

Battery Pack Connectors & Terminals

FCI Basics offers customized battery or charger connectors and terminals with or without cables meeting general industry standards.

Reliable, Robust, Durable for a Perfect Connection.

- Cordless Power Tools
- E-Bike Battery Charger
- Smart Home Appliances
- E-Cigarette

CORDLESS POWER TOOLS

E-BIKES

CORDLESS & ROBOTIC VACUUM CLEANERS

Battery Pack Connectors & Terminals

Overview

- Range** » Customized Battery/charger connectors and terminals
 » Meeting general industry standards
- Features** » Reliable and robust interconnection
 » Durability
- Application** » Cordless Power Tools
 » Battery charging connection for E-bikes
 » Lawn mowers
 » Cordless/robotic vacuum cleaners

Features & Benefits

Meeting customer requirements



Features	Benefits
» Available in Various Pin Configuration and Connector sizes	» Wide range of application
» Current range up to 40 amps	» Covers the entire low and medium power
» Dual Beam contact design for Receptacle Contacts	» Reliable electrical connection
» Weather proof solutions	» Harsh environments
» High Number of Mating cycles	» Meets requirements of demanding applications

Battery Connector General Specification

Operating Voltage	» Up to 300V
Current	» Up to 40 Amps. (*See Note)
Operating temperature	» -40°C to 150°C
IP Sealing	» IP67, IP68 (*See Note)
Durability	» Up to 4000 Mating Cycles (*See Note)
Termination	» Wire Crimp termination, Flow Solder, Welding
Vibration	» Sinusoidal Freq-10-500Hz, 1oct./min displacement 0.75mm for 30 mins each in X, Y, Z axis (*See Note)
Shock	» Acceleration 50g, half sine wave pulses of 11msec in 12 shocks in each X, Y & Z axis (*See Note)
Insertion and withdrawal force	» Typical value per pin - Insertion- 10-20N max. Extraction- 7.5-10N max. (1.5 N Min) (*See Note)
Contact resistance	» Typical – 2.5 mohm (Max.) (*See Note)
Resistance at crimp	» 0.5 mohm (Max)- 12AWG
Damp/heat steady state	» Relative humidity-95% for 21 days at 40°C
Salt spray	» Temp : 35 degree Humidity:-95-98%RH 48 hrs. (*See Note)
Temperature life	» 105°C for 500 hrs. (*See Note)

Note : *Above stated specification are the common spec . However this can be upgraded / modified based on the Customer Requirement.

Key Application Segments



Vacuum Cleaner, Lawn Mower, Blower, Cordless Hair Dryer etc.

Example of Connectors

Battery Connector

Application Cordless Power Tools

Battery Connector

Application Cordless Electric Bicycle Battery Charger

Swappable Battery Station

Application Cordless Battery Connectors for Charging

Battery Pack Connectors

Application Cordless Lawn Mowers/Robotic Vacuum Cleaner / Radar Guns /Personal Care



Cordless Power Tool

Applications

The world of cordless tools is increasingly used both in the professional and in the DIY market.

In any of these you have a PCB where our products and our Knowledge can support your demand.



FCI Basics Connector Solutions



E-Bikes

Applications

Cable Harnesses

Signal

Battery

Motor

Splitters

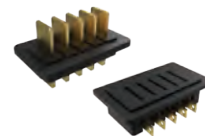
Main Cable



Battery Pack Scope



FCI Basics Connector Solutions



Cordless & Robotic Vacuum Cleaners

Applications



Swappable Battery Station

Applications





Battery Pack Connectors & Terminals

FCi Basics

FCi Basics provides a modular interconnection platform of high quality and innovative solutions with a fast and competitive service model that helps to increase the competitiveness of our customer's equipment.

Our solutions include Signal & Mid Power Wire-to-Board,
Board -to-Board, Input/Output, FFC/FPC and Backplane.

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