## **OPERATING INSTRUCTIONS**

### CABLE ASSEMBLIES/CHARGING CABLE MODE3 2.0

Type 2 to type 2, and further, in according to IEC 62196 Lapp Mobility GmbH, Stuttgart-Germany

For model: "M32-T2Pm-T2Cm-swsw-S-32A3P-xxxx" "M32-T2Pm-T2Cm-swsw-S-32A1P-xxxx"

"M32-T2Pm-T2Cm-swsw-S-20A3P-xxxx" "M32-T2Pm-T2Cm-swsw-S-20A1P-xxxx"

Explanation: M32-T2Pm-T2Cm-swsw-S-20A1P-xxxx Cable length xxxx in mm Maximum charging current and number of phases Cable design "S" = straight Colour top cover and bottom cover "sw" = black Type 2 plug, right side, assembled

Type 2 plug, left side, assembled Mode 3 2.0

### Mode 3 2.0

## INTENDED USE

The charging cable Mode3 (type2 to type2, IEC), and others, according to IEC 62196, is intended for charging electric and hybrid vehicles at suitable charging infrastructure with charging point marking, e.g. "C", according to EN 17186. The marking stands for type 2 plug with a voltage range  $\leq$  480 VAC. Any use other than the use permitted by Lapp Mobility GmbH is not permitted. This charging cable is only safe if the operating instructions are observed. Before using the charging cable, read these operating instructions and follow their instructions. Please keep the operating instructions. In addition to these operating instructions, also observe the documentation for your electric and hybrid vehicle and for your charging station. Failure to follow these instructions may result in damage to the Mode3 charging cable. Furthermore, this is associated with dangers such as electric shock, short circuit or fire.

# USE NOT IN ACCORDANCE WITH THE INTENDED PURPOSE

Improper use increases the risk of damage to property and health. Avoid the following actions at all costs:

- Modify/manipulate the lead set/charging cable
- Connecting the charging cable to unsuitable plugs
- Driving over the cable assemblies/charging cable
- Using defective charging cables

The operator, not the manufacturer, is responsible for all personal injury and property damage resulting from improper use. Lapp Mobility GmbH accepts no liability for damage resulting from improper use.

# SAFETY INSTRUCTIONS

- Children must not use the cable assemblies/charging cable!
- Keep animals away from the cable assemblies/charging cable.
- Only connect the cable assemblies/charging cable to the designated and labelled plugs and sockets.
- Do not use adapters, conversion adapters or cord extension cables.
- The use of the cable assemblies/charging cable is not permitted in explosive environments or in rooms containing flammable liquids, gases or dusts - risk of explosion and fire!
- Operate cable assemblies/charging cable only under the intended ambient or storage conditions.

### **TECHNICAL DATA**

Cable assemblies/charging cable Mode3 (type 2 to type 2, IEC)	Standard IEC 61851-1 Standard IEC 62196
Rated voltage (type 2 to type 2, IEC)	250 V AC 1ph 440 V AC 3ph
Nominal frequency	50 Hz/60 Hz
Rated current type 2, IEC	20A / 32A
Charging capacity type 2, IEC (20A) 1-phase "M32-T2Pm-T2Cm-swsw-S-20A1P-xxxx"	4.6 kW
Charging capacity type 2, IEC (20A) 3-phase "M32-T2Pm-T2Cm-swsw-S-20A3P-xxxx"	13.8 kW
Charging capacity type 2, IEC (32A) 1-phase "M32-T2Pm-T2Cm-swsw-S-32A1P-xxxx"	7.2 kW
Charging capacity type 2, IEC (32A) 3-phase "M32-T2Pm-T2Cm-swsw-S-32A3P-xxxx"	22 KW
IP Protection type 2, IEC	IP55 (plugged)
Ambient temperature	-35°C+50°C
Storage temperature	-5°C+50°C
Humidity	5 – 95% (non condensing)

# OPERATION

### MARNING

### Damaged cable assemblies/charging cable - danger to life due to electric shock!

Handling a damaged lead set/charging cable can result in death or serious injury.

- Check the charging cable for damage before each use. Replace damaged lead sets/charging cables with a new one.
- Do not use adapters or extensions in connection with the cable assemblies /charging cable.

### Start charging process

When the cable assemblies/charging cable is connected to the charging station and the electric vehicle, the charging process can be started.

Please also refer to the operating instructions for your electric and hybrid vehicle and for your charging station.

#### **End loading process**

After using the cable assemblies/charging cable, replace the protective cap fitted at the factory. Wind up the cable set/charging cable without bending it and stow it in the designated place in the vehicle. Temporarily storing the Mode3 2.0 charging cable in the luggage compartment is unproblematic up to a temperature of 65 °C.

## CLEANING

### ⚠ WARNING

### Only clean the charging cable when it is unplugged!

### ⚠ WARNING

#### Touching live components - danger to life from electric shock!

Touching live components can lead to death or serious injury.

- Only clean the cable assemblies/charging cable when it is unplugged-
- Make sure that no water can get to contact parts.

### ▲ ATTENTION

#### Material damage due to incorrect cleaning

Incorrect cleaning can lead to material damage to the cable set/charging cable.

- Make sure that no water can get to contact parts.
- Do not use compressed air or high-pressure cleaners.
- Wipe the cable set/charging cable with a dry cloth only, without adding any cleaning agents.

#### Dry cleaning

Use only a dry cloth for cleaning, wipe the lead set/ charging cable with it.

# DISPOSAL

The cable assemblies/charging cable must not be disposed of with normal household waste. Use a collection point for recycling old electrical and electronic equipment. For this purpose, contact your dealer or directly your responsible waste disposal company.

# STORAGE

- During normal use, carry the cable assemblies / charging cable in a place provided for this purpose in the vehicle.
- After use, replace the protective cap fitted at the factory.
- Wind up the cable harness/charging cable without bending it and stow it in the designated place in the vehicle.
- If the cable assemblies/charging cable is not required for a longer period of time or is to be stored, it is essential to clean it before storage and if it becomes dirty, in this case pack the cable set/charging cable in the original packaging and store it in a clean, dry place.
- Observe the specifications/information under "Technical data".



Please also note our instructions on the product

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