

EQ Battery Cable Crimping Guide

Pre-assembled battery power cables with connectors (*one positive and one negative*) are supplied with each EQ series battery. In most installations, we strongly recommend using the provided cables to connect the inverter to the battery master unit, ensuring optimal charging and discharging performance.

In situations where installers are required to crimp new battery connectors onsite, please refer to the attached connector crimping guide.

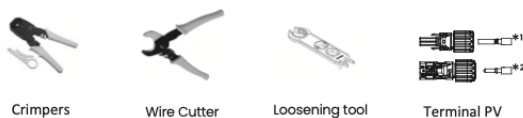
The EQ series battery has a maximum input current of **50 A**. If installers choose to supply their own cables, Fox ESS recommends using conductors with a cross-sectional area of at least **10 mm²**.

Besides, installers must also ensure full compliance with all relevant standards, including AS/NZS 3000, AS/NZS 3008, and AS/NZS 5139, for cable selection, wiring, protection device and overall installation practices.

EQ Series

1. Tools

The following tools and components will be required to perform the crimping.



Note: The loosening tool and terminal can be found in the Packing List.

- *1 Positive terminal
- *2 Negative terminal

2. Assembly Process

Note: Before performing any work, ensure that neither end is connected to a battery or power source.

Step 1

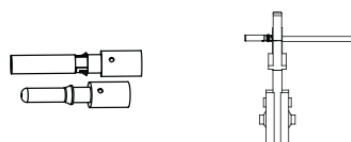
Strip the insulating layer of cable.

Wire Diameter(mm²)	Trip Length(mm)
10	L=9±0.5
16	L=9±0.5

Be careful not to cut the wire core beneath the insulation layer.

Step 2

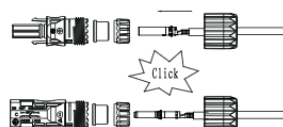
Rivet the terminals. Ensure the concentricity between the metal parts and the cables. After riveting, the tensile force between the cables and the metal parts must meet the requirements specified in the table below.



Cable Model	Crimping Method	Crimping Standard(mm)	Tensile Force(N)
PV cable 10 mm²	Hexagonal crimping	Upper limit 5.0, Lower limit 4.6	≥500
PV cable 16 mm²	Hexagonal crimping	Upper limit 5.3, Lower limit 5.0	≥1500
UL 10269 6AWG	Hexagonal crimping	Upper limit 5.3, Lower limit 5.0	≥1500

Step 3

Push the riveted pin into the insulator until they engage. Until hear a "click". Pull lightly on the lead to check that the metal part has engaged.



Step 4

Install the cable rear cover. First hand-tighten it, then use a loosening tool to tighten it to 2.6~2.9 N·m. When tightening the rear cover, ensure the cable is concentric with the cover. The connector rear cover is a removable type. The original loosening tool is suitable for on-site assembly, but not for factory batch assembly.

