

**EV Quick Charge Connector**  
**KW1 Series**  
( UL and cUL Recognized Products)

CONNECTOR  
MB-0259-4  
Dec. 2021

RoHS Compliant



Powerlance brand EV charging KW series connectors combine durability and high quality performance to provide the industries most dependable solutions.



KW1 Series is a connector and cable assembly compatible with CHAdeMO protocol electric vehicle (EV) quick chargers. This connector was designed with ease of operation and safety in mind as it is to be used by the general public.

The grip has been ergonomically designed for ease of handling and an intuitive single-action operation. The outer body shell and lock lever are made of metal, and the grip is made of environment resistant resin that withstands against fierce ultraviolet and moisture conditions, all making it highly reliable for outdoor use. One side of the outer shell is designed with a cover in case emergency release is needed due to the connector accidentally locking in mated condition. The connector supports the CHAdeMO based charging throughout North America, with UL recognition for United States and cUL for Canada.

### Features

- Compliant with CHAdeMO Ver1.2
- Grip designed for easy operation
- Convenient single action insertion and removal
- Highly reliable design using metal for significant componentry
- Designed with easy accessibility of lock in case of needing emergency unmating
- UL and cUL recognized products

### Application

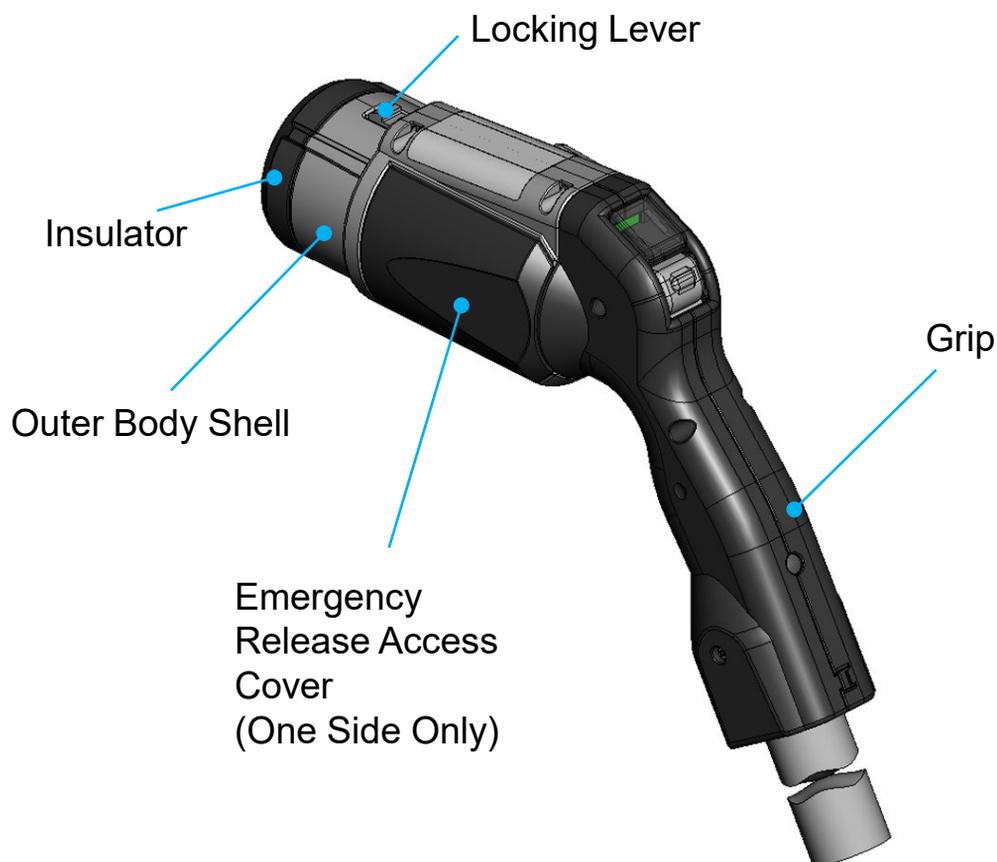
Quick Charger for Electric Vehicles (CHAdeMO Protocol)

## General Specifications

Number of Contacts	Power: 2 pos, Signal: 7 pos
Rated Current	Power: 125A, Signal: 2A
Rated Voltage	Power: DC500V
Insulation Resistance	100 MΩ min.
Dielectric Withstanding Voltage	AC 2,200V / 1 minute
Durability	10,000-cycles
Insertion Force	90N max.
Operating Temperature Range	-30°C to +40°C

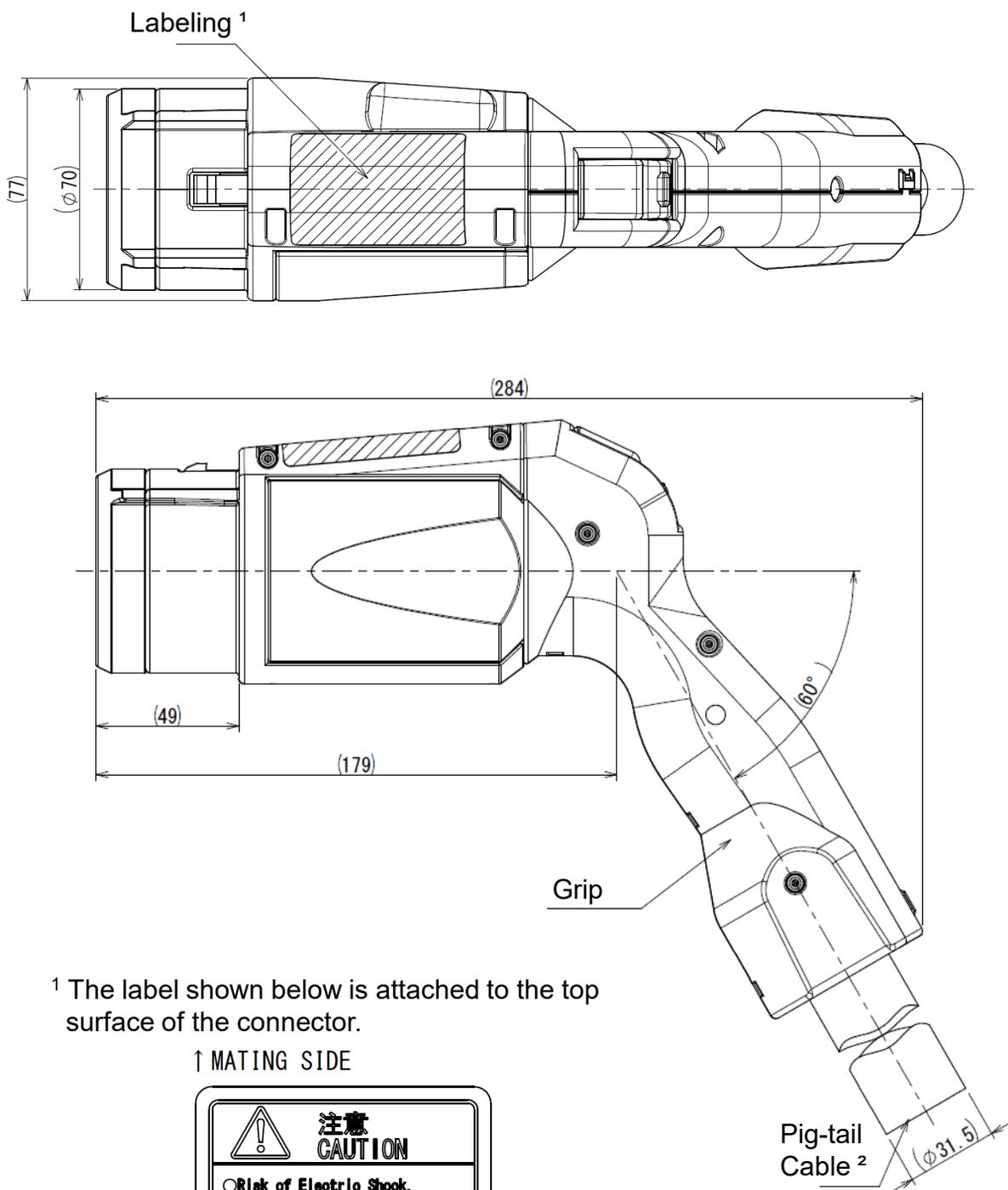
## Materials and Finishes

Component	Material	Finish
Outer Body Shell	Aluminum Alloy	Baked Finish
Emergency Cover	Environment Resistant Resin	—
Grip	Environment Resistant Resin	—
Lock Lever	Stainless Steel	—
Insulator	Environment Resistant Resin	—





Outer Dimensions



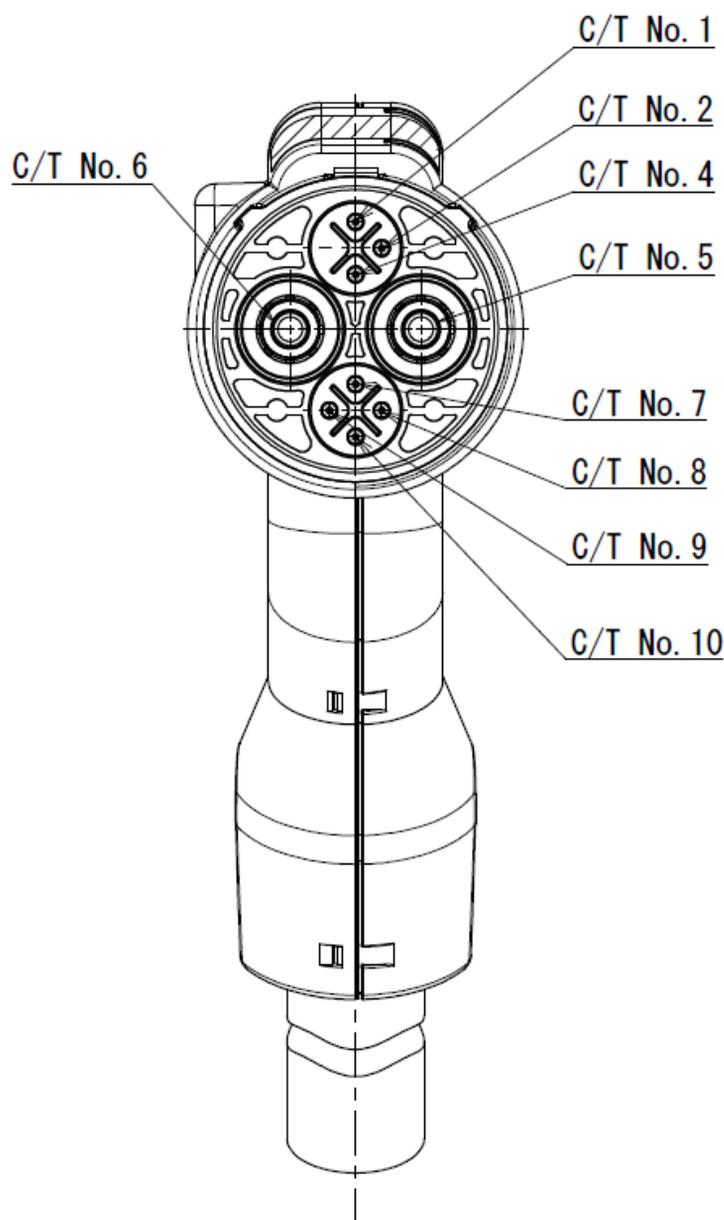
<sup>1</sup> The label shown below is attached to the top surface of the connector.

↑ MATING SIDE

	<p><b>注意</b> <b>CAUTION</b></p>
<p>○Risk of Electric Shock, Do Not Disconnect Under Load.</p> <p>○感電の恐れがあります。充電中に 引き抜かないでください。</p> <p>○Insert into the Inlet until 「UNLOCK」 hide.</p> <p>○「UNLOCK」が消えるまで 挿入してください。</p>	
<p>Japan Aviation Electronics Industry, LTD. KW16Y09PD1 DC500V 125A Type3R</p>	

<sup>2</sup> Opposite the connector the cable is pigtailed.

## Contact Arrangement

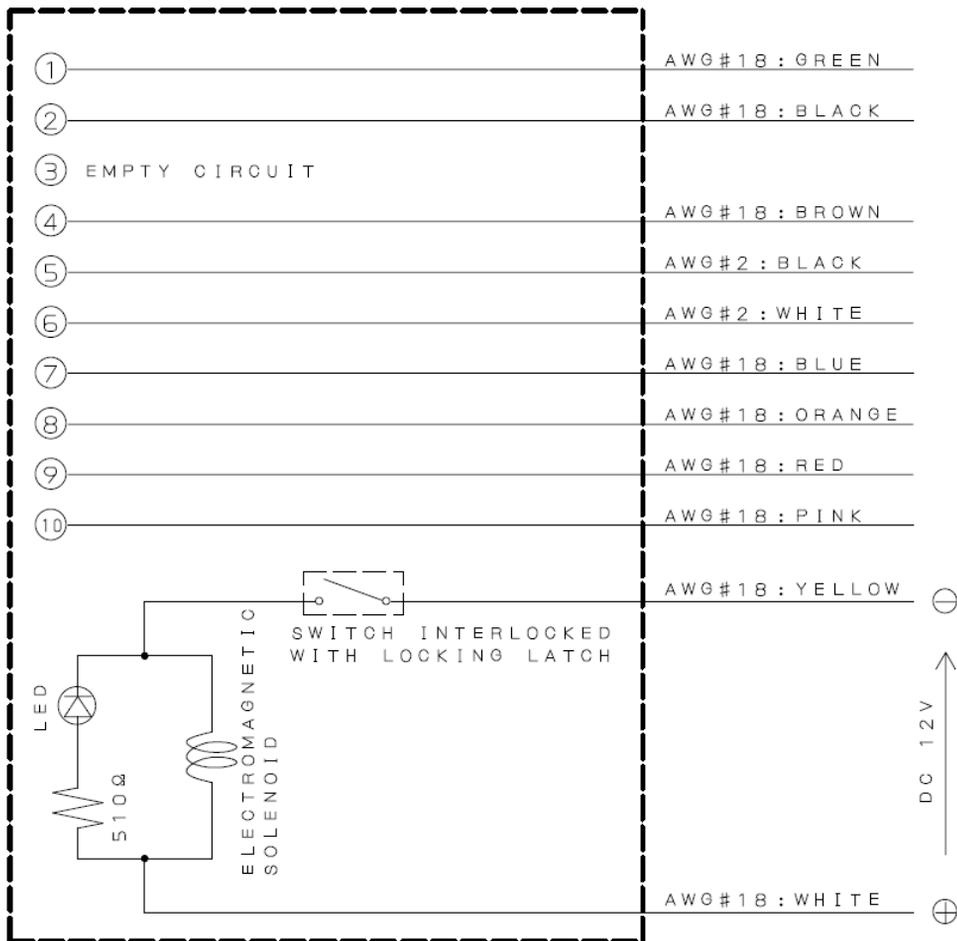
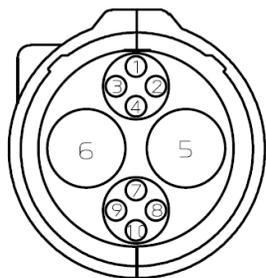


## Wiring Table

C/T No.	SIZE	COLOR
1	AWG#18	GREEN
2	AWG#18	BLACK
3	(EMPTY)	—
4	AWG#18	BROWN
5	AWG#2	BLACK
6	AWG#2	WHITE
7	AWG#18	BLUE
8	AWG#18	ORANGE
9	AWG#18	RED
10	AWG#18	PINK
LED (+)	AWG#18	WHITE
LED (-)	AWG#18	YELLOW

# Connector Circuit Diagram

## Connector Face View



## Connector

**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.

## **Japan Aviation Electronics Industry, Limited**

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