | | | | | C | Crimp | BK | Black | Screw hole spacing 18mm | 01 | ESS-120A-25-C-BK-00(or 01) |
| | | | | | | | | OR | Orange | | | ESS-120A-25-C-OR-00(or 01) |
| | | | | | | | | RD | Red | | | ESS-120A-25-C-RD-00(or 01) |
| | | | | | | B/S | Busbar/ Screw | BK | Black | | | ESS-120A-25-B/S-BK-00(or 01) |
| | | | | | | | | OR | Orange | | | ESS-120A-25-B/S-OR-00(or 01) |
| | | | | | | | | RD | Red | | | ESS-120A-25-B/S-RD-00(or 01) |





# ES-150A

- Rated voltage: 1500V
- Rated current: 150A

## Technical parameters

| Plug type: ESP-150A | | | |
|---|---|---|---|
| Insertion force | 75N MAX | Material of O-ring | Silicon |
| Withdrawal force | 10N≤X≤75N | Mechanical life | >100 |
| Rated voltage | 1500V | External cable diameter | 11-12.5mm |
| Rated current | 150A | Cross section of wire | 35mm² |
| Contact resistance | <0.5mΩ | Stripping length of wire | 13-14mm |
| Insulation resistance | >5000MΩ | Connection method | Crimp |
| Color | Orange/Black/Red | Degree of protection | IP67(1m,30min) |
| Material of contact | Copper alloy | Ambient temperature (operation) | -40℃+125℃ |
| Insulation material | PA | Flammability rating according to UL 94 | V0 |
| Material of seal | Silicon | Certification | UI4128 and TUV 2PFG2740 |
| **Socket type: ESS-150A** | | | |
| Connection method | Busbar,Crimp,Screw,Copper screw | Layout torque | M4/0.4-0.7N.m |

## Ordering information

| Product series | Type | | Rated current | Cross section of wire | | Connection method | | Color | | Series | | Product description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ES | P | Plug | 150A | 35 | 35mm² | / | | BK | Black | 18 | 180° | ESP-150A-35-BK-18 |
| | | | | | | | | OR | Orange | 90 | 90° | ESP-150A-35-OR-90 |
| | | | | | | | | RD | Red | 90 | 90° | ESP-150A-35-RD-90 |
| | S | Socket | 150A | 35 | 35mm² | B | Busbar | BK | Black | 18 | 180° | ESS-150A-35-B-BK-18 |
| | | | | | | | | OR | Orange | 90 | 90° | ESS-150A-35-B-OR-90 |
| | | | | | | | | RD | Red | 90 | 90° | ESS-150A-35-B-RD-90 |
| | | | | | | S | Screw | BK | Black | 18 | 180° | ESS-150A-35-S-BK-18 |
| | | | | | | | | OR | Orange | 90 | 90° | ESS-150A-35-S-OR-90 |
| | | | | | | | | RD | Red | 90 | 90° | ESS-150A-35-S-RD-90 |
| | | | | | | C | Crimp | BK | Black | 18 | 180° | ESS-150A-35-C-BK-18 |
| | | | | | | | | OR | Orange | 90 | 90° | ESS-150A-35-C-OR-90 |
| | | | | | | | | RD | Red | 90 | 90° | ESS-150A-35-C-RD-90 |
| | | | | | | B/S | Busbar/ Screw | BK | Black | 18 | 180° | ESS-150A-35-B/S-BK-18 |
| | | | | | | | | OR | Orange | 90 | 90° | ESS-150A-35-B/S-OR-90 |
| | | | | | | | | RD | Red | 90 | 90° | ESS-150A-35-B/S-RD-90 |

# ES-200A

- Rated voltage: 1500V
- Rated current: 200A

## Technical parameters

| Plug type: ESP-200A | | | |
|---|---|---|---|
| Insertion force | 75N MAX | Material of O-ring | Silicon |
| Withdrawal force | 10N≤X≤75N | Mechanical life | >100 |
| Rated voltage | 1500V | External cable diameter | 12.5-14mm |
| Rated current | 200A | Cross section of wire | 50mm² |
| Contact resistance | <0.5mΩ | Stripping length of wire | 13-14mm |
| Insulation resistance | >5000MΩ | Connection method | Crimp |
| Color | Orange/Black/Red | Degree of protection | IP67（1m,30min） |
| Material of contact | Copper alloy | Ambient temperature (operation) | -40℃+125℃ |
| Insulation material | PA | Flammability rating according to UL 94 | V0 |
| Material of seal | Silicon | Certification | UI4128 and TUV2PFG2740 |
| **Socket type: ESS-200A** | | | |
| Connection method | Busbar,Crimp,Screw,Copper screw | Layout torque | M4/0.4-0.7N.m |

## Ordering information

| Product series | Type | | Rated current | Cross section of wire | | Connection method | | Color | | Series | | Product description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ES | P | Plug | 200A | 50 | 50mm² | / | | BK | Black | 18 | 180° | ESP-200A-50-BK-18 |
| | | | | | | | | OR | Orange | 90 | 90° | ESP-200A-50-OR-90 |
| | | | | | | | | RD | Red | 90 | 90° | ESP-200A-50-RD-90 |
| | S | Socket | 200A | 50 | 50mm² | B | Busbar | BK | Black | 18 | 180° | ESS-200A-50-B-BK-18 |
| | | | | | | | | OR | Orange | 90 | 90° | ESS-200A-50-B-OR-90 |
| | | | | | | | | RD | Red | 90 | 90° | ESS-200A-50-B-RD-90 |
| | | | | | | S | Screw | BK | Black | 18 | 180° | ESS-200A-50-S-BK-18 |
| | | | | | | | | OR | Orange | 90 | 90° | ESS-200A-50-S-OR-90 |
| | | | | | | | | RD | Red | 90 | 90° | ESS-200A-50-S-RD-90 |
| | | | | | | C | Crimp | BK | Black | 18 | 180° | ESS-200A-50-C-BK-18 |
| | | | | | | | | OR | Orange | 90 | 90° | ESS-200A-50-C-OR-90 |
| | | | | | | | | RD | Red | 90 | 90° | ESS-200A-50-C-RD-90 |
| | | | | | | B/S | Busbar/ Screw | BK | Black | 18 | 180° | ESS-200A-50-B/S-BK-18 |
| | | | | | | | | OR | Orange | 90 | 90° | ESS-200A-50-B/S-OR-90 |
| | | | | | | | | RD | Red | 90 | 90° | ESS-200A-50-B/S-RD-90 |





# ESS-200A-A (Fool-proofing-Socket installation)

- Rated voltage: 1500V
- Rated current: 200A

## Technical parameters

| Plug type: ESP-200A | | | |
|---|---|---|---|
| Insertion force | 75N MAX | Material of O-ring | Silicon |
| Withdrawal force | 10N≤X≤75N | Mechanical life | >100 |
| Rated voltage | 1500V | External cable diameter | 12.5-14mm |
| Rated current | 200A | Cross section of wire | 50mm² |
| Contact resistance | <0.5mΩ | Stripping length of wire | 13-14mm |
| Insulation resistance | >5000MΩ | Connection method | Crimp |
| Color | Orange/Black/Red | Degree of protection | IP67(1m,30min) |
| Material of contact | Copper alloy | Ambient temperature (operation) | -40℃+125℃ |
| Insulation material | PA | Flammability rating according to UL 94 | V0 |
| Material of seal | Silicon | Certification | UI4128 and TUV 2PFG2740 |
| **Socket type: ESS-200A** | | | |
| Connection method | Busbar,Crimp,Screw,Copper screw | Layout torque | M4/0.4-0.7N.m |

## Ordering information

| Product series | Type | | Rated current | Cross section of wire | | Connection method | | Color | | Series | | Product description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ES | P | Plug | 200A | 50 | 50mm² | / | | BK | Black | 18 | 180° | ESP-200A-50-BK-18 |
| | | | | | | | | OR | Orange | 90 | 90° | ESP-200A-50-OR-90 |
| | | | | | | | | RD | Red | 90 | 90° | ESP-200A-50-RD-90 |
| | S | Socket | 200A | 50 | 50mm² | B | Busbar | BK | Black | 16 | 160° | ESS-200A-50-B-BK-16 |
| | | | | | | | | OR | Orange | 20 | 20° | ESS-200A-50-B-OR-20 |
| | | | | | | | | RD | Red | 20 | 20° | ESS-200A-50-B-RD-20 |
| | | | | | | S | Screw | BK | Black | 16 | 160° | ESS-200A-50-S-BK-16 |
| | | | | | | | | OR | Orange | 20 | 20° | ESS-200A-50-S-OR-20 |
| | | | | | | | | RD | Red | 20 | 20° | ESS-200A-50-S-RD-20 |
| | | | | | | C | Crimp | BK | Black | 16 | 160° | ESS-200A-50-C-BK-16 |
| | | | | | | | | OR | Orange | 20 | 20° | ESS-200A-50-C-OR-20 |
| | | | | | | | | RD | Red | 20 | 20° | ESS-200A-50-C-RD-20 |
| | | | | | | B/S | Busbar/ Screw | BK | Black | 16 | 160° | ESS-200A-50-B/S-BK-16 |
| | | | | | | | | OR | Orange | 20 | 20° | ESS-200A-50-B/S-OR-20 |
| | | | | | | | | RD | Red | 20 | 20° | ESS-200A-50-B/S-RD-20 |

# ES-250A (Fool-proofing-Socket installation)

- Rated voltage: 1500V
- Rated current: 250A
- Screw hole spacing: 36mm

## Technical parameters

| Plug type: ESP-250A | | | |
|---|---|---|---|
| Insertion force | 75N MAX | Material of O-ring | Silicon |
| Withdrawal force | 10N≤X≤75N | Mechanical life | >100 |
| Rated voltage | 1500V | External cable diameter | 15.5-17mm |
| Rated current | 250A | Cross section of wire | 70mm² |
| Contact resistance | <0.5mΩ | Stripping length of wire | 19-21mm |
| Insulation resistance | >5000MΩ | Connection method | Crimp |
| Color | Orange/Black/Red | Degree of protection | IP67 (1m,30min) |
| Material of contact | Copper alloy | Ambient temperature (operation) | -40℃+125℃ |
| Insulation material | PA | Flammability rating according to UL 94 | V0 |
| Material of seal | Silicon | Certification | UI4128 and TUV2PFG2740 |
| **Socket type: ESS-250A** | | | |
| Connection method | Busbar,Crimp,Screw,Copper screw | Layout torque | M4/0.4-0.7N.m |

## Ordering information

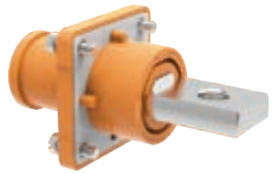
| Product series | Type | | Rated current | Cross section of wire | | Connection method | | Color | | Series | | Product description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ES | P | Plug | 250A | 70 | 70mm² | / | | BK | Black | 00 | Standard | ESP-250A-70-BK-00 |
| | | | | | | | | OR | Orange | | | ESP-250A-70-OR-00 |
| | | | | | | | | RD | Red | | | ESP-250A-70-RD-00 |
| | S | Socket | 250A | 70 | 70mm² | B | Busbar | BK | Black | 00 | Standard | ESS-250A-70-B-BK-00 |
| | | | | | | | | OR | Orange | | | ESS-250A-70-B-OR-00 |
| | | | | | | | | RD | Red | | | ESS-250A-70-B-RD-00 |
| | | | | | | S | Screw | BK | Black | 00 | Standard | ESS-250A-70-S-BK-00 |
| | | | | | | | | OR | Orange | | | ESS-250A-70-S-OR-00 |
| | | | | | | | | RD | Red | | | ESS-250A-70-S-RD-00 |
| | | | | | | C | Crimp | BK | Black | 00 | Standard | ESS-250A-70-C-BK-00 |
| | | | | | | | | OR | Orange | | | ESS-250A-70-C-OR-00 |
| | | | | | | | | RD | Red | | | ESS-250A-70-C-RD-00 |
| | | | | | | B/S | Busbar/ Screw | BK | Black | 00 | Standard | ESS-250A-70-B/S-BK-00 |
| | | | | | | | | OR | Orange | | | ESS-250A-70-B/S-OR-00 |
| | | | | | | | | RD | Red | | | ESS-250A-70-B/S-RD-00 |





# ES-250A- Small size socket (Fool-proofing-Socket installation)

- Rated voltage: 1500V
- Rated current: 250A
- Screw hole spacing: 25 / 24.5mm



## Technical parameters

| Plug type: ESP-250A | | | |
|---|---|---|---|
| Insertion force | 75N MAX | Material of O-ring | Silicon |
| Withdrawal force | 10N≤X≤75N | Mechanical life | >100 |
| Rated voltage | 1500V | External cable diameter | 15.5-17mm |
| Rated current | 250A | Cross section of wire | 70mm² |
| Contact resistance | <0.5mΩ | Stripping length of wire | 19-21mm |
| Insulation resistance | >5000MΩ | Connection method | Crimp |
| Color | Orange/Black/Red | Degree of protection | IP67(1m,30min) |
| Material of contact | Copper alloy | Ambient temperature (operation) | -40℃+125℃ |
| Insulation material | PA | Flammability rating according to UL 94 | V0 |
| Material of seal | Silicon | Certification | UI4128 and TUV 2PFG2740 |
| **Socket type: ES-250A-Small size socket panel** | | | |
| Connection method | Busbar,Crimp,Screw,Copper screw | Layout torque | M4/0.4-0.7N.m |

## Ordering information

| Product series | Type | | Rated current | Cross section of wire | | Connection method | | Color | | Series | | Product description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ES | P | Plug | 250A | 70 | 70mm² | / | | BK | Black | 02 | Screw hole: 25mm | ESP-250A-70-BK-00 |
| | | | | | | | | OR | Orange | 03 | | ESP-250A-70-OR-00 |
| | | | | | | | | RD | Red | 03 | | ESP-250A-70-RD-00 |
| | S | Socket | 250A | 70 | 70mm² | B | Busbar | BK | Black | 02 | Screw hole: 25mm | ESS-250A-70-B-BK-02 |
| | | | | | | | | OR | Orange | 03 | | ESS-250A-70-B-OR-03 |
| | | | | | | | | RD | Red | 03 | | ESS-250A-70-B-RD-03 |
| | | | | | | S | Screw | BK | Black | 02 | Screw hole: 25mm | ESS-250A-70-S-BK-02 |
| | | | | | | | | OR | Orange | 03 | | ESS-250A-70-S-OR-03 |
| | | | | | | | | RD | Red | 03 | | ESS-250A-70-S-RD-03 |
| | | | | | | C | Crimp | BK | Black | 02 | Screw hole: 25mm | ESS-250A-70-C-BK-02 |
| | | | | | | | | OR | Orange | 03 | | ESS-250A-70-C-OR-03 |
| | | | | | | | | RD | Red | 03 | | ESS-250A-70-C-RD-03 |
| | | | | | | B/S | Busbar/ Screw | BK | Black | 02 | Screw hole: 25mm | ESS-250A-70-B/S-BK-02 |
| | | | | | | | | OR | Orange | 03 | | ESS-250A-70-B/S-OR-03 |
| | | | | | | | | RD | Red | 03 | | ESS-250A-70-B/S-RD-03 |
| | | | | | | B/S | Busbar/ Screw | BK | Black | 01 | Screw hole: 24.5mm | ESS-250A-70-B/S-BK-01 |
| | | | | | | | | OR | Orange | | | ESS-250A-70-B/S-OR-01 |

# ES-300A (Non rotating plug)

- Rated voltage: 1500V
- Rated current: 300A

## Technical parameters

| Plug type: ESP-300A | | | |
|---|---|---|---|
| Insertion force | 80N MAX | Material of O-ring | Silicon |
| Withdrawal force | 10N≤X≤80N | Mechanical life | >100 |
| Rated voltage | 1500V | External cable diameter | 16.0-18.0mm |
| Rated current | 300A | Cross section of wire | 95mm² |
| Contact resistance | <0.5mΩ | Stripping length of wire | 16-18mm |
| Insulation resistance | >5000MΩ | Connection method | Crimp |
| Color | Orange/Black/Red | Degree of protection | IP67 (1m,30min) |
| Material of contact | Copper alloy | Ambient temperature (operation) | -40℃+125℃ |
| Insulation material | PA | Flammability rating according to UL 94 | V0 |
| Material of seal | Silicon | Certification | UI4128 and TUV2PFG2740 |
| **Socket type: ESS-300A** | | | |
| Connection method | Busbar,Crimp,Screw,Copper screw | Layout torque | M4/0.4-0.7N.m |

## Ordering information

| Product series | Type | | Rated current | Cross section of wire | | Connection method | | Color | | Series | | Product description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ES | P | Plug | 300A | 95 | 95mm² | / | | BK | Black | 00 | Standard | ESP-300A-95-BK-00 |
| | | | | | | | | OR | Orange | | | ESP-300A-95-OR-00 |
| | | | | | | | | RD | Red | | | ESP-300A-95-RD-00 |
| | S | Socket | 300A | 95 | 95mm² | B | Busbar | BK | Black | 00 | Standard | ESS-300A-95-B-BK-00 |
| | | | | | | | | OR | Orange | | | ESS-300A-95-B-OR-00 |
| | | | | | | | | RD | Red | | | ESS-300A-95-B-RD-00 |
| | | | | | | S | Screw | BK | Black | 00 | Standard | ESS-300A-95-S-BK-00 |
| | | | | | | | | OR | Orange | | | ESS-300A-95-S-OR-00 |
| | | | | | | | | RD | Red | | | ESS-300A-95-S-RD-00 |
| | | | | | | C | Crimp | BK | Black | 00 | Standard | ESS-300A-95-C-BK-00 |
| | | | | | | | | OR | Orange | | | ESS-300A-95-C-OR-00 |
| | | | | | | | | RD | Red | | | ESS-300A-95-C-RD-00 |
| | | | | | | B/S | Busbar/ Screw | BK | Black | 00 | Standard | ESS-300A-95-B/S-BK-00 |
| | | | | | | | | OR | Orange | | | ESS-300A-95-B/S-OR-00 |
| | | | | | | | | RD | Red | | | ESS-300A-95-B/S-RD-00 |





# ES-300A

- Rated voltage: 1500V
- Rated current: 300A,250A

## Technical parameters

| Plug type: E300A | | | |
|---|---|---|---|
| Insertion force | 80N MAX | Material of O-ring | Silicon |
| Withdrawal force | 10N≤X≤80N | Mechanical life | >100 |
| Rated voltage | 1500V | External cable diameter | 16.0-18.0mm/14.0-16.0mm |
| Rated current | 300A/250A(70mm²) | Cross section of wire | 95mm² / 70mm² |
| Contact resistance | <0.5mΩ | Stripping length of wire | 16-18mm |
| Insulation resistance | >5000MΩ | Connection method | Crimp |
| Color | Orange/Black/Red | Degree of protection | IP67(1m,30min) |
| Material of contact | Copper alloy | Ambient temperature (operation) | -40℃+125℃ |
| Insulation material | PA | Flammability rating according to UL 94 | V0 |
| Material of seal | Silicon | Certification | UI4128 and TUV 2PFG2740 |
| **Socket type: ESS-300A** | | | |
| Connection method | Busbar,Crimp,Screw,Copper screw | Layout torque | M4/0.4-0.7N.m |

## Ordering information

| Product series | Type | | Rated current | Cross section of wire | | Connection method | | Color | | Series | | Product description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ES | P | Plug | 300A | 95 | 95mm² | / | | BK | Black | 00-01 | 300A(95mm²cable) | ESP-300A-95-BK-00-XX(01 or 03) |
| | | | | | | | | OR | Orange | | | ESP-300A-95-OR-00-XX(01 or 03) |
| | | | | 70 | 70mm² | | | RD | Red | 00-03 | 250A(70mm² cable) | ESP-300A-95-RD-00-XX(01 or 03) |
| | S | Socket | 300A | 95 | 95mm² | B | Busbar | BK | Black | 00-01 | Standard | ESS-300A-95-B-BK-00-01 |
| | | | | | | | | OR | Orange | | | ESS-300A-95-B-OR-00-01 |
| | | | | | | | | RD | Red | | | ESS-300A-95-B-RD-00-01 |
| | | | | | | S | Screw | BK | Black | 00-01 | Standard | ESS-300A-95-S-BK-00-01 |
| | | | | | | | | OR | Orange | | | ESS-300A-95-S-OR-00-01 |
| | | | | | | | | RD | Red | | | ESS-300A-95-S-RD-00-01 |
| | | | | | | C | Crimp | BK | Black | 00-01 | Standard | ESS-300A-95-C-BK-00-01 |
| | | | | | | | | OR | Orange | | | ESS-300A-95-C-OR-00-01 |
| | | | | | | | | RD | Red | | | ESS-300A-95-C-RD-00-01 |
| | | | | | | B/S | Busbar/ Screw | BK | Black | 00-01 | Standard | ESS-300A-95-B/S-BK-00-01 |
| | | | | | | | | OR | Orange | | | ESS-300A-95-B/S-OR-00-01 |
| | | | | | | | | RD | Red | | | ESS-300A-95-B/S-RD-00-01 |

# ES-350A (Fool-proofing-Socket installation)

- Rated voltage: 1500V
- Rated current: 350A

## Technical parameters

| Plug type: ESP-350A | | | |
|---|---|---|---|
| Insertion force | 80N MAX | Material of O-ring | Silicon |
| Withdrawal force | 10N≤X≤80N | Mechanical life | ＞100 |
| Rated voltage | 1500V | External cable diameter | 19.0-22.0mm |
| Rated current | 350A | Cross section of wire | 120mm² |
| Contact resistance | ＜0.5mΩ | Stripping length of wire | 22-24mm |
| Insulation resistance | ＞5000MΩ | Connection method | Crimp |
| Color | Orange/Black/Red | Degree of protection | IP67（1m,30min） |
| Material of contact | Copper alloy | Ambient temperature (operation) | -40℃+125℃ |
| Insulation material | PA | Flammability rating according to UL 94 | V0 |
| Material of seal | Silicon | Certification | UI4128 and TUV2PFG2740 |
| **Socket type: ESS-350A** | | | |
| Connection method | Busbar,Crimp,Screw,Copper screw | Layout torque | M4/0.4-0.7N.m |

## Ordering information

| Product series | Type | | Rated current | Cross section of wire | | Connection method | | Color | | Series | | Product description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ES | P | Plug | 350A | 120 | 120mm² | / | | BK | Black | 00 | Standard | ESP-350A-120-BK-00 |
| | | | | | | | | OR | Orange | | | ESP-350A-120-OR-00 |
| | | | | | | | | RD | Red | | | ESP-350A-120-RD-00 |
| | S | Socket | 350A | 120 | 120mm² | B | Busbar | BK | Black | 00 | Standard | ESS-350A-120-B-BK-00 |
| | | | | | | | | OR | Orange | | | ESS-350A-120-B-OR-00 |
| | | | | | | | | RD | Red | | | ESS-350A-120-B-RD-00 |
| | | | | | | S | Screw | BK | Black | 00 | Standard | ESS-350A-120-S-BK-00 |
| | | | | | | | | OR | Orange | | | ESS-350A-120-S-OR-00 |
| | | | | | | | | RD | Red | | | ESS-350A-120-S-RD-00 |
| | | | | | | C | Crimp | BK | Black | 00 | Standard | ESS-350A-120-C-BK-00 |
| | | | | | | | | OR | Orange | | | ESS-350A-120-C-OR-00 |
| | | | | | | | | RD | Red | | | ESS-350A-120-C-RD-00 |
| | | | | | | B/S | Busbar/ Screw | BK | Black | 00 | Standard | ESS-350A-120-B/S-BK-00 |
| | | | | | | | | OR | Orange | | | ESS-350A-120-B/S-OR-00 |
| | | | | | | | | RD | Red | | | ESS-350A-120-B/S-RD-00 |





# ES-400A (Fool-proofing-Socket installation)

- Rated voltage: 1500V
- Rated current: 400A

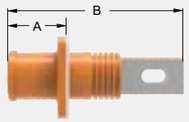
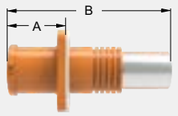
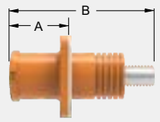
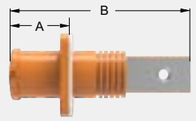
## Technical parameters

| Plug type: ESP-400A | | | |
|---|---|---|---|
| Insertion force | 100N MAX | Material of O-ring | Silicon |
| Withdrawal force | 10N≤X≤100N | Mechanical life | ＞100 |
| Rated voltage | 1500V | External cable diameter | 20.0-22.0mm |
| Rated current | 400A | Cross section of wire | 127mm² |
| Contact resistance | ＜0.5mΩ | Stripping length of wire | 22-24mm |
| Insulation resistance | ＞5000MΩ | Connection method | Crimp |
| Color | Orange/Black/Red | Degree of protection | IP67(1m,30min) |
| Material of contact | Copper alloy | Ambient temperature (operation) | -40℃+125℃ |
| Insulation material | PA | Flammability rating according to UL 94 | V0 |
| Material of seal | Silicon | Certification | UI4128 and TUV2PFG2740 |
| **Socket type: ESS-400A** | | | |
| Connection method | Busbar,Crimp,Screw,Copper screw | Layout torque | M4/0.4-0.7N.m |

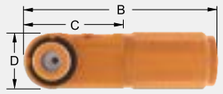
## Ordering information

| Product series | Type | | Rated current | Cross section of wire | | Connection method | | Color | | Series | | Product description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ES | P | Plug | 400A | 250 | 120mm² | / | | BK | Black | 00 | Standard | ESP-400A-250-BK-00 |
| | | | | | | | | OR | Orange | | | ESP-400A-250-OR-00 |
| | | | | | | | | RD | Red | | | ESP-400A-250-RD-00 |
| | S | Socket | 400A | 250 | 120mm² | B | Busbar | BK | Black | 00 | Standard | ESS-400A-250-B-BK-00 |
| | | | | | | | | OR | Orange | | | ESS-400A-250-B-OR-00 |
| | | | | | | | | RD | Red | | | ESS-400A-250-B-RD-00 |
| | | | | | | S | Screw | BK | Black | 00 | Standard | ESS-400A-250-S-BK-00 |
| | | | | | | | | OR | Orange | | | ESS-400A-250-S-OR-00 |
| | | | | | | | | RD | Red | | | ESS-400A-250-S-RD-00 |
| | | | | | | C | Crimp | BK | Black | 00 | Standard | ESS-400A-250-C-BK-00 |
| | | | | | | | | OR | Orange | | | ESS-400A-250-C-OR-00 |
| | | | | | | | | RD | Red | | | ESS-400A-250-C-RD-00 |
| | | | | | | B/S | Busbar/ Screw | BK | Black | 00 | Standard | ESS-400A-250-B/S-BK-00 |
| | | | | | | | | OR | Orange | | | ESS-400A-250-B/S-OR-00 |
| | | | | | | | | RD | Red | | | ESS-400A-250-B/S-RD-00 |

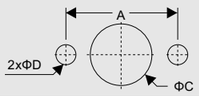
## Socket Dimensions

| Item | Screw connection | | Crimp connection | | Screw connection | | Busbar connection | |
|---|---|---|---|---|---|---|---|---|
| Size |  | |  | |  | |  | |
| | A | B | A | B | A | B | A | B |
| 50A/70A | 16.2 | 41.1 | 16.2 | 37.2 | 16.2 | 36.4 | 16.2 | 41.1 |
| 100A/120A | 19 | 53.7 | 19 | 53.5 | 19 | 45.5 | 19 | 53.7 |
| 150A/200A | 22 | 68.1 | 22 | 61.8 | 22 | 55.1 | 22 | 68.1 |
| 250A | 25.1 | 68.4 | 25.1 | 70.1 | 25.1 | 60.1 | 25.1 | 68.4 |
| 300A | 30.3 | 70 | 25.3 | 70.2 | 25.3 | 60.8 | 25.3 | 70.2 |
| 350A | 30.6 | 73.9 | 30.6 | 74.6 | 30.6 | 68.6 | 30.6 | 73.9 |

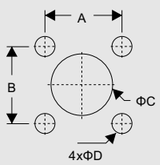
## Plug Dimensions

| Item | Crimp connection | | | |
|---|---|---|---|---|
| Size | | |  | |
| | A | B | C | D |
| 50A/70A | 21.2 | 51 | 24.3 | 16 |
| 100A/120A | 25 | 68.3 | 30.7 | 19 |
| 150A/200A | 29.4 | 76.7 | 40.7 | 22 |
| 250A | 33.8 | 87.2 | 38.7 | 23.5 |
| 300A | 39 | 101 | 44 | 29 |
| 350A | 44.4 | 106.4 | 48 | 33 |

## Layout Dimensions

| Current | A | ΦC | D | Layout Torque | Socket Torque | | Figure |
|---|---|---|---|---|---|---|---|
| | | | | | Busbar Torque | Screw Torque | |
| 50A/70A | 24±0.1 | 12.9±0.2 | M4 Screw | 0.4-0.7N.m | M4 Screw 1.2-1.5N.m | M4 Nut: 1.2N.m max |  |

## Layout Dimensions

| Current | A | B | ΦC | D | Layout Torque | Busbar Torque | Screw Torque | Figure |
|---|---|---|---|---|---|---|---|---|
| 100A/120A | 18±0.1<br>21±0.1 | 18±0.1<br>21±0.1 | 14.3±0.1<br>20.3±0.1 | M4 Screw | M4 bolts: 0.4-0.7N.m | M5 bolts: 2N.m max | M6 Nut: 2N.m max |  |
| 150A/200A (ExcludeESS-200A-A) | 21.0±0.1<br>21.8±0.1 | 21.0±0.1<br>21.8±0.1 | 18.6±0.1<br>20.0±0.1<br>(Screw) | M4 Screw | M4 bolts: 0.4-0.7N.m | M5 bolts: 2N.m max | M8 Nut: 6N.m max | |
| 250A | 36±0.1 | 36±0.1 | 32±0.1 | M4 Screw | M4 bolts: 0.4-0.7N.m | M8 Nut: 6N.m max | M8 Nut: 6N.m max | |
| 250A Small size | 24.5±0.1<br>25.0±0.1 | 24.5±0.1<br>25.0±0.1 | 23.9±0.1 | M3/M4 Screw | M3/M4 bolts: 0.4-0.7N.m | M8 bolts: 6N.m max | M8 Nut: 6N.m max | |
| 300A | 24.5±0.1 | 24.5±0.1 | 22.5+0.2/-0 | M4 Screw | M4 bolts: 0.4-0.7N.m | M8 bolts: 6N.m max | M8 Nut: 6N.m max | |
| 350A/400A | 36±0.1 | 36±0.1 | 32±0.1 | M4 Screw | M4 bolts: 0.4-0.7N.m | M8 bolts: 6N.m max | M8 Nut: 6N.m max | |





# 8 Cores Waterproof Signal Connector

- Rated voltage: 500V
- Rated current: 5A

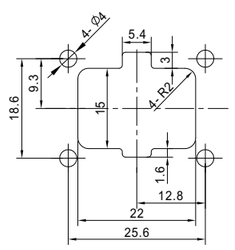
## Technical parameters

| Electrical characteristics | | Installation data | |
|---|---|---|---|
| Rated voltage | 500V DC | Panel thickness | ≤6mm |
| Rated current | 5A | Blocking plug | Optional |
| Insulation resistance | ≥200MΩ | Connection method | Crimp |
| Contact resistance | ≤5mΩ | Color | Gray |
| Withstanding voltage | AC1500V/1min | Wire range(AWG/mm²) | 22~18/0.3~0.8 |
| Ambient temperature | -40℃~+105℃ | Environment Items | RoHS |
| IP Class | IP67(Mated) | Certification | TUV |

## Ordering information

| Product series | Type | | Rated current | Cable quantity | Connection | Color | Series | Product description |
|---|---|---|---|---|---|---|---|---|
| ET | P | Plug | 05-5A | P08-8Core | C-Crimp | GY-Gray | 01- keyway 1<br>02- keyway 2 | ETP-5A-P08-C-GY-01<br>ETS-5A-P08-C-GY-01<br>ETP-5A-P08-C-GY-02<br>ETS-5A-P08-C-GY-02 |
| | S | Socket | | | | | | |

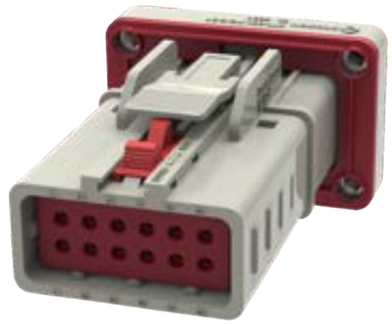
## Dimension figure




Panel Mounted

# 12 Cores Waterproof Signal Connector

- Rated voltage: 500V
- Rated current: 5A



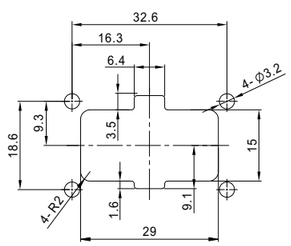
## Technical parameters

| Electrical characteristics | | Installation data | |
|---|---|---|---|
| Rated voltage | 500V DC | Panel thickness | ⩽6mm |
| Rated current | 5A | Blocking plug | Optional |
| Insulation resistance | ⩾200MΩ | Connection method | Crimp |
| Contact resistance | ⩽5mΩ | Color | Gray |
| Withstanding voltage | AC1500V/1min | Wire range(AWG/mm$^2$) | 22~18/0.3~0.8 |
| Ambient temperature | -40℃~+105℃ | Environment Items | RoHS |
| IP Class | IP67(Mated) | Certification | TUV |

## Ordering information

| Product series | Type | | Rated current | Cable quantity | Connection | Color | Series | Product description |
|---|---|---|---|---|---|---|---|---|
| ET | P | Plug | 05-5A | P012-12Core | C-Crimp | GY-Gray | 01- keyway 1<br>02- keyway 2 | ETP-5A-P12-C-GY-01<br>ETS-5A-P12-C-GY-01<br>ETP-5A-P12-C-GY-02<br>ETS-5A-P12-C-GY-02 |
| | S | Socket | | | | | | |

## Dimension figure




Panel Mounted





# 24 Cores Waterproof Signal Connector

- Rated voltage: 500V
- Rated current: 5A

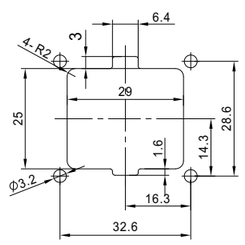
## Technical parameters

| Electrical characteristics | | Installation data | |
|---|---|---|---|
| Rated voltage | 500V DC | Panel thickness | ⩽6mm |
| Rated current | 5A | Blocking plug | Optional |
| Insulation resistance | ⩾200MΩ | Connection method | Crimp |
| Contact resistance | ⩽5mΩ | Color | Gray |
| Withstanding voltage | AC1500V/1min | Wire rang | 0.3~0.8mm |
| Ambient temperature | -40℃~+105℃ | Environment Items | RoHS |
| IP Class | IP67(Mated) | Certification | TUV |

## Ordering information

| Product series | Type | | Rated current | Cable quantity | Connection | Color | Series | Product description |
|---|---|---|---|---|---|---|---|---|
| ET | P | Plug | 05-5A | P024-24Core | C-Crimp | GY-Gray | 01- keyway 1<br>02- keyway 2 | ETP-5A-P24-C-GY-01<br>ETS-5A-P24-C-GY-01<br>ETP-5A-P24-C-GY-02<br>ETS-5A-P24-C-GY-02 |
| | S | Socket | | | | | | |

## Dimension figure




Panel Mounted

# MSD

- Fast separate the connections of high-voltage circuit
- Avoid the risk of electric shock after disconnect this switch during maintenance
- Approval standards: UL, TUV
- Current and voltage: 350A, 1500V

## Technical parameters

| MSD | | | |
|---|---|---|---|
| Rated voltage | 1500V | Degree of protection | IP68(Mated) 1m,1h |
| Rated current | 350A | Certification | UL/TUV |
| Insulation resistance | 5000MΩ MIN (dring)<br>200MΩ MIN (Rh95%) | Temperature range | -40℃~+125℃ |
| Contact impedance | <0.25mΩ | Mechanical life | ⩾100 |
| Withstanding voltage | Power contact point | Environmental protection | RoHS |
| Withstanding voltage | Interlocking contact point contact point | Dimension | 49mm*45mm |
| — | — | — | — |

## Ordering information

| Product series | Type | | Rated current | Cable data | Connection | Color | Series | Product description |
|---|---|---|---|---|---|---|---|---|
| EM | P | Plug | 350A | D-Default | D-Default | OR-Orange | HV-Including hvil pin | EMP-350A-D-D-OR-HV |
| | S | Socket | | 120 | S-Screw | | | EMS-350A-120-S-OR-HV |





# EG-300/600A

- Copper bar can be connected in four directions
- Low cost solution
- Follow UL1977 standard

## Technical parameters

| EG-150/250/300/600A | | | |
|---|---|---|---|
| Rated voltage | 1500V DC | Insulating material | PC |
| Rated current | 150A/250A/300A/350A | Pin header | Copper, Ni plated |
| Area of connected wire | 35mm²~250mm² | Flammability rating | UL94V-0 |
| Operation life | 10 years | Color | Orange/Black/Red |
| Mounting dimension | 45mm*45mm | Type of installation | Panel |
| Ambient temperature | -40℃~125℃ | Connection method | Screw connection |
| — | — | Environment Items | Compliant with REACH/RoHS |

## Ordering information

| Product series | Rated current | Cross section of wire | Connection method | | Color | | Series | Product description |
|---|---|---|---|---|---|---|---|---|
| EGD | 250A | 35mm²-150A:B35<br>70mm²-250A:B70<br>95mm²-300A:B95<br>250mm²-600A:250 | B/S | Busbar/ Screw | BK | Black | 00 | EGD-150A-B35-B/S-BK-00<br>EGD-150A-B35-B/S-OR-00<br>EGD-250A-B70-B/S-BK-00<br>EGD-250A-B70-B/S-OR-00<br>EGD-300A-B95-B/S-BK-00<br>EGD-300A-B95-B/S-OR-00<br>EGD-600A-250-B/S-BK-00<br>EGD-600A-250-B/S-OR-00 |
| | | | | | OR | Orange | | |

## ES-K-350

- The rotating cover plate design can effectively avoid the loss or damage of the cover plate
- Pre-break structure can be flexibly removed according to site connection conditions to enhance safety protection
- Two-way wiring can connect the energy storage battery in series or in parallel
- Low temperature rise of products, realizing safe, economical and efficient connection

### Technical parameters

| ES-K-350 | | | |
|---|---|---|---|
| Rated voltage | 1000V DC | Insulating material | PC |
| Rated current | 350A | Pin header | Copper, Ni plated |
| Wire range | 3/0AWG (95mm²) | Flammability rating | UL94V-0 |
| Copper bar specification | 20mm*5mm | Color | Orange/Black/Red |
| Torque tightening 1 | M10(Outside the battery pack) :20N·m | Type of installation | Panel |
| Torque tightening 2 | M6(Inside the battery pack):8N·m | Connection method | Screw connection |
| Ambient temperature | -40℃~125℃ | Environment Items | REACH/RoHS |

### Ordering information

| Product series | Rated current | Series | Product description |
|---|---|---|---|
| ES-K | 350A | 15-10AH | ES-K350-15-10AH |
| | | 13-20AH | ES-K350-13-20AH |





## Low protection terminal 120A/250A

- Applied to battery device power connection
- Applied to DCDC connection of electric new energy vehicles

### Technical parameters

| EGD | | | |
|---|---|---|---|
| Rated voltage | 1500V DC | Satisfy outdoor use | Yes |
| Rated current | 250A | Operating temperature | -40~+125(including temperature rise) |
| Contact resistance | ≤0.5mΩ | Housing materrial | PA+GF |
| Insulation resistance | ≥5000MΩ(drying) | Salt spray | 48H |
| Color | Black/Orange | Certification | UL |
| Withstanding voltage | 6800V/min | — | — |
| Flammability rating | V0 | — | — |

### Ordering information

| Product series | Rated current | Color | | Product description |
|---|---|---|---|---|
| EGD | 120A | OR | Orange | EGD-120A-25-B/S-OR-10 |
| | 250A | BK | Black | EGD-120A-25-B/S-BK-10 |

## ES-RJ communication connector

- Rated voltage: 30V
- Rated current: 1A
- Protection level：IP67
- Snap on lock, integrated product, more stable transmission

### Technical parameters

| ES-RJ | | | |
|---|---|---|---|
| Rated voltage | 30V | Locking method | Snap-in type |
| Rated current | 1A | Degree of protection | IP67(Mating) |
| Insulation resistance | ⩾500MΩ | Withstanding voltage | 500V AC |
| Flame retardant rating | ＜0.25mΩ | Mechanical life | ⩾750 |
| Temperature range | -40℃~+85℃ | Environmental protection | RoHS |

### Ordering information

| Series | Type | | Material | | Transmission rate | Locking mode | Front lock and back lock | Straight/ protection level /wire length | Product description |
|---|---|---|---|---|---|---|---|---|---|
| RJ | P | Plug | P | Plastic | 5E | Thread locking | F-Front lock | L/7/001 | RJ-P-P5E-CFL7001-00ZH |
| | S | Socket | | | 5E | Thread locking | F-Front lock | Length customization | RJ-S-P5E-CFL7A-X-00ZH |





## High protection terminal RJ45

- CAT5 100M transmission
- Pass the test of vertical burning
- IP67 Protection
- Compliance with vibration and shock requirements of UL

### Technical parameters

| RJ45 | | | |
|---|---|---|---|
| Rated voltage | 125V | Locking method | Thread |
| Rated current | 1.5A | Degree of protection | IP67(Mating) |
| Insulation resistance | ⩾100MΩ | Contact resistance | ⩽5mΩ |
| Flame retardant rating | UL94V-0 | Mechanical life | 100 |
| Temperature range | -40℃~+85℃ | Environmental protection | RoHS |

### Ordering information

| Series | Type | | Material | | Transmission rate | Locking mode | Front lock and back lock | Straight/ protection level /wire length | Product description |
|---|---|---|---|---|---|---|---|---|---|
| RJ | PM | Plug | P | Plastic | 5 | Thread locking | F-Front lock | Length customization | PM-RJ45-2L-7E-600-C1078 |
| | SD | Socket | | | 5 | Thread locking | F-Front lock | Length customization | SD-RJ45-SF7E-700-C1078 |

Photovoltaic connectors are used to connect components of inverters and other components.Degson provides photovoltaic connection solution from photovoltaic panels, DC wiring system, and inverter to AC grid-connected system, etc.

DEGSON offers connector products for photovoltaic solutions rang from photovoltaic panels、DC wiring systems、inverters to AC connection systems for grid-connected applications.

- AC-DC connection technology for device connection
- DC connection technology for field wiring
- Connection technology for signal and data transmission





## Coding principles for photovoltaic connectors

PV – □□□□ – □□ – □□ – □□□ – □□P – □□A – □ – □□Z(H)

**Special encoding**
- □00 – Standard
- □01~99 – Extend

**Protection grade**
- □0 = IP 20
- □4 = IP 54
- □5 = IP 65
- □6 = IP 66
- □7 = IP 67
- □8 = IP 68
- /- No protection

**Magnitude of current**
- □A 01-99A
- / / Signal Transmission

**Pin Number of Contacts**
- □03,04,05,08,12,17...Pin

**Connection**
- □W- Weld
- □C- Crimping

**Shell Style**
- □ S - Straight (For Molding and Assembly)
- □ R - Right Angle (For Molding and Assembly)
- □ F - Front seat (For Panel)
- □ B - Behind seat (For Panel)

**Connector installation style**
- □P- Panel connector
- □C- Cable terminal

**Contact Type**
- □M - Male
- □F - Female
- □G- Genderless
- / None of them are

**Connector Style**
- □M - Male Connector
- □F - Female Connector
- □G - Genderless
- / None of them are

**Classified by signal interface type**
- □□RJ- RJ45
- □□US-USB
- / / None of them are

**Classified by connector type**
- □□ FU- Fuse
- □□ HY- Hybrid
- / / None of them are

**Style**
- PV
- Photovoltaic connection

**Connector Type**
- ST- Signal Transmission
- DC- Direct Current
- AC - Alternating Current

PV Connector-Cable Terminal Male Plug
PV Connector-Cable Terminal Female **Socket**
**PV Connector Cable Terminal with protective Female Socket**

Cable terminal male plug

- Tinned contacts provide high electrical conductivity
- Robust locking system
- Anti-finger design

PV connector cable terminal with protective female socket

Cable terminal female socket

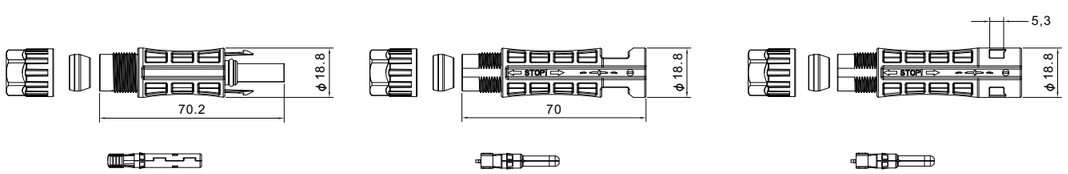
## Scope of application

Application for photovoltaic equipment

## Technical parameters

| | | | |
|---|---|---|---|
| Order NO . | PV-DC-MF-CSC-01P-40A-8-01Z(H)<br>PV-DC-FM-CSC-01P-40A-8-02Z(H)<br>PV-DC-FM-CSC-01P-40A-8-03Z(H) | PV-DC-MF-CSC-01P-40A-8-00Z(H)<br>PV-DC-FM-CSC-01P-40A-8-00Z(H)<br>PV-DC-FM-CSC-01P-40A-8-01Z(H) | |
| Rated current | 40A | Connection mode | Riveting press |
| Rated voltage | 1500V/2000V | Material | PA |
| Line diameter range | 4.0~6.0mm² | Contact parts | Bare Cu with Tin |
| Flame retardant rating | UL94V-0 | Protection level | IP68(Mated) 1m,1h |
| Operating temperature | −40℃ ～ +85℃ | Environment requirement | RoHS |
| — | — | — | — |

## Dimension figure








**PV Connector-Board Male Plug**
**PV Connector-Board Female Socket**
**PV Connector Board with protective Female Socket**

Board male plug

- Robust locking system
- Anti-finger design

PV connector board with protective female socket

Board female socket

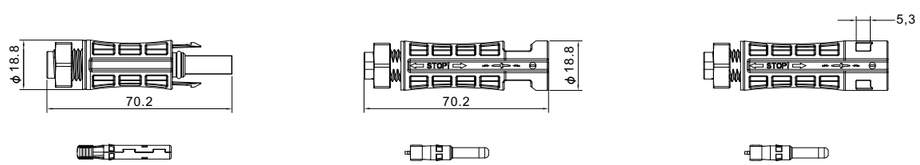
## Scope of application

Application for photovoltaic equipment

## Technical parameters

| | | | |
|---|---|---|---|
| Order NO . | PV-DC-MF-PSC-01P-40A-8-01Z(H)<br>PV-DC-FM-PSC-01P-40A-8-02Z(H)<br>PV-DC-FM-PSC-01P-40A-8-03Z(H) | PV-DC-MF-PSC-01P-40A-8-00Z(H)<br>PV-DC-FM-PSC-01P-40A-8-00Z(H)<br>PV-DC-FM-PSC-01P-40A-8-01Z(H) | |
| Rated current | 40A | Connection mode | Riveting press |
| Rated voltage | 1500V/2000V | Material | PA |
| Line diameter range | 4.0~6.0mm² | Contact parts | Bare Cu with Tin |
| Flame retardant rating | UL94V-0 | Protection level | IP68(Mated) 1m,1h |
| Operating temperature | −40℃ ～ +85℃ | Environment requirement | RoHS |
| — | — | — | — |

## Dimension figure



## DC Fuse Connector

- Quick locking and unlocking
- Moderate insertion and withdraw force
- The shell is provided with an installation identification mark
- Easy maintenance
- Solve the problem of unordered installation and unordered unlocking. The fuse is reserved in the trunk connector

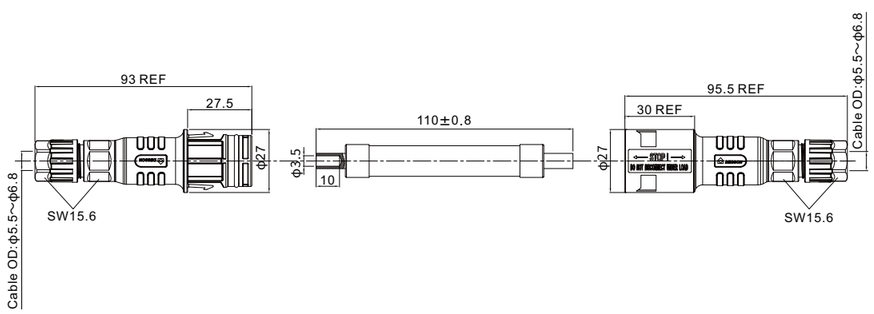
### Scope of application

Application for communication signal connection

### Technical parameters

| Fuse wire | | | |
|---|---|---|---|
| Order NO . | PV-DCFU-G-CSC-25A-8-00Z(H) | | |
| Rated current | 20A/25A | Connection mode | Crimping |
| Rated voltage | 1500V DC | Mechanical life | 100 |
| Insulation resistance | ⩾5000MΩ | Operating temperature | −40℃ ～ +85℃ |
| Flame retardant rating | UL94V-0 | Environment requirement | RoHS |
| Protection level | IP68(Mated) 1m,1h | — | — |
| — | — | — | — |

### Dimension figure








## 4 Cores RJ45 Connector - Socket (Non-standard)

- Modular RJ45 network port
- Save customer panel space and facilitate equipment miniaturization

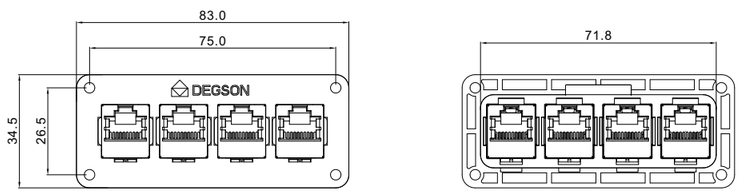
### Scope of application

Application for communication signal connection

### Technical parameters

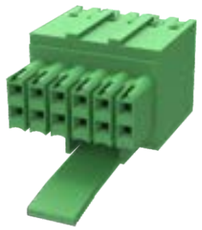
| Socket | | | |
|---|---|---|---|
| Order NO . | DGK17-019-01-00A(H) | | |
| Rated current | 1.5A | Connection mode | — |
| Rated voltage | 150V | Salt spray | 48H (EIA 364-26) |
| Insulation resistance | ⩾1000MΩ | Withstand voltage | 500V AC |
| Flame retardant rating | UL94V-0 | Iransmission.rate | CAT5E |
| Operating temperature | −40℃ ～ +85℃ | Withdrawal force | ＞30N |
| Protection level | — | Environment requirement | RoHS |

### Dimension figure



## 12 Cores Communication Connector - Plug

- Quick locking and unlocking
- Moderate insertion and withdraw force
- High mating and unmating life
- After insertion and removal in right position, there is visual and auditory feedback



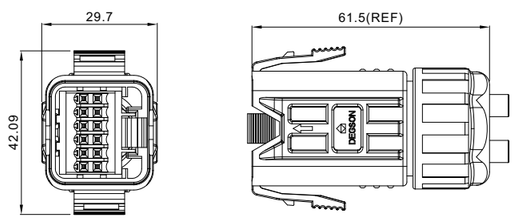
### Scope of application

Application for communication signal connection

### Technical parameters

| Plug(Internal terminals can be removed) | | | |
|---|---|---|---|
| Order NO . | PV-ST-MF-PSC-12P-00A(H) | | |
| Rated current | 1.5A | Connection mode | Crimping |
| Rated voltage | 160V | Salt spray | 48H (EIA 364-26) |
| Insulation resistance | ⩾100MΩ | Withstand voltage | 500V AC |
| Flame retardant rating | UL94V-0 | Mechanical life | 30 |
| Operating temperature | −40℃～+105℃ | Withdrawal force | >25N |
| Protection level | IP67(Mated) 1m,0.5h | Environment requirement | RoHS |

### Dimension figure








## 12 Cores Communication Connectors - Socket

- Quick locking and unlocking
- Moderate insertion and withdraw force
- High mating and unmating life
- After insertion and removal in right position, there is visual and auditory feedback

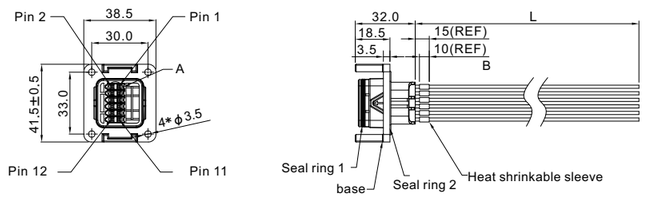
### Scope of application

Application for communication signal connection

### Technical parameters

| Socket | | | |
|---|---|---|---|
| Order NO . | PV-ST-FM-PFC-12P-00A(H) | | |
| Rated current | 1.5A | Connection mode | Crimping |
| Rated voltage | 160V | Salt spray | 48H (EIA 364-26) |
| Insulation resistance | ⩾100MΩ | Withstand voltage | 500V AC |
| Flame retardant rating | UL94V-0 | Mechanical life | 30 |
| Operating temperature | −40℃～+105℃ | Withdrawal force | >25N |
| Protection level | IP67(Mated) 1m,0.5h | Environment requirement | RoHS |

### Dimension figure



## 18 Cores Communication Connector - Plug

- Quick locking and unlocking
- Moderate insertion and withdraw force
- High mating and unmating life
- After insertion and removal in right position, there is visual and auditory feedback

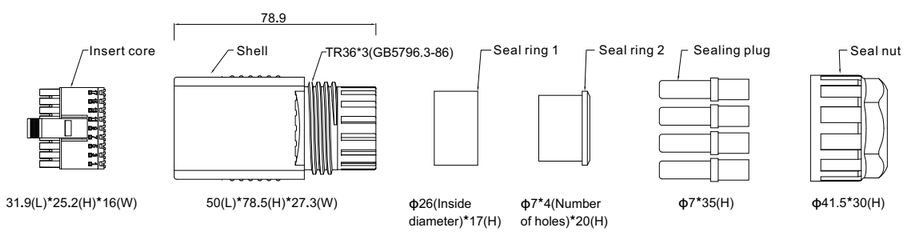
### Scope of application

Application for communication signal connection

### Technical parameters

| Plug(Internal terminals can be removed) | | | |
|---|---|---|---|
| Order NO . | PV-ST-MF-PSC-18P-00Z(H) | | |
| Rated current | 1.5A | Locking method | Latch |
| Rated voltage | 250V | Material | PC |
| Insulation resistance | ⩾500MΩ | Withstanding voltage | 1000V AC |
| Flame retardant rating | UL94V-0 | Mechanical life | 100 |
| Operating temperature | −40℃～+85℃ | Withdrawal force | — |
| Protection level | IP67(Mated) 1m,0.5h | Environment requirement | RoHS |

### Dimension figure








## 18 Cores Communication Connectors - Socket

- Quick locking and unlocking
- Moderate insertion and withdraw force
- High mating and unmating life
- After insertion and removal in right position, there is visual and auditory feedback

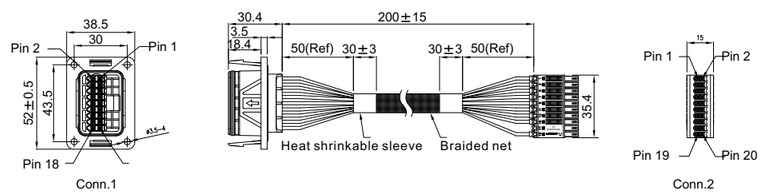
### Scope of application

Application for communication signal connection

### Technical parameters

| Socket | | | |
|---|---|---|---|
| Order NO . | PV-ST-FM-PFC-18P-00Z(H) | | |
| Rated current | 1.5A | Connection mode | crimping |
| Rated voltage | 250V | Material | Nylon |
| Insulation resistance | ⩾500MΩ | Withstanding voltage | 1000V AC |
| Flame retardant rating | UL94V-0 | Mechanical life | 100 |
| Operating temperature | −40℃～+85℃ | Withdrawal force | — |
| Protection level | IP67(Mated) 1m,0.5h | Environment requirement | RoHS |

### Dimension figure



## 12-26 Cores Plastic Coated Communication Connector -Plug (Non-standard)

- Quick locking and unlocking
- Moderate insertion and withdraw force
- High mating and unmating life
- After insertion and removal in right position, there is visual and auditory feedback

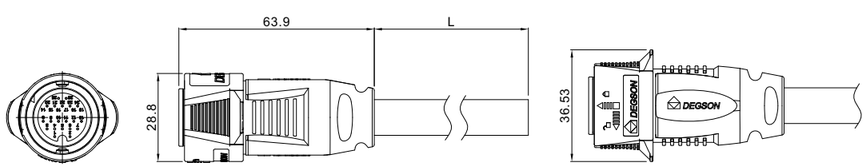
### Scope of application

Application for communication signal connection

### Technical parameters

| Plug | | | |
|---|---|---|---|
| Order NO . | PV-ST-MM-PSW-20P-00A(H) | | |
| Rated current | 1.5A | Connection mode | Welding |
| Rated voltage | 30V | Salt spray | 48H (EIA 364-26) |
| Insulation resistance | ⩾100MΩ | Withstanding voltage | 500V AC |
| Flame retardant rating | UL94V-0 | Mechanical life | 100 |
| Operating temperature | −40℃～+85℃ | Withdrawal force | >20N |
| Protection level | IP67(Mated) 1m,0.5h | Environment requirement | RoHS |

### Dimension figure








## 12-26 Cores Plastic Coated Communication Connector -Socket (Non-standard)

- Quick locking and unlocking
- Moderate insertion and withdraw force
- High mating and unmating life
- After insertion and removal in right position, there is visual and auditory feedback

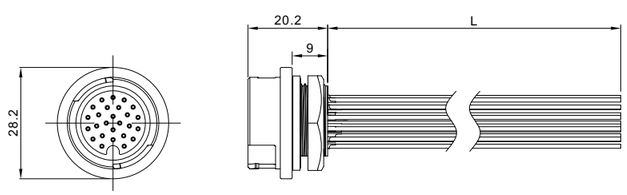
### Scope of application

Application for communication signal connection

### Technical parameters

| Socket | | | |
|---|---|---|---|
| Order NO . | PV-ST-FF-PFW-20P-00A(H) | | |
| Rated current | 1.5A | Connection mode | Welding |
| Rated voltage | 30V | Salt spray | 48H (EIA 364-26) |
| Insulation resistance | ⩾100MΩ | Withstanding voltage | 500V AC |
| Flame retardant rating | UL94V-0 | Mechanical life | 100 |
| Operating temperature | −40℃～+85℃ | Withdrawal force | >20N |
| Protection level | IP67(Mated) 1m,0.5h | Environment requirement | RoHS |

### Dimension figure



## 3 Core Power Connector - Plug

- Quick locking and unlocking
- Moderate insertion and withdraw force
- After insertion and removal in right position, there is visual and auditory feedback

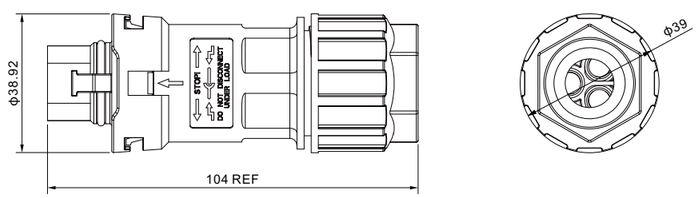
### Scope of application

Application for photovoltaic equipment

### Technical parameters

| Plug | | | |
|---|---|---|---|
| Order NO . | PV-AC-MM-CSC-03P-42A-8-00Z(H) | | |
| Rated current | 42A | Connection mode | Screw connection |
| Rated voltage | 600V | Mechanical life | 100 |
| Insulation resistance | ⩾500MΩ | Operating temperature | −40℃ ～ +85℃ |
| Flame retardant rating | UL94V-0 | Environment requirement | RoHS |
| Protection level | IP68(Mated) 1m,1h | — | — |
| — | — | — | — |

### Dimension figure








## 3 Core Power Connector - Socket

- Quick locking and unlocking
- Moderate insertion and withdraw force
- After insertion and removal in right position, there is visual and auditory feedback

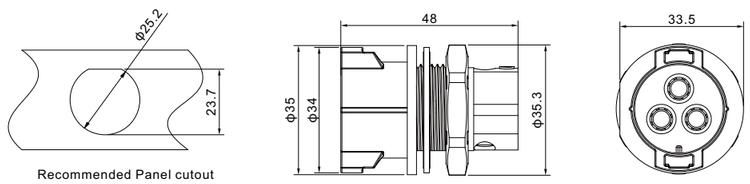
### Scope of application

Application for photovoltaic equipment

### Technical parameters

| Socket | | | |
|---|---|---|---|
| Order NO . | PV-AC-FF-PBC-03P-42A-8-00Z(H) | | |
| Rated current | 42A | Connection mode | Screw connection |
| Rated voltage | 600V | Mechanical life | 100 |
| Insulation resistance | ⩾500MΩ | Operating temperature | −40℃ ～ +85℃ |
| Flame retardant rating | UL94V-0 | Environment requirement | RoHS |
| Protection level | IP68(Mated) 1m,1h | — | — |
| — | — | — | — |

### Dimension figure



## 5 Core Power Connector - Plug

- Quick locking and unlocking
- Moderate insertion and withdraw force
- After insertion and removal in right position, there is visual and auditory feedback

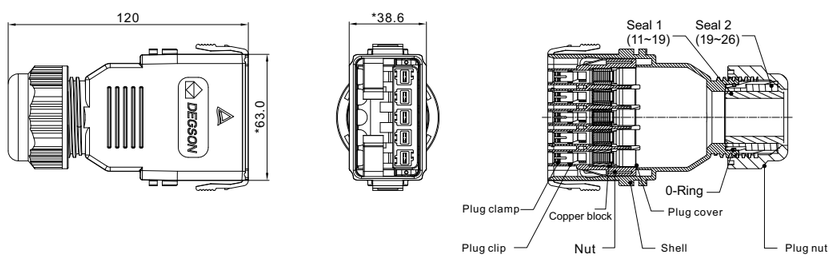
### Scope of application

Application for photovoltaic equipment

### Technical parameters

| Plug(Internal terminals can be removed) | | | |
|---|---|---|---|
| Order NO . | DG043-PV-PB-05P-FF | | |
| Rated current | 65A | Connection mode | Screw connection |
| Rated voltage | 600V | Salt spray | 48H (EIA 364-26) |
| Insulation resistance | ⩾100MΩ | Withstand voltage | 2200V |
| Flame retardant rating | UL94V-0 | Mechanical life | 100 |
| Operating temperature | −40℃～+105℃ | Environment requirement | RoHS |
| Protection level | IP66 (Mated，Can withstand water flow impact) | — | — |

### Dimension figure








## 5 Core Power Connector - Socket

- Quick locking and unlocking
- Moderate insertion and withdraw force
- After insertion and removal in right position, there is visual and auditory feedback

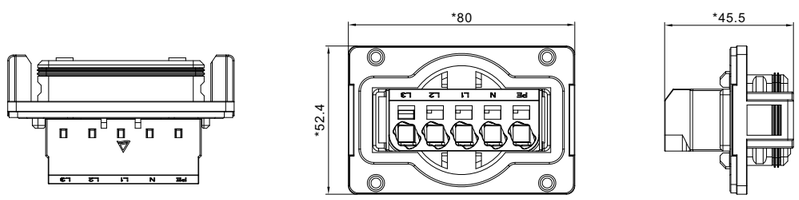
### Scope of application

Application for photovoltaic equipment

### Technical parameters

| Socket | | | |
|---|---|---|---|
| Order NO . | DG043-PV-SC-05P-MM | | |
| Rated current | 65A | Connection mode | Spring connection |
| Rated voltage | 600V | Salt spray | 48H (EIA 364-26) |
| Insulation resistance | ⩾100MΩ | Withstand voltage | 2200V |
| Flame retardant rating | UL94V-0 | Mechanical life | 100 |
| Operating temperature | −40℃～+105℃ | Environment requirement | RoHS |
| Protection level | IP66 (Mated，Can withstand water flow impact) | — | — |

### Dimension figure



## 5 Core Power Connector 80A - Plug

- Quick locking and unlocking
- Moderate insertion and withdraw force
- After insertion and removal in right position, there is visual and auditory feedback

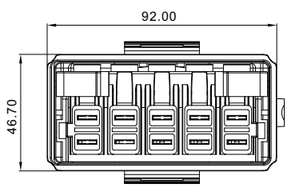
### Scope of application

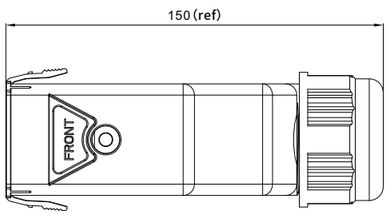
Application for photovoltaic equipment

### Technical parameters

| Plug(Internal terminals can be removed) | | | |
|---|---|---|---|
| Order NO . | PV-AC-MF-PSC-05P-80A-6-00Z(H) | | |
| Rated current | 80A | Connection mode | Screw connection |
| Rated voltage | 600V | Salt spray | 48H (EIA 364-26) |
| Insulation resistance | ⩾100MΩ | Withstand voltage | 2200V |
| Flame retardant rating | UL94V-0 | Mechanical life | 100 |
| Operating temperature | −40℃～+105℃ | Environment requirement | RoHS |
| Protection level | IP66 (Mated，Can withstand water flow impact) | — | — |

### Dimension figure








## 5 Core Power Connector 80A - Socket

- Quick locking and unlocking
- Moderate insertion and withdraw force
- After insertion and removal in right position, there is visual and auditory feedback

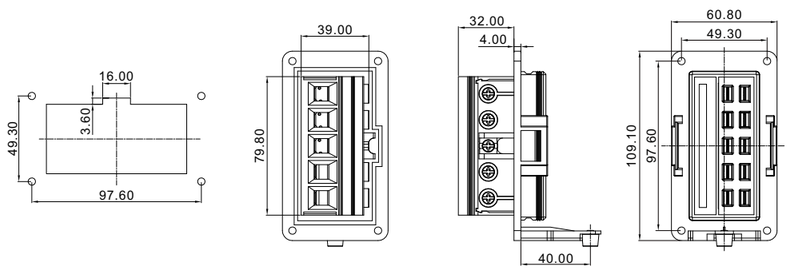
### Scope of application

Application for photovoltaic equipment

### Technical parameters

| Socket | | | |
|---|---|---|---|
| Order NO . | PV-AC-FM-PFC-05P-80A-6-00Z(H) | | |
| Rated current | 80A | Connection mode | Spring connection |
| Rated voltage | 600V | Salt spray | 48H (EIA 364-26) |
| Insulation resistance | ⩾100MΩ | Withstand voltage | 2200V |
| Flame retardant rating | UL94V-0 | Mechanical life | 100 |
| Operating temperature | −40℃～+105℃ | Environment requirement | RoHS |
| Protection level | IP66 (Mated，Can withstand water flow impact) | — | — |

### Dimension figure



## 10 Core Power Connector 80A - Plug

- Quick locking and unlocking
- Moderate insertion and withdraw force
- After insertion and removal in right position, there is visual and auditory feedback

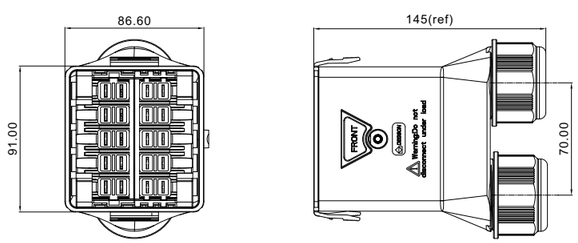
### Scope of application

Power and signal transmission

### Technical parameters

| Plug(Internal terminals can be removed) | | | |
|---|---|---|---|
| Order NO . | PV-AC-MF-PSC-10P-80A-6-00Z(H) | | |
| Rated current | 80A | Connection mode | Screw connection |
| Rated voltage | 600V | Salt spray | 48H (EIA 364-26) |
| Insulation resistance | ⩾100MΩ | Withstand voltage | 2200V |
| Flame retardant rating | UL94V-0 | Mechanical life | 100 |
| Operating temperature | −40℃～+105℃ | Environment requirement | RoHS |
| Protection level | IP66 (Mated，Can withstand water flow impact) | — | — |

### Dimension figure








## 10 Core Power Connector 80A - Socket

- Quick locking and unlocking
- Moderate insertion and withdraw force
- After insertion and removal in right position, there is visual and auditory feedback

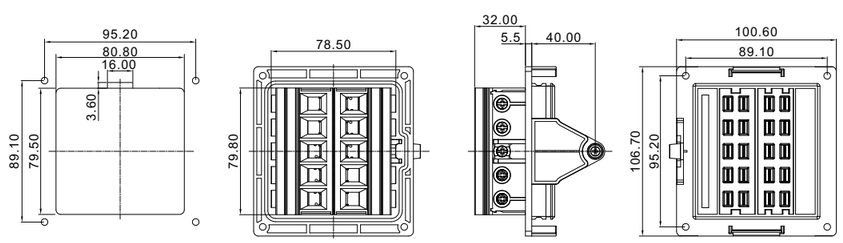
### Scope of application

Application for photovoltaic equipment

### Technical parameters

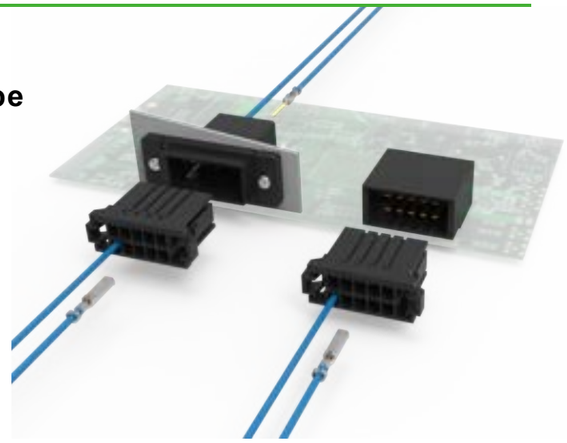
| Socket | | | |
|---|---|---|---|
| Order NO . | PV-AC-FM-PFC-10P-80A-6-00Z(H) | | |
| Rated current | 80A | Connection mode | Spring connection |
| Rated voltage | 600V | Salt spray | 48H (EIA 364-26) |
| Insulation resistance | ⩾100MΩ | Withstand voltage | 2200V |
| Flame retardant rating | UL94V-0 | Mechanical life | 100 |
| Operating temperature | −40℃～+105℃ | Environment requirement | RoHS |
| Protection level | IP66 (Mated，Can withstand water flow impact) | — | — |

### Dimension figure



## BMS signal connection - crimp type

- Reliable crimping connection method, greatly saving installation costs
- SNAP-LOCK safety lock structure,Excellent vibration resistance performance
- Contact gold plating process, low connection resistance, low temperature rise, more stable electrical transmission
- The socket can resist the upward and downward oscillation caused by the cable



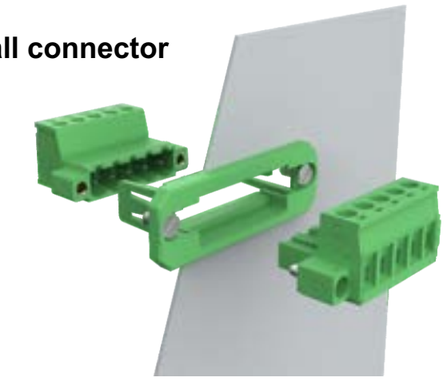
| Picture | Pruduct serie | Description | Poles(P) | Pitch(mm) | Rated current(A) | Rated voltage(V) | Connection method | Certification |
|---|---|---|---|---|---|---|---|---|
| | 9EDGCP-31KDX-3.81 | Double Row Plugs | 4-24 | 3.81 | 8 | 250 | Crimp Connector | / |
| | 9EDGCP-31RDX-3.81 | Double Row Reverse Plug (Wire to Wire) | 4-24 | 3.81 | 8 | 250 | Crimp Connector | / |
| | 9EDGCP-31KRMDX-3.81 | Double Row Sockets-Bent Pin | 4-24 | 3.81 | 8 | 250 | Crimp Connector | / |
| | 9EDGCP-32KSX-5.08 | Single Row Plug | 2-12 | 5.08 | 8 | 600 | Crimp Connector | / |
| | 9EDGCP-32RSX-5.08 | Single Row Socket-Bent Pin | 2-12 | 5.08 | 8 | 600 | Crimp Connector | / |
| | 9EDGCP-32KDX-5.08 | Double Row Plugs | 4-24 | 5.08 | 8 | 600 | Crimp Connector | / |
| | 9EDGCP-32KRMDX-5.08 | Double Row Reverse Plug | 4-24 | 5.08 | 8 | 600 | Crimp Connector | / |
| | 9EDGCP-32RDX-5.08 | Double Row Sockets-Bent Pin | 4-24 | 5.08 | 8 | 600 | Crimp Connector | / |
| | 9EDGCP-31T01 | Crimp terminal for plug | 1 | / | 8 | / | / | / |
| | 9EDGCP-31RT01 | Reverse Plug Crimp Terminal Blocks | 1 | / | 8 | / | / | / |





## Signal transmission connection- plug-in wall connector

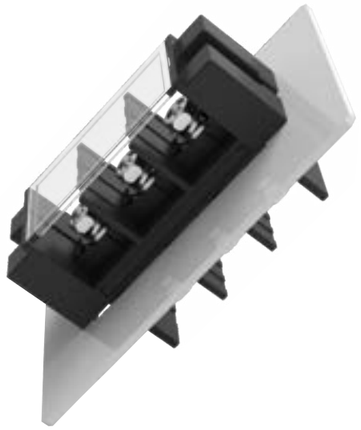
- Adopt screw and spring connection, adapt to a variety of occasions
- Support multi-angle line direction, widely used
- The screw flanges on both sides are fixed to form anti-vibration connection and improve the stability of signal transmission



| Picture | Pruduct serie | Description | Poles(P) | Pitch(mm) | Rated current(A) | Rated voltage(V) | Connection direction | Connection method | Certification |
|---|---|---|---|---|---|---|---|---|---|
| | 15CDGV-3.81 | Threaded flange Wall connection | 2-24 | 3.81 | 7 IEC<br>8 UL (B, D) | 250 IEC<br>300 UL (B, D) | 0° | Soldered or splined connection | UL |
| | 15CDG-3.81 | Bulkhead panel frame | 2-16 | 3.81 | / | / | 0° | Flange connection | / |
| | 15EDGKRP-3.81 | With 15CDG-3.81 for wall connection | 2-16 | 3.81 | 7 IEC<br>8 UL (B) | 250 IEC<br>300 UL (B) | 0° | Screw connection with clamp wire | UL |
| | 15EDGKM-3.81 | With threaded flange | 2-24 | 3.81 | 7 IEC<br>8 UL (B, D) | 250 IEC<br>300 UL (B, D) | 0° | Screw connection with clamp wire | VDE、UL |
| | 15EDGKDM-3.81 | With threaded flange | 2-24 | 3.81 | 12 IEC<br>8 UL (B,C,D) | 250 IEC<br>300 UL (B, C,D) | 0° | Push-in spring connection | VDE、UL |
| | 2CDGB-5.08 | Threaded flange Wall connection | 2-22 | 5.08 | 12 IEC<br>15 UL (B)<br>10 UL (D) | 400 IEC<br>300 UL (B)<br>300 UL (D) | 0° | Soldered or splined connection | UL |
| | 2CDG-5.08 | Bulkhead panel frame | 2-22 | 5.08 | / | / | 0° | Flange connection | / |
| | 2EDGKRP-5.08 | With 2CDG-5.08 for wall connection | 2-22 | 5.08 | 20 IEC<br>15 UL (B)<br>10 UL (D) | 320 IEC<br>300 UL (B)<br>300 UL (D) | 0° | Screw connection with clamp wire | UL |
| | 2EDGKDRP-5.08 | With 2CDG-5.08 for wall connection | 2-16 | 5.08 | 20 IEC<br>10 UL (B, D) | 320 IEC<br>300 UL (B, D) | 0° | Push-in spring connection | / |
| | 2EDGKM-5.08 | With threaded flange | 2-22 | 5.08 | 20 IEC<br>15 UL (B)<br>10 UL (D) | 320 IEC<br>300 UL (B)<br>300 UL (D) | 0° | Screw connection with clamp wire | VDE、UL |
| | 2EDGKDM-5.08 | With threaded flange | 2-24 | 5.08 | 20 IEC<br>10 UL (B, D) | 320 IEC<br>300 UL (B, D) | 0° | Push-in spring connection | VDE、UL |

# Barrier Terminals

- Screw locking, can withstand large torque, reliable wiring.
- The product line is complete, including welding board products and wire-to-wire products.
- Provide one-piece/pluggable double-layer structure to save space.
- The installation methods include welding plate, panel and rail installation.
- The maximum voltage can reach 1000V, and the maximum current can reach 500A.



| Picture | Pruduct serie | Description | Poles(P) | Pitch(mm) | Rated current(A) | Rated voltage(V) | Connection method | Certification |
|---|---|---|---|---|---|---|---|---|
| | DG40-A | panel feed through | 2-10 | 13 | 40 UL(B,D) | 600 UL(B,C,D) | Panel installation | UL |
| | DG75-A | panel feed through | 1-XXP | 16 | 75 UL(B,C)<br>5 UL(D) | 600 UL(B,C,D) | Panel installation | UL |
| | DG100-A | panel feed through | 1-XXP | 21 | 115 UL(B,C)<br>5 UL(D) | 600 UL(B,C,D) | Panel installation | UL |
| | DG150-A | panel feed through | 2-10 | 27 | 150 UL(E) | 1000 UL(E) | Panel installation | UL |
| | DG200-A | panel feed through | 2-10 | 27 | 200 UL(E) | 1000 UL(E) | Panel installation | UL |
| | DG250-A | panel feed through | 2-10 | 27 | 250 UL(E) | 1000 UL(E) | Panel installation | UL |
| | DG300-A | panel feed through | 2-10 | 27 | 300 UL(E) | 1000 UL(E) | Panel installation | UL |
| | DG100D-A | 2 poles short circuit panel feed through | 2,4 | 21 | 100 UL(B,C)<br>5 UL(D) | 600 UL(B,C,D) | Panel installation | UL |
| | DG200D-A | 2 poles short circuit panel feed through | 2,4 | 27 | 200 UL(E) | 1000 UL(E) | Panel installation | UL |



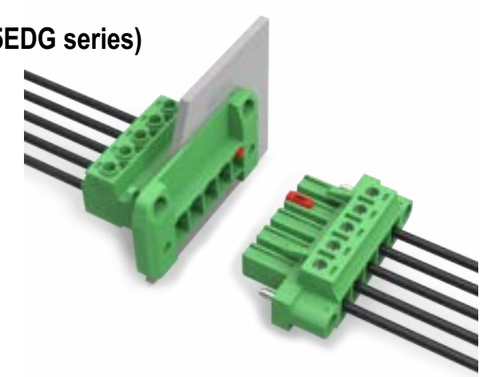


## 10-500A

| Picture | Pruduct serie | Description | Pitch(mm) | Poles(P) | Pitch(mm) | Rated current(A) | Rated voltage(V) | Connection method | Certification |
|---|---|---|---|---|---|---|---|---|---|
| | DGR10 | Al Rail | 7.3 | 1-21 | 24-16 | 10 UL(B,C)<br>5 UL(D) | 600 UL(B,C,D) | Din-rail installation | CE |
| | DGR20 | Al Rail | 9.5 | 1-16 | 24-12 | 20 UL(B,C)<br>5 UL(D) | 600 UL(B,C,D) | Din-rail installation | CE |
| | DGR30 | Al Rail | 11.5 | 1-16 | 20-10 | 30 UL(B,C)<br>5 UL(D) | 600 UL(B,C,D) | Din-rail installation | CE |
| | DGR40 | Al Rail | 14 | 1-16 | 22-6 | 60 UL(B,C)<br>5 UL(D) | 600 UL(B,C,D) | Din-rail installation | UL |
| | DGR60 | Steel Rail<br>Panel Mounted | 19 | 1-16 | 20-4 | 80 UL(B,C)<br>5 UL(D) | 600 UL(B,C,D) | Din-rail installation and panel installation | UL |
| | DGR100 | Steel Rail<br>Panel Mounted | 25 | 1-16 | 20-1 | 130 UL(B,C) | 600 UL(B,C) | Din-rail installation and panel installation | UL |
| | DGB100 | Panel Mounted | 25.5 | 2-11 | 20-2 | 130 UL(B,C) | 600 UL(B,C) | Panel installation | UL |
| | DGR150 | Steel Rail<br>Panel Mounted | 27 | 1-12 | 20-2/0 | 155 UL(B,C)<br>5 UL(D) | 600 UL(B,C,D) | Din-rail installation and panel installation | UL |
| | DGR200 | Al Rail<br>Panel Mounted | 36 | 1-11 | 20-4/0 | 200 UL(B,C)<br>5 UL(D) | 600 UL(B,C,D) | Din-rail installation and panel installation | UL |
| | DGR240 | Al Rail | 36 | 1-16 | 4-250 Kcmil | 240 UL(B,C)<br>5 UL(D) | 600 UL(B,C,D) | Din-rail installation and panel installation | CE |
| | DGR300 | Steel Rail<br>Panel Mounted | 45 | 1-16 | 20-300 Kcmil | 300 UL(B,C)<br>5 UL(D) | 600 UL(B,C,D) | Din-rail installation and panel installation | UL |
| | DGR500 | Panel Mounted | 60 | 1-16 | 300-750 Kcmil | 500 UL(B,C)<br>5 UL(D) | 600 UL(B,C,D) | Panel installation | UL |

## Power connection - screw type PCB connector (5EDG series)

- Adopting screw wiring method, suitable for various occasions.
- Supports two inlet angles and is widely used
- Supports multiple connection methods: line to line, line to PCB,flange and fixed without flange.



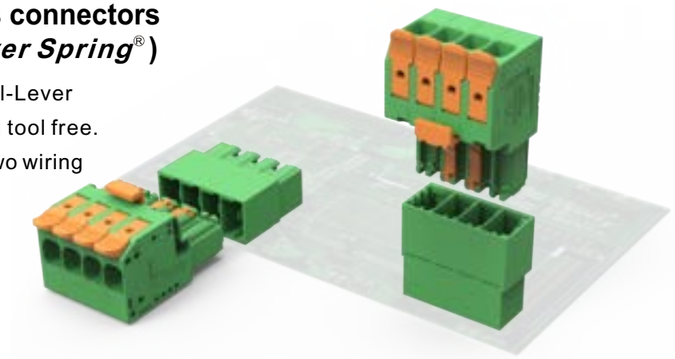
| Picture | Pruduct serie | Description | Poles(P) | Pitch(mm) | Rated current(A) | Rated voltage(V) | Connection direction | Connection method | Certification |
|---|---|---|---|---|---|---|---|---|---|
| | 5EDGKRP-7.62 | Through-wall connection | 2-12 | 7.62 | 20 IEC<br>35 UL (B, C)<br>5 UL (D) | 630 IEC<br>300 UL (B, C)<br>600 UL (D) | 0° | Screw connection with clamp wire | / |
| | 5EDGK-7.62<br>5EDGKM-7.62 | Without flange<br>Flange with screw | 2-12 | 7.62 | 32 IEC<br>30 UL (B, C)<br>10 UL (D) | 400 IEC<br>300 UL (B, C)<br>300 UL (D) | 0° | Screw connection with clamp wire | VDE、UL |
| | 5EDGKH-7.62<br>5EDGKHM-7.62 | Without flange<br>Flange with screw | 2-12 | 7.62 | 41 IEC<br>41 UL (B, C)<br>5 UL (D) | 1000 IEC<br>600 UL(B, C)<br>600 UL(D) | 0° | Screw connection with clamp wire | UL |
| | 5EDGK-10.16<br>5EDGKM-10.16 | Without flange<br>Flange with screw | 2-8 | 10.16 | 57 IEC<br>52 UL (B, C)<br>10 UL (D) | 600 IEC<br>600 UL (B, C)<br>300 UL (D) | 0° | Screw connection with clamp wire | VDE、UL |
| | 5EDGVC-7.62<br>5EDGVM-7.62 | Without flange<br>Flange with thread | 2-12 | 7.62 | 32 IEC<br>30 UL (B, C)<br>10 UL (D) | 400 IEC<br>300 UL (B, C)<br>300 UL (D) | 90° | Wave soldering | VDE、UL |
| | 5EDGVHC-7.62<br>5EDGVHM-7.62 | Without flange<br>Flange with thread | 2-12 | 7.62 | 41 IEC<br>41 UL (B, C)<br>5 UL (D) | 630 IEC<br>300 UL (B, C)<br>600 UL (D) | 90° | Wave soldering | UL |
| | 5EDGVC-10.16<br>5EDGVM-10.16 | Without flange<br>Flange with thread | 2-8 | 10.16 | 57 IEC<br>52 UL (B, C)<br>5 UL (D) | 600 IEC<br>300 UL (B, C)<br>600 UL (D) | 90° | Wave soldering | VDE、UL |
| | 5EDGRC-7.62<br>5EDGRM-7.62 | Without flange<br>Flange with thread | 2-12 | 7.62 | 32 IEC<br>30 UL (B, C)<br>10 UL (D) | 400 IEC<br>300 UL (B, C)<br>300 UL (D) | 0° | Wave soldering | VDE、UL |
| | 5EDGRHC-7.62<br>5EDGRHM-7.62 | Without flange<br>Flange with thread | 2-12 | 7.62 | 41 IEC<br>41 UL (B)<br>41 UL (C)<br>10 UL (D) | 630 IEC<br>300 UL (B)<br>150 UL (C)<br>300 UL (D) | 0° | Wave soldering | UL |
| | 5EDGRC-10.16<br>5EDGRM-10.16 | Without flange<br>Flange with thread | 2-8 | 10.16 | 57 IEC<br>52 UL (B, C)<br>5 UL (D) | 600 IEC<br>300 UL (B, C)<br>600 UL (D) | 0° | Wave soldering | VDE、UL |
| | 5CDG-7.62 | Through-wall connection | 2-12 | 7.62 | 32 IEC<br>30 UL (B, C) | 400 IEC<br>300 UL (B, C) | 90° | Soldered or splined connection | UL |

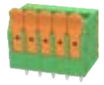
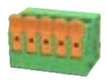




## Power Connectors- Tool less connectors (*Dual-Lever Spring*®)

- Comfortable and labor-saving Dual-Lever Spring technology,fast wiring and tool free.
- Pluggable and PCB type, support two wiring angles, wide application.
- Independent test holes available, quick and convenient testing.

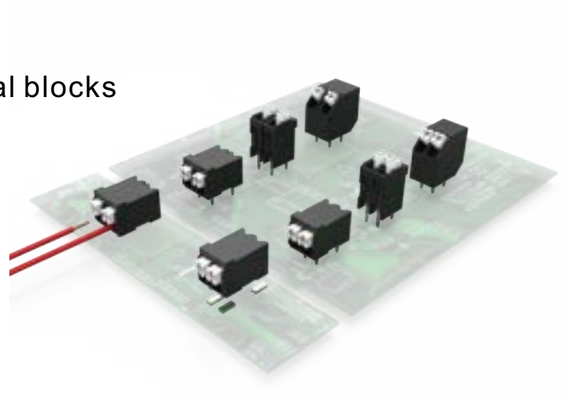


| Picture | Pruduct serie | Description | Poles(P) | Pitch(mm) | Rated current(A) | Rated voltage(V) | Connection direction | Connection method | Certification |
|---|---|---|---|---|---|---|---|---|---|
| | DG2204R-5.0 | Tool-free connection | 1-12 | 5.0 | 32 IEC<br>20 UL (B)<br>10 UL (D) | 400 IEC<br>300 UL (B)<br>300 UL (D) | 0° | Push-in spring connection | VDE、UL |
|  | DG2204V-5.0 | Tool-free connection | 1-12 | 5.0 | 32 IEC<br>20 UL (B)<br>10 UL (D) | 400 IEC<br>300 UL (B)<br>300 UL (D) | 90° | Push-in spring connection | VDE、UL |
| | DG2206R-7.5 | With Z-shaped pin for 600V UL applications<br>Tool-free connection | 1-12 | 7.5 | 41 IEC<br>41 UL (B)<br>41 UL (C)<br>5 UL (D) | 1000 IEC<br>600 UL (B)<br>600 UL (C)<br>600 UL (D) | 0° | Push-in spring connection | VDE、UL |
|  | DG2206V-7.5 | With Z-shaped pin for 600V UL applications<br>Tool-free connection | 1-12 | 7.5 | 41 IEC<br>41 UL (B)<br>41 UL (C)<br>5 UL (D) | 1000 IEC<br>600 UL (B)<br>600 UL (C)<br>600 UL (D) | 90° | Push-in spring connection | VDE、UL |
| | DG2206S-7.5 | With Z-shaped pin for 600V UL applications<br>Tool-free connection | 1-12 | 7.5 | 41 IEC<br>41 UL (B)<br>41 UL (C)<br>5 UL (D) | 1000 IEC<br>600 UL (B)<br>600 UL (C)<br>600 UL (D) | 45° | Push-in spring connection | UL |
| | DG2216R-10.0<br>DG2216R-15.0 | With Z-shaped pin for 600V UL applications<br>Tool-free connection | 2-12 | 10.0<br>15.0 | 76 IEC<br>66 UL (B)<br>66 UL (C)<br>10 UL (D) | 600 IEC<br>300 UL (B)<br>150 UL (C)<br>300 UL (D) | 0° | Push-in spring connection | VDE、UL |
| | DG2216V-10.0 | With Z-shaped pin for 600V UL applications<br>Tool-free connection | 1-12 | 10.0 | 76 IEC<br>66 UL (B)<br>66 UL (C)<br>10 UL (D) | 400 IEC<br>300 UL (B)<br>150 UL (C)<br>300 UL (D) | 90° | Push-in spring connection | VDE、UL |
| | 5EDGKDL-7.62 | Tool-free connection | 2-12 | 7.62 | 41 IEC<br>42 UL (B, C) | 1000 IEC<br>600 UL (B, C) | 0° | Push-in spring connection | UL |
| | 5EDGKDLR-7.62 | Tool-free connection | 2-12 | 7.62 | 41 IEC<br>42 UL (B, C) | 1000 IEC<br>600 UL (B, C) | 0° | Push-in spring connection | VDE |
| | 5EDGRL-7.62<br>5EDGVL-7.62 | / | 2-12 | 7.62 | 41 IEC<br>42 UL (B, C)<br>5 UL (D) | 630 IEC<br>300 UL (B, C)<br>600 UL (D) | 0°<br>90° | Wave soldering | UL |
| | 5BDG-7.62 | Bulkhead panel frame | 2-12 | 7.62 | / | / | 0° | Clamping plate | / |

# Energy storage converter

## Signal Connectors- Compact terminal blocks (DG212 Series)

- PUSH-IN spring connection technology for fast wiring, reducing the wiring time and costs.
- Compact structure, saving the installation space of equipment.
- Suitable for SMT and THR soldering process.



### THR Series

| Picture | Pruduct serie | Description | Poles(P) | Pitch(mm) | Rated current(A) | Rated voltage(V) | Connection direction | Connection method | Certification |
|---|---|---|---|---|---|---|---|---|---|
| | DG212V-THR-3.5 | THR and Wave soldering | 2-24 | 3.5 | 17.5 IEC<br>12 UL (B)<br>10 UL (D) | 200 IEC<br>300 UL (B)<br>300 UL (D) | 90° | Push-in spring connection | UL,VDE |
| | DG212R-THR-3.5 | THR and Wave soldering | 2-24 | 3.5 | 17.5 IEC<br>12 UL (B)<br>10 UL (D) | 200 IEC<br>300 UL (B)<br>300 UL (D) | 0° | Push-in spring connection | UL,VDE |
| | DG212S-THR-3.5 | THR and Wave soldering | 2-24 | 3.5 | 17.5 IEC<br>12 UL (B)<br>10 UL (D) | 160 IEC<br>300 UL (B)<br>300 UL (D) | 45° | Push-in spring connection | UL |
| | DG212V-THR-5.0 | THR and Wave soldering | 2-24 | 5.0 | 17.5 IEC<br>12 UL (B)<br>10 UL (D) | 320 IEC<br>300 UL (B)<br>300 UL (D) | 90° | Push-in spring connection | UL,VDE |
| | DG212R-THR-5.0 | THR and Wave soldering | 2-24 | 5.0 | 17.5 IEC<br>12 UL (B)<br>10 UL (D) | 320 IEC<br>300 UL (B)<br>300 UL (D) | 0° | Push-in spring connection | UL,VDE |
| | DG212S-THR-5.0 | THR and Wave soldering | 2-24 | 5.0 | 17.5 IEC<br>12 UL (B)<br>10 UL (D) | 320 IEC<br>300 UL (B)<br>300 UL (D) | 45° | Push-in spring connection | UL,VDE |

### SMT Series

| Picture | Pruduct serie | Description | Poles(P) | Pitch(mm) | Rated current(A) | Rated voltage(V) | Connection direction | Connection method | Certification |
|---|---|---|---|---|---|---|---|---|---|
| | DG212R-THR-3.5 (1050R) | SMT soldering | 2-24 | 3.5 | 17.5 IEC<br>12 UL (B) | 160 IEC<br>300 UL (B) | 0° | Push-in spring connection | UL,VDE |
| | DG212R-THR-5.0 (1050R) | SMT soldering | 2-24 | 5.0 | 17.5 IEC<br>12 UL (B)<br>10 UL (D) | 320 IEC<br>300 UL (B)<br>300 UL (D) | 0° | Push-in spring connection | UL,VDE |

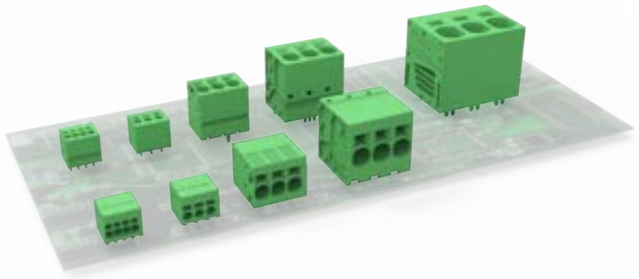




# Energy storage converter

## Power Connectors- Push-in terminal blocks (DG271 Series)

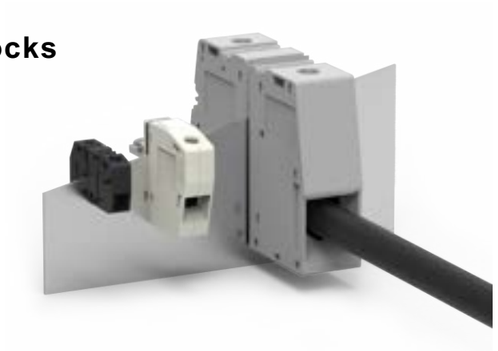
- PUSH-IN spring connection technology, for high performance compact equipment.
- Full range of pitch products, support two wiring angles, wide application.
- Cross section up to 35mm² (2 AWG), rated current up to 125A.



| Picture | Pruduct serie | Description | Poles(P) | Pitch(mm) | Rated current(A) | Rated voltage(V) | Connection direction | Connection method | Certification |
|---|---|---|---|---|---|---|---|---|---|
| | DG271V-3.5 | Linear double pinning | 1-24 | 3.5 | 17.5 IEC<br>10 UL (B) | 200 IEC<br>300 UL (B) | 90° | Push-in spring connection | UL |
| | DG271R-3.5 | Linear double pinning | 1-24 | 3.5 | 17.5 IEC<br>10 UL (B) | 200 IEC<br>300 UL (B) | 0° | Push-in spring connection | UL |
| | DG271V-5.0 | Linear double pinning | 1-24 | 5.0 | 24 IEC<br>20 UL (B)<br>10 UL (D) | 400 IEC<br>300 UL (B)<br>300 UL (D) | 90° | Push-in spring connection | UL,VDE |
| | DG271R-5.0 | Linear double pinning | 1-24 | 5.0 | 24 IEC<br>20 UL (B)<br>10 UL (D) | 400 IEC<br>300 UL (B)<br>300 UL (D) | 0° | Push-in spring connection | UL,VDE |
| | DG271V-7.5 | Zigzag pinning W | 1-24 | 7.5 | 41 IEC<br>40 UL (B)<br>40 UL (C)<br>10 UL (D) | 1000 IEC<br>300 UL (B)<br>150 UL (C)<br>300 UL (D) | 90° | Push-in spring connection | UL,VDE |
| | DG271R-7.5 | Zigzag pinning W | 1-24 | 7.5 | 41 IEC<br>40 UL (B)<br>40 UL (C)<br>10 UL (D) | 1000 IEC<br>300 UL (B)<br>150 UL (C)<br>300 UL (D) | 0° | Push-in spring connection | UL,VDE |
| | DG271V-10.0 | Zigzag pinning W | 2-24 | 10 | 76 IEC<br>70 UL (B, C)<br>5 UL (D) | 1000 IEC<br>600 UL (B, C)<br>600 UL (D) | 90° | Push-in spring connection | UL,VDE |
| | DG271R-10.0 | Zigzag pinning W | 2-24 | 10 | 76 IEC<br>70 UL (B, C)<br>5 UL (D) | 1000 IEC<br>600 UL (B, C)<br>600 UL (D) | 0° | Push-in spring connection | UL,VDE |
| | DG271V-15.0 | Linear double pinning | 1-6 | 15.0 | 125 IEC<br>101 UL (B, C) | 1000 IEC<br>600 UL (B, C) | 90° | Push-in spring connection | / |

## DGH series through-wall terminal blocks

- Through-wall mounted, adaptable to 1-5mm thick panels for more flexible installation
- Current range 32A-232A, meeting the needs of customers with different power designs
- Screw wiring technology, secure wiring, and wide wiring range



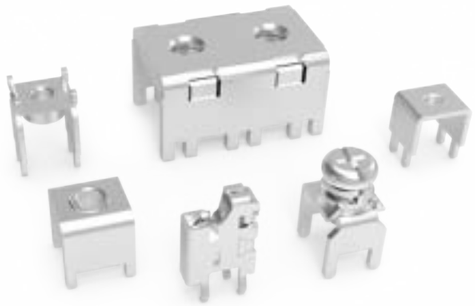
| Picture | Pruduct serie | Description | Poles(P) | Pitch(mm) | Rated current(A) | Rated voltage(V) | Connection direction | Connection method | Certification |
|---|---|---|---|---|---|---|---|---|---|
| | DGH4 | Screw connection | / | Bit,can be installed side by side | 41 IEC<br>30 UL (B, C)<br>10 UL (D) | 400 IEC<br>300 UL (B, C)<br>300 UL (D) | 0° | Screw connection with clamp wire | UL |
| | DGH10 | Screw connection | / | Bit,can be installed side by side | 76 IEC<br>65 UL (B, C)<br>10 UL (D) | 500 IEC<br>300 UL (B, C)<br>300 UL (D) | 0° | Screw connection with clamp wire | UL |
| | DGH16 | Screw connection | / | Bit,can be installed side by side | 76 IEC<br>85 UL (B, C)<br>5 UL (D) | 500 IEC<br>600 UL (B, C)<br>600 UL (D) | 0° | Screw connection with clamp wire | UL |
| | DGH25 | Screw connection | / | Bit,can be installed side by side | 101 IEC<br>115 UL (B, C)<br>5 UL (D) | 500 IEC<br>600 UL (B, C)<br>600 UL (D) | 0° | Screw connection with clamp wire | UL |
| | DGH50 | Screw connection | / | Bit,can be installed side by side | 150 IEC<br>170 UL (B, C)<br>5 UL (D) | 1000 IEC<br>600 UL (B, C)<br>600 UL (D) | 0° | Screw connection with clamp wire | UL |
| | DGH95 | Screw connection | / | Bit,can be installed side by side | 232 IEC<br>230 UL (B) | 1000 IEC<br>600 UL (B) | 0° | Screw connection with clamp wire | / |
| | DGV4 | Screw connection | / | Bit,can be installed side by side | 41 IEC<br>30 UL (B) | 400 IEC<br>300 UL (B) | -90° | Screw connection with clamp wire | UL |
| | DGV10 | Screw connection | / | Bit,can be installed side by side | 57 IEC<br>65 UL (B)<br>65 UL (C)<br>10 UL (D) | 400 IEC<br>300 UL (B)<br>150 UL (C)<br>300 UL (D) | -90° | Screw connection with clamp wire | UL |
| | DGP4 | Weld | By screw or clamp attachment Fixed on the panel | Bit,can be installed side by side | 32 IEC<br>30 UL (B)<br>30 UL (C)<br>10 UL (D) | 800 IEC<br>300 UL (B)<br>150 UL (C)<br>300 UL (D) | 0° | Screw connection with clamp wire | VDE、UL |
| | DGP16 | Screw and bolt connection | / | Bit,can be installed side by side | 76 IEC<br>85 UL (B, C)<br>5 UL (D) | 500 IEC<br>600 UL (B, C)<br>600 UL (D) | 0° | Screw connection with clamp wire | UL |
| | DGP95 | Screw and bolt connection | / | Bit,can be installed side by side | 232 IEC<br>230 UL (B) | 1000 IEC<br>600 UL (B) | 0° | Screw connection with clamp wire | / |

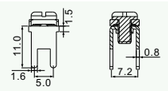
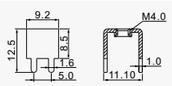
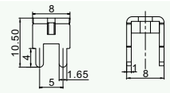
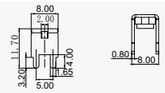
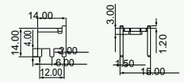
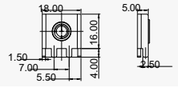
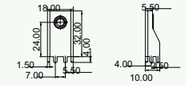
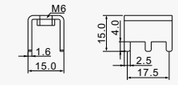
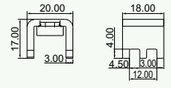
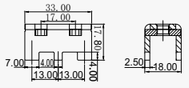
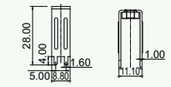




## K series matel parts

- Suitable for internal wiring of devices, with better cost control.
- The current can reach 350A, suitable for various applications.
- Multiple processing techniques to meet different torque and salt spray requirements.



| Picture | Pruduct serie | Description | Material | Rated current(A) | Nut specification | Torsion | Specification and size |
|---|---|---|---|---|---|---|---|
| | K14-00A(H) | Extraction nu | Orichalcum | 15 | M3.5 | 0.8 N·m |  |
| | K31-00A(H) | Extraction nu | Orichalcum | 40 | M4 | 1.2 N·m |  |
| | K128-00A(H) | One-piece formed nut | Orichalcum | 40 | M4 | 1.2 N·m |  |
| | K145-00A(H) | One-piece formed nut | Orichalcum | 50 | M4 | 1.5 N·m |  |
| | K51-00A(H) | Extraction nu | Orichalcum | 92 | M5 | 2.0 N·m |  |
| | K146-00A(H) | Riveted nu | Red copper | 110 | M6 | 2.75 N·m |  |
| | K147-00A(H) | Riveted nu | Red copper | 110 | M6 | 2.75 N·m |  |
| | K36-00A(H) | Extraction nu | Red copper | 115 | M6 | 1.8 N·m |  |
| | K41-00A(H) | Riveted nu | Red copper | 250 | M6 | 1.98 N·m |  |
| | K136-00A(H) | One-piece formed nut | Red copper | 350 | M6 | 4.5 N·m |  |
| | K115-00A(H) | Riveted nu | Orichalcum | 63 | M4 | 1.8 N·m |  |

## Standard cables

Energy storage industry cable materials used in XLPE, PVC, silicone, etc., comprehensive cable performance, flexibility, price and other factors, to XLPE material cable applications. From the cable performance point of view, most of the requirements of the temperature above 90 °, voltage 1500V or so. On the other hand, low-voltage equipment requires low cable voltage, generally around 600~1000V. Degson has planned a standard cable inventory, with professional wire harness processing capabilities, to provide safe and fast connections for the industry!

## Recommended cable

| Applicable products | Sectional area | Material | Voltage | Certification | Part number | Color |
|---|---|---|---|---|---|---|
| 350A | 120mm² | XLPE | 3000V | UL3817 | 92105001949 | Orange |
| 300A | 95mm² | PVC | 600V | UL1015 | 92105000782 | Black |
| 300A | 95mm² | XLPE | 3000V | UL758/1581 | 92105001063 | Black |
| 300A | 95mm² | EVR | 1500V | GB/T12528 | 92105001967 | Orange |
| 250A | 70mm² | XLPE | 3000V | UL3817 | 92105001512 | Orange |
| 200A | 50mm² | XLPE | 3000V | UL758/1581 | 92105000981 | Orange |
| 150A | 35mm² | XLPE | 3000V | UL758/1581 | 92105001260 | Orange |
| 120A | 25mm² | XLPE | 1500V | / | 92105001500 | Black |
| 120A | 25mm² | PVC | 600V | UL1015 | 92105001066 (Recommended) | Black |
| 120A | 25mm² | PVC | 600V | UL1015 | 92105001257 (Recommended) | Red |
| 120A | 25mm² | Silicon | 600V | / | 92105000758 | Orange |
| 120A | 25mm² | XLPE | 3000V | UL3817 | 92105001262 | Orange |
| 100A | 16mm² | XLPE | 3000V | UL3817 | 92105001264 | Orange |
| 70A | 10mm² | PVC | 600V | UL1015 | 92105001061 | Black |
| 70A | 10mm² | XLPE | 3000V | UL3817 | 92105001058 | Black |
| 50A | 6mm² | PVC | 600V | UL1015 | 92105001062 | Black |
| 50A | 6mm² | XLPE | 3000V | UL3817 | 92105001269 | Black |

## Value added service

## Sucessful applications

Under the background of carbon peaking and carbon neutrality, the proportion of renewable energy continues to increase. the most representative is wind and solar energy. Due to the natural instability of solar and wind energy, the supporting energy storage system is required to achieve stability grid-connected operation. As a professional manufacturer of connectors, DEGSON focus on technological innovation, interpret excellence with professionalism, and has developed a new electrical connection solution for the new energy industry, including the compact PCB terminal blocks of DG212 series, tool-free PCB terminal blocks of Dual-Lever Spring series, as well as PCB terminal blocks DG271 series and pluggable terminal blocks 5EDG series for power connection. We can provide safe, convenient and reliable connection in the field of signal, data and power transmission!

DG212 series-wind power converter

DG2206 series-energy storage inverter

DG2206 series-wind power pitch driver

DG271 series- wind power pitch driver

5EDG series-energy storage system