

Charging and Discharging System Connector for Electric Vehicles **KW03C Series**

CONNECTOR
MB-0397-1
Jun.2024

RoHS Compliant



Powerlance branded EV charging connectors combine durability and high-quality performance to provide the industry's most dependable solutions.



The KW03C Series connector is an electric vehicle (EV) charging connector developed for, CHAdeMO standard based, medium-capacity quick charger and V2X (Vehicle to Load, Vehicle to Home, Vehicle to Building, Vehicle to Grid) systems.

This product supports a rated voltage of DC 750V and highly considerable in use for EV chargers and V2X systems that support high charging voltages. By utilizing pin 3, to supply 12V power from the EV, it is possible to supply power to the infrastructure side, allowing the device to power up even in situations where commercial power is not available (e.g. power outage).

In addition, this connector has passed rigorous waterproof and durability testing to acquire UL certification.

Application

Medium-Capacity Quick charger and Quick Charger for EV (CHAdeMO protocol)
V2X System for EV (CHAdeMO protocol)

Features

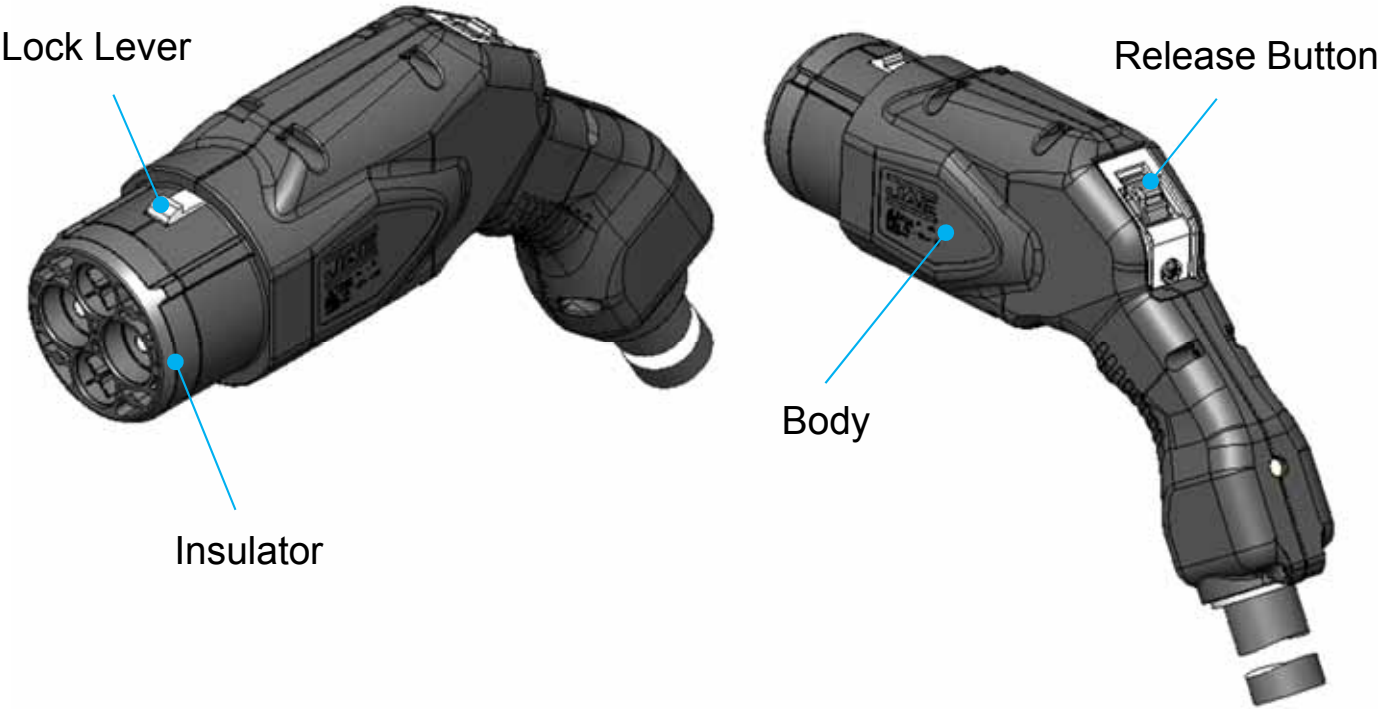
- Compliant with CHAdeMO standard
- Compliant with the EV Charging and Discharging System Guidelines
- Compatible with JCS standard (Charging Cable)
- UL and cUL recognized products
- Compatible with DC 750V rated voltage.
- Highly reliable design using materials which are tough against various environmental conditions

General Specifications

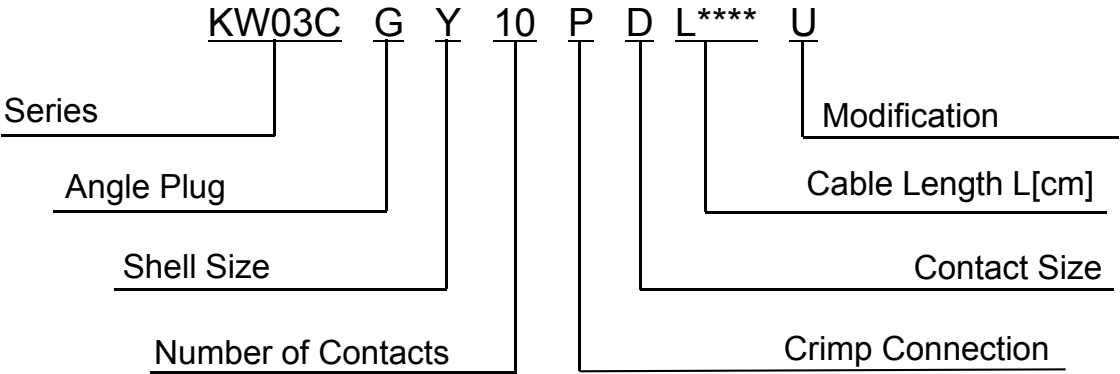
Number of Contacts	Power: 2 pos 12V Power: 1 pos GND: 1 pos Signal: 6 pos
Rated Current	Power: 80A 12V Power: 6.4A Signal: 2A
Rated Voltage	Power: DC750V 12V Power & Signal: DC16V max.
Insulation Resistance	100 MΩ min. (Apply DC750V between adjacent contacts)
Dielectric Withstanding Voltage	AC 3,000V / 1 minute
Durability	10,000 times
Insertion Force	100N max.
Operating Temperature Range	-30 ° C to +50 ° C

Materials

Component	Material
Body	Environment Resistant Resin
Release Button	Environment Resistant Resin
Lock Lever	Stainless Steel
Insulator	Environment Resistant Resin



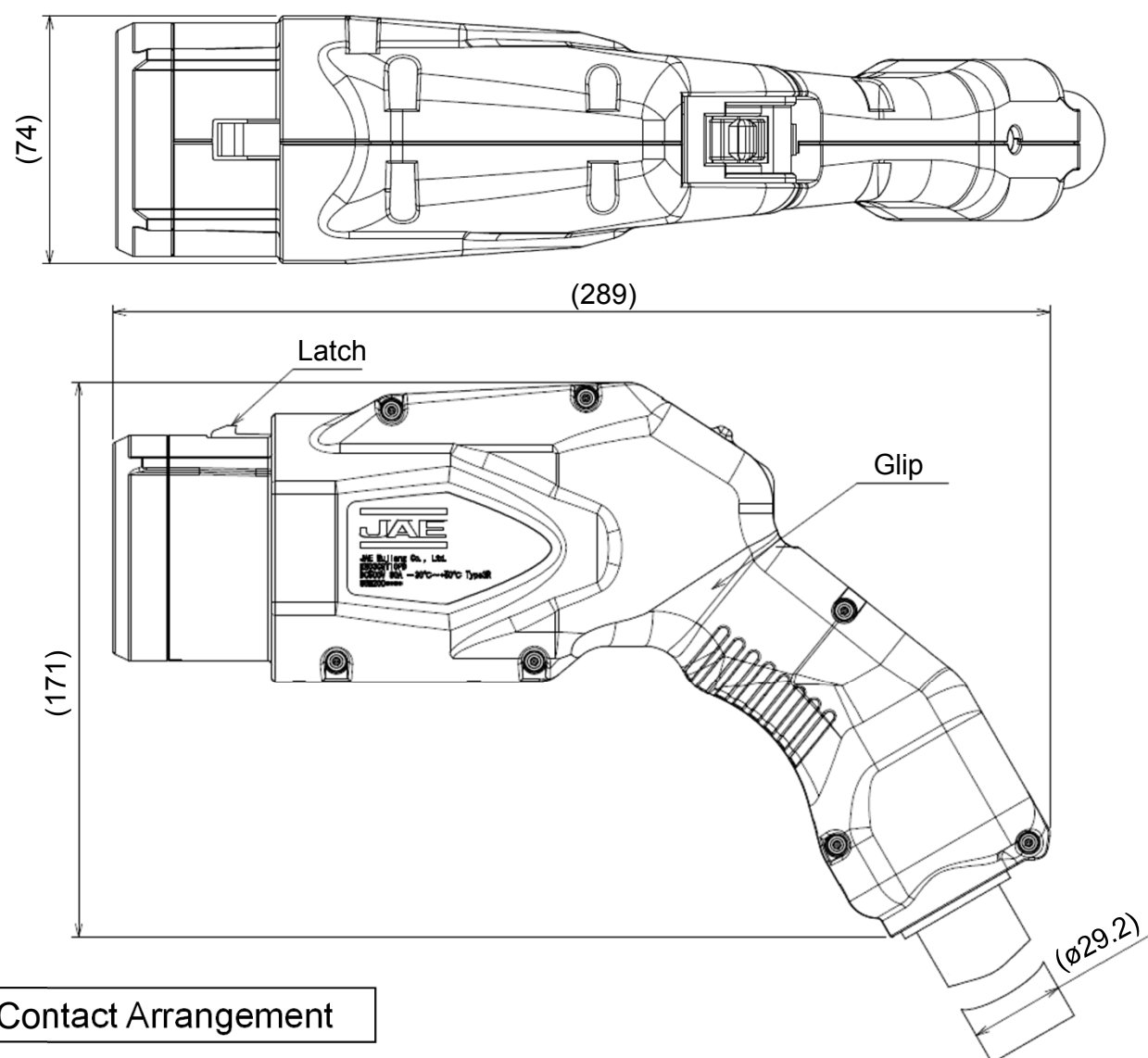
Ordering Information



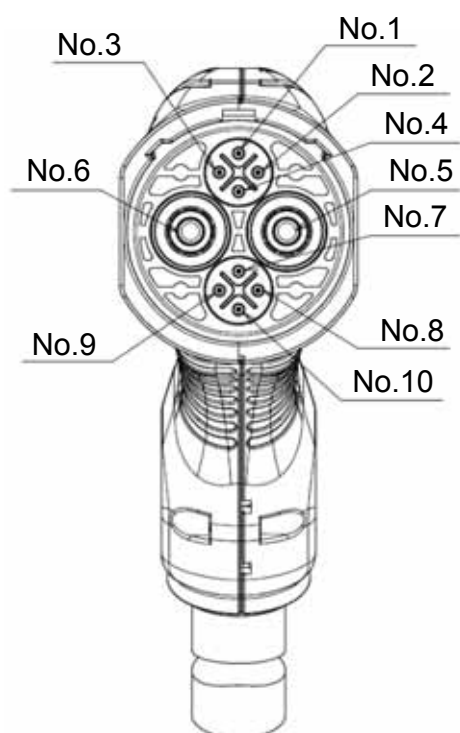
Part Number List

Part Number	Drawing No.	Cable Length	Specifications	Handling Instructions
KW03CGY10PDL0300U	SJ127127	3.0m	JACS-40261	JAHL-40261
KW03CGY10PDL0350U		3.5m		
KW03CGY10PDL0400U		4.0m		
KW03CGY10PDL0450U		4.5m		
KW03CGY10PDL0500U		5.0m		
KW03CGY10PDL0550U		5.5m		
KW03GY10PDL0600U		6.0m		
KW03CGY10PDL0650U		6.5m		
KW03CGY10PDL0700U		7.0m		
KW03CGY10PDL0750U		7.5m		
KW03CGY10PDL0800U		8.0m		
KW03CGY10PDL0850U		8.5m		
KW03CGY10PDL0900U		9.0m		
KW03CGY10PDL0950U		9.5m		
KW02CGY10PDL1000U		10.0m		

Outer Dimensions

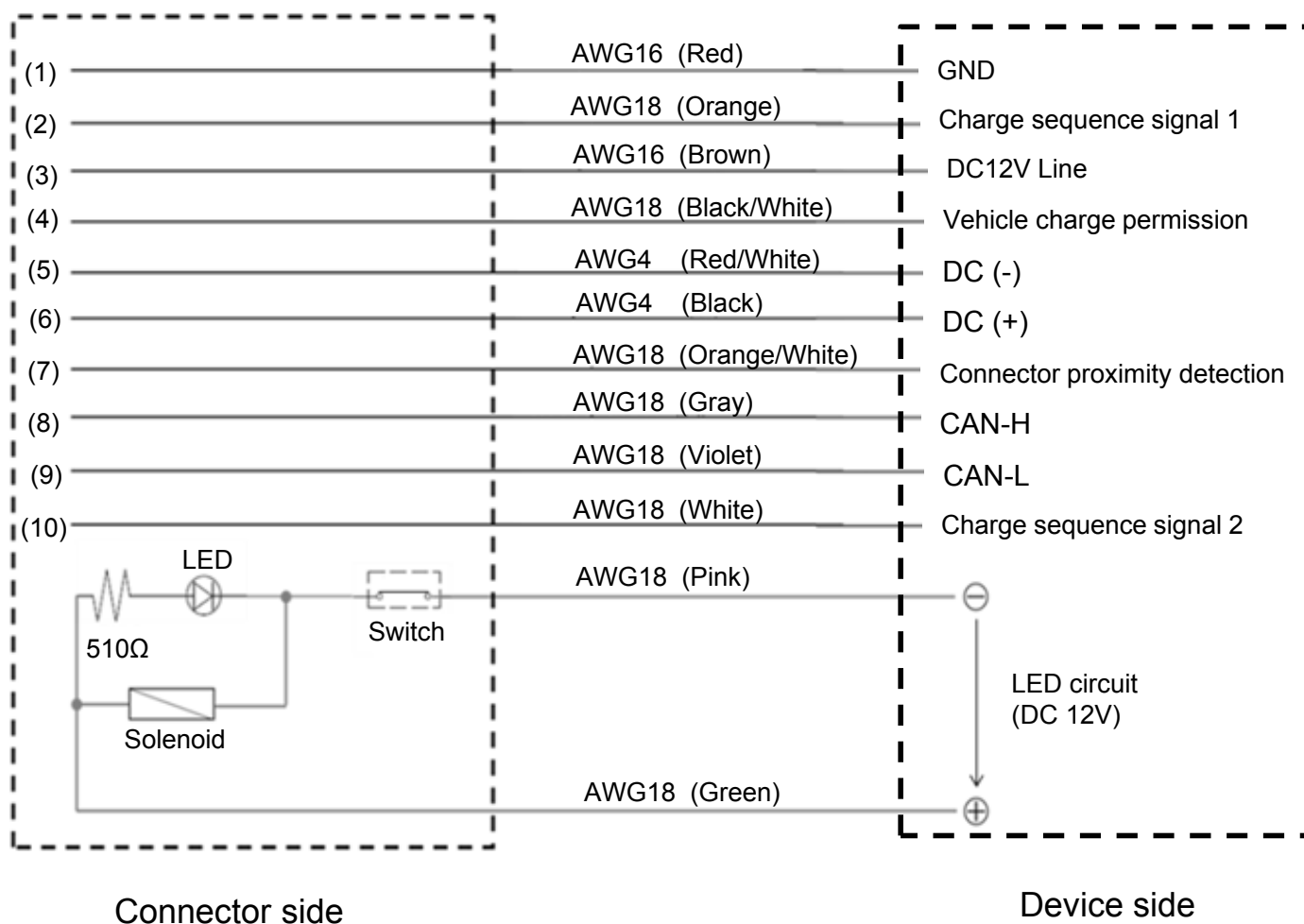


Contact Arrangement



No.	SIZE	WIRE COLOR
1	AWG16	Red
2	AWG18	Orange
3	AWG16	Brown
4	AWG18	Black/White
5	AWG4	Red/White
6	AWG4	Black
7	AWG18	Orange/White
8	AWG18	Gray
9	AWG18	Purple
10	AWG18	White

Connector Circuit Diagram



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.