



ZH05 Series

2mm Pitch Wire-to-Board Connector with Short-Circuit/Electric Shock Prevention Design

FEATURES:

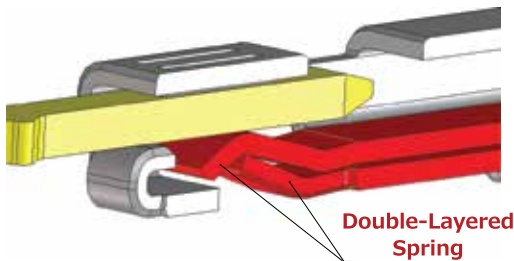
- ▶ Compact and narrow width connector
- 0.5mm terminal, 2mm pitch
- ▶ Improved safety with short-circuit/electric shock prevention design
- ▶ High heat resistance 125°C
- ▶ High vibration resistance
(European automobile standard: LV214 Severity 1)
- ▶ Potting capable design
- ▶ 2 keying options

High Vibration Resistance due to Unique Contact Design

Female Contact Design

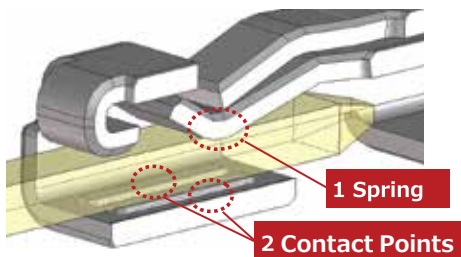
Double-Layered Spring Design

Increase the contact force and prevents vibration from outside.



3-Point Contact Design

Withstands severe vibration due to improved contact reliability.

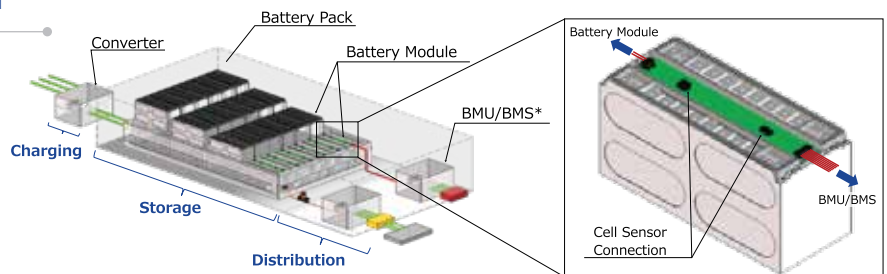


1 Spring + 2 Contact Points = 3-Point Contact Design

*The contact is flipped upside down to make the beat easier to see.

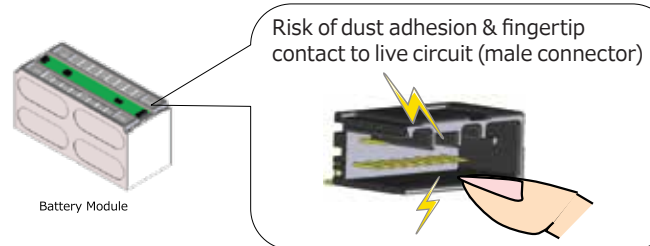


EV Battery Connection Image



*BMU : Battery Management Unit
BMS : Battery Management System

ENSURING THE SAFETY OF WORKERS



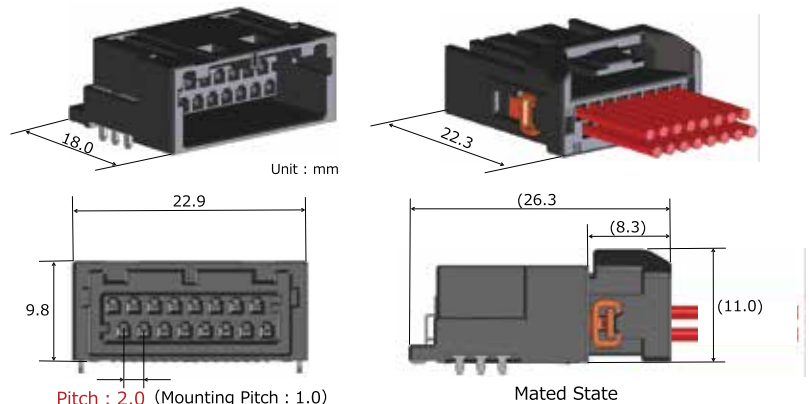
Compact and Narrow Width

Dimension Example : 16pos.

Receptacle : ZH05-16DS-2H(A)

Plug : ZH05-16DP-HU(A)

Plug Contact : ZH05-2224PCF

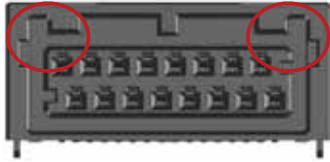


Prevents Mis-mating When Using Multiple Connectors

A key (Black)

Receptacle : ZH05-16DS-2H(A)

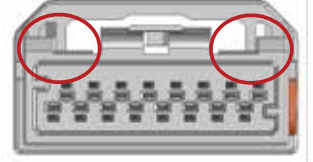
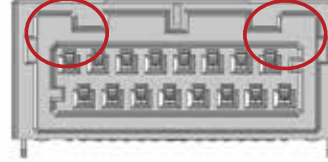
Plug : ZH05-16DP-2HU(A)



B key (Gray)

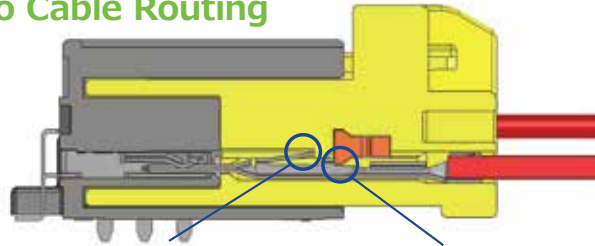
Receptacle : ZH05-16DS-2H(B)

Plug : ZH05-16DP-2HU(B)



High Tensile Strength, Contact Lance and Retainer Ensure High Tensile Strength Design Resistant to Cable Routing

Lance Only
(Primary Locking)
20N Min.



Lance + Retainer
(Secondary Locking)
50N Min.

Contact lance catches socket housing

Retainer further increases tensile strength

Specifications

MATERIAL AND FINISH

Component		Material	Finish, Remarks
Receptacle	Housing	PA	UL94V-0, Black or Gray
	Female Contact	Copper Alloy	Tin Plated over Nickel Underplating
	Retention Tab	Brass	Tin Plated over Nickel Underplating
Plug	Housing	PA	UL94V-0, Black or Gray
	Retainer	PBT	UL94V-0, Dark Gray
Plug Contact		Brass	Tin Plated over Copper Plating

PERFORMANCE CHARACTERISTICS

Rated Current	2A
Rated Voltage	60V AC/DC
Operating Temperature	-40 to +125°C*
Contact Resistance	10mΩ Max.
Withstand Voltage	1000V AC for 1 min.
Insulation Resistance	100MΩ Min. (500V DC)
Mating Durability	30 times

- No. of Pos.: 20pos. (Mass Production), 12/16/24pos. (Planned)
 - Applicable Cable: 22-24 AWG (0.2-0.35sq), Coated Outer Diameter 1.4mm (FLRY)
 - Mating Key: A and B, Two Key Types - RoHS2 compliant

*Including temperature rise due to current flow



For additional information please go to
www.hirose.com/product/en/pr/ZH05

Specifications herein are subject to change without notice.
 Contact Hirose for latest specifications, drawings, or availabilities.

STAY CONNECTED

