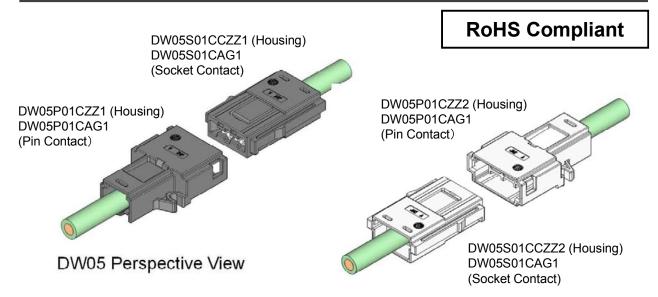




# High-Current Connector **DW05 Series**

CONNECTOR MB-0283-1 August 2014



### **《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.

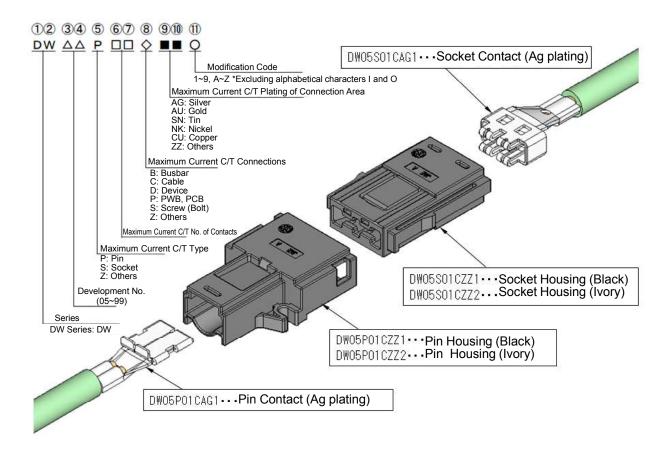
■ Operating Temperature: -40 Deg. C to +85 Deg. C

■ Rated Current: 150A, DC150A (Temperature rise: 40 Deg. C max.)

■ Contact Resistance:  $0.2m \Omega max$ . (initial)

 $0.3m \Omega max. (after various tests)$ 

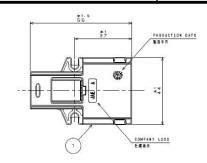
#### **Ordering Information**

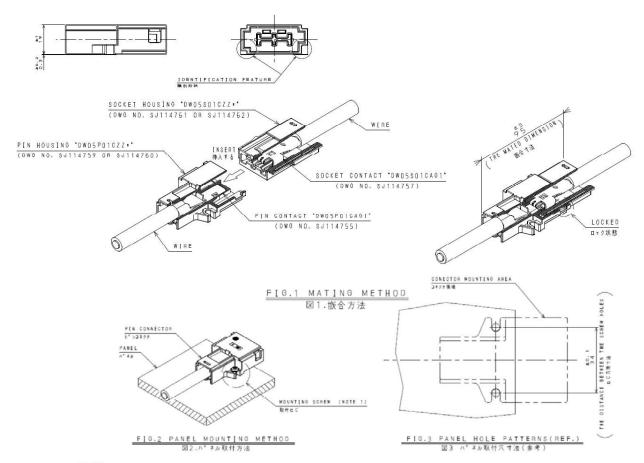


### **Product Drawing**

## 1. Pin Housing, Black (Main Unit)

Part Number	DW05P01CZZ1
SJ Drawing	SJ114759





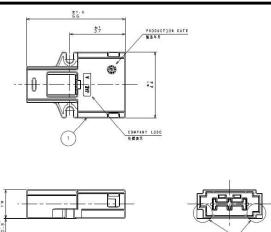
NOTE 1.RECOMMENDATION MOUNTING SCREW IS CROSS RECESSED HEAD SCREW. THE SCREW-TIGHTENING TORQUE SHALL BE 1.48 N/m.

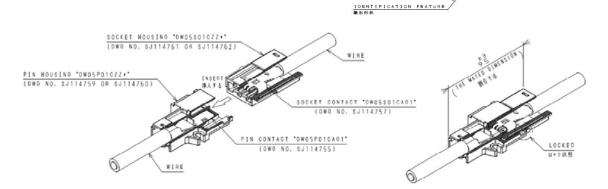
注1.推奨取付ねじは、『十字穴付き小ねじ』とする。 取付ねじの締付トルクは、1.48N/mとする。

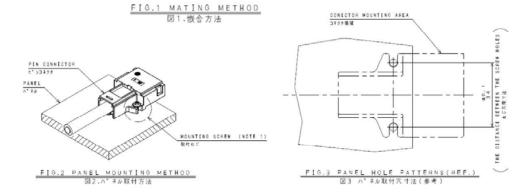
1	HOUSING ハウシ'ンク'	1	GLASS FILLED PBT カプラス入りPBT	COLOR:BLACK 色相 :黒色
符 号	名	個数	材 料	仕 上
NO.	DESCRIPTION	QTY.	MATERIAL	FIN(SH

# 2. Pin Housing, Ivory (Main Unit)

Part Number	DW05P01CZZ2
SJ Drawing	SJ114760







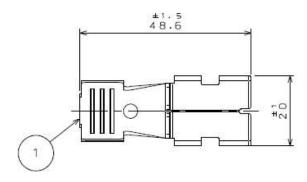
NOTE 1.RECOMMENDATION MOUNTING SCREW IS CROSS RECESSED HEAD SCREW. THE SCREW-TIGHTENING TORQUE SHALL BE 1.48 N/m.

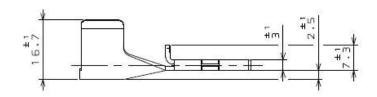
注1.推奨取付ねじは、「十字穴付き小ねじ」とする。 取付ねじの締付トルクは、1.48N/mとする。

1	ハウシ ンク	1	GLASS FILLED PBT カ・ラス入りPBT	COLOR:[VORY 色相 :アイホ・リ
符 号	名 称	個 数	材 料	仕 上
NO.	DESCRIPTION	QTY.	MATERIAL	FIN(SH

## 3. Pin Contact (Ag Plating)

Part Number	DW05P01CAG1
SJ Drawing	SJ114755







NOTE1.

· APPLICABLE WIRE

WIRE SIZE:  $26 \, \text{mm2} \sim 42 \, \text{mm2}$ 

AWG#2

INSULATION DIAMETER: \$ 13.0mm MAX.

注1.

・適合電線

導体サイス':26mm2 ~ 42mm2

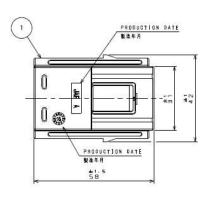
AWG#2

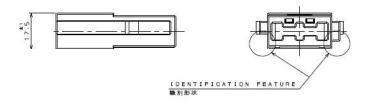
被覆外径: ø 13.0 m m 以下

1	CONTACT コンタクト	1	COPPER ALLOY 銅合金	SILVER PLATING 銀めっき	- W
符 号	名 称	個数	材料	仕 上	備 考
NO.	DESCR[PTION	QTY.	MATER]AL	FINISH	REMARKS

# 4. Socket Housing, Black (Main Unit)

Part Number	DW05S01CZZ1
SJ Drawing	SJ114761





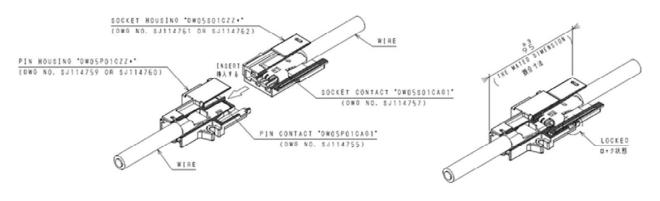
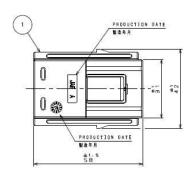


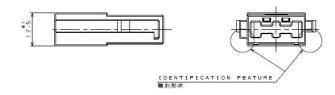
FIG.1 MATING METHOD ⊠1.嵌合方法

1 H	OUS]NO ウシ゛ンク゛	1	GLASS FILLED PBT カプラス入りPBT	COLOR:BLACK 色相 :黒色	
符号	名 数	個数	材料	仕 上	備 考
NO.	DESCR]PTION	QTY.	MATER[AL	F[N]SH	REMARKS

# 5. Socket Housing, Ivory (Main Unit)

Part Number	DW05S01CZZ2
SJ Drawing	SJ114762





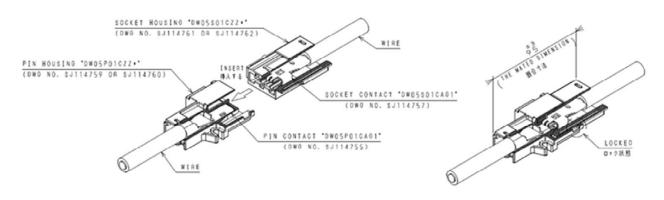
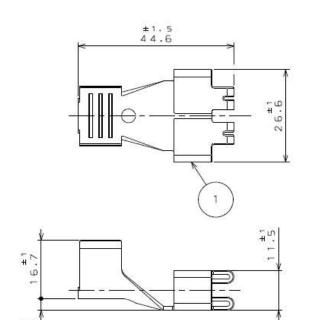


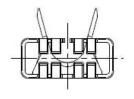
FIG.1 MATING METHOD 図1.嵌合方法

1	HOUSING ハウシ゛ンク゛	1	GLASS FILLED PBT カンラス入りPBT	COLOR:[VORY 色相 :アイホ・リ	
符号	名	個 数	材料	仕 上	備 考
NO.	DESCRIPTION	QTY.	MATER[AL	F(N)SH	REMARKS

## 6. Socket Contact (Ag Plating)

Part Number	DW05S01CAG1
SJ Drawing	SJ114757





NOTE1.

· APPLICABLE WIRE

WIRE SIZE:  $26\,\text{mm2} \sim 42\,\text{mm2}$ AWG#2

INSULATION DIAMETER: Ø 13.0mm MAX.

注1.

·適合電線

導体サイス\*:26mm2 ~ 42mm2

AWG#2

被覆外径: ø 13.0 mm以下

	CONTACT コンタクト	1	COPPER ALLOY 銅合金	SILVER PLATING 銀めっき	8 <del>1</del> = 3
符 号	名 称	個 数	材 料	仕 上	備 考
NO.	DESCRIPTION	QTY.	MATERIAL	FINISH	REMARKS

#### **Technical Documents**

	Technical Document No. (Document Content)
Product Drawings	SJ114759 (DW05 Pin Housing, Black) SJ114760 (DW05 Pin Housing, Ivory)
	SJ114755 (DW05 Pin Contact, Ag Plating)
	SJ114761 (DW05 Socket Housing ,Black)
	SJ114762 (DW05 Socket Housing, Ivory) SJ114757 (DW05 Socket Contact, Ag Plating)
Specifications	JACS-30349

#### **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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<sup>\*</sup> The specifications in this brochure are subject to change without notice. Please contact JAE for information.