

Connecting
Globally

Data Center Solutions



Powering the Digital Future

In today's data-driven world, data centers serve as the digital heart of industries, governments, and everyday life

They power cloud computing, enable artificial intelligence, support smart cities, and store the massive volumes of data that flow across the globe every second. As the demand for instantaneous access and uninterrupted services grows, so does the need for reliable, safe, and high-performance infrastructure.

Data centers are expected to operate seamlessly under immense pressure, often running non-stop and managing critical applications. Downtime is not just a technical issue - it can have severe financial and reputational consequences. That is why every component of a data center, including the cabling systems, must be engineered with precision, performance, and foresight.

With over three decades of engineering and manufacturing experience, TFKable delivers solutions that go beyond standard expectations. The focus is not only on technical capability, but on future-readiness, environmental responsibility, and adaptability to rapidly changing technological environments. Our comprehensive range of cable technologies supports this mission by addressing every major aspect of a modern data center's operation: from power distribution and communication infrastructure to fire safety and energy efficiency.

Building with Purpose: Engineering for Operational Excellence

Designing a cabling system for a data center is about more than just selecting products. It involves understanding the energy architecture, anticipating peak loads, ensuring thermal efficiency, and planning for future expansion. TFKable's solutions are developed with the needs of both hyperscale and edge facilities in mind, ensuring that installations remain flexible, scalable, and secure.

Reliability lies at the core of our designs. Whether it's power distribution cables capable of maintaining stable current under harsh conditions, or data transmission lines that guarantee high-speed, interference-free connectivity, each product is built to perform. Specific materials, insulation types, and shielding techniques are selected based on rigorous testing and real-world application scenarios. This attention to detail minimizes the risk of outages, reduces maintenance costs, and extends service life.

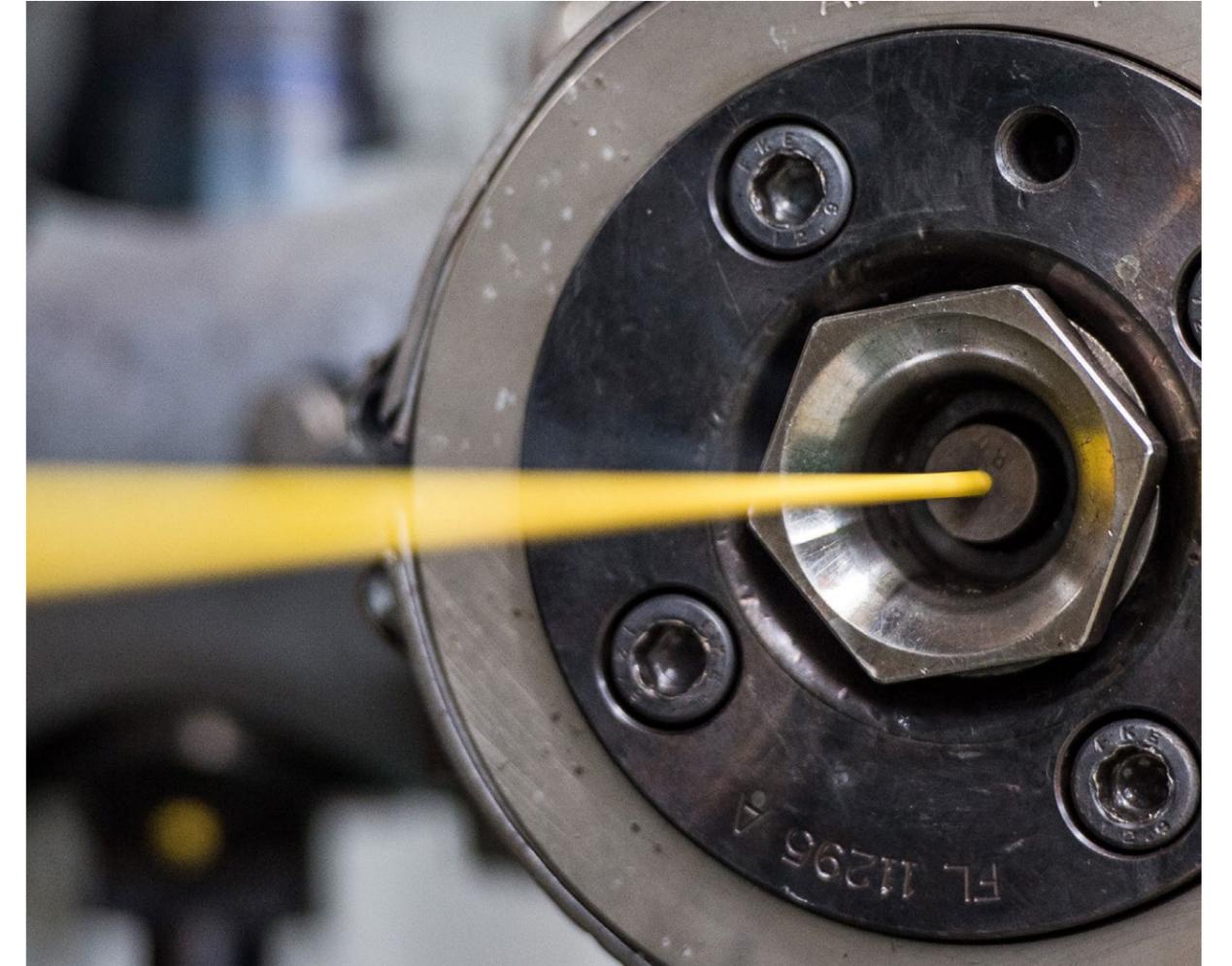


Navigating Challenges with Smart Cabling Design

Modern data centers face a unique set of challenges. Physical space is often limited, yet the need for power and bandwidth continues to grow. Thermal load management is a constant concern, especially in densely packed environments. Regulatory standards related to fire safety, emissions, and electromagnetic interference must be met without compromise.

TFKable addresses these issues through advanced material science and product engineering.

Cables are designed to be as compact and flexible as possible, allowing for high-density installation and efficient airflow. Fire-resistant and halogen-free constructions enhance safety, while low-smoke, low-toxicity designs support compliance with international standards. Modular configurations and clearly marked identification features simplify installation and enable rapid reconfiguration when scaling up.



Certifications & Compliance

Integrated management systems

At TFKable, certifications and regulatory compliance form the foundation of how our power cables are designed, manufactured, and approved for use in demanding environments such as Data Centers and critical infrastructure. Our approach is fully aligned with international standards and market-specific regulations, ensuring both operational safety and long-term reliability.

At TFKable, certifications and regulatory compliance are fundamental to the way our power cables are designed, manufactured and delivered. We operate integrated management systems covering quality, environmental protection, and occupational health and safety, certified in accordance with **ISO 9001**, **ISO 14001**, and **ISO 45001**. These systems ensure consistent production processes, full traceability, and continuous improvement across all manufacturing locations.

Compliance with key market regulations

TFKable power cables are developed in line with applicable European and international regulations, with particular emphasis on requirements relevant to Data Centers and critical infrastructure. Our products comply with the **Construction Products Regulation**

(CPR), addressing fire performance and safety in building installations. In addition, compliance with **RoHS** ensures controlled use of substances and responsible material selection throughout the product lifecycle.

CPR and fire safety performance

Compliance with the Construction Products Regulation (CPR) is a key requirement for power cables used in Data Centers and critical building installations. TFKable offers fire safety and fire-resistant electric cables designed to support system integrity and operational safety in the event of fire conditions.

These cables are engineered to **maintain circuit integrity during fire exposure**, ensuring a continued power supply to critical systems where safety and functionality are essential. They are **recommended for use in fire protection and safety systems**, supporting evacuation, alarm, control, and emergency power functions.

In addition, TFKable fire safety cables are designed with **low smoke and low corrosive gas emissions**, contributing to improved visibility and reduced risk for people and equipment in the event of a fire. Their construction also enables **easy processing and assembly**, supporting efficient installation while maintaining high fire performance standards.



Testing and product validation

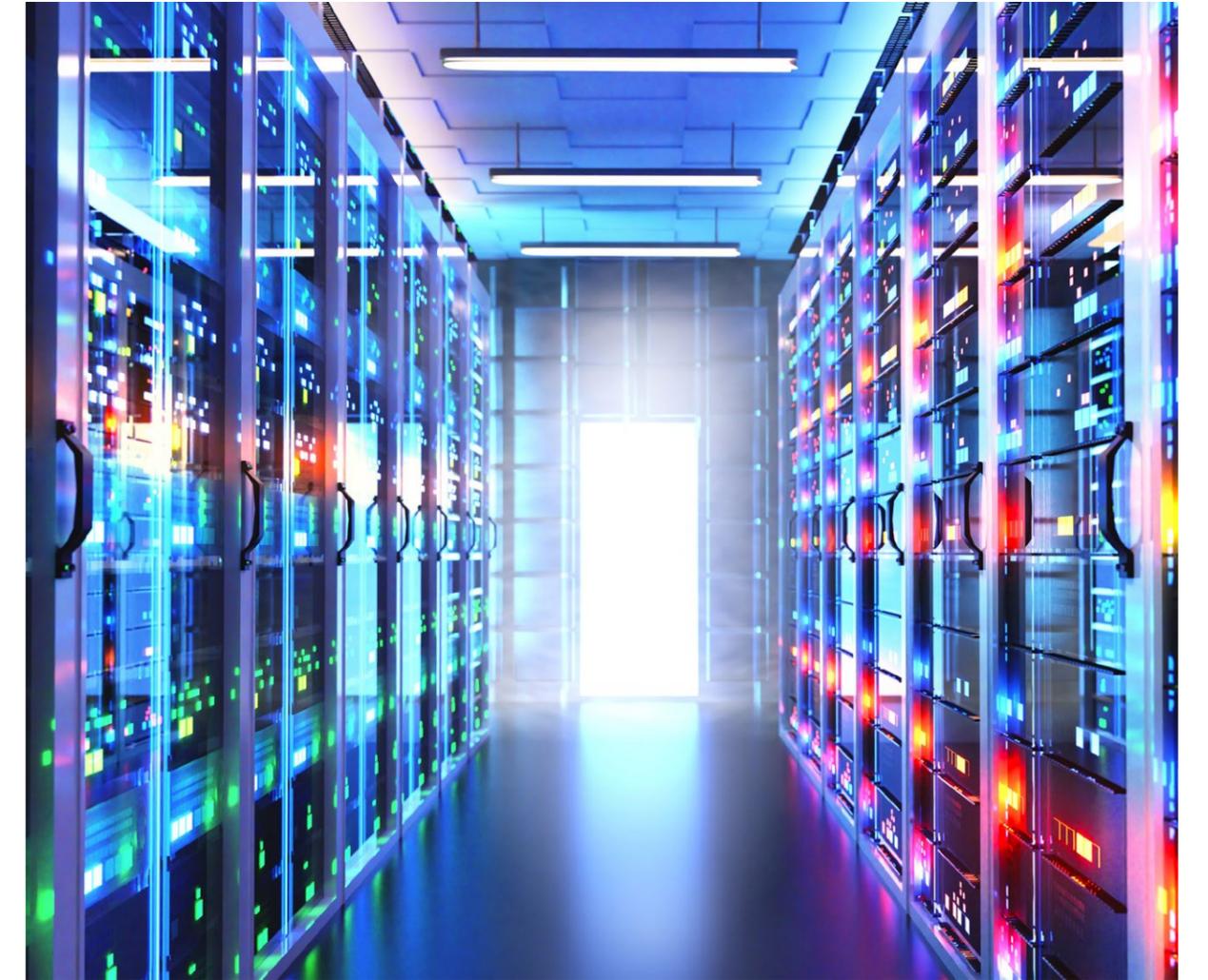
Before being placed on the market, all TFKable cables undergo extensive testing in accordance with recognised international and national standards, including **IEC, EN, BS, and DIN**. Testing programmes cover fire behaviour, flame propagation, smoke density, corrosive gas emission, electrical integrity, and mechanical performance. Verification is carried out both in TFKable's own laboratories and through cooperation with independent, accredited certification and testing bodies.

International certifications and approvals

Depending on the cable design and application, selected products may comply with or be certified to additional market-specific standards, including **UL, cUL, and CSA**, as well as **BASEC, LPCB, and VDE** approvals (subject to final verification for individual constructions). This approach supports the deployment of TFKable power cables across international projects and regulated markets.

Responsible supply chain and material control

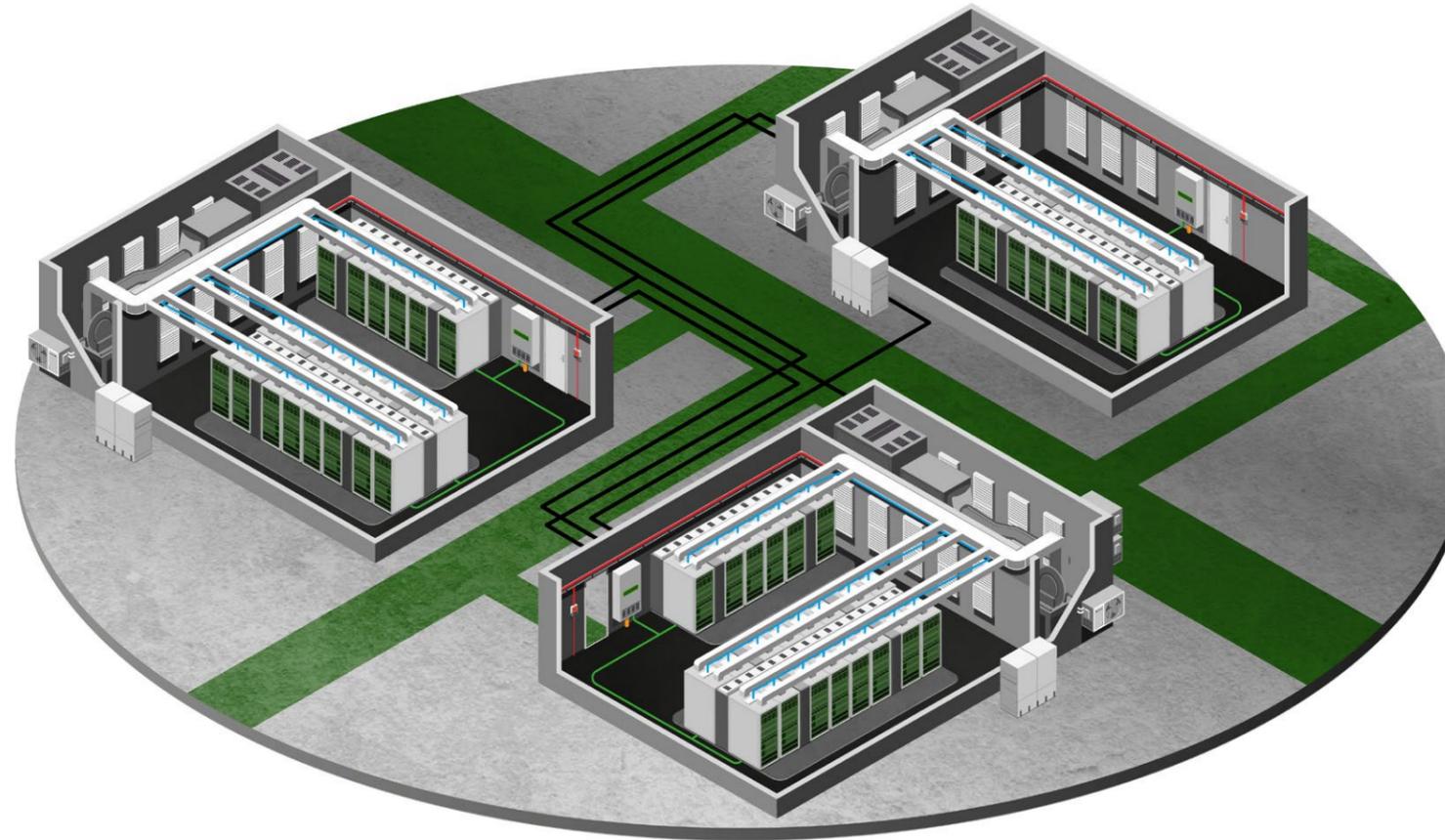
Compliance at TFKable extends beyond the finished product. We apply structured supplier qualification and audit processes, with a strong focus on environmental management systems, RoHS compliance, and material traceability. By combining certified management systems, rigorous testing, and responsible sourcing, TFKable delivers power cable solutions that meet the highest expectations for safety, quality, and regulatory conformity.



Mission Critical Applications



ENGINEERED SERVICES



- Power supply for cooling pumps
- Power supply for cooling units
- Humidity and temperature control system

Cooling System Power Cables



Multi-conductor Type W

- Telecommunication centers – power supply for telecommunication equipment at all levels
- Power supply for devices in cable distribution centers
- Telephone exchange power supply

Central Office Power Cables



DLO RHH/RHW2/2000V
RW90/RW90-TC 1000V

- Internal distribution – power distribution from main switchboards to subunits within infrastructure
- Transformer power supply systems
- Emergency power generation system
- Power supply for switchboards

Grey Space Power Cables



FLAMEBLOCKER N2XH 0.6/1(1.2)kV
B2ca/Dca

Fire Alarm & Safety Power Cables



FLAME-X 950 (N)HXH FE180/E90 0.6/1kV

- Fire detection system
- Alarm system
- Fire suppression system
- Emergency lighting and evacuation route signage

Medium & High (MV&HV) Power Cables



MV-105 5-35 kV

- Main power supply for data centers
- Primary distribution – power distribution between individual server halls
- Power supply between MV/LV transformers within data centers

Communication Cables



U/UTP CAT 6

- For data transmission up to 250 MHz
- Internal network infrastructure
- Network distribution points



Description of pictograms used in catalogue

CPR
Eca Construction Products Regulation class

CE The cable meets the requirements of the EU directive

RoHS
✓ Cable complies with requirements of RoHS directive

Oil
Resistance

INSIDE + OUTSIDE Universal cable

Water Cables can be used in rooms protected by fixed water-based fire extinguishing systems

U Circuit continuity FE180 acc. to DIN VDE 0472-814 (800 °C, 180 min.), IEC 60331-21

Smoke Cable meets the requirements of the density of smoke during combustion according to DIN EN 61034-2

Acid Tested on gases evolved during combustion of materials from cables acc. to DIN EN 50267-2-2, VDE 0482-267-2-2, IEC 60754-2: pH ≥ 4.3; conductivity ≤ 2.5 µS/mm

U E30-E90 Maintaining the function of the cable system E30 - E90 acc. to DIN 4102-12

III Positive result for vertical flame spread test acc. to IEC 50266-2-2, VDE 04882-266-2-2, PN-EN IEC 60332-3-22 -23 -24

I Positive result for vertical flame spread test acc. to IEC 60332-1-2

UV UV resistant jacket

Humidity Humidity resistant

FLEX Cable with flexible conductors

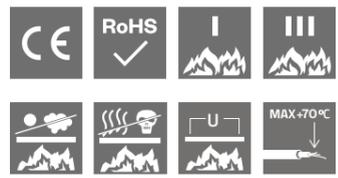
Ground Suitable for installation directly in the ground

MAX+90° Maximum conductor operating temperature

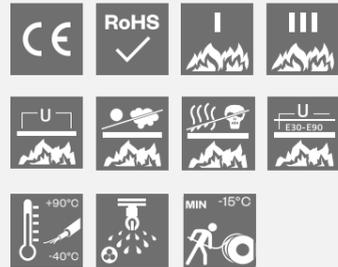
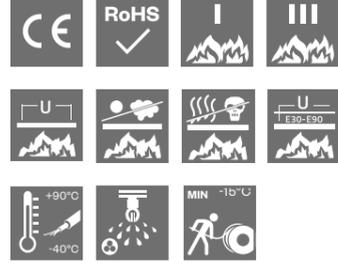
MIN -5°C Temperature of installation

+90°C / -20°C Operating temperature

DATA CENTER CABLES - DESCRIPTION AND FEATURES

Cable range	General construction		
Cable Name	Model	Description	Cable Properties & Specification
FLAME-X 950 SERIES 1 450/750V		Single core, non-sheathed fire resistant cable having low emission of smoke and corrosive gases when affected by fire. Specially design to withstand up to 3 hours during an event of fire, 30 minutes in fire and water conditions and 15 minutes in fire with mechanical shock at extreme temperatures up to 950°C. BASEC & LPCB certified.	 
FLAME-X 950 SERIES 2 300/500V		Fire resistant screened cables having low emission of smoke and corrosive gases when affected by fire. Specially design to withstand up to 3 hours during an event of fire, 30 minutes in fire and water conditions and 15 minutes in fire with mechanical shock at extreme temperatures up to 950°C. Enhanced with PH 120 fire resistance classification. BASEC & LPCB certified.	 
FLAME-X 950 SERIES 2e 300/500V		Fire resistant screened cables having low emission of smoke and corrosive gases when affected by fire. Specially design to withstand up to 3 hours during an event of fire, 120 minutes in fire and water conditions and 15 minutes in fire with mechanical shock at extreme temperatures up to 950°C. Enhanced with PH 120 fire resistance classification. BASEC & LPCB certified.	 

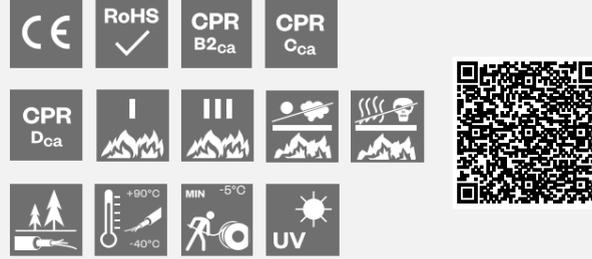
DATA CENTER CABLES - DESCRIPTION AND FEATURES

Cable range	General construction		
Cable Name	Model	Description	Cable Properties & Specification
FLAME-X 950 (N)HXH FE180/E90 0.6/1kV		Halogen-free low smoke fire resistant security power cables with excellent flame retardant and flame resistant properties. Cable's insulation can maintain full integrity during event of fire for over 180 minutes and full system integrity for min. 90 minutes. Design as security cable for installation everywhere, where high safety requirements have a special significance, e.g. in industrial complexes, power stations, public buildings, hotels, underground railway systems, hospitals. Can be installed near the fire sprinklers. Have VDE and CNBOP approval.	 
FLAME-X 950 (N)HXCH FE180/E90 0.6/1kV		Halogen-free low smoke fire resistant security power cables with copper concentric conductor, having excellent flame retardant and flame resistant properties. Cable's insulation can maintain full integrity during event of fire for over 180 minutes and full system integrity for min. 90 minutes. Design as security cable for installation everywhere, where high safety requirements have a special significance, e.g. in industrial complexes, power stations, public buildings, hotels, underground railway systems, hospitals. Can be installed near the fire sprinklers. Have VDE and CNBOP approval.	 
FLAMEBLOCKER N2XH 0.6/1(1.2)kV B2ca, Dca		XLPE insulated and halogen-free thermoplastic compound sheathed power and auxiliary control cables for the supply of electrical energy. Designed for fixed installations, in the areas where fire and emissions of smoke and toxic fumes create a potential threat to human life or sensitive equipment. CPR reaction to fire B2ca or Dca depending on the construction. Flame retardant acc. to IEC 60332-1-2 and IEC 60332-3-24. Suitable for installation indoors and in cable ducts in buildings or industrial plants with a high density of people or valuable items. Not suitable for use in water. With VDE approval.	 

DATA CENTER CABLES - DESCRIPTION AND FEATURES

Cable range

General construction

Cable Name	Model	Description	Cable Properties & Specification
FLAMEBLOCKER N2XCH 0.6/1kV B2ca, Cca, Dca		XLPE insulated and halogen-free thermoplastic compound sheathed power and auxiliary control cables for the supply of electrical energy. The concentric conductor with a traverse spiral of copper serves as a screen and can be used as PE or PEN conductor. Designed for fixed installations, in the areas where fire and emissions of smoke and toxic fumes create a potential threat to human life or sensitive equipment. CPR reaction to fire B2ca, Cca or Dca depending on the construction. Flame retardant acc. to IEC 60332-1-2 and IEC 60332-3-24. Suitable for installation indoors and in cable ducts in buildings or industrial plants with a high density of people or valuable items. Not suitable for use in water. With VDE approval.	 

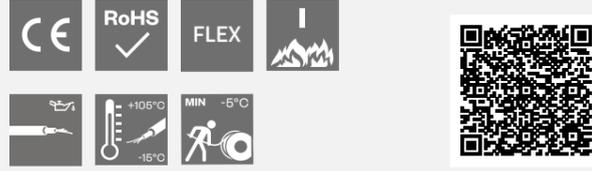
FLAMEBLOCKER FXQJ/ XCMK-HF 0.6/1kV Cca		XLPE insulated and halogen-free thermoplastic compound sheathed power cables for the supply of electrical energy. Special for installations where fire and emissions of smoke and toxic fumes create a potential threat. The concentric conductor is allowed to use as neutral, protective or earthed conductor. Simultaneously, this also is permitted to apply as a screen for example earth-connected protection against contact.	 
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FLAMEBLOCKER NHXMH 300/500V B2ca		XLPE insulated and halogen-free thermoplastic compound sheathed installation cables for industrial complexes, public buildings, hotels, airports, hospitals or industrial plants with high concentration of people and/or property especially where fire and emissions of smoke and toxic fumes create a potential threat. CPR reaction to fire B2ca. Flame retardant acc. to IEC 60332-1-2 and IEC 60332-3-24 Usable in dry, damp and wet environments in the open and concealed, on, in and under plastered surfaces as well as in masonry and in concrete, not suitable for imbedding in vibrated or compressed concrete. Not suitable for use in water. With VDE approval.	 
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DATA CENTER CABLES - DESCRIPTION AND FEATURES

Cable range

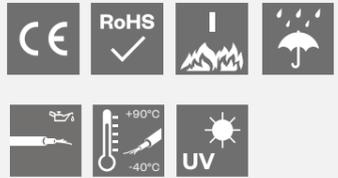
General construction

Cable Name	Model	Description	Cable Properties & Specification
TRI-RATED 600V		Single core non-sheathed, flexible cables with thermoplastic, flame retardant, oil resistant PVC insulation. Produced acc. to BS 6321, UL 758 and CSA C22.2 127-18 standards. Cables can operate at temperature up to 105 °C. Suitable for switchgear and panel wiring. UL, CSA, BASEC approved.	 

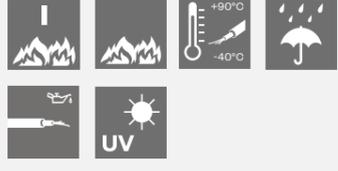
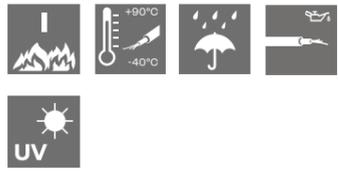
FLAMEBLOCKER H07Z-R 450/750V Cca		Single core non-sheathed cables with low emission of smoke and corrosive gases. Protected against UV radiation. Designed for installation in surface mounted or embedded conduits or similar closed systems. Suitable for fixed protected installation in, or on, lighting and control gear for voltages up to 1000 V a.c. or, up to 750V d.c. to earth.	 
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FLAMEBLOCKER RZ1-K 0.6/1kV Dca		Highly flexible, Low Smoke Zero Halogen (LSOH) power cable with standard flame retardant properties and increased CPR Dca class reaction to fire. Designed for supply of electrical energy in urban grids, special for installations where fire and emission of smoke and toxic fumes create potential threat. The high flexibility of the cable and compact dimensions allow for a much easier installation process, especially in places where frequent changes in the direction of cable installation are required.	 
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DATA CENTER CABLES - DESCRIPTION AND FEATURES

Cable Name	Model	Description	Cable Properties & Specification
H07ZZ-F 450/750V		Flexible, heat resistant cables, insulated and sheathed with cross-linked halogen-free materials with low smoke and corrosive gases emission. Suitable for usage in mobile power units, stage lighting, UPS connection and audio visual equipment both for indoor and temporary outdoors usage, particularly for situations in which low emission of smoke and corrosive gases is required in the case of burning.	 
H07RN-F 450/750V Eca		Flexible rubber insulated and sheathed heavy-duty power cable specified for industrial applications able to withstand chemical, mechanical and thermal stresses. Suitable for applications such as handling equipment, mobile power supplies, worksites, stage and audio visual equipment, port areas and dam. May be used in dry and wet environment. CPR Eca class reaction to fire. BBJ-HAR approved.	 
SOOW/H07RN-F 750V		Harmonized, heavy-duty flexible cables designed to withstand medium mechanical stress in both dry and wet environments. They offer excellent flexibility. Easy to handle and install. Suitable for both indoor and outdoor use. Built to last in challenging conditions, resistant to mechanical damage, oils, chemicals, moisture, flame and other external factors. Recommended for use in boilers, heating plates, hand lamps, wiring of cranes and hoists and other equipment in industrial settings. SOOW UL/CSA approved H07RN BBJ-HAR approved	 

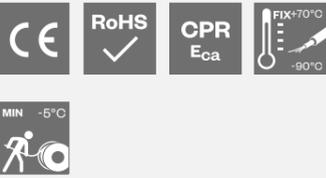
DATA CENTER CABLES - DESCRIPTION AND FEATURES

Cable Name	Model	Description	Cable Properties & Specification
Multi-conductor Type W 2000V		Flexible portable power cables designed for hard industrial and light-to-medium mining applications, providing reliable service. Also suitable for temporary power supply. Ideal for use cable for battery, motor and generator etc.. Construction and materials used in this type of cables provide flexibility and resistance for factors present in harsh industrial environment (chemical and physical) thus ensure long-term performance and reliability. UL, CSA, MSHA approved.	 
DLO RHH/RHW2/2000V RW90/RW90-TC 1000V		Extra elastic portable power cable designed for uses requiring high flexibility. May be used for portable or fixed installations. Specially designed fine-stranded tinned copper conductors improve overall cable flexibility. Such construction enable small bending radii important for installation in machinery. Suitable for motors generators, batteries, jumper and other industrial applications. May be used in dry and wet environment. CSA Type RW90 approved UL Type RHW-2 approved DLO MSHA approved	 
MV-105 5-35 kV		Medium voltage single core, shielded, EPR insulated power cable designed for installation in wide range of industrial environments where high resistance for chemical and physical factors is required. Provides safe and reliable power supply in wide range of temperatures. Suitable for use in dry and wet environment. UL approved.	 

DATA CENTER CABLES - DESCRIPTION AND FEATURES

Cable range

General construction

Cable Name	Model	Description	Cable Properties & Specification
2XSH 8.7/15kV Cca		Halogen-free cables with cross-linked polyethylene insulation and thermoplastic LSOH sheath with improved fire resistance characteristics. Designed for permanent installation in power plants and other facilities where fire safety is key, in pipes, ducts and on cable ladders. The cables meet the requirements of the CPR Directive for class Cca, are characterized by low smoke emission and corrosiveness of gases. In other aspects related to power transmission, they meet the requirements of standard power medium voltage cables, taking into account the required harmonized tests.	 
N2XSH 20kV Cca		Halogen-free cables with cross-linked polyethylene insulation and thermoplastic polyolefin sheath with improved fire resistance characteristics. Designed for permanent installation in power plants and other facilities where fire safety is key, in pipes, ducts and on cable ladders. The cables meet the requirements of the CPR Directive for class Cca, are characterized by low smoke emission and corrosiveness of gases. In other aspects related to power transmission, they meet the requirements of standard power medium voltage cables, taking into account the required harmonized tests. Also available with an aluminum core (N)A2XSH.	 
U/UTP CAT 6		PVC or LSOH insulated with single soft copper wire with uniform circular cross - section, with homogenous quality and free from defects. With standard flame retardant properties - CPR ECA class reaction to fire. For digital signals transmission with binary flowability, signal frequency spectrum up to 250 MHz. U/UTP cable is intended for use in computer data processing systems, measurement systems, automation and control systems. For high frequency analogue signals transmission in automation and industrial TV network. Cable is intended to be used for horizontal and vertical installations within data communication networks.	 

GLOBAL ENGAGEMENT: driving technological excellence in the cable industry

Sustainability as Standard

Sustainability is no longer optional - it is a business imperative. TFKable integrates sustainable practices at every stage of the product lifecycle. From the use of recyclable materials and energy-efficient production techniques to optimized packaging and reduced logistics emissions, environmental stewardship is woven into our processes. Products are designed for long service life, which reduces waste and operational disruption. Material choices aim to eliminate harmful substances such as halogens and MCCPs, and we continue to innovate toward carbon-neutral manufacturing goals. These efforts contribute to the broader objectives of green data centers and support clients who are committed to lowering their environmental impact.

We participate in meetings of international cable industry organisations (Europacable, PEMA, BCA, ICF, PSEW, CIGRE, PIGE, EDA, BSI, CMPS, LEA, ACI, PPC, PTMEW, Cooper Mark). This means we have access to knowledge about new industry trends, as well as market needs and expectations. Based on this, we deliver technologically advanced products of the highest quality.



We are a part of...



We cooperate with...





TELE-FONIKA Kable SA
Hipolita Cegielskiego 1
32-400 Mysłenice, Poland
T. +48 12 785 505 330
datacenter@tfkable.com

tele-fonika.com

**TFKable Group produces, among others,
cables for the energy sector in the
following product groups:**

low voltage power cables up to 1kV, medium voltage power cables from 6/10kV to 18/30kV, high voltage power cables from 36kV to 150kV, extra high voltage power cables from 220kV to 400kV, telecommunication copper and fiber optic cables; rubber insulated cables, including mining and crane cables; control cables for data transmission and security, as well as Inter-array cables (33kV & 66kV), Subsea Power Umbilicals, Steel Tube Umbilicals, rental and oil & gas services, i.e. submarine cables (including cables connecting wind towers and export cables), which are used in the construction and operation of offshore and onshore wind farms.