Electric Vehicle Charging
Products & Connectors
EVconnectors is the brand name for a range of products and Connectors specifically for the Electric Vehicle industry.

The EV connectors focus particularly on the emerging Electric Vehicle market and the associated infrastructure product manufacturing companies in addition to the long term after market requirements.

The Products and Services aim to fill the demand from Car, Commercial Electric vehicle and Street Charging Equipment manufacturers who require a specialist supplier to support the requirements of the industry.

www.evconnectors.com
### Charging Modes

<table>
<thead>
<tr>
<th>CHARGING MODES</th>
<th>INTERLOCKING</th>
<th>SINGLE PHASE</th>
<th>3 PHASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mode 1</td>
<td>In Vehicle</td>
<td>MAX 16A - 3.7 kW</td>
<td>MAX 16A - 11.0 kW</td>
</tr>
<tr>
<td>Mode 2</td>
<td>In Vehicle</td>
<td>MAX 32A - 7.4 kW</td>
<td>MAX 32A - 22.0 kW</td>
</tr>
<tr>
<td>Mode 3</td>
<td>Vehicle and Charging Sockets</td>
<td>MAX 63A - 14.5 kW</td>
<td>MAX 63A - 43.5 kW</td>
</tr>
</tbody>
</table>

Different Charging Modes are defined for various applications and charging requirements.

The EV Market is currently adopting Mode 3 for Street and Fast Charging where Vehicles can be charged with up to 63A 3 Phase current.

Mode 1 and 2 are Domestic Chargers which will be superseded with intelligent versions.

### Standards

<table>
<thead>
<tr>
<th>STANDARDS</th>
<th>CAPACITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>J1772 TYPE 1</td>
<td>up to 7.4 kW</td>
</tr>
<tr>
<td>62196-2 TYPE 2</td>
<td>up to 44 kW</td>
</tr>
</tbody>
</table>

**J1772 Type 1** is generally the adopted standard in Japan and the US.

**62196-2 Type 2** adopted by the European Charger Manufacturers.

**62196-2 version 2** is now available where the contact gender has been changed to bring the standard for Vehicles into line with traditional IEC legislation.
## Cable Selection Guide

<table>
<thead>
<tr>
<th>Vehicle</th>
<th>Vehicle Plug DSI</th>
<th>Charger Plug DSIEC</th>
<th>Part No.</th>
<th>Description</th>
<th>Cable Length</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>5 Pin J1772 Male Vehicle Inlet</strong>&lt;br&gt; Chevrolet Volt&lt;br&gt; Citroen C-Zero&lt;br&gt; Ford Focus Electric&lt;br&gt; Mia&lt;br&gt; Mitsubishi I-Miev&lt;br&gt; Nissan NV200 SE Van&lt;br&gt; Nissan Leaf&lt;br&gt; Peugeot Ion&lt;br&gt; Renault Fluence&lt;br&gt; Renault Kangoo&lt;br&gt; Smiths Edison Van&lt;br&gt; Smiths Newton&lt;br&gt; Tata Indica Vista EV&lt;br&gt; Toyota Prius&lt;br&gt; Vauxhall Ampera</td>
<td>Type 1 Female Mode 3</td>
<td>Type 2 Male Mode 3</td>
<td>DSIEC-2EV16P-XC</td>
<td>Type 1 to Type 2 16A Plug</td>
<td>3 or 5m Cable</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>DSIEC-2EV32P-XC</td>
<td>Type 1 to Type 2 32A Plug</td>
<td>3 or 5m Cable</td>
</tr>
<tr>
<td><strong>7 Pin 62196-2 Female Vehicle Inlet</strong>&lt;br&gt; Smart</td>
<td>Type 2 Male Mode 3</td>
<td>Type 2 Male Mode 3</td>
<td>DSIEC-2EV16P-XC</td>
<td>Type 2 to Type 2 16A Plug</td>
<td>3 or 5m Cable</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>DSIEC-2EV32P-XC</td>
<td>Type 2 to Type 2 32A Plug</td>
<td>3 or 5m Cable</td>
</tr>
<tr>
<td><strong>7 Pin 62196-2 Male Vehicle Inlet</strong>&lt;br&gt; Smart 2&lt;br&gt; Renault Zoe</td>
<td>Type 2 Female Mode 3</td>
<td>Type 2 Male Mode 3</td>
<td>DSIEC2b-2e-EV16P-XC</td>
<td>Type 2 to Type 2 16A Plug</td>
<td>3 or 5m Cable</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>DSIEC2b-2e-EV32P-XC</td>
<td>Type 2 to Type 2 32A Plug</td>
<td>3 or 5m Cable</td>
</tr>
</tbody>
</table>
J1772 Female Plug

- IP54 Rated Ergonomic Pistol Grip Style
- Impact Resistant ‘Run Over’ Proof
- 10,000 Mating Cycles
- Cable Strain Relief Feature
- Insulated Terminal Design
- Locking Feature for Padlock
- Dust Cap on Lanyard
- Custom Options on Cable Length and Colour
- CE & UL Approved

For further information on these products please contact EVconnectors Ltd. on:

T: +44 (0) 1371 811230  E: sales@evconnectors.com  F: +44 (0) 1371 810933
**Series DSI - J1772 Female**

**Cable Rating**
- EV16 - 16A 240v
- EV32 - 32A 240v
- EV63 - 63A 240v
- EV70 - 70A 240v

**Plug**

**Cable Length**
- NC - No Cable
- 3C - 3 metres
- 5C - 5 metres

**Supply**
- Single Phase

**Part Numbers**

<table>
<thead>
<tr>
<th>Type</th>
<th>DSI-EV16-70</th>
<th>Mating Force</th>
<th>≤80N</th>
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<tbody>
<tr>
<td>Colour</td>
<td>White</td>
<td>Mating Cycles</td>
<td>≥10000</td>
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<tr>
<td>Rated Current</td>
<td>16A/32A/63A/70A</td>
<td>Flame Retardant</td>
<td>UL94 V-0</td>
</tr>
<tr>
<td>Rated Voltage</td>
<td>500V</td>
<td>IP Rating</td>
<td>IP54</td>
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<tr>
<td>Test Voltage</td>
<td>2000V</td>
<td>Operating Temperature</td>
<td>-30°C to 60°C</td>
</tr>
<tr>
<td>Insulation Resistance</td>
<td>500MΩ</td>
<td>Cable Size</td>
<td>13mm² - 2.5mm²</td>
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<tr>
<td>Contact Resistance</td>
<td>0.055±0.005Ω</td>
<td>Plug Material</td>
<td>PC/Copper Alloy</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Series</th>
<th>Rated voltage</th>
<th>Rated current</th>
<th>Power</th>
<th>Cable size</th>
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<tbody>
<tr>
<td>1</td>
<td>DSI-EV70</td>
<td>240V AC</td>
<td>70 Amp</td>
<td>16.8KW</td>
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<tr>
<td>2</td>
<td>DSI-EV63</td>
<td>240V AC</td>
<td>63 Amp</td>
<td>15.1KW</td>
</tr>
<tr>
<td>3</td>
<td>DSI-EV32</td>
<td>240V AC</td>
<td>32 Amp</td>
<td>7.6KW</td>
</tr>
<tr>
<td>4</td>
<td>DSI-EV16</td>
<td>240V AC</td>
<td>16 Amp</td>
<td>3.8KW</td>
</tr>
</tbody>
</table>
J1772 Male Socket / Inlet

- 4 Point Fixing
- Hinged Lid
- Low Contact Resistance
- CE & UL Approved

For Product Specifications See Page 7
# TYPE 1 - J1772

## Sockets / Inlets for Vehicles

[www.evconnectors.com](http://www.evconnectors.com)

## Part Numbers

<table>
<thead>
<tr>
<th>Series</th>
<th>EVXX</th>
<th>S</th>
<th>XXC</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSI - J1772 Male</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Cable Rating

- EV16 - 16A 240v
- EV32 - 32A 240v
- EV63 - 63A 240v
- EV70 - 70A 240v

## Socket/Inlet

- NC - No Cable
- 0.5C - 0.5 metres
- 1.5C - 1.5 metres

## Supply

- Single Phase

[BUY ONLINE](http://www.evconnectors.com)
Plugs & Cables for Vehicles & Charging Stations

- IP54 Rated Ergonomic Pistol Grip Style
- Impact Resistant ‘Run Over’ Proof
- 10,000 Mating Cycles
- Cable Strain Relief Feature
- Insulated Terminal Design
- J1772 Locking Feature for Padlock
- Dust Cap on Lanyard
- High Viz Orange Or Black Cable
- Custom Options on Cable Length and Colour
- CE & UL Approved

For further information on these products please contact EVconnectors Ltd. on:
T: +44 (0) 1371 811230  E: sales@evconnectors.com  F: +44 (0) 1371 810933

J1772 to 62196-2
Female to Male Plug
Cable Colour Option: Orange, Black

Part Numbers:
- DSI - J1772 Female
- DSIEC - 62196-2 Male

Cable Rating:
- EV16 - 16A 240v
- EV32 - 32A 240v
- EV63 - 63A 240v

Plug:
- P

Cable Length:
- 3C - 3 metres
- 5C - 5 metres

Supply:
- Single Phase

Curly Cable: Available soon on all products

Buy Online:
www.evconnectors.com
TYPE 2 - 62196-2

- IP54 Rated Ergonomic Pistol Grip Style
- Impact Resistant ‘Run Over’ Proof
- 10,000 Mating Cycles
- Cable Strain Relief Feature
- Insulated Terminal Design
- Single and 3 Phase Cable
- Dust Cap on Lanyard
- High Viz Orange or Black Cable
- Custom Options on Cable Length and Colour
- CE & TUV Approved

For further information on these products please contact EVconnectors Ltd. on:
T: +44 (0) 1371 811230  E: sales@evconnectors.com  F: +44 (0) 1371 810933
**Series**
- DSIEC-16-63

**Mating Force** ≤80N

**Colour**
- White

**Rated Current**
- 16A/32A/63A

**Rated Voltage**
- 500V

**Test Voltage**
- 2000V

**Insulation Resistance**
- 500MΩ

**Contact Resistance**
- 0.055±0.005Ω

**Mating Cycles** ≥10000

**Flame Retardant**
- UL94 V-0

**IP Rating**
- IP54

**Operating Temperature**
- -30˚C to 60˚C

**Cable Size**
- 10mm² - 2.5mm²

**Contact Resistance**
- 0.055±0.005Ω

**Plug Material**
- PC/Copper Alloy

**Cable Colour Options**
- Orange
- Black

**Part Numbers**
- DSIEC-62196-2 Male Plug + Cable
- DSIEC-62196-2 Male to Male Plug

**No. of Plugs**
- [blank] - Single Plug
- 2 - Plug to Plug

**Cable Rating**
- EV16 - 16A 240-450v
- EV32 - 32A 240-450v
- EV63 - 63A 240-450v

**Cable Length**
- NC - No Cable
- 3C - 3 metres
- 5C - 5 metres

**Supply**
- [blank] - Single Phase
- 3 - Three Phase

**Test Voltage**
- 2000V

**Operating Temperature**
- -30˚C to 60˚C

**Insulation Resistance**
- 500MΩ

**Contact Resistance**
- 0.055±0.005Ω

**Plug Material**
- PC/Copper Alloy

**Cable Colour Options**
- Orange
- Black

**BUY ONLINE**
www.evconnectors.com

---

**Series**
- DSIEC63

**Rated Voltage**
- 240 / 415V AC

**Rated Current**
- 63 Amp

**Power**
- 15.1 / 45.3KW

**Cable Size**
- 10mm²

**Series**
- DSIEC32

**Rated Voltage**
- 240 / 415V AC

**Rated Current**
- 32 Amp

**Power**
- 7.6 / 22.8KW

**Cable Size**
- 6mm²

**Series**
- DSIEC16

**Rated Voltage**
- 240 / 415V AC

**Rated Current**
- 16 Amp

**Power**
- 3.8 / 11.5KW

**Cable Size**
- 2.5mm²

---

**Type**
- DSIEC-62196-2 Male Plug + Cable
- DSIEC-62196-2 Male to Male Plug
62196-2 Female Socket 3 Point Fixing

- 3 Point Fixing
- Water Drain
- Hinged Lid
- Electronic Locking Solenoid with Manual Override
- Solenoid Fixing options, Vertical, 120° or 240°
- Single and 3 Phase

For Product Specifications See Page 13
3 Point Fixing  Hinged Lid

3 Point Fixing  Locking Solenoid, Manual Override

Sockets / Inlets for Chargers and Vehicles

www.evconnectors.com

BUY ONLINE

www.evconnectors.com

Part Numbers

<table>
<thead>
<tr>
<th>DSIEC</th>
<th>EL/ELB</th>
<th>G</th>
<th>EVXX</th>
<th>S</th>
<th>XXC</th>
<th>3</th>
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</thead>
<tbody>
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</tr>
</tbody>
</table>

Series
DSIEC - 62196-2 Female

Locking Solenoid
EL - Version 1 Pull Unlock

G - Hinged Lid

Cable Rating
EV16 - 16A 240-415v
EV32 - 32A 240-415v
EV63 - 63A 240-415v

S - Socket/Inlet

Cable Length
NC - No Cable
3C - 3 metres
5C - 5 metres

Supply
[blank] - Single Phase
3 - Three Phase

Buy Online
www.evconnectors.com
62196-2 Female Socket 4 Point Fixing

- 4 Point Fixing
- Screw Termination - Field Wireable
- Water Drain
- Hinged Lid
- Electronic Locking Solenoid with Manual Override
- Single and 3 Phase

For Product Specifications See Page 13
- 4 Point Fixing
- Hinged Lid

- 4 Point Fixing
- Locking Solenoid Manual Override

- Lever Release
- Pull Release

**Part Numbers**

<table>
<thead>
<tr>
<th>Series</th>
<th>M</th>
<th>EL/ELB</th>
<th>G</th>
<th>EVXX</th>
<th>S</th>
<th>XXC</th>
<th>3</th>
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</thead>
<tbody>
<tr>
<td>DSIEC</td>
<td>M</td>
<td></td>
<td>G</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Cable Length</td>
<td>NC - No Cable</td>
<td>3C - 3 metres</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supply</td>
<td>[blank] - Single Phase</td>
<td>3 - Three Phase</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**BUY ONLINE**

www.evconnectors.com
62196-2  Male Locking Inlet

- 4 Point Fixing
- Water Drain
- Dust Cap with Lanyard
- Gaiter Protection
- Cable with Conduit
- Water Drain
- Electronic Locking Solenoid with Manual Override
- Solenoid Fixing options, Vertical, 120° or 240°
- Single and 3 Phase
Male Locking Socket + Cable

**Series**
- DSIEC2f - Male Socket

**Locking Solenoid**
- EL - Pull Unlock

**Cable Rating**
- EV16 - 16A 240-415v
- EV32 - 32A 240-415v
- EV63 - 63A 240-415v

**S - Socket/Inlet**

**Cable Length**
- NC - No Cable
- 3C - 3 metres
- 5C - 5 metres

**Supply**
- [blank] - Single Phase
- 3 - Three Phase

**Part Numbers**

```
DSIEC2f  EL  EVXX  S  XXC  3
```

- **DSIEC2f**
- **EL**
- **EVXX**
- **S**
- **XXC**
- **3**

**BUY ONLINE**

www.evconnectors.com
62196-2 Female Plug

- IP54 Rated Ergonomic Pistol Grip Style
- Impact Resistant ‘Run Over’ Proof
- 10,000 Mating Cycles
- Cable Strain Relief Feature
- Insulated Terminal Design
- Single and 3 Phase Cable
- Dust Cap on Lanyard
- High Viz Orange or Black Cable
- Custom Options on Cable Length and Colour
- CE & TUV Approved
62196-2  Female Plug + Cable

Cable Colour Option  ▶️ Orange ▶️ Black

<table>
<thead>
<tr>
<th>Type</th>
<th>DSIEC-16-63</th>
<th>Mating Force</th>
<th>≤80N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>White</td>
<td>Mating Cycles</td>
<td>≥10000</td>
</tr>
<tr>
<td>Rated Current</td>
<td>16A/32A/63A</td>
<td>Flame Retardant</td>
<td>UL94 V-0</td>
</tr>
<tr>
<td>Rated Voltage</td>
<td>500V</td>
<td>IP Rating</td>
<td>IP54</td>
</tr>
<tr>
<td>Test Voltage</td>
<td>2000V</td>
<td>Operating Temperature</td>
<td>-30°C to 60°C</td>
</tr>
<tr>
<td>Insulation Resistance</td>
<td>500MQ</td>
<td>Cable Size</td>
<td>10mm² - 2.5mm²</td>
</tr>
<tr>
<td>Contact Resistance</td>
<td>0.055±0.005Ω</td>
<td>Plug Material</td>
<td>PC/Copper Alloy</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Series</th>
<th>Rated voltage</th>
<th>Rated current</th>
<th>Power</th>
<th>Cable size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DSIEC63</td>
<td>240 / 415V AC</td>
<td>63 Amp</td>
<td>15.1 / 45.3KW</td>
</tr>
<tr>
<td>2</td>
<td>DSIEC32</td>
<td>240 / 415V AC</td>
<td>32 Amp</td>
<td>7.6 / 22.8KW</td>
</tr>
<tr>
<td>3</td>
<td>DSIEC16</td>
<td>240 / 415V AC</td>
<td>16 Amp</td>
<td>3.8 / 11.5KW</td>
</tr>
</tbody>
</table>

Part Numbers

- DSIEC2e - Female Plug
- EVXX - Cable Rating
- P - Plug
- XXC - Cable Length
- 3 - Supply

- Ev16 - 16A 240-450v
- Ev32 - 32A 240-450v
- Ev63 - 63A 240-450v

BUY ONLINE
www.evconnectors.com
62196-2

Male to Female Plugs

- IP54 Rated Ergonomic Pistol Grip Style
- Impact Resistant ‘Run Over’ Proof
- 10,000 Mating Cycles
- Cable Strain Relief Feature
- Insulated Terminal Design
- Single and 3 Phase Cable
- Dust Cap on Lanyard
- High Viz Orange or Black Cable
- Custom Options on Cable Length and Colour
- CE & TUV Approved

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**Cable Colour Option**  
- Orange
- Black

<table>
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<tr>
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<th>DSIEC-16-63</th>
<th>Mating Force</th>
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**Part Numbers**

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<th>Power</th>
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<tr>
<td>1</td>
<td>DSIEC63</td>
<td>240 / 415V AC</td>
<td>63 Amp</td>
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</tr>
<tr>
<td>2</td>
<td>DSIEC32</td>
<td>240 / 415V AC</td>
<td>32 Amp</td>
<td>7.6 / 22.8KW</td>
</tr>
<tr>
<td>3</td>
<td>DSIEC16</td>
<td>240 / 415V AC</td>
<td>16 Amp</td>
<td>3.8 / 11.5KW</td>
</tr>
</tbody>
</table>

**Series**  
DSIEC2b-2e - 62196-2 Male-Female

**Cable Rating**  
- EV16 - 16A 240-450v
- EV32 - 32A 240-450v
- EV63 - 63A 240-450v

**P**  
Plug

**Cable Length**  
- 3C - 3 metres
- 5C - 5 metres

**Supply**  
[blank] - Single Phase
3 - Three Phase
EV Tester

The electric vehicle charging station test system is designed to fully test a charging point for compliance with IEC61851 mode 3.

Housed in a “Peli” GRP enclosure, the system is lightweight, portable and extremely rugged.

- For use with Single or 3 Phase Mode 3 EV Charger Points
- Two meter Tethered Cable with 62196-2 Plug
- Peli IP Rated GPR Enclosure
- Contactor Fault Detection
- Provides for State A,B,C and D as per IEC618651
- Code Resistor Testing
- Integrated 13A Socket for Test Equipment

BUY ONLINE
www.evconnectors.com
**EV Rescue**

Worlds first **TOTALLY PORTABLE EV POWER**

- Standalone Power for Roadside Assistance or Showroom use
- Unique 5kW Portable EV Charging System
- Type 2 Socket with Mode 3 Communication
- Easy to use Rugged Controls
- Optional GSM Communication & Smartphone APP
- Cost effective solution for Recovery Specialist and Fleet Management