

Charging and Discharging System Connector for Electric Vehicles CONNECTOR

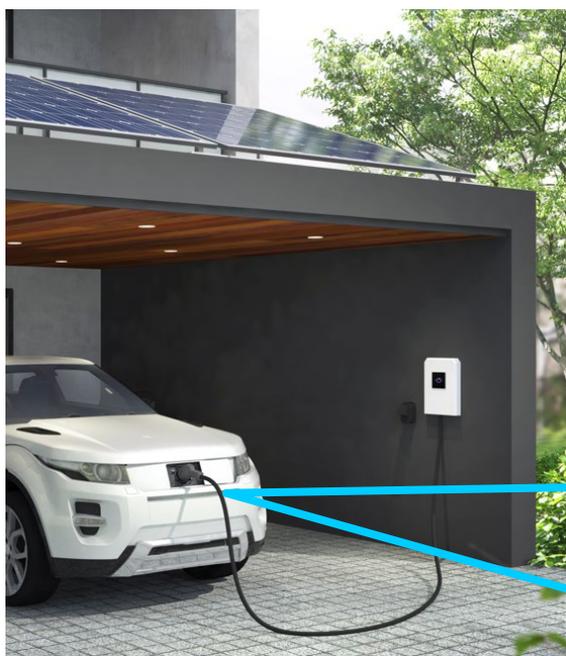
## KW02 Series

( CE and JCS Standard Compliant Products )

MB-0320-4

Jun.2024

**RoHS Compliant**



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



KW02 Series is a CHAdeMO protocol compliant, electric vehicle system connector. It uses a weather resistant and highly durable resin outer shell, as well as is being a lightweight and highly reliable connector.

KW02 Series is structured for use as V2L (vehicle to load) and V2H (vehicle to home) systems, which utilizes large-capacity of electric vehicles as renewable energy storage batteries for home and office buildings and also for the V2G (vehicle to grid) system that adjusts supply and demand of community wide electrical energy.

## Application

- Electric Vehicle Charging and Discharging System (CHAdeMO protocol), V2H (Vehicle to Home), V2G (Vehicle to Grid) and other EV charging related applications.

## Features

- Compliant with the Electric Vehicle Charging and Discharging System Guidelines (EVPS-002).
- Convenient single action insertion and removal procedure for ease of operation.
- Grip designed with operability ergonomics considerations.
- Highly reliable design using materials which are tough against various environmental conditions.
- Achieves both being high-durability and lightweight in a single solution.
- CE compliant product (IEC62196-3 Compliant, by certification organization TÜV Rheinland)

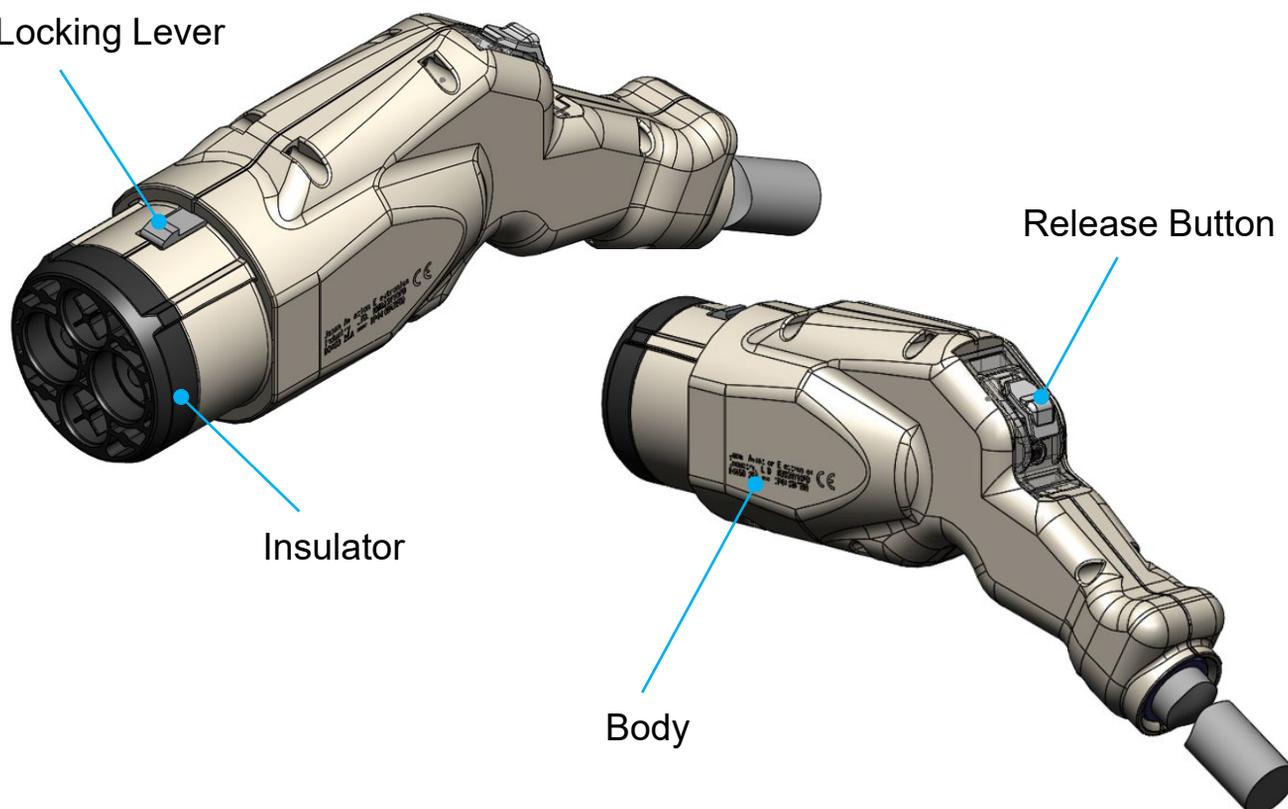
## General Specifications

|                                 |   |
|---------------------------------|---|
| Number of Contacts              | Power: 2 pos<br>12V Power : 1 pos<br>GND : 1 pos<br>Signal: 6 pos |
| Rated Current                   | Power: 25A , 12V Power: 6.4A, Signal: 2A                          |
| Rated Voltage                   | Power: DC450V   |
| Insulation Resistance           | 100 MΩ min.   |
| Dielectric Withstanding Voltage | AC 3,000V / 1 minute  |
| Durability                      | 10,000-cycles   |
| Insertion Force                 | 100N max.   |
| Operating Temperature Range     | -30° C to +50° C  |

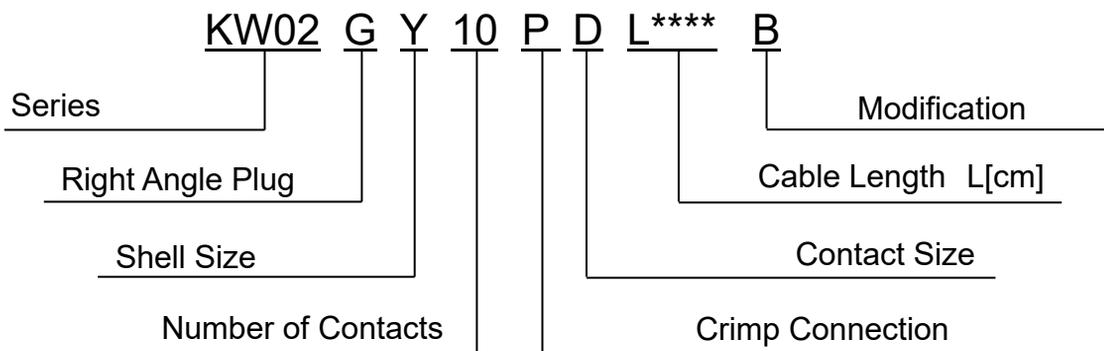
## Materials and Finishes

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

Locking Lever



Ordering Information



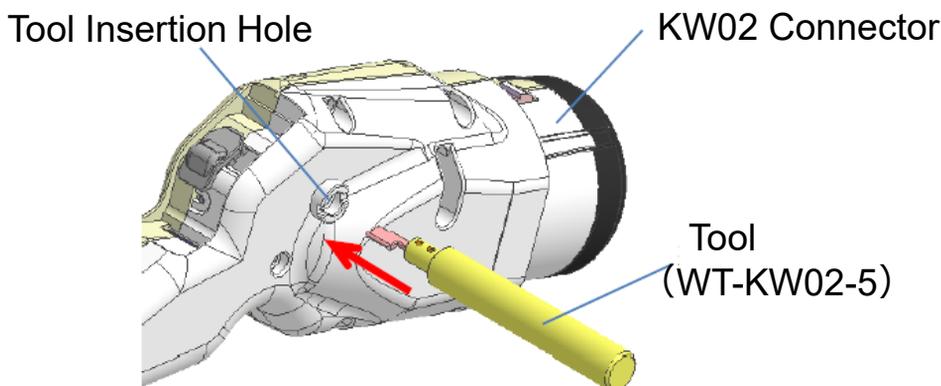
Part Number List

| Part Number      | Cable Length | Drawing No. | Specifications | Handling Instructions |
|------------------|--------------|-------------|----------------|-----------------------|
| KW02GY10PDL0400B | 4.0m         | SJ117957    | JACS-40181     | JAHL-40181            |
| KW02GY10PDL0450B | 4.5m         |             |                |                       |
| KW02GY10PDL0500B | 5.0m         |             |                |                       |
| KW02GY10PDL0540B | 5.4m         |             |                |                       |
| KW02GY10PDL0600B | 6.0m         |             |                |                       |
| KW02GY10PDL0640B | 6.4m         |             |                |                       |
| KW02GY10PDL0700B | 7.0m         |             |                |                       |
| KW02GY10PDL0790B | 7.9m         |             |                |                       |
| KW02GY10PDL0800B | 8.0m         |             |                |                       |
| KW02GY10PDL0850B | 8.5m         |             |                |                       |
| KW02GY10PDL0890B | 8.9m         |             |                |                       |

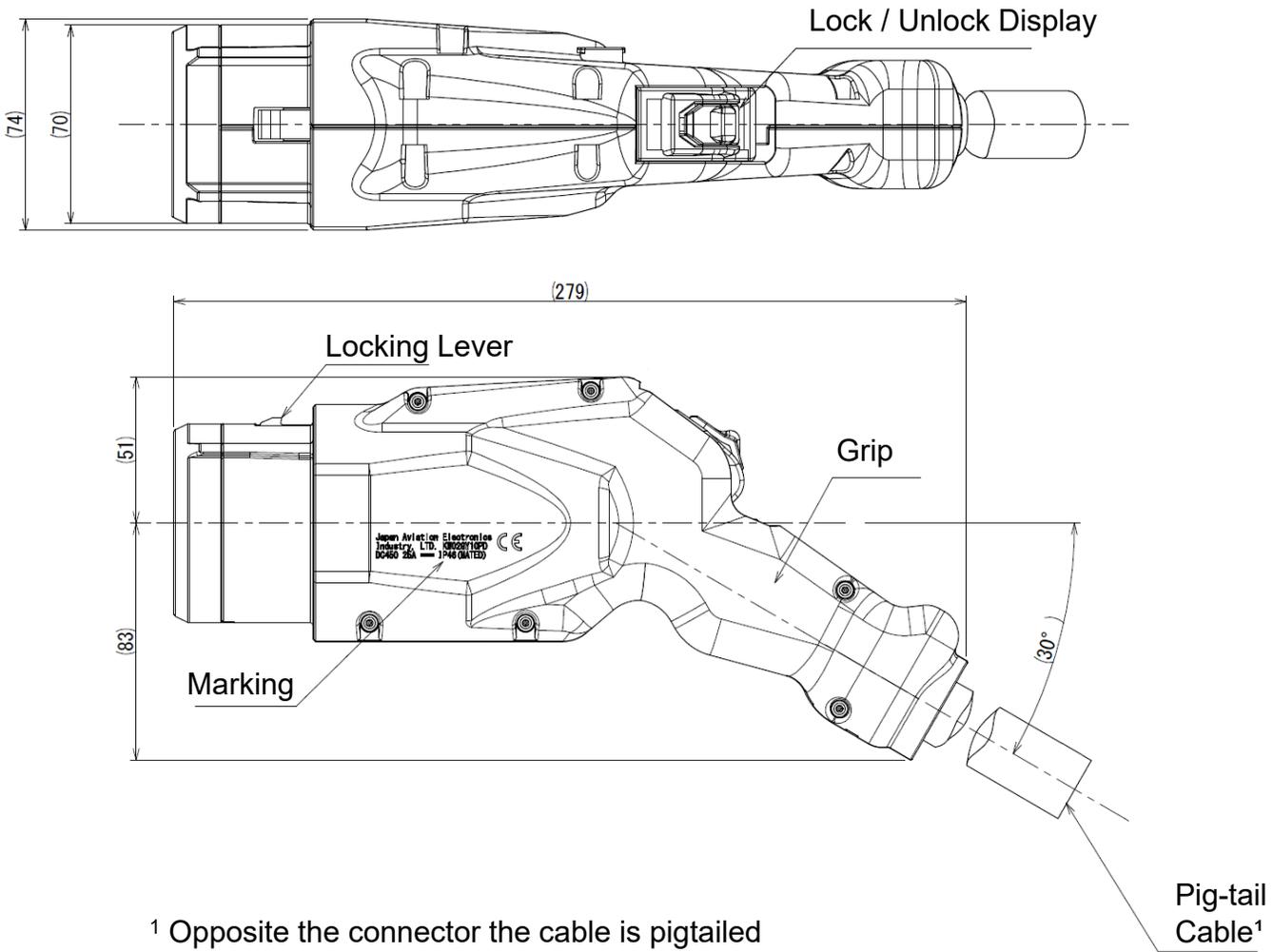
Exclusive Tool

This tool will be used in need of an emergency releasing of the connector. Please refer to the Emergency Release Handling Instructions concerning emergency release, and the Tool Handling Instructions regarding the usage of tools.

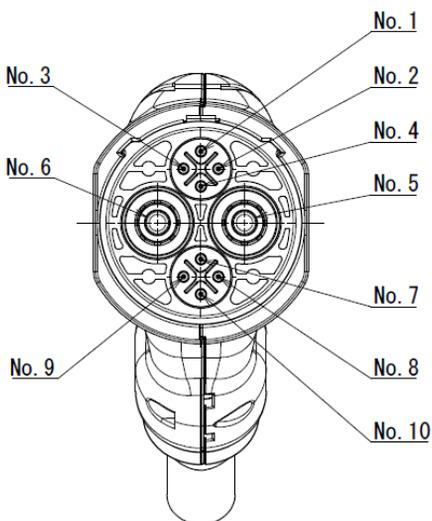
| Part Number      | Emergency Release Handling Instructions | Tool Name | Tool Handling Instructions |
|------------------|---|-----------|----------------------------|
| KW02GY10PDL****B | JAHL-40176-01                           | WT-KW02-5 | T714398                    |



Outer Dimensions



Contact Arrangement



| No. | Size   | Color / Marking |
|-----|--------|-----------------|
| 1   | 1.25sq | Black / 1       |
| 2   | 0.75sq | Black / 2       |
| 3   | 1.25sq | Black / 3       |
| 4   | 0.75sq | Black / 4       |
| 5   | 3.5sq  | Light Blue      |
| 6   | 3.5sq  | Brown           |
| 7   | 0.75sq | Black / 7       |
| 8   | 0.75sq | Black / 8       |
| 9   | 0.75sq | Black / 9       |
| 10  | 0.75sq | Black / 10      |

