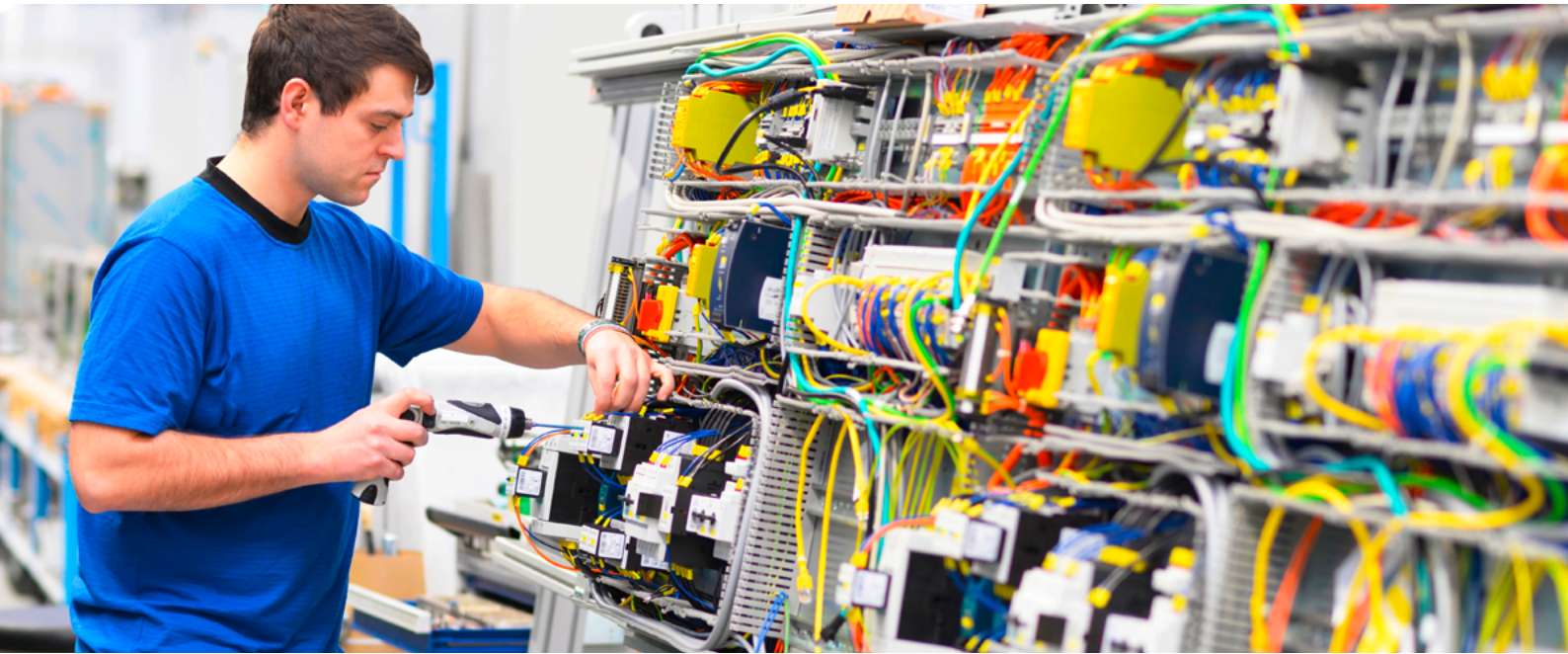


# Cable Solutions for Apparatus Engineering

## BETAtherm<sup>®</sup> and BETAflam<sup>®</sup> Energy and Control Cables



The safety of technical systems is becoming increasingly important, especially when it comes to fire protection. We meet the stricter legal requirements in the area of fire protection by using cross-linked insulating materials that ensure operational safety even in the event of a short circuit. Our **BETAtherm<sup>®</sup>** single-core and **BETAflam<sup>®</sup>** cables have been especially developed to meet these requirements.

### Fire protection for humans and machine

In order to prevent fires caused by overloading or high temperatures, halogen-free cables with short-circuit protection are essential. In the event of fire, non-halogen-free cables (such as PVC) can release dangerous dioxins and furans. Our products not only protect people and machines, but also contribute to sustainability with their long service life. Our electron-beam cross-linked, halogen-free core cables offer:

- Improved behavior in the event of fire
- Increased temperature resistance
- Resistant to UV radiation, oil and fuels thanks to insulation made from our specially developed compound

### Innovative solutions for your applications

You can rely on our expertise and experience in the manufacturing of cables for:

- Internal wiring
- Electrical machines (thermal class B)
- Switchgear and distribution boards in apparatus, machine and plant engineering

Thanks to a very high level of vertical integration and proven Swiss quality, we can respond to individual customer requirements. Studer Cables stands for customer-specific cable solutions and innovative products that are characterized by reliability and safety.

## Advantages

- Very high temperature resistance
- Operating temperature -55 °C to +145 °C
- Sustainable due to very long service life (220,000 h at 90 °C, 5,000 h at 145 °C)
- Highest fire protection properties
- Short-circuit proof (resistant to thermal pressure)
- Electron beam cross-linked
- Halogen-free
- Sustainable
- Fire class BauPV / CPR
- Various approvals (UL 3271/3820, UL/cUL CSA, DNV, BV, LR, VDE)

## Sustainability and certified quality

Our products are tested in accordance with the Construction Products Ordinance (BauPV) and meet the highest safety requirements for buildings. Use our cables for safe, future-proof and sustainable wiring in your plant construction.

## Research, development and consulting

We rely on state-of-the-art production facilities and work continuously in our laboratories on the development of innovative polymer plastics. The result:

- Excellent insulating properties
- Good conductivity with temperature fluctuations
- Longer service life
- Easy handling
- Additional security features

## Single-core

Other cross-sections on request

	Nominal voltage	Temperature range	Cross sections	Certifications
<b>BETAtherm</b> ® 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

## Multi-core cables (and shielded cables)

Other cross-sections and number of cores on request

	Nominal voltage	Temperature range	Cross sections	Certifications
<b>BETAflam</b> ® 145 flex	600 / 1000 V	-55 °C to +145 °C	2 × 0.5 mm <sup>2</sup> to 5 × 95 mm <sup>2</sup>	DNV/GL, Lloyd's Register, BUREAU VERITAS, CPR
<b>BETAflam</b> ® 145 C-flex	600 / 1000 V	-55 °C to +145 °C	2 × 0.5 mm <sup>2</sup> to 5 × 35 mm <sup>2</sup>	DNV/GL, Lloyd's Register, BUREAU VERITAS, CPR

## Single-core and multi-core cables with UL certification

Other cross-sections and number of cores on request

	Nominal voltage	Temperature range	Cross sections	Certifications
<b>BETAtherm</b> ® 145 UL/CSA 3266	300 V	-55 °C to +145 °C	AWG24 to AWG12	UL, CSA
<b>BETAtherm</b> ® 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
<b>BETAflam</b> ® 145 flex UL/cUL AWM 4486	1000 V	-55 °C to +145 °C	2 × 0.5 mm <sup>2</sup> to 5 × 95 mm <sup>2</sup>	UL, cUL
<b>BETAflam</b> ® 145 C-flex UL/cUL AWM 4486	1000 V	-55 °C to +145 °C	2 × 0.5 mm <sup>2</sup> to 5 × 35 mm <sup>2</sup>	UL, 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.