Quick Charging / Charging and Discharging system Connector for EV

CONNECTOR
MB-0371-2
Aug. 2023

KW1C Series (CE Compliant Products)

RoHS Compliant

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

KW1C series connectors are CHAdeMO compliant and designed to be used with fast chargers. Previous generation KW1 used a combination of materials for the core of the body. This product is approximately 20% lighter with the use of a weather resistant resin material. The KW1C was also designed with stainless steel for critical components, such as the latche and internal locking mechanisms, to maintain high reliability. The design has been enhanced to give a more user friendly experience during the charging process. The light-weight and compact solution makes KW1C the optimal choice for EV charger installers where mass installation is required.

Thanks to V2X system and KW1C technology the Electric Vehicle Power System (EVPS) can continue to operate as a portable power storage even power outages.

*The European product (KW1E series) of this product is also available.

Features

- Compliant with CHAdeMO specifications Ver.2.0
- Compliant with the EV Charging and Discharging System Guidelines (EVPS-002) Ver.2.1
- CE compliant product (IEC62196-3 Compliant, by certification organization TÜV Rheinland)
- Highly reliable design using materials which are tough against various environmental conditions.
- Lightweight and highly reliable design.

Application

- Quick Charger for EV (CHAdeMO protocol)
- Charging and Discharging System for EV (CHAdeMO protocol)

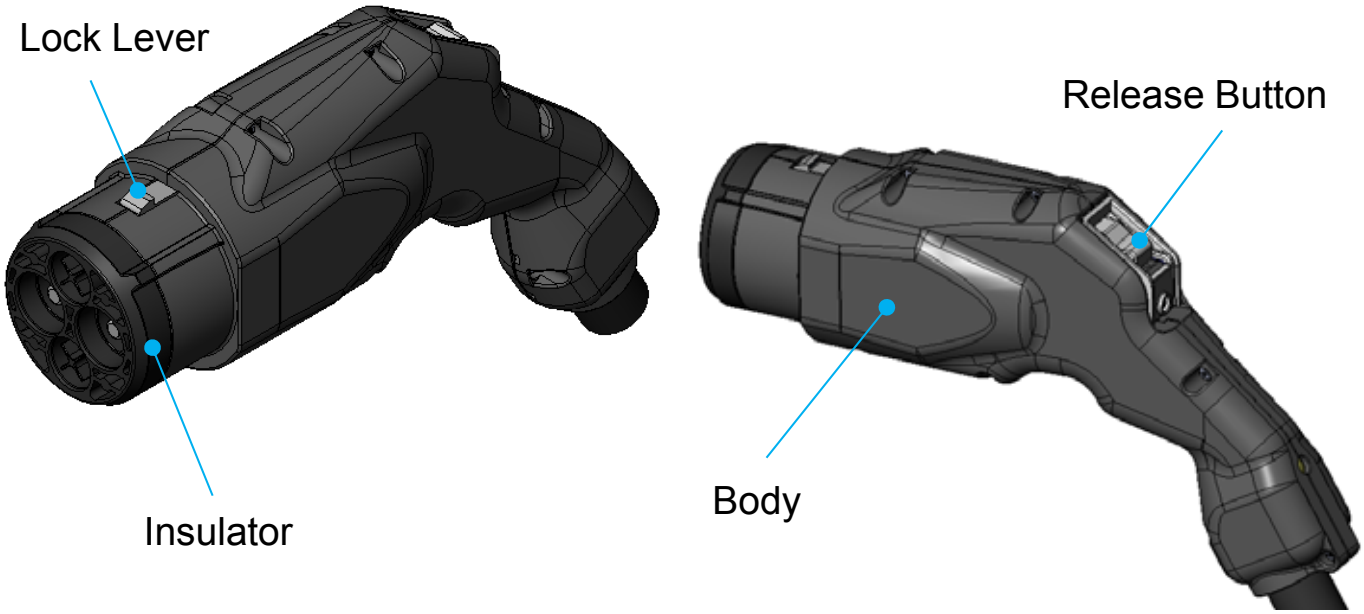
General Specifications

Number of Contacts	Power: 2 pos 12V Power : 2 pos Signal: 6 pos
Rated Current	Power: 150A max.[1] 12V Power :6.4A Signal: 2A
Rated Voltage	Power: DC500V 12V Power & Signal: DC16V max.
Insulation Resistance	100 MΩ min. (Apply DC500V between adjacent contacts)
Dielectric Withstanding Voltage	AC 3,000V / 1 minute
Durability	10,000 times
Insertion Force	100N max.
Operating Temperature Range[1]	-30°C to +50°C (Rated current: 125A) -30°C to +45°C (Rated current: 135A) -30°C to +40°C (Rated current: 150A)

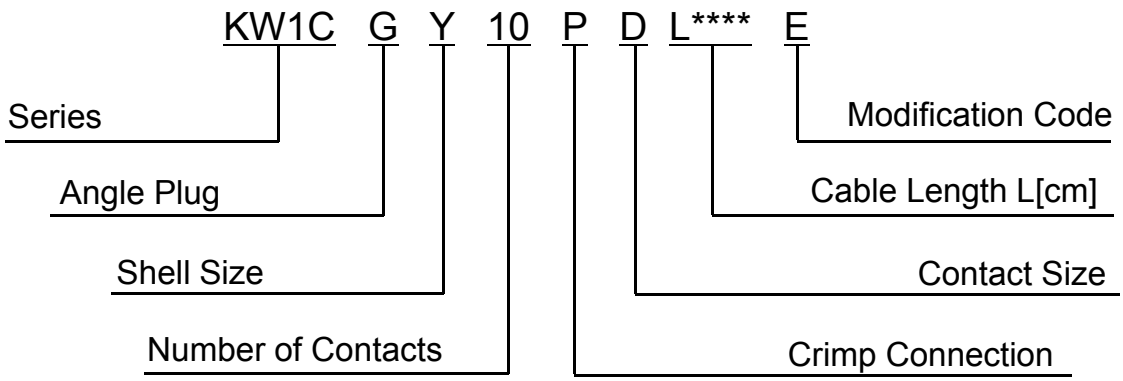
[1] Rated current is dependent on operating temperature.

Materials and Finishes

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



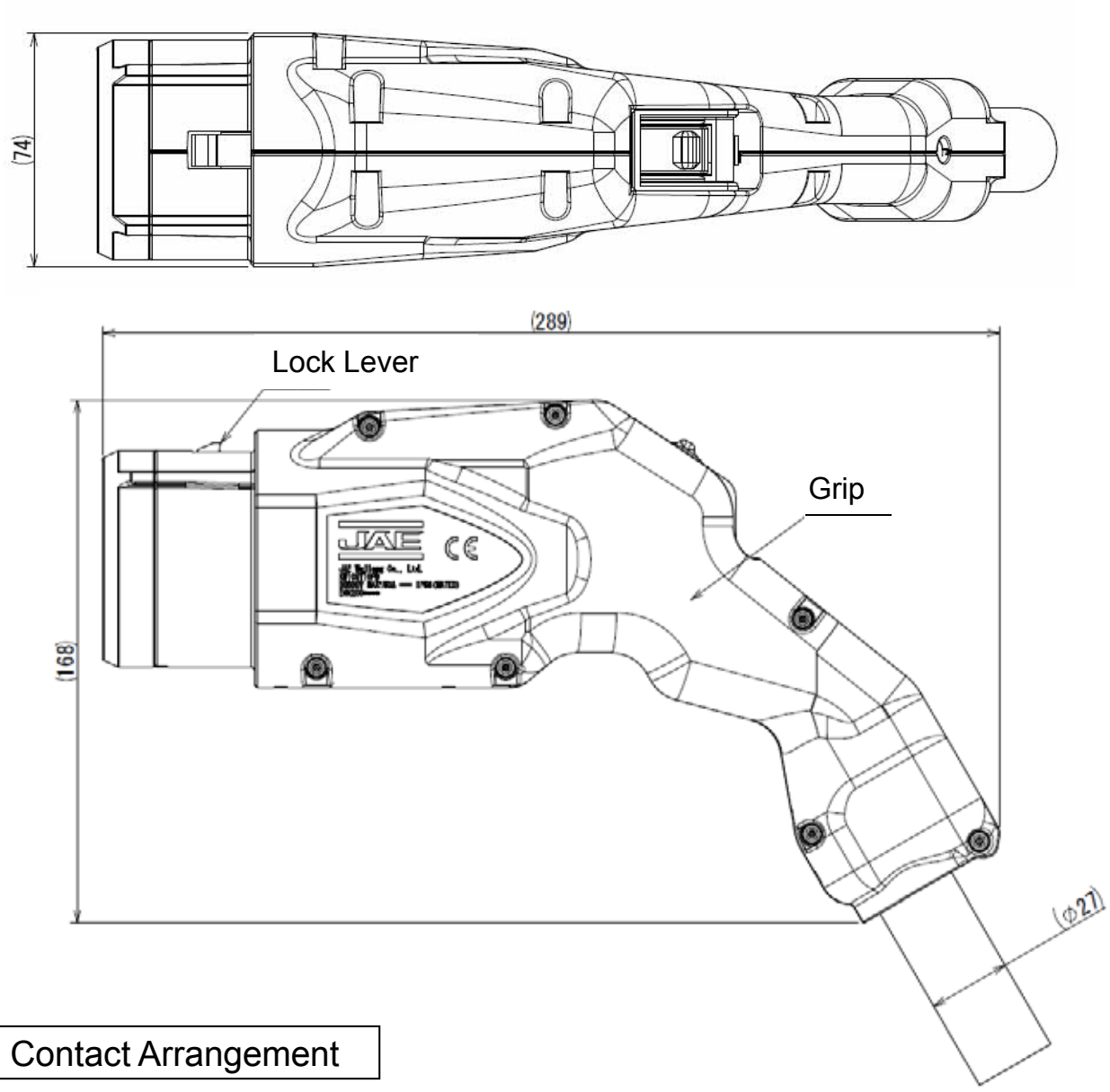
Ordering Information



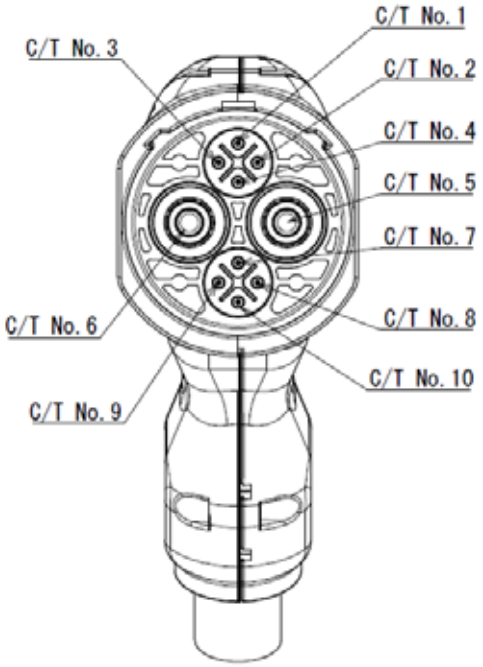
Part Number List

Part Number	Drawing No.	Cable Length	Specifications	Handling Instructions
KW1CGY10PDL0300E	SJ123493	3.0m	JACS-40222	JAHL-40222
KW1CGY10PDL0350E		3.5m		
KW1CGY10PDL0400E		4.0m		
KW1CGY10PDL0450E		4.5m		
KW1CGY10PDL0500E		5.0m		
KW1CGY10PDL0550E		5.5m		
KW1CGY10PDL0600E		6.0m		
KW1CGY10PDL0650E		6.5m		
KW1CGY10PDL0700E		7.0m		
KW1CGY10PDL0750E		7.5m		
KW1CGY10PDL0800E		8.0m		

Outer Dimensions

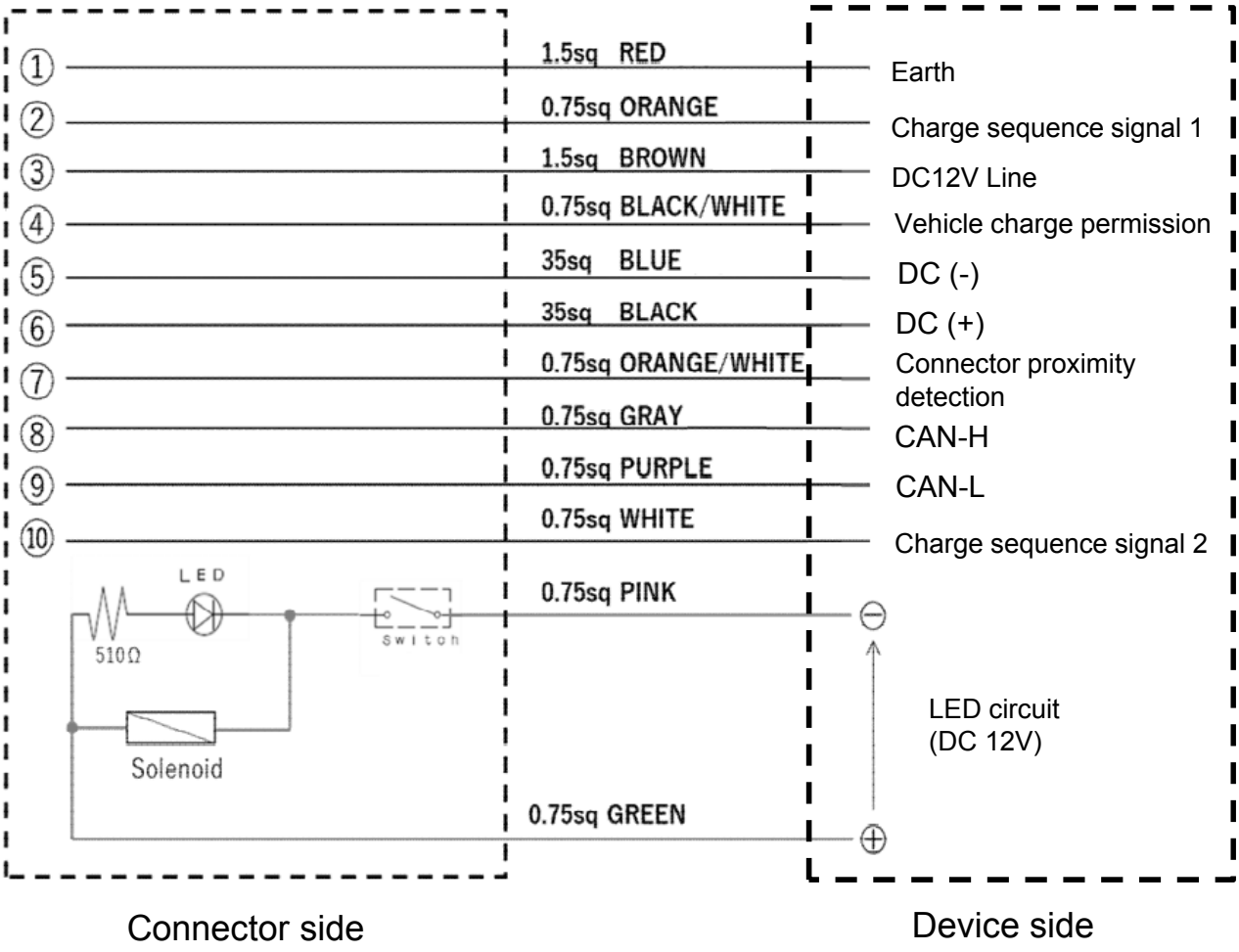


Contact Arrangement



C/T No.	CABLE	
	SIZE[sq]	COLOR/MARKING
1	1.5	RED
2	0.75	ORANGE
3	1.5	BROWN
4	0.75	BLACK/WHITE
5	35	BLUE
6	35	BLACK
7	0.75	ORANGE/WHITE
8	0.75	GRAY
9	0.75	PURPLE
10	0.75	WHITE
LED (+)	0.75	GREEN
LED (−)	0.75	PINK

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.

Japan Aviation Electronics Industry, Limited

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