



## Flexible Fast Charger (Mode 2 Charging Cable)



# Flexible Fast Charger (Mode 2 Charging Cable)

## Instructions for use

### Contents

|                                   |    |
|-----------------------------------|----|
| Information                       | 4  |
| Operating                         | 8  |
| Installation (Optional accessory) | 14 |
| Troubleshooting                   | 15 |
| Environmental specifications      | 16 |
| Disposal                          | 16 |
| Certification/Compliance          | 16 |

# Information

## Symbols used in this document



Denotes instructions that draw your attention to dangers.



Denotes instructions that draw your attention to special features.

◀ Denotes the end of the instruction or other text.

## Safety information

Read the information carefully and look at the device to familiarise yourself with it before you attempt to install, operate or service it. Use only for charging BMW, MINI or Rolls-Royce vehicles.



**RISK OF FIRE OR ELECTRIC SHOCK CAUTION:** Always ensure that the electrical power connection complies with the national statutory regulations. To reduce the risk of fire, use the device only with a sufficiently dimensioned circuit breaker. Increased ambient temperatures in the control cabinet must also be taken into consideration. In certain circumstances, it may require a reduction in the charging current to increase the system availability. ◀



## Safety information

- Children should be supervised when in the vicinity of Flexible Fast Charger when it is connected.
- Clean the charging device only with a dry cloth. Make sure it is disconnected from the power grid and vehicle. Do not use any cleaning supplies or flammable solvents, such as alcohol or benzene.
- Do not use Flexible Fast Charger with damaged outlet, cable or housing. Ensure that the contact area is not close to heat sources, dirt or water.
- Do not use the device at potentially explosive atmosphere areas.
- Do not disconnect mains adapter cable while it is in charging session.
- Do not put your fingers into the connector.
- Do not use Flexible Fast Charger with an extension cord, cable drum, multiple sockets, travel adapters, timers and any adapter of vehicle connector.
- Do not make any unauthorized changes or modifications to Flexible Fast Charger.
- Repair work to Flexible Fast Charger shall only be performed by the manufacturer.
- Do not remove any identifiers such as safety symbols, warning instructions, labels or cable markings.
- Do not use Flexible Fast Charger if mains adapter is not plugged into domestic outlet completely.
- Do not connect to any other loads, electric tools, etc.
- Do not drop Flexible Fast Charger and adapter cable.
- Do not drive over Flexible Fast Charger or adapter.
- Do not put device under water.
- Do not bend the cables.
- Do not use the below listed mains adapter cables with any other In-Cable-Control-Boxes.
- Do not run over flexible Fast Charger, adapter cables and plugs.
- For the safe transportation in the car, use the provided bag and fasten it at your anchoring refer to Safety Guide for safe placement.
- Must disconnect the mains adapter from domestic outlet while assembling.
- Never use defective, worn or dirty mains adapter cable or vehicle connector.
- Pull Flexible Fast Charger out of the domestic outlet by the adapter instead of cable . ◀

## Infrastructure information

- The device is designed for use with a selection of electrical outlets. These electrical outlets must comply with the relevant national regulations (connection and installation standards) whether they are already existing or installed separately.
- Ensure that the maximum permissible charging current suits the installed circuit breaker and the back-up fuse.
- Ensure that an already existing wall installation and outlet is designed for permanent electrical load. It is highly recommended that the device is connected to an electrical outlet with a separate residual-current-operated circuit breaker. No other circuits should be connected to this residual-current-operated circuit breaker.
- All electrical outlets must be installed, commissioned and serviced by appropriately trained, qualified and authorized electricians, with the knowledge of the relevant standards, who bear full responsibility for compliance with current standards and installation regulations.
- This device must have access to an earth connection. In the event of an error, the earth connection will reduce the danger of an electric shock. Please ensure that the electrical outlet can provide a sufficiently designed earth connection.

## Intended use

The intended use of the device in every case includes compliance with the ambient conditions for which this device was developed.

The instructions contained in manual must be followed to the letter. Otherwise sources of danger may be created or safety equipment may be rendered inoperable. In addition to the safety information, the safety and accident prevention regulations relating to the specific device must be followed.

## About this manual

This manual and functions described are valid for Mode 2 charging devices of the following type:

Flexible Fast Charger

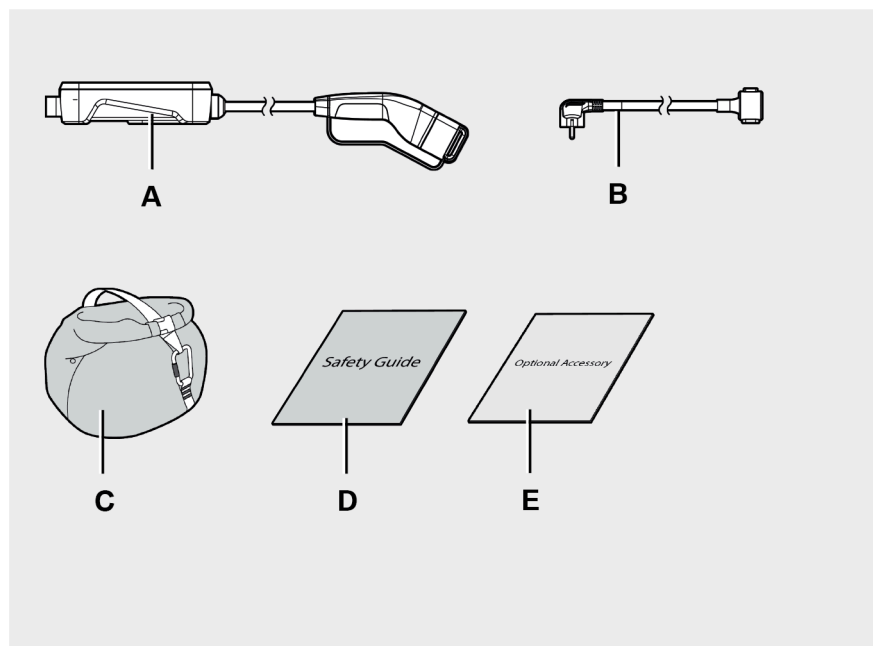
The illustrations and explanations contained in this manual refer to a typical version of device. Your device version may differ from this. This manual is aimed at the target groups, e.g. End customers (users of Flexible Fast Charger).

## Warranty

Service can provide more information in terms of the warranty. However, the following cases are not covered:

- Defects or damage caused by installation work not as specified in the installation instructions and the product not being used as specified in the manual.
- Costs and damage caused by repair work not carried out by a specialist electrician authorized by sales outlet or authorized service workshop.

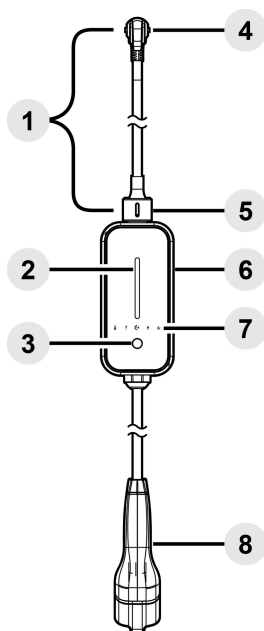
## Scope of delivery



- A Function box with vehicle connector
- B Mains adapter cable
- C Bag
- D Safety guide
- E Optional accessory

# Operating

## Overview



1. Mains adapter cable
2. Charging status bar
3. Function button
4. Mains adapter
5. Mains interface with adapter cap
6. Function box (ICCB: In-Cable-Control-Box)
7. LED indicator
8. Vehicle connector

## LED indicator



Temperature



Internal error



Current limitation



Mains voltage



Ground detection



## Function button



Flexible Fast Charger is not limited in delivery condition. Please check your electrical house installation ahead of usage and activate the power limitation (6A) via using the push button if needed (LED indicator "Current limitation" is illuminating orange during power limitation).

- Charging current can be switched between maximum charging current of mains adapter cable and 6A with a short press and release within 1~3 seconds.
- Restart Flexible Fast Charger with long press more than 8 seconds. The manual restart is to be regarded as a manual reset in the event of an error. For example, if LED indicator "Internal error" blink red, press the button to restart it. ◀

## Start charging

1. Connect the chosen mains adapter cable to Flexible Fast Charger.
2. Connect the mains adapter to a domestic outlet.
3. When the mains adapter is connected to domestic outlet, the Charging status bar will flash orange, then illuminate blue, indicating Flexible Fast Charger is ready for charging.
4. Connect the vehicle connector to EV (Electric vehicle) inlet, charging session will start automatically and charging led bar flashes blue.



- EV shall be parked close enough to the domestic outlet for connection.
- Ensure Flexible Fast Charger will not be stepped on to avoid damage. ◀

## Stop charging

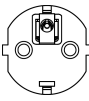
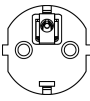
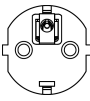
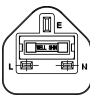
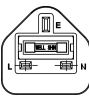
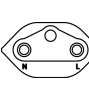
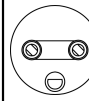
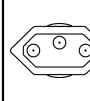
1. Stop charging session at the EV.
2. Disconnect the vehicle connector from the EV inlet.
3. Remove the mains adapter from the domestic outlet.







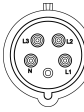
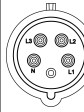
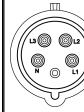
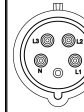
Disconnection abnormally or disconnection with load with domestic outlet, Flexible Fast Charger could be damaged or the situation could be dangerous to people. ◀

## Mains adapter cables for international available plugs

Flexible Fast Charger can be used with various kinds of below mains adapters to charge wherever you are and as fast as possible. Please check the additional adapters list available as optional accessory for further information.

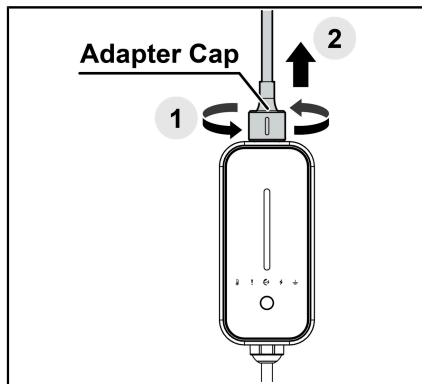
| Plug Type                       | Type E+F  | Type E+F  | Type E+F  | Type G  | Type G  | Type J  | Type K  | Type N   |
|---------------------------------|---|---|---|---|---|---|---|--|
|                                 |  |  |  |  |  |  |  |  |
| Max rating / Max charging power | 8A / 1.8kW  | 10A / 2.3kW   | 10A / 2.3kW   | 10A / 2.3kW   | 10A / 2.3kW   | 8A / 1.8kW  | 6A / 1.3kW  | 8A / 1.8kW   |
| TT/TN system                    | X   | X   |   | X   |   | X   | X   | X  |
| IT system*                      |   |   | X   |   | X   |   |   |  |

\*IT earthing system: No ground monitoring (e. g. Norway). IT mains adapter cables are labelled with a yellow marking.

| Plug Type                       | Type N  | TIS 166-2549  | CEE 16A (blue, 1 phase)   | CEE 16A (blue, 1 phase)   | CEE 16A (red, 3 phase)  | CEE 16A (red, 3 phase)  | CEE 32A (red, 3 phase)  | CEE 32A (red, 3 phase)  |
|---------------------------------|---|---|---|---|---|---|---|---|
|                                 |  |  |  |  |  |  |  |  |
| Max rating / Max charging power | 16A / 3.6kW   | 10A / 2.3kW   | 16A / 3.6kW   | 16A / 3.6kW   | 16A / 11kW  | 16A / 11kW  | 16A / 11kW  | 16A / 11kW  |
| TT/TN system                    | X   | X   | X   |   | X   |   | X   |   |
| IT system*                      |   |   |   | X   |   | X   |   | X   |

\*IT earthing system: No ground monitoring (e. g. Norway). IT mains adapter cables are labelled with a yellow marking.

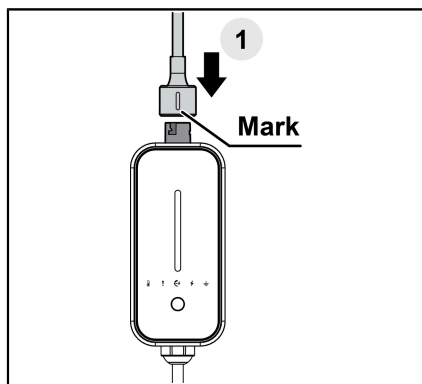
## Change mains adapter cable



Mains adapter cable can be changed to adapt the specific electrical environment.

Disassemble the mains adapter cable:











1. Rotate the mains adapter cable cap for loosening the plug.
2. Pull the mains adapter cable away.



Assemble the mains adapter cable:

1. Align the mark and insert the plug, the mains adapter cable cap will rotate and lock automatically.
2. Check if adapter is connected completely by pulling the adapter cable cap.

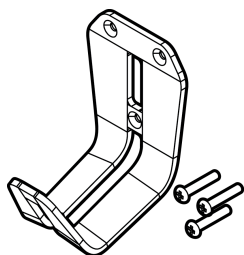
## Status LED information

| Symbol  | LED Indicator       | Status       | Description                                    |
|---|---------------------|--------------|--|
|   | All                 | All black    | Power off                                      |
|    | Charging status bar | Blink orange | Charger self-test                              |
|    | Charging status bar | Blue         | Charger standby/ready for charging             |
|    | Charging status bar | Blink blue   | Charging                                       |
|    | Temperature         | Red          | Over temperature protection                    |
|    | Internal error      | Red          | Control pilot error, output over current       |
|    | Internal error      | Blink red    | Self-test failed, relay fault                  |
|    | Current limitation  | Orange       | Limited current 6A                             |
|  | Mains voltage       | Red          | Input under/over voltage                       |
|  | Ground detection    | Red          | Ground disconnection for TT/TN earthing system |
|  | Ground detection    | Orange       | Ground detection off for IT earthing system*   |

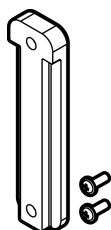
\*Illuminates orange constantly when using IT mains adapter cable.

## Installation (Optional accessory)

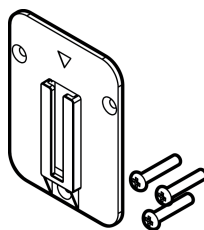
### Wall mounting overview



Cable holder and  
3 x wood screw

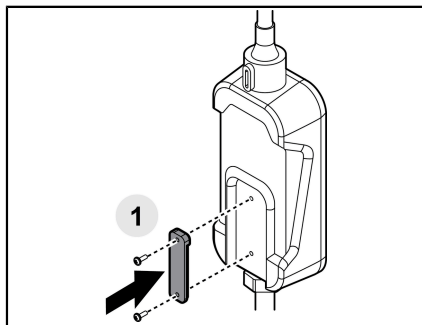


Bracket and  
2 x Hex screw

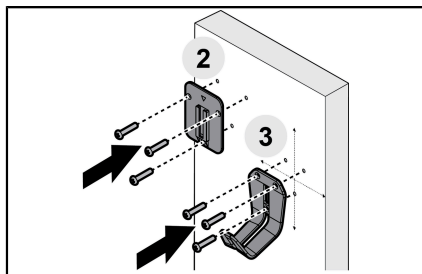


Wall kit and  
3 x wood screw

### Wall mounting installation



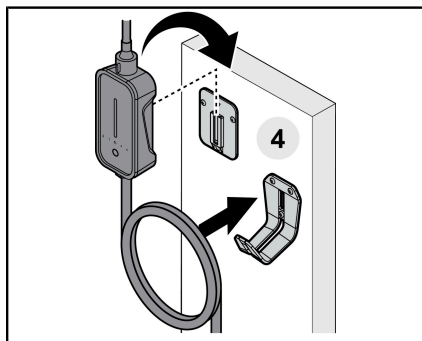
1. Mount the bracket on Flexible Fast Charger with Hex screws



2. Mount the wall kit on the wall\* with wood screws

3. Mount the cable holder to the wall\* with wood screws

\*Note: location depends on legal requirements and customer requirements where to place it especially.



4. Secure Flexible Fast Charger and the cable on the wall

## Troubleshooting

Contact local dealer or customer support if the product appears to be functioning abnormally or LED indicators display a fault status. DO NOT open the product or remove circuit protective devices or any other component.

| Situation                          | Action  |
|------------------------------------|---|
| Indicator does not light           | <ol style="list-style-type: none"> <li>1. Make sure the mains adapter is connected fully and the power input is within operating range of the unit.</li> <li>2. Replug and power Flexible Fast Charger again or try another domestic outlet</li> <li>3. If problem persists, contact your dealer or customer support.</li> </ol>  |
| Indicator flash red while charging | <ol style="list-style-type: none"> <li>1. Wait until the temporary error is resolved and the product returns to normal condition, typically less than 10 seconds.</li> <li>2. Replug Flexible Fast Charger again, press the function button to restart or try another domestic outlet.</li> <li>3. If the situation persists, contact your dealer or customer support.</li> </ol>                       |
| Indicator illuminates red          | <ol style="list-style-type: none"> <li>1. It might be a critical error (e.g. hardware fault).</li> <li>2. Unplug the vehicle connector.</li> <li>3. Wait for Flexible Fast Charger to recover from temporary error.</li> <li>4. Plug in the vehicle connector again or press the function button to restart.</li> <li>5. If the situation persists, contact your dealer or customer support.</li> </ol> |

# Environmental specifications

|                       |   |
|-----------------------|---|
| Frequency             | 50Hz  |
| Humidity              | 2% to 95% relative humidity, non-condensing |
| Altitude              | 3000m                                       |
| Operating temperature | -40 °C to + 50 °C                           |
| Storage temperature   | -40 °C to + 80 °C                           |
| IP Protection class   | IP67  |

# Disposal



Flexible Fast Charger is an electronic device and must be disposed of separately from normal house wastes. Please have it disposed in compliance with the waste disposal and recycle local regulation.

# Certification/Compliance



**EN17186:** The product complies to EN 17186:2019

**CE declaration:** The complete CE declaration of conformity for this product can be downloaded from the internet at <https://www.bmw.com/supportflexiblefastcharger>



