High-Current Connector
DW05 Series

《Summary》
Along with the spread of energy management systems in recent years, the introduction of storage battery system using lithium-ion is becoming widespread.

As for the systems like storage battery one using high current, the importance is attached to the safety at the time of assembly work and maintenance. So there are a lot of demands for connection methods that can prevent incorrect wiring and short circuit accidents.

JAE has now developed the 150A-class high-current connector “DW05 Series” which can realize a safe connection in the situation using such high current.

The contacts of the DW05 Series cannot be touched easily, and from the difference in the mating shape, the connection between the opposite polarities cannot be made. So it is possible to prevent short circuit accidents between the opposite polarities and realize a high level of safety.

Also, it contributes to shorten work time for customers by simplifying connection work with an easy operation lock structure equipped between the connectors, which can provide adequate strength as well as screw fixing.

The DW05 Series features a multi-contact structure compatible with high-current connection and also has superior connection stability.

Features

- Improved Workability: With mis-mating prevention key to avoid wrong wiring and short-circuit during assembly.
- High Safety: With structure to prevent finger tips from touching the terminal to avoid electrical shock.
- Mis-connection of positive and negative polarity terminals prevented by using 2 different colors for insulator (ivory and black), and a different mating shape for each.
- Termination: Crimp termination considering on-site assembly.
  Conductor cross-section of standard cable is 38 mm². (Cable of 26 to 42 mm² in the same shape is possible to be used)
General Specifications

■ No. of Contacts: 1 pos.
■ Operating Temperature: -40 Deg. C to +85 Deg. C
■ Rated Current: 150A, DC150A (Temperature rise: 40 Deg. C max.)
■ Contact Resistance: 0.2m Ω max. (initial)
  0.3m Ω max. (after various tests)

Ordering Information

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**Modification Code**

1~9, A~Z *Excluding alphabetical characters I and O

**Maximum Current C/T Plating of Connection Area**

AG: Silver
AU: Gold
SN: Tin
NK: Nickel
CU: Copper
ZZ: Others

**Maximum Current C/T Connections**

B: Busbar
C: Cable
D: Device
P: PWB, PCB
S: Screw (Bolt)
Z: Others

**Maximum Current C/T No. of Contacts**

P: Pin
S: Socket
Z: Others

**Development No. (05~99)**

**Series**

DW Series: DW

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**Socket Housing (Black)**

**Socket Housing (Ivory)**

**Pin Housing (Black)**

**Pin Housing (Ivory)**

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**Pin Contact (Ag plating)**

**Socket Contact (Ag plating)**
1. Pin Housing, Black (Main Unit)

Part Number: DW05P01CZZ1

SJ Drawing: SJ114759

NOTE 1. RECOMMENDATION MOUNTING SCREW IS CROSS RECESS HEAD SCREW. THE SCREW-TIGHTENING TORQUE SHALL BE 1.48 N/m.

Additional note: When using the screw, tighten it to 1.48 N/m.
2. Pin Housing, Ivory (Main Unit)

<table>
<thead>
<tr>
<th>Part Number</th>
<th>DW05P01CZZ2</th>
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<tbody>
<tr>
<td>SJ Drawing</td>
<td>SJ114760</td>
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NOTE 1. RECOMMENDATION MOUNTING SCREW IS CROSS RECESSED HEAD SCREW. THE SCREW-TIGHTENING TORQUE SHALL BE 1.48 N/m.

注1. 推奨取付ねじは、「十字穴付小ねじ」とする。
取付ねじの締付けトルクは、1.48N/mとする。
3. Pin Contact (Ag Plating)

<table>
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<th>Part Number</th>
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<td>SJ114755</td>
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</table>

**Note 1.**

- **Applicable Wire**
  - Wire Size: 26 mm² ~ 42 mm²
  - AWG #2
  - Insulation Diameter: ∅ 13.0 mm MAX.

- 適合電線
  - 導体サイズ：26 mm² ~ 42 mm²
  - AWG #2
  - 被覆外径：∅ 13.0 mm以下

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<tr>
<th>No.</th>
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<th>Copper Alloy</th>
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4. Socket Housing, Black (Main Unit)

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**FIG. 1 MATING METHOD**

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![Diagram of Socket Housing]

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<tr>
<th>1</th>
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<th>GLASS FILLER PBT</th>
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![Table of parts]

6. Socket Contact (Ag Plating)

Part Number | DW05S01CAG1
---|---
SJ Drawing | SJ114757

**NOTE 1.**

· **APPLICABLE WIRE**
  
  WIRE SIZE: 26mm² ~ 42mm²  
  AWG #2  
  INSULATION DIAMETER: \( \phi 13.0 \text{mm} \) MAX.

注1.

· 適合電線
  
  導体サイズ：26mm² ~ 42mm²  
  AWG #2  
  被覆外径：\( \phi 13.0 \text{mm} \)以下

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<th>#</th>
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**Notice:**
1. The values specified in this brochure are only for reference. The products and their specifications are subject to change without notice. Contact our sales staff for further information before considering or ordering any of our products. For purchase, a product specification must be agreed upon.
2. Users are requested to provide protection circuits and redundancy circuits to ensure safety of the equipment, and sufficiently review the suitability of JAE's products to the equipment.
3. The products presented in this brochure are designed for the uses recommended below. We strongly suggest you contact our sales staff when considering use of any of the products in any other way than the recommended applications or for a specific use that requires an extremely high reliability.

(1) Applications that require consultation:
(i) Please contact us if you are considering use involving a quality assurance program that you specify or that is peculiar to the industry, such as: Automotive electrical components, train control, telecommunications devices (mainline), traffic light control, electric power, combustion control, fire prevention or security systems, disaster prevention equipment, etc.
(ii) We may separately give you our support with a quality assurance program that you specify, when you think of a use such as: Aviation or space equipment, submarine repeaters, nuclear power control systems, medical equipment for life support, etc.

(2) Recommended applications include:
Computers, office appliances, telecommunications devices (terminals, mobile units), measuring equipment, audiovisual equipment, home electric appliances, factory automation equipment, etc.

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JAE Electronics:

DW05S01CAG1  DW05S01CZZ2  DW05S01CZZ1  DW05P01CAG1  DW05P01CZZ1  DW05P01CZZ2