

# Cable Solutions for Charging Stations

## BETAtherm<sup>®</sup> 145 Single-Core Wires for the Future of E-Mobility



E-mobility is the future, and more and more people are switching to electric drives. As the public charging infrastructure expands, the demands are also increasing – especially at fast-charging stations. Higher power flows, rising temperatures, and more intensive use place significant strain on the infrastructure.

### **Safety for your charging infrastructure**

To ensure reliable protection of charging Systems against overload and fire hazards, halogen-free, short-circuit-resistant wiring is essential. Our robust, electron-beam cross-linked cables offer excellent fire protection, high temperature resistance, and exceptional pressure resistance in short-circuit conditions. Their long service life also makes an important contribution to sustainability.

### **Swiss quality**

With our proven Swiss quality and extensive manufacturing depth, we also develop customized solutions. Our **BETAtherm<sup>®</sup>** wires are engineered for safe operation in charging stations, switchgear, distribution systems, and industrial machinery. They deliver excellent insulation performance, high reliability, and added safety margins.

## Advantages

- Very high temperature-resistance
- Operating temperature: -55 °C to +145 °C
- Sustainable due to extremely long service life (220,000 h at 90 °C, 5,000 h at 145 °C)
- Superior fire safety properties
- Short-circuit-proof (heat pressure-resistant)
- Electron-beam cross-linked
- Halogen-free
- Flame class according to BauPV / CPR
- Multiple certifications (UL 3271/3820, UL/cUL CSA, UL/cUL 3289, DNV, BV, LR, VDE)

## Studer Cables – your partner for tailored solutions

Rely on Swiss quality, extensive in-house manufacturing, and years of experience for perfectly matched cable solutions.

## Reliable quality for maximum safety

In our state-of-the-art production facilities, we continuously develop new polymer compounds with outstanding insulation properties that meet the highest demands in temperature resistance, fire behaviour, media resistance, and electrical performance.

## Rely on Studer Cables – for future-proof, sustainable, and safe wiring solutions in e-mobility.



## Single-core

	Nominal voltage	Temperature range	Cross sections	Certifications
<b>BETA</b> therm® 145	600 / 1000 V	-55 °C to +145 °C	0.25 mm <sup>2</sup> to 300 mm <sup>2</sup>	VDE, DNV/GL, Lloyd's Register, BUREAU VERITAS, CPR

## Single-core with UL certification

	Nominal voltage	Temperature range	Cross sections	Certifications
<b>BETA</b> therm® 145 UL/CSA 3266	300 V	-55 °C to +145 °C	AWG24 to AWG12	UL, CSA
<b>BETA</b> therm® 145 UL/CSA/cUL/ 3271/3820	1000 V	-55 °C to +145 °C	0.25 mm <sup>2</sup> to 240 mm <sup>2</sup>	UL, CSA, cUL



Further information can be found in our data sheets on our website: <https://studercables.com/en/products/>

In addition to first-class products, Studer Cables offers comprehensive advice, precise calculations and other services. If you have any questions, please do not hesitate to contact us personally.

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