



**SINGATRON**  
GROUP Since 1976



# LEV • eBike CONNECTORS

**SGconn**<sup>®</sup>  
Waterproof Connectors



✉ [sales@singatron.com.tw](mailto:sales@singatron.com.tw)



[sgconn.com](http://sgconn.com)

[www.singatron.com.tw](http://www.singatron.com.tw)  
[www.singatron.com.cn](http://www.singatron.com.cn)

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## The Singatron Group

Singatron Group was first established in Hsinchu, Taiwan in 1976. Since 2000, Singatron established China plants in both Suzhou and Zhongshan to satisfy customers demand in Greater China area. Singatron provides worldwide service network in Taiwan, Mainland China, Japan, S. Korea, Vietnam, Singapore, Malaysia, India, USA, Canada and Europe.



Experience in Connector Manufacturing  
**47+** years



1976

- o Founded in Taiwan

2001-2002

- o Established China plants in Suzhou and Zhongshan
- o Listed on Taiwan Stock Exchange

2011-2013

- o Established Waterproof BU in Suzhou, China
- o Set-up San Jose, USA office

Become a preferred inter-connectivity solutions provider

VISION

MISSION

Build a healthy and efficient environment to exceed expectations of customers

# Singatron Worldwide Service Network

Employees 1300+



2015

Suzhou, China plant was listed on the National Equities Exchange and Quotations (NEEQ) in 2015.

2018-2020

Established Automotive BU in Suzhou, China.

In 2020, Suzhou plant was delisted from NEEQ in China.

2023

Suzhou, China plant was listed on the ChiNext.

2024

Establish a subsidiary in Thailand.

## Quality & Reliability

- + ISO 9001:2015
- + IATF 16949:2016
- + 6 Sigma



## Environmental, Health & Safety

- + ISO 14001:2015
- + ISO 45001:2018
- + IECQ QC080000:2017
- + Sony & ASUS Green Partner
- + RoHS & WEEE
- + Energy Saving & Carbon Reduce

- + ISO 14064-1 Greenhouse gases Part 1

# Laboratory Verification



## Electrical & Plating

## Mechanical



Network Analysis



Oscilloscope



Solderability-Wating Balance Test



Low Lever Contact



Plating Thickness



Solder Dip Test



Insulation Resistance Dielectric Withstanding Voltage Insulation



DC Power Supply, Current Rating and Temperature



Vertical Tensile Strength Testing



X-ray Inspection System



2.5D Optical Microscope Dimension Measurement



Horizontal Optical Microscope



Connector Endurance Testing



International Regulation,  
Product Specifications &  
Worldwide Safety Requirements



Corporate Social Responsibility

+ RBA 7.0

+ Procurement Specification for Non-conflicted Areas



*We do our best to meet all test requirements 100%  
even the worst condition*



Environmental & Green Partner

Sealing & Waterproof



Salt Spray Test Instrument



Hot Air Rapid Drying Oven



Temperature & Humidity  
Test Chamber



Steam Aging Equipment



Polishing Machine



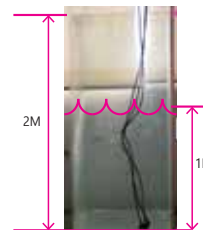
Pure Convection Reflow Oven



Thermal Shock Chamber



Automatic Vacuum Tester  
(Positive/ Negative Pressure)



IP67/ IP68 Test



IP65/ IP66 Test

# Applications

① Battery



② Battery Charger



③ Motor & Motor Controller



⑤ Display, Throttle & Brake



⑥ Accessory



④ Sensors



# LEV • eBike CONNECTORS

SGConn<sup>®</sup> Electrical Vehicle connectors meet waterproof rating from IP65 to IP67 based on IEC60529 standard and are used in Battery Charging, Controller, Motor, Sensor and Display applications of Vehicle and e-bike industries.

## Specifications

Rated Voltage	DC 60V
Contact resistance	≤ 10mΩ
Insulation Resistance	≥ 20MΩ at DC 500V
Operating Temperature	
Connector Body	-40°C ~ +100°C
Cable	-25°C ~ +70°C
Humidity	95% (40°C)
IP Rating	IP65/ IP66/ IP67
Flammability	UL94-V0
Durability	200 cycles minimum
Breakdown Voltage	≥AC 1000V per minute
Corrosion	48 hours salt spray contact
Material	
Contact	Copper Alloy, Gold Plated
Connector Body	Nylon+GF, PC, UL Recognized



# LEV • eBike CONNECTORS



## *Power Connectors for Battery Discharging*



# LEV • eBike CONNECTORS

## Power Connectors

for Battery Discharging

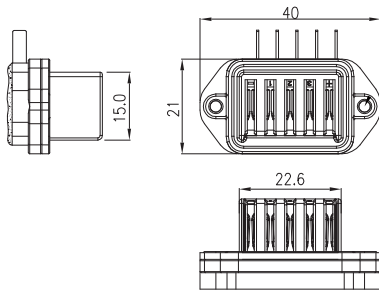
### Female Connector



Female Pin  
Panel Mount Type

**20A+2A : 2+3 pins**

P/N: 2BA3020-W05RXXH

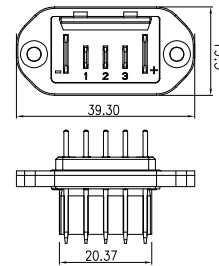


### Male Connector



Male Pin  
Panel Mount Type

P/N: 2BW3021-W05RXXH



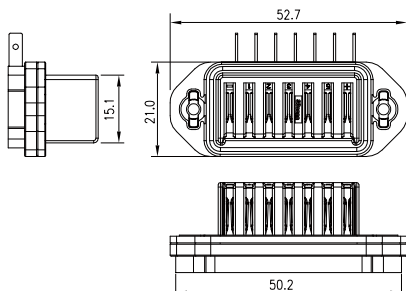
### Female Connector



Female Pin  
Panel Mount Type

**30A+5A : 2+5 pins**

P/N: 2BA3020-W07RXXH

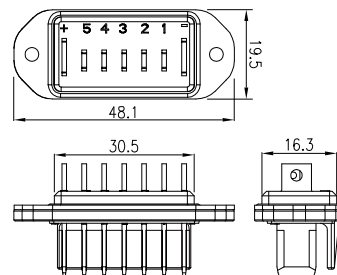


### Male Connector



Male Pin  
Panel Mount Type

P/N: 2BA3021-W07RXXH



## Power Connectors

for Battery Discharging

### Female Connector

Female Pin  
Panel Mount Type

P/N: 2BA3W01-011114H

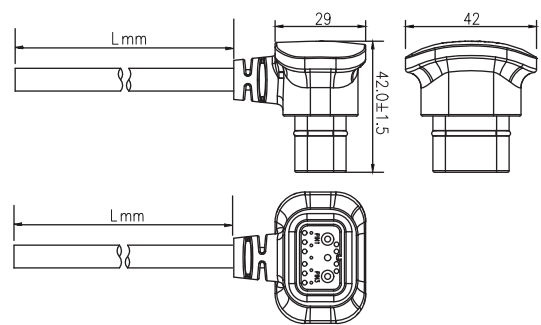
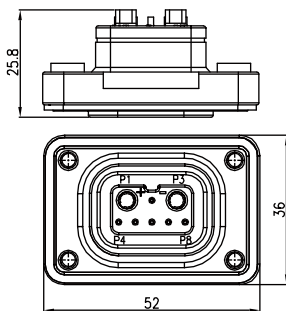


**30A+2A : 2+5 pins**

### Male Connector

Male Pin  
Molded with Cable

P/N: 2BW3100-W08DXXH



Cable OD : Max Ø7.0 mm  
Cable Length : Standard 1000mm ( L: customized )

## OEM/ODM PRODUCTS

Please contact us for more information  
for your Battery solutions.



60A+5A: 2+7 pins



40A

30A



20A+5A: 2+3 pins



20A+5A: 2+8 pins



10A: 2pins

30A+5A: 2+5 pins

# LEV • eBike CONNECTORS



## *Power Connectors for Battery Charging*



# LEV • eBike CONNECTORS

## Power Connectors

for Battery Charging

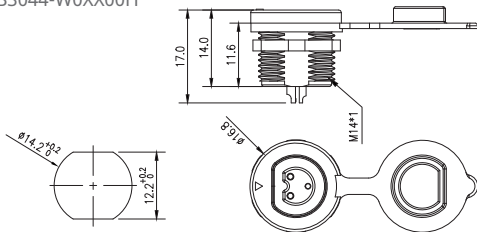
### Female Connector



Female Pin  
Panel Mount Type

P/N: 2EB3044-W0XX00H

**5A+2A : 2+1, 2+2, 2+3 pins**

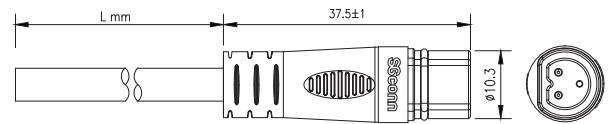


### Male Connector



Male Pin  
180° Molded with Cable Type

P/N: 2EB3024-W0XX00H



Cable OD : Max Ø5.0mm (3 pins); Max Ø5.5mm (5 pins)  
Cable Length : Standard 1000mm ( L: customized )



5A+2A: 2+1 Pins



5A+2A: 2+2 Pins



5A+2A: 2+3 Pins



5A+2A: 2+1 Pins



5A+2A: 2+2 Pins



5A+2A: 2+3 Pins

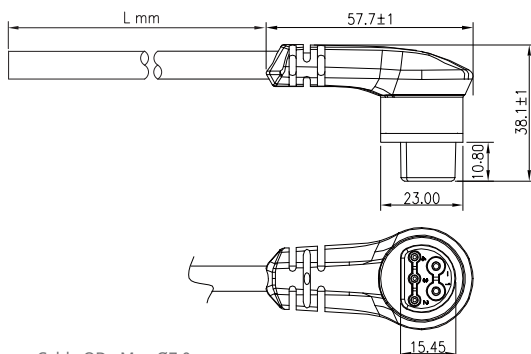
### Female Connector



Male Pin  
90° Molded with Cable Type

P/N: 2BW3030-W058XXH

**10A+5A : 2+3 pins**



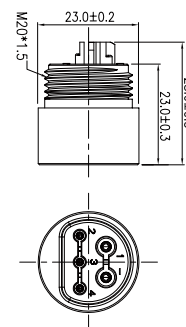
Cable OD : Max Ø7.0 mm  
Cable Length : Standard 1000mm ( L: customized )

### Male Connector



Female Pin  
Panel Mount Type

P/N: 2BA3014-V058XXH





# LEV • eBike CONNECTORS

## Power Connectors

for Battery Charging

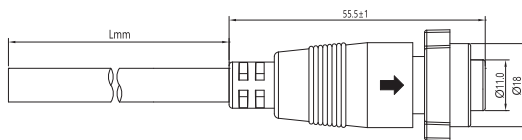
### Female Connector



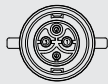
Male Pin  
180° Molded with Cable Type

**10A+5A : 2+2 pins**

P/N: 2CT3016-W048XX



Cable OD : Max Ø5.6mm  
Cable Length : Standard 1000mm ( L: customized )



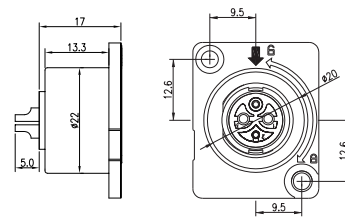
10A+5A: 2+2 Pins

### Male Connector



Female Pin  
Panel Mount Type

P/N: 2CT3020-W048XX



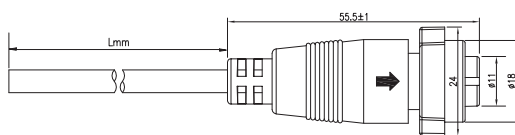
### Female Connector



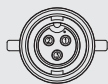
Male Pin  
180° Molded with Cable Type

**10A : 3 pins**

P/N: 2CT3016-W034XX



Cable OD : Max Ø5.6 mm  
Cable Length : Standard 1000mm ( L: customized )



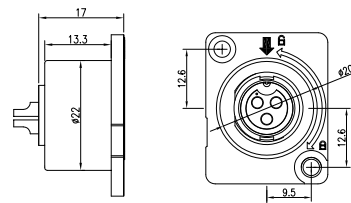
10A: 3 Pins

### Male Connector



Female Pin  
Panel Mount Type

P/N: 2CT3020-W034XX



# LEV • eBike CONNECTORS



## ***Power Connectors*** ***Cable Assemblies for Motor & Motor Controller***



## Power Connectors

Cable Assembly for Motor and Motor Controller

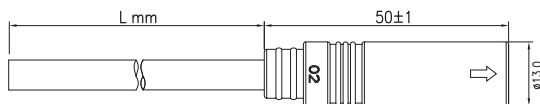
### Female Connector



Female Pin  
180° Molded with Cable Type

**10A+5A : 3+6 pins**

P/N: 2EB3004-W097XX



Cable OD : Max Ø6.6mm  
Cable Length : Standard 1000mm ( L: customized )



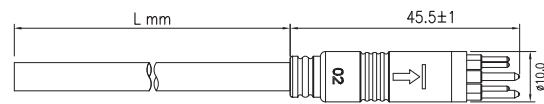
10A+5A : 3+6 Pins

### Male Connector



Male Pin  
180° Molded with Cable Type

P/N: 2EB3024-W097XX



Cable OD : Max Ø5.9mm  
Cable Length : Standard 1000mm ( L: customized )



10A+5A : 3+6 Pins

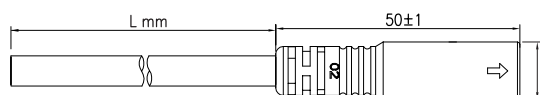
### Female Connector



Female Pin  
180° Molded with Cable Type

**10A+2A : 3+3 pins**

P/N: 2EB3004-W069XX



Cable OD : Max Ø6.2 mm  
Cable Length : Standard 1000mm ( L: customized )



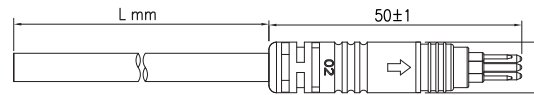
10A+2A : 3+3 Pins

### Male Connector



Male Pin  
180° Molded with Cable Type

P/N: 2EB3024-W069XX



Cable OD : Max Ø5.6 mm  
Cable Length : Standard 1000mm ( L: customized )



10A+2A : 3+3 Pins

## Power Connectors

Cable Assembly for Motor and Motor Controller

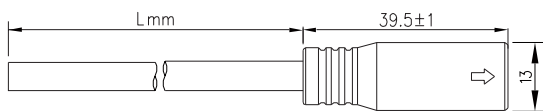
### Female Connector

Male Pin  
180° Molded with Cable Type



**15A+2A : 2+4 pins**

P/N: 2EB3016-W06DXXH



Cable OD : Max Ø5.5mm  
Cable Length : Standard 1000mm ( L: customized )



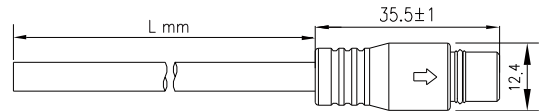
15A+2A : 2+4 Pins

### Male Connector

Female Pin  
180° Molded with Cable Type



P/N: 2EB3030-W06DXXH



Cable OD : Max Ø5.5mm  
Cable Length : Standard 1000mm ( L: customized )



15A+2A : 2+4 Pins

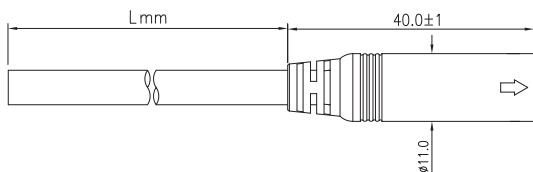
### Female Connector

Male Pin  
180° Molded with Cable Type



**10A : 3 pins**

P/N: 2EB3024-W034AX



Cable OD : Max Ø5.6 mm  
Cable Length : Standard 1000mm ( L: customized )



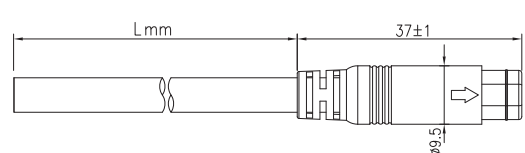
10A: 3 Pins

### Male Connector

Female Pin  
180° Molded with Cable Type



P/N: 2EB3004-W034AX



Cable OD : Max Ø5.6 mm  
Cable Length : Standard 1000mm ( L: customized )



10A: 3 Pins



# LEV • eBike CONNECTORS



## *Signal Connectors Cable Assemblies for Display and Sensor*



## Signal Connectors

Cable Assembly for Sensor and Display

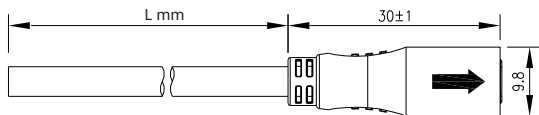
### Female Connector

Female Pin  
180° Molded with Cable Type



**3A : 7 pins**

P/N: 2EB3N01-W072XXH



Cable OD : Max Ø4.2mm  
Cable Length : Standard 1000mm ( L: customized )



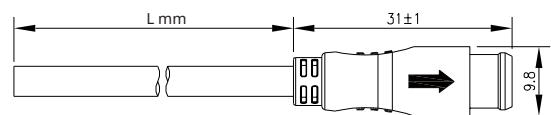
3A: 7 Pins

### Male Connector

Male Pin  
180° Molded with Cable Type



P/N: 2EB3N02-W072XXH



Cable OD : Max Ø4.2mm  
Cable Length : Standard 1000mm ( L: customized )



3A: 7 Pins

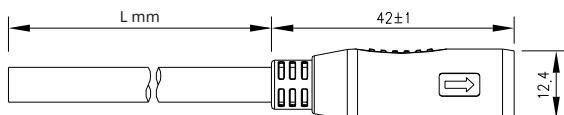
### Female Connector

Female Pin  
180° Molded with Cable Type



**3A : 11 pins**

P/N: 2EB3111-W112XXH



Cable OD : Max Ø6.0 mm  
Cable Length : Standard 1000mm ( L: customized )



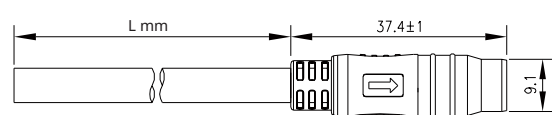
3A: 11 Pins

### Male Connector

Male Pin  
180° Molded with Cable Type



P/N: 2EB3112-W112XXH



Cable OD : Max Ø6.0 mm  
Cable Length : Standard 1000mm ( L: customized )



3A: 11 Pins

## Signal Connectors

Cable Assembly for Sensor and Display

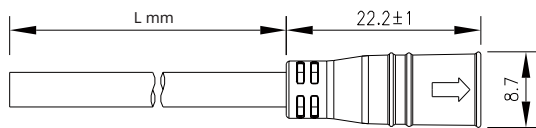
### Female Connector

Female Pin  
180° Molded with Cable Type



**3A : 6 pins**

P/N: 2EB3701-W062XXH



Cable OD : Max Ø4.0mm  
Cable Length : Standard 1000mm ( L: customized )



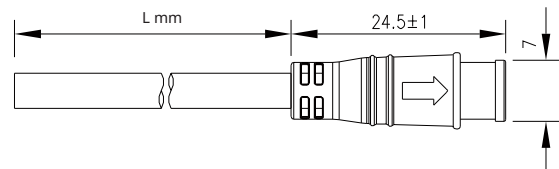
3A: 8 Pins

### Male Connector

Male Pin  
180° Molded with Cable Type



P/N: 2EB3702-W062XXH



Cable OD : Max Ø4.0mm  
Cable Length : Standard 1000mm ( L: customized )



3A: 8 Pins

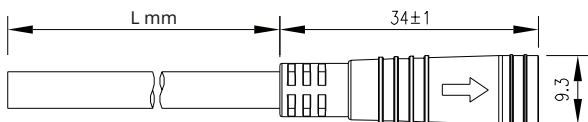
### Female Connector

Female Pin  
180° Molded with Cable Type



**3A : 6 pins**

P/N: 2EB38C1-W062XXH



Cable OD : Max Ø4.0 mm  
Cable Length : Standard 1000mm ( L: customized )



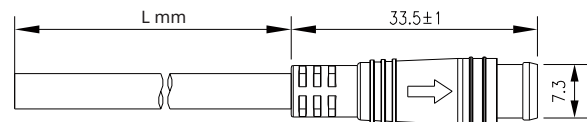
3A: 6 Pins

### Male Connector

Male Pin  
180° Molded with Cable Type



P/N: 2EB38C2-W062XXH



Cable OD : Max Ø4.0 mm  
Cable Length : Standard 1000mm ( L: customized )



3A: 6 Pins

## Signal Connectors

Cable Assembly for Sensor and Display

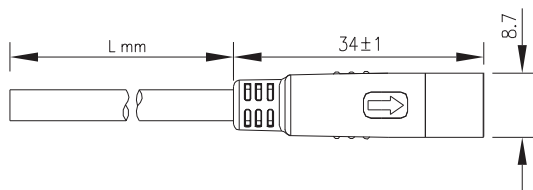
### Female Connector

Female Pin  
180° Molded with Cable Type



**3A : 8 pins**

P/N: 2EB3R01-W082XXH



Cable OD : Max Ø4.2mm  
Cable Length : Standard 1000mm ( L: customized )



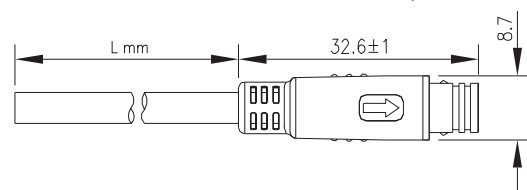
3A: 8 Pins

### Male Connector

Male Pin  
180° Molded with Cable Type



P/N: 2EB3R02-W082XXH



Cable OD : Max Ø4.2mm  
Cable Length : Standard 1000mm ( L: customized )



3A: 8 Pins

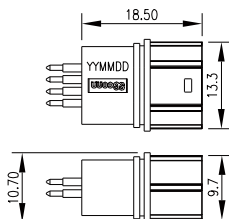
### Female Connector

Female Pin  
180° Panel Mount Type



**3A : 8 pins**

P/N: 2EB3R05-W082XXH



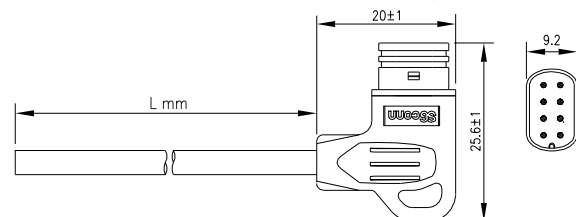
3A: 8 Pins

### Male Connector

Male Pin  
90° Molded with Cable Type



P/N: 2EB3R04-W082XXH



Cable OD : Max Ø4.2 mm  
Cable Length : Standard 1000mm ( L: customized )



3A: 8 Pins

## Signal Connectors

Cable Assembly for Sensor and Display

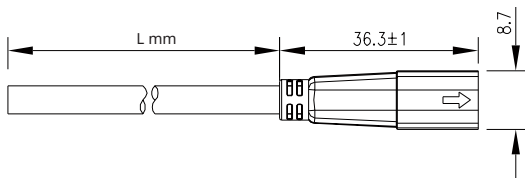
### Female Connector

Female Pin  
180° Molded with Cable Type



**3A : 8 pins**

P/N: 2EB3S01-W082XXH



Cable OD : Max Ø4.2mm  
Cable Length : Standard 1000mm ( L: customized )



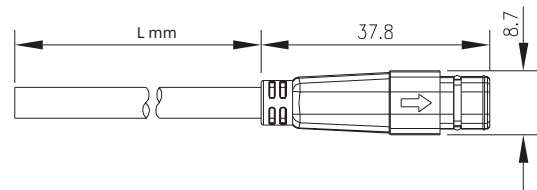
3A: 8 Pins

### Male Connector

Male Pin  
180° Molded with Cable Type



P/N: 2EB3S02-W082XXH



Cable OD : Max Ø4.2mm  
Cable Length : Standard 1000mm ( L: customized )



3A: 8 Pins

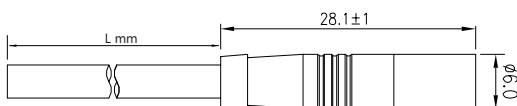
### Female Connector

Male Pin  
180° Molded with Cable Type



**1A : 6 pins**

P/N: 2EB3016-W061XXH



Cable OD : Max Ø3.6 mm  
Cable Length : Standard 1000mm ( L: customized )



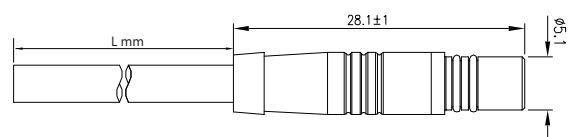
1A: 6 Pins

### Male Connector

Female Pin  
180° Molded with Cable Type



P/N: 2EB3030-W061XXH



Cable OD : Max Ø3.6 mm  
Cable Length : Standard 1000mm ( L: customized )



1A: 6 Pins

# LEV • eBike CONNECTORS

## Signal Connectors

Cable Assembly for Sensor and Display

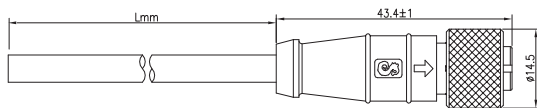
### Female Connector

Female Pin  
180° Molded with Cable Type

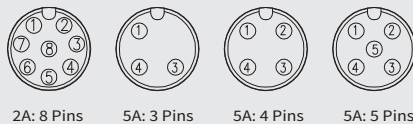


**2A : 8 pins**  
**5A : 3/ 4/ 5 pins**

P/N: 2MT3010-W082XX (2A); 2MT3010-W0X3XX (5A)



Cable OD : Max Ø7.0 mm  
Cable Length : Standard 1000mm ( L: customized )

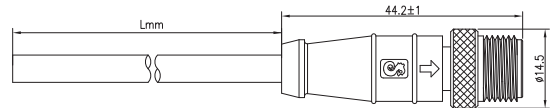


### Male Connector

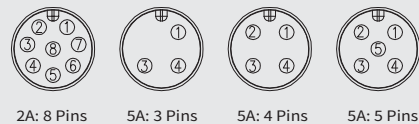
Male Pin  
180° Molded with Cable Type



P/N: 2MT3012-W082XX (2A); 2MT3012-W0X3XX (5A)



Cable OD : Max Ø7.0 mm  
Cable Length : Standard 1000mm ( L: customized )



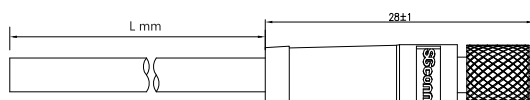
### Female Connector

Female Pin  
180° Molded with Cable Type



**1A : 4 pins**

P/N: 2MN3010-W04200



Cable OD : Max Ø3.5 mm  
Cable Length : Standard 1000mm ( L: customized )

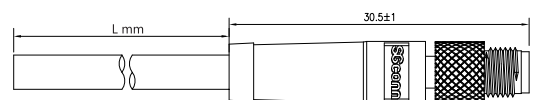


### Male Connector

Male Pin  
180° Molded with Cable Type



P/N: 2MN3012-W04200



Cable OD : Max Ø3.5 mm  
Cable Length : Standard 1000mm ( L: customized )



# LEV • eBike CONNECTORS



## *Accessory*



# WE CAN WATERPROOF



**ENERGY**  
Charging



**CONSUMER**  
Smart Appliances



**AUTOMOTIVE**  
Transportation



**NOTEBOOK**  
Computers



Energy Storage Connector

QC3.0/ PD3.0  
USB Charger



Circular Quick-Lock Connector

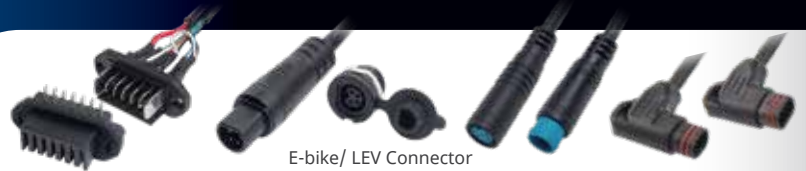
M5/ M8/ M12  
Connector



USB3.0A

USB Type-C

RJ45



E-bike/ LEV Connector



DC Power Jack/ Plug

Micro USB

USB Type-C

Cable  
Assembly





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