Bayka® since 1885

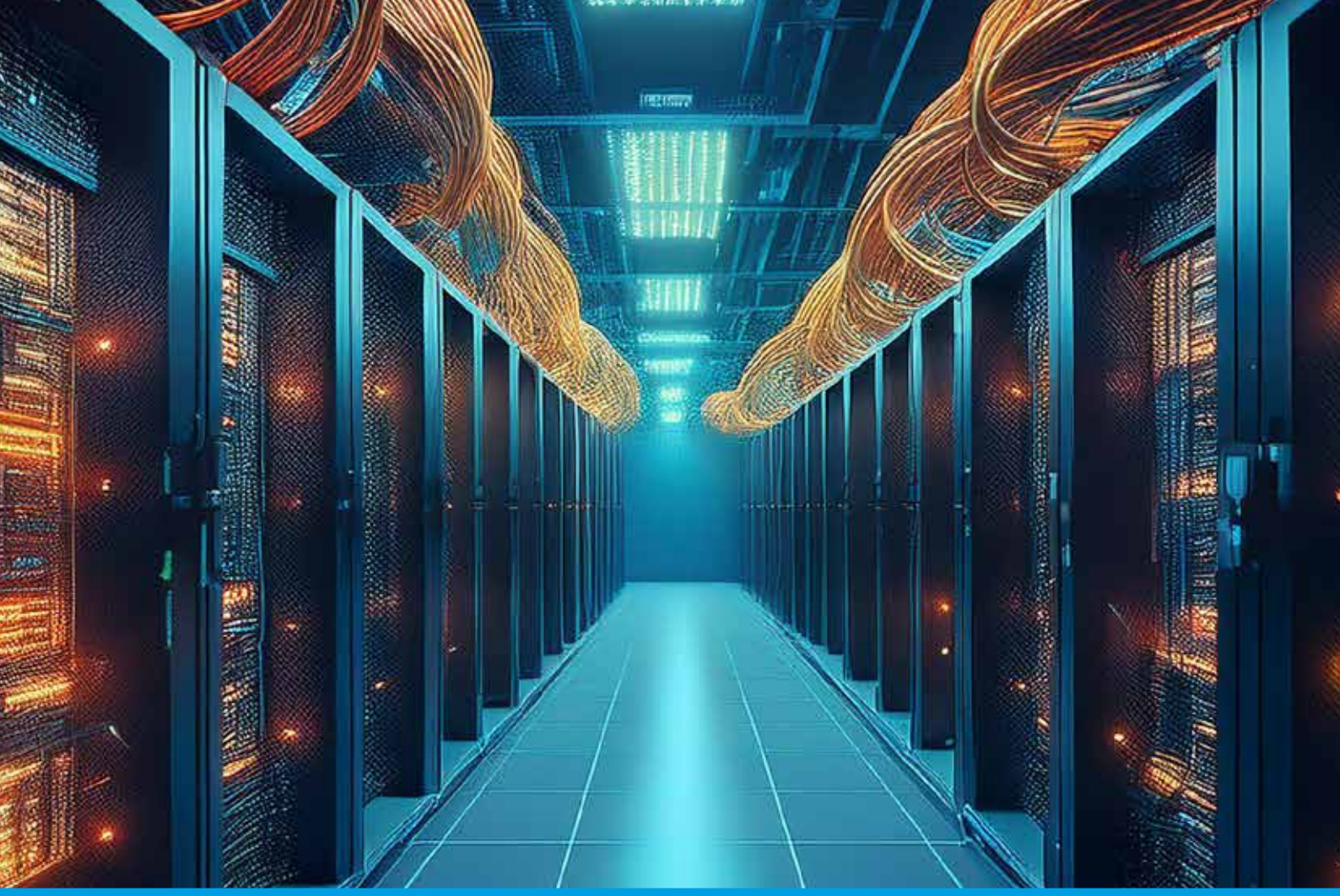
BAYERISCHE KABELWERKE AG


EXPERTISE IN CABLE TECHNOLOGY

# DATA CENTER INFRASTRUCTURE

# CONTENT





## WE CREATE INDIVIDUAL

# SOLUTIONS

As a development partner of leading national and international companies, we know the demands our customers place on cables. The synergies from our energy, telecommunications, railroad and signal cable divisions enable us to develop cables quickly and efficiently.

Cables are capital goods. They must be economical and durable. But cables are like many other things in life as there is not a generally applicable solution for every problem. Nevertheless, there is always a technology that meets each and every requirement individually. As a long-standing partner, we have developed numerous innovations for Deutsche Telekom AG, Deutsche Bahn AG, energy supply companies, the Federal Water and Shipping Administration and other customers. You too can benefit from our experience for your projects.

THIS IS BAYKA!

# TEAM SPIRIT, QUALITY AND PASSION SINCE 1885.

Cables and wires connect people, buildings and entire continents. They network machines and devices, they supply us with energy and take us from A to B. No wonder that they have been moving our company for more than a century.

At Bayka, tradition meets innovation. Thanks to lean hierarchies, unique material expertise and a highly modern testing laboratory, the best of both worlds flows into our products. As a supplier of universal cables with a wide range of applications and tailor-made solutions, Bayka has made a name for itself in future-oriented industries such as rail technology and public transport, power engineering, construction as well as mechanical and plant engineering.

## BAYERISCHE KABELWERKE AG

Universal cable factory / main location in Roth

**BAYKA PLUS**

Cable accessories
and equipment

**BAYKA BERLIN**

Specialized in the production
of power cables

**BERLINER GLASFASERWERKE**

Berliner Glsafaserwerke
(Berlin fiber optic plant)
Production site for FOC

**BAYKA COLOR**

Bayka Color
Production of plastic granules
and color concentrates

**Four companies, one team and more than a century of tradition in cable production – that's Bayka.**
We develop and manufacture power cables, high voltage cables, fl exible connecting cables and motor cables, telecommunication cables, low-current cables, fi ber optic cables, railroad cables, signal cables, fire protection cables and customized special cables. The Baykaplus product area with a constantly growing range of cable accessories complements our cable range. Production sites for cable manufacturing are located at the headquarters in Roth in Central Franconia; at Bayka Berlin GmbH & Co. KG as well as the Berliner Glasfaserkabel GmbH in Berlin. The subsidiary Bayka Color Farbkonzentrate GmbH, also located in Roth, produces colour concentrates and plastic granules for the cable industry and plastic processing companies.

## BAYKA BY THE NUMBERS

**ABOUT 400**

WONDERFUL PEOPLE WHO
WORK TOGETHER AS A TEAM

**35 THOUSAND**

INNOVATIVE CABLE TYPES

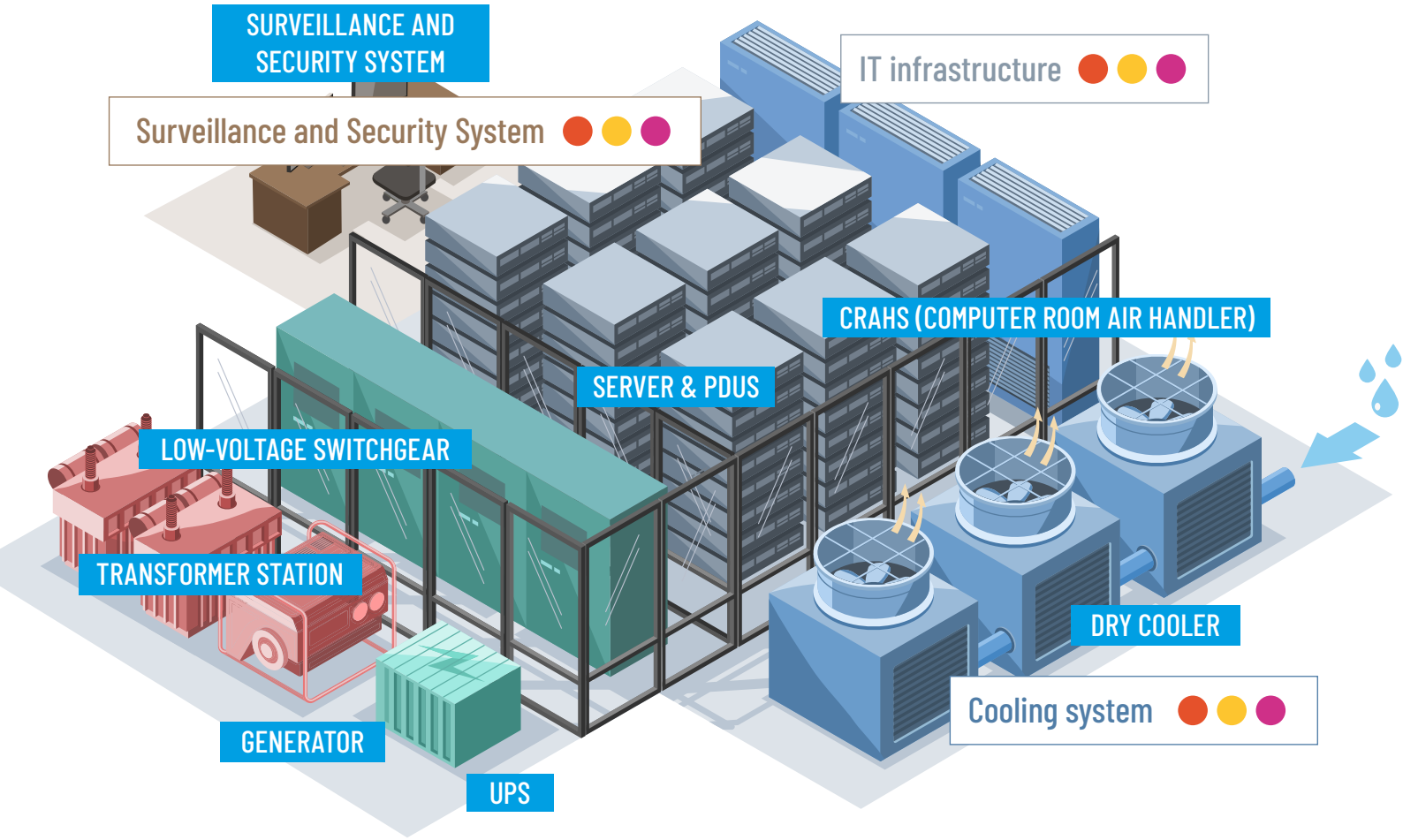
**SINCE 1885**

REPUTABLE CUSTOMERS
RELY ON OUR
CABLE SOLUTIONS

**20 THOUSAND**

KILOMETERS OF CABLE
WE MANUFACTURE FOR
OUR CUSTOMERS EACH YEAR

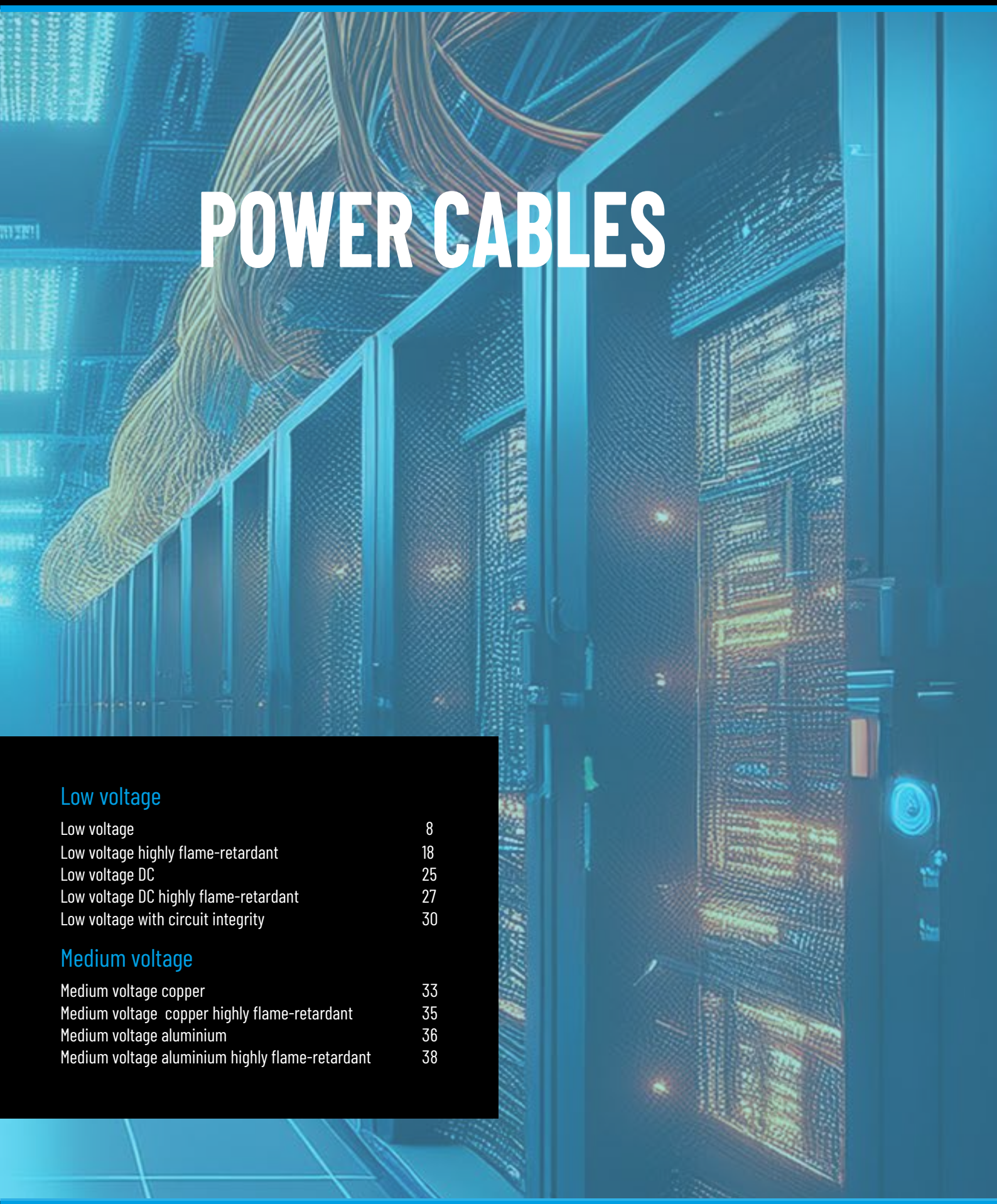
# OUR COMPREHENSIVE SOLUTION




Power distribution and UPS

(Backup) power supply

- Medium voltage
- Low voltage
- Data cables
- Grounding cables
- Cable accessories



# POWER CABLES

## Low voltage



## Medium voltage

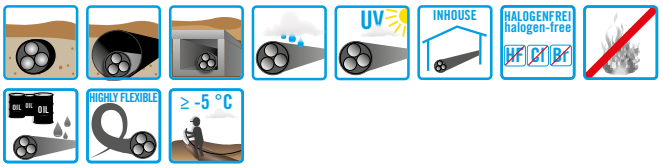
## BayMotion® CPR Flex Power + 1x... 0,6/1 kV Eca

Highly flexible, halogen-free, flame-retardant, UV and weather-resistant, groundable connection cable with a very temperature-resistant conductor insulation made of a special HP elastomer compound for use in plant and mechanical engineering

- copper conductor, finely stranded, class 5
- Insulation: special elastomer, crosslinked
- outer sheath, halogen-free, black

This product is also available in a highly flame-retardant version: Page 18

100% RoHS 100% REACH CE



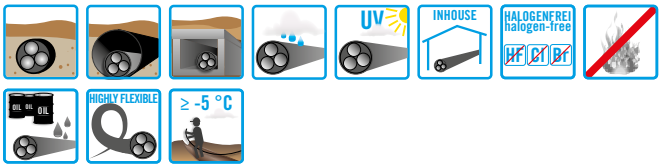

## BayMotion® CPR Flex Power + TN-C 4x1x... 0,6/1 kV Eca


Highly flexible, halogen-free, flame-retardant, UV and weather-resistant, groundable connection cable with a very temperature-resistant conductor insulation made of a special HP elastomer compound for use in plant and mechanical engineering

- copper conductor, finely stranded, class 5
- Insulation: special elastomer, crosslinked
- outer sheath, halogen-free, black

This product is also available in a highly flame-retardant version: Page 18

100% REACH 100% RoHS CE




## BayMotion® CPR Flex Power + 3-5x... 0,6/1 kV Eca


Highly flexible, halogen-free, flame-retardant, UV and weather-resistant, groundable connection cable with a very temperature-resistant conductor insulation made of a special HP elastomer compound for use in plant and mechanical engineering

- copper conductor, finely stranded, class 5
- Insulation: special elastomer, crosslinked
- outer sheath, halogen-free, black

This product is also available in a highly flame-retardant version: Page 18

100% RoHS 100% REACH CE

## CFW PowerCable® TN-C/PUR FR 0,6/1 kV Eca

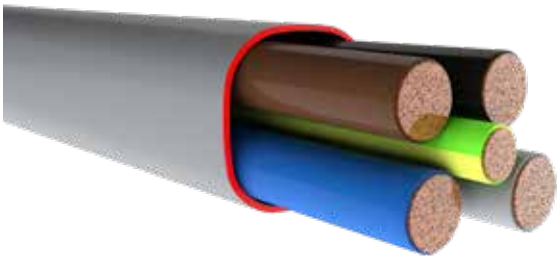
100% RoHS 100% REACH CE cfw


Flame-resistant, flexible stranded transformer cable for high EMC requirements, e.g. in data centers, hospitals, schools, offices, commercial and industrial facilities, research and development

- copper conductor, finely stranded, class 5
- Insulation: special elastomer, crosslinked
- outer sheath, flame retardant, PUR, grey

This product is also available in a highly flame-retardant version: Page 19

## CFW PowerCable® TN-S/PUR FR 0,6/1 kV Eca



100% RoHS 100% REACH CE cfw


Flame-resistant, flexible, stranded transformer cable for high EMC requirements, e.g. in data centers, hospitals, schools, offices, commercial and industrial facilities, research and development

- copper conductor, finely stranded, class 5
- Insulation: special elastomer, crosslinked
- Symmetrically twisted around the PE conductor
- outer sheath, flame retardant, PUR, grey

This product is also available in a highly flame-retardant version: Page 19

## BayMotion® CPR Flex Power + 1x... 1,8/3 kV Eca


Highly flexible, halogen-free, flame-retardant, UV and weather-resistant, groundable connection cable with a very temperature-resistant conductor insulation made of a special HP elastomer compound for use in plant and mechanical engineering

- copper conductor, finely stranded, class 5
- Insulation: special elastomer, crosslinked
- outer sheath, halogen-free, black

This product is also available in a highly flame-retardant version: Page 20

100% RoHS 100% REACH CE

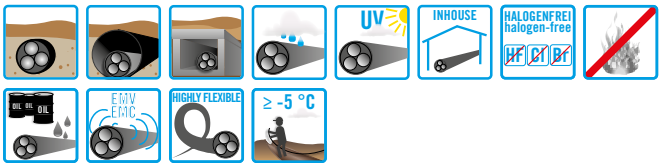

## BayMotion® CPR Flex Power + EMC 1x... 1,8/3 kV Eca


Highly flexible, halogen-free, flame-retardant, UV and weather-resistant, groundable connection cable with a very temperature-resistant conductor insulation made of a special HP elastomer compound for use in plant and mechanical engineering

- copper conductor, finely stranded, class 5
- Insulation: special elastomer, crosslinked
- wrapping (optional)
- screen, Al-foil and tinned copper braid
- outer sheath, halogen-free, black

This product is also available in a highly flame-retardant version: Page 20

100% RoHS 100% REACH CE



## BayEnergy® CPR N2XH-J 1x... 0,6/1 kV Eca


100% RoHS 100% REACH CE


Power cables with improved behaviour in case of fire, halogen-free, flame-retardant and low smoke e.g. for power stations, industrial and switchgear systems, as well as in local networks, if no increased mechanical protection is required, (see DIN VDE 0298-1)

- copper conductor, solid or stranded
- Insulation: XLPE
- outer sheath, halogen-free, flame retardant, black

This product is also available in a highly flame-retardant version: Page 21

## BayEnergy® CPR N2XH-J 3x... 0,6/1 kV Eca

100% RoHS 100% REACH CE


Power cables with improved behaviour in case of fire, halogen-free, flame-retardant and low smoke e.g. for power stations, industrial and switchgear systems, as well as in local networks, if no increased mechanical protection is required, (see DIN VDE 0298-1)

- copper conductor, solid or stranded
- Insulation: XLPE
- core identification acc. to VDE 0293
- cores stranded concentrically
- inner covering
- outer sheath, halogen-free, flame retardant, black

This product is also available in a highly flame-retardant version: Page 21

## BayEnergy® CPR N2XH-J 3 ½ x... 0,6/1 kV Eca


100% RoHS 100% REACH CE


Power cables with improved behaviour in case of fire, halogen-free, flame-retardant and low smoke e.g. for power stations, industrial and switchgear systems, as well as in local networks, if no increased mechanical protection is required, (see DIN VDE 0298-1)

- copper conductor, solid or stranded
- Insulation: XLPE
- core identification acc. to VDE 0293
- cores stranded concentrically
- inner covering
- outer sheath, halogen-free, flame retardant, black

This product is also available in a highly flame-retardant version: Page 21

## BayEnergy® CPR N2XH-J 4-5x... 0,6/1 kV Eca


100% RoHS 100% REACH CE


Power cables with improved behaviour in case of fire, halogen-free, flame-retardant and low smoke e.g. for power stations, industrial and switchgear systems, as well as in local networks, if no increased mechanical protection is required, (see DIN VDE 0298-1)

- copper conductor, solid or stranded
- Insulation: XLPE
- core identification acc. to VDE 0293
- cores stranded concentrically
- inner covering
- outer sheath, halogen-free, flame retardant, black

This product is also available in a highly flame-retardant version: Page 21

## BayEnergy® CPR N2XH-J > 5x... 0,6/1 kV Eca

100% RoHS 100% REACH CE


Power cables with improved behaviour in case of fire, halogen-free, flame-retardant and low smoke e.g. for power stations, industrial and switchgear systems, as well as in local networks, if no increased mechanical protection is required, (see DIN VDE 0298-1)

- copper conductor, solid
- Insulation: XLPE
- core identification, black with number printing, protective conductor green-yellow
- cores stranded concentrically
- inner covering
- outer sheath, halogen-free, flame retardant, black

This product is also available in a highly flame-retardant version: Page 21

## BayEnergy® CPR N2XH-O 1-2x... 0,6/1 kV Eca


100% RoHS 100% REACH CE


Power cables with improved behaviour in case of fire, halogen-free, flame-retardant and low smoke e.g. for power stations, industrial and switchgear systems, as well as in local networks, if no increased mechanical protection is required, (see DIN VDE 0298-1)

- copper conductor, solid or stranded
- Insulation: XLPE
- outer sheath, halogen-free, flame retardant, black

This product is also available in a highly flame-retardant version: Page 21

## BayEnergy® CPR N2XH-O 3x... 0,6/1 kV Eca

100% RoHS 100% REACH CE


Power cables with improved behaviour in case of fire, halogen-free, flame-retardant and low smoke e.g. for power stations, industrial and switchgear systems, as well as in local networks, if no increased mechanical protection is required, (see DIN VDE 0298-1)

- copper conductor, solid or stranded
- Insulation: XLPE
- core identification acc. to VDE 0293
- cores stranded concentrically
- inner covering
- outer sheath, halogen-free, flame retardant, black

This product is also available in a highly flame-retardant version: Page 21

## BayEnergy® CPR N2XH-O 3 ½ x.. 0,6/1 kV Eca

100% RoHS 100% REACH CE


Power cables with improved behaviour in case of fire, halogen-free, flame-retardant and low smoke e.g. for power stations, industrial and switchgear systems, as well as in local networks, if no increased mechanical protection is required, (see DIN VDE 0298-1)

- copper conductor, solid or stranded
- Insulation: XLPE
- core identification acc. to VDE 0293
- cores stranded concentrically
- inner covering
- outer sheath, halogen-free, flame retardant, black

This product is also available in a highly flame-retardant version: Page 21

## BayEnergy® CPR N2XH-O 4-5x... 0,6/1 kV Eca

100% RoHS 100% REACH CE


Power cables with improved behaviour in case of fire, halogen-free, flame-retardant and low smoke e.g. for power stations, industrial and switchgear systems, as well as in local networks, if no increased mechanical protection is required, (see DIN VDE 0298-1)

- copper conductor, solid or stranded
- Insulation: XLPE
- core identification acc. to VDE 0293
- cores stranded concentrically
- inner covering
- outer sheath, halogen-free, flame retardant, black

This product is also available in a highly flame-retardant version: Page 21

## BayEnergy® CPR N2XH-O > 5x... 0,6/1 kV Eca

100% RoHS 100% REACH CE


Power cables with improved behaviour in case of fire, halogen-free, flame-retardant and low smoke e.g. for power stations, industrial and switchgear systems, as well as in local networks, if no increased mechanical protection is required, (see DIN VDE 0298-1)

- copper conductor, solid
- Insulation: XLPE
- core identification, black with number printing
- cores stranded concentrically
- inner covering
- outer sheath, halogen-free, flame retardant, black

This product is also available in a highly flame-retardant version: Page 21

## BayEnergy® CPR N2XCH 1-2x.../... 0,6/1 kV Eca

100% RoHS 100% REACH CE


Power cables with improved behaviour in case of fire, halogen-free, flame-retardant and low smoke e.g. for power stations, industrial and switchgear installations, as well as in local networks, if protection against contact voltage in case of mechanical damage is required. (See DIN VDE 0298-1)

- copper conductor, solid or stranded
- Insulation: XLPE
- core identification acc. to VDE 0293
- cores stranded concentrically
- inner covering
- concentric conductor, copper with counter-helix
- outer sheath, halogen-free, flame retardant, black

## BayEnergy® CPR N2XCH 3x.../... 0,6/1 kV Eca

100% RoHS 100% REACH CE


Power cables with improved behaviour in case of fire, halogen-free, flame-retardant and low smoke e.g. for power stations, industrial and switchgear installations, as well as in local networks, if protection against contact voltage in case of mechanical damage is required. (See DIN VDE 0298-1)

- copper conductor, solid or stranded
- Insulation: XLPE
- core identification acc. to VDE 0293
- cores stranded concentrically
- inner covering
- concentric conductor, copper with counter-helix
- outer sheath, halogen-free, flame retardant, black

This product is also available in a highly flame-retardant version: Page 21

## BayEnergy® CPR N2XCH 4x.../... 0,6/1 kV (4½) Eca

100% RoHS 100% REACH CE


Power cables with improved behaviour in case of fire, halogen-free, flame-retardant and low smoke e.g. for power stations, industrial and switchgear installations, as well as in local networks, if protection against contact voltage in case of mechanical damage is required. (See DIN VDE 0298-1)

- copper conductor, solid or stranded
- Insulation: XLPE
- core identification acc. to VDE 0293
- cores stranded concentrically
- inner covering
- concentric conductor, copper with counter-helix
- outer sheath, halogen-free, flame retardant, black

This product is also available in a highly flame-retardant version: Page 21

## BayEnergy® CPR N2XCH 4x.../... 0,6/1 kV (4+1) Eca

100% RoHS 100% REACH CE


Power cables with improved behaviour in case of fire, halogen-free, flame-retardant and low smoke e.g. for power stations, industrial and switchgear installations, as well as in local networks, if protection against contact voltage in case of mechanical damage is required. (See DIN VDE 0298-1)

- copper conductor, solid or stranded
- Insulation: XLPE
- core identification acc. to VDE 0293
- cores stranded concentrically
- inner covering
- concentric conductor, copper with counter-helix
- outer sheath, halogen-free, flame retardant, black

## BayEnergy® CPR N2XCH 5x.../... 0,6/1 kV Eca

100% RoHS 100% REACH CE


Power cables with improved behaviour in case of fire, halogen-free, flame-retardant and low smoke e.g. for power stations, industrial and switchgear installations, as well as in local networks, if protection against contact voltage in case of mechanical damage is required. (See DIN VDE 0298-1)

- copper conductor, solid or stranded
- Insulation: XLPE
- core identification acc. to VDE 0293
- cores stranded concentrically
- inner covering
- concentric conductor, copper with counter-helix
- outer sheath, halogen-free, flame retardant, black

## BayEnergy® CPR N2XCH > 5x.../... 0,6/1 kV Eca


100% RoHS 100% REACH CE


Power cables with improved behaviour in case of fire, halogen-free, flame-retardant and low smoke e.g. for power stations, industrial and switchgear installations, as well as in local networks, if protection against contact voltage in case of mechanical damage is required. (See DIN VDE 0298-1)

- copper conductor, solid or stranded
- Insulation: XLPE
- core identification acc. to VDE 0293
- cores stranded concentrically
- inner covering
- concentric conductor, copper with counter-helix
- outer sheath, halogen-free, flame retardant, black

## BayEnergy® CPR N2XCWH 4x.../... 0,6/1 kV (4 ½) Eca


VDE 100% RoHS 100% REACH CE


Power cables with improved behaviour in case of fire, halogen-free, flame-retardant and low smoke e.g. for power stations, industrial and switchgear installations, as well as in local networks, if protection against contact voltage in case of mechanical damage is required. (See DIN VDE 0298-1)

- copper conductor, solid or stranded
- Insulation: XLPE
- core identification acc. to VDE 0293
- cores stranded concentrically
- inner covering
- concentric conductor, copper applied in a wave shape with copper holding helix
- outer sheath, halogen-free, flame retardant, black

This product is also available in a highly flame-retardant version Page 22

## BayEnergy® CPR N2XCWH 4x.../... 0,6/1 kV (4 +1) Eca


100% RoHS 100% REACH CE


Power cables with improved behaviour in case of fire, halogen-free, flame-retardant and low smoke e.g. for power stations, industrial and switchgear installations, as well as in local networks, if protection against contact voltage in case of mechanical damage is required. (See DIN VDE 0298-1)

- copper conductor, solid or stranded
- Insulation: XLPE
- core identification acc. to VDE 0293
- cores stranded concentrically
- inner covering
- concentric conductor, copper applied in a wave shape with copper holding helix
- outer sheath, halogen-free, flame retardant, black

## BayEnergy® CPR N2XSH 0,6/1 kV Eca


100% RoHS 100% REACH CE DB


**Halogen-free, flame-retardant cable for special applications, e.g. as a single-core web supply cable for AC railways and for traction current return for voltages up to 0.6/1 kV**

- copper conductor, stranded
- Insulation: XLPE
- wrapping, plastic foil
- copper screen with counter helix
- wrapping
- outer sheath, halogen-free, flame retardant, black

This product is also available in a highly flame-retardant version Page 22

## BayEnergy® CPR N2XS(F)H 0,6/1 kV Eca


100% RoHS 100% REACH CE


**Halogen-free, flame-retardant cable for special applications, e.g. as a single-core web supply cable for AC railways and for traction current return for voltages up to 0.6/1 kV**

- copper conductor, stranded
- Insulation: XLPE
- wrapping, swellable tape
- copper screen with counter helix
- wrapping
- outer sheath, halogen-free, flame retardant, black

This product is also available in a highly flame-retardant version Page 23

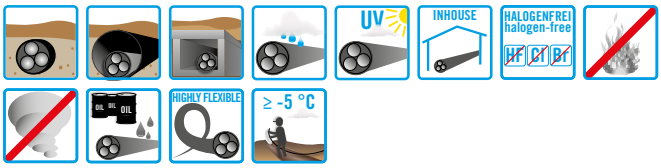
# Low voltage, highly flame-retardant – flexible 0,6/1 kV

## BayMotion® nonfire Power Soil 1x... 0,6/1 kV B2ca


Highly flame-retardant, flexible power, connection and interconnecting cable for use in plant and mechanical engineering for structures with very high safety requirements, e.g. in tunnels, underground railway stations, hospitals and in escape routes

- copper conductor, finely stranded, class 5
- Insulation: special elastomer, crosslinked
- outer sheath, halogen-free, flame retardant, black

100% RoHS 100% REACH CE

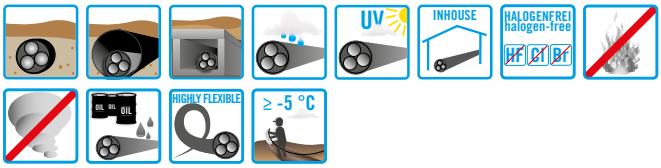



## BayMotion® nonfire Power Soil TN-C 4x1x... 0,6/1 kV B2ca


Flexible and flame retardant power cable for use in plant construction and mechanical engineering and for structures with very high safety requirements, eg. in tunnels, underground stations, hospitals and in escape routes

- copper conductor, finely stranded, class 5
- Insulation: special elastomer, crosslinked
- outer sheath, halogen-free, flame retardant, black

100% REACH 100% RoHS CE




## BayMotion® nonfire Power Soil >1x... 0,6/1 kV B2ca

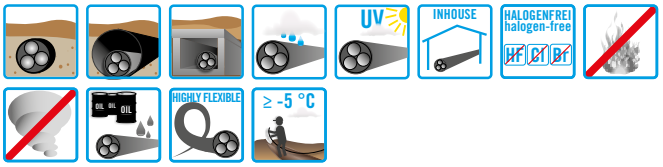

Highly flame-retardant, flexible power, connection and interconnecting cable for use in plant and mechanical engineering for structures with very high safety requirements, e.g. in tunnels, underground railway stations, hospitals and in escape routes

- copper conductor, finely stranded, class 5
- Insulation: special elastomer, crosslinked
- inner covering
- outer sheath, halogen-free, flame retardant, black

100% RoHS 100% REACH CE

## CFW PowerCable® TN-C/Z1+S FE05 0,6/1 kV B2ca

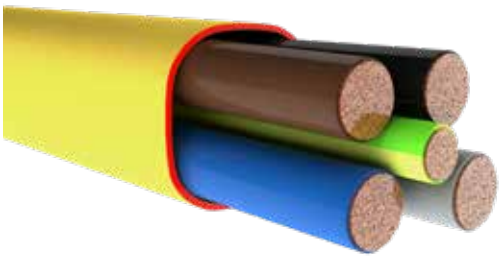
100% RoHS 100% REACH CE cfw



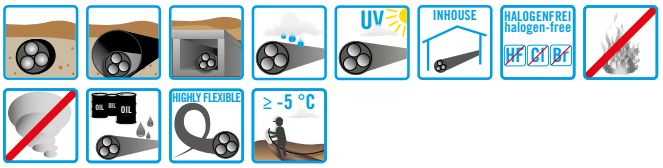

Highly flame-resistant, flexible stranded transformer cable for high EMC requirements in buildings with high fire protection and technical safety requirements, e.g. in data centers, hospitals, schools, offices, commercial and industrial facilities, research and development

- copper conductor, finely stranded, class 5
- Insulation: special elastomer, crosslinked
- outer sheath, halogen-free, flame retardant, yellow

## CFW PowerCable® TN-S/Z1+S FE05 0,6/1 kV B2ca



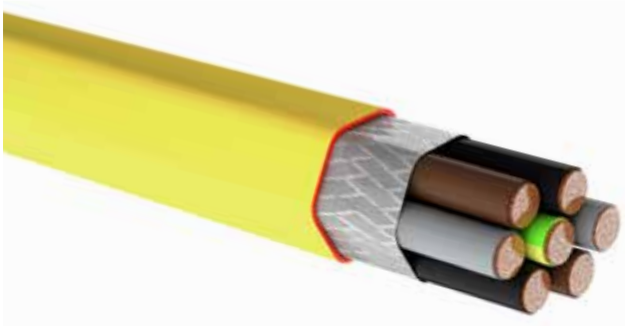
100% REACH 100% RoHS CE cfw




Highly flame-resistant, flexible, symmetrically arranged installation cable for high EMC requirements in buildings with high fire protection and technical safety requirements, e.g. in data centers, hospitals, schools, offices, commercial and industrial facilities, research and development

- copper conductor, finely stranded, class 5
- Insulation: special elastomer, crosslinked
- Symmetrically stranded around the PE conductor
- outer sheath, halogen-free, flame retardant, yellow

## CFW PowerCable® FU-Drive/Z1+S FE05/C 0,6/1 kV B2ca



100% RoHS 100% REACH CE cfw

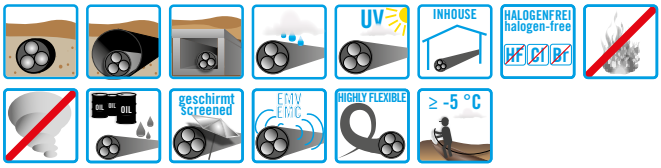

Highly flame-resistant, flexible, symmetrically arranged and screened VFD and motor connection cable for highest EMC requirements, e.g. in fields of mechanical engineering, generators, robotics and automation

- copper conductor, finely stranded, class 5
- Insulation: special elastomer, crosslinked
- 2 systems arranged symmetrically and stranded around the PE conductor, banded
- screen, Al-foil and tinned copper braid
- outer sheath, halogen-free, flame retardant, yellow

# Low voltage, highly flame-retardant – flexible 0,6/1 kV - 1,8/3 kV

## BayMotion® nonfire soilblack EMC 0,6/1 kV B2ca


100% RoHS 100% REACH CE

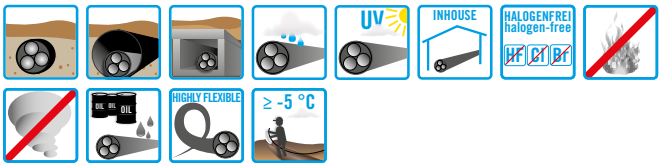



Halogen-free and highly flame-retardant power and control cables for the connection and interconnection of electrical systems, especially for increased requirements on electromagnetic compatibility (EMC)

- copper conductor, finely stranded, class 5
- Insulation: HP elastomer
- core identification acc. to HD 308/4
- cores stranded concentrically
- filling element (optional)
- screen, Al-foil and tinned copper braid
- outer sheath, halogen-free, flame retardant, black

## BayMotion® nonfire Power Soil 1x... 1,8/3 kV B2ca


100% RoHS 100% REACH CE




Highly flame-retardant, flexible power, connection and interconnecting cable for use in plant and mechanical engineering for structures with very high safety requirements, e.g. in tunnels, underground railway stations, hospitals and in escape routes

- copper conductor, finely stranded, class 5
- Insulation: special elastomer, crosslinked
- outer sheath, halogen-free, flame retardant, black

## BayEnergy® nonfire N2XH 0,6/1 kV B2ca

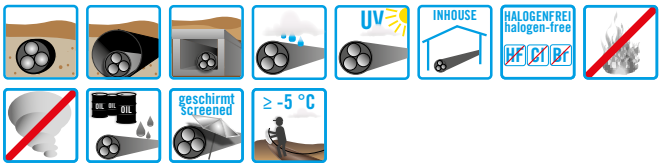

100% REACH 100% RoHS CE


Highly flame-retardant power cable with improved behaviour in case of fire in accordance with the Construction Products Regulation, halogen-free, flame-retardant and low-smoke for use in buildings with very high safety requirements, for power stations, industrial and switchgear installations

- copper conductor, solid or stranded
- Insulation: XLPE
- outer sheath, halogen-free, flame retardant, black

## BayEnergy® nonfire N2XCH 3x.../... 0,6/1 kV B2ca


100% RoHS 100% REACH CE

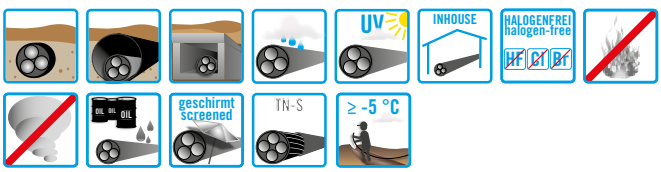



Highly flame-retardant power cable with improved behaviour in case of fire in accordance with the Construction Products Regulation, halogen-free, flame-retardant and low-smoke for use in buildings with very high safety requirements, for power stations, industrial and switchgear installations

- copper conductor, solid or stranded
- Insulation: XLPE
- core color code acc. to VDE 0293
- cores stranded concentrically
- inner covering
- concentric conductor, copper with counter-helix
- outer sheath, halogen-free, flame retardant, black

## BayEnergy® nonfire N2XCH 4x.../... 0,6/1 kV (4½) B2ca


100% RoHS 100% REACH CE

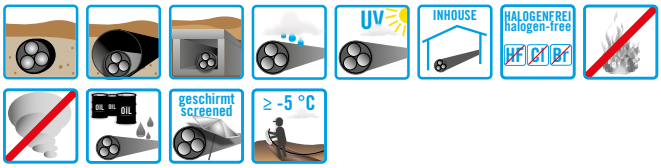



Highly flame-retardant power cable with improved behaviour in case of fire in accordance with the Construction Products Regulation, halogen-free, flame-retardant and low-smoke for use in buildings with very high safety requirements, for power stations, industrial and switchgear installations

- copper conductor, solid or stranded
- Insulation: XLPE
- core color code acc. to VDE 0293
- cores stranded concentrically
- inner covering
- concentric conductor, copper with counter-helix
- outer sheath, halogen-free, flame retardant, black

## BayEnergy® nonfire N2XCWH 3x.../... 0,6/1 kV B2ca


100% REACH 100% RoHS CE

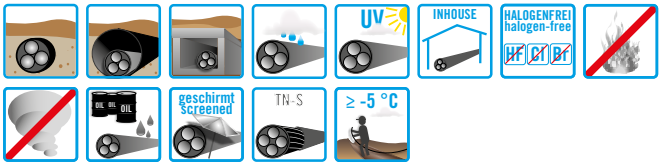



Highly flame-retardant power cable with improved behaviour in case of fire in accordance with the Construction Products Regulation, halogen-free, flame-retardant and low-smoke for use in buildings with very high safety requirements, for power stations, industrial and switchgear installations

- copper conductor, solid or stranded
- Insulation: XLPE
- core color code acc. to VDE 0293
- cores stranded concentrically
- inner covering
- concentric conductor, copper applied in a wave shape with copper holding helix
- outer sheath, halogen-free, flame retardant, black

## BayEnergy® nonfire N2XCWH 4x.../... 0,6/1 kV (4½) B2ca


100% RoHS 100% REACH CE




Highly flame-retardant power cable with improved behaviour in case of fire in accordance with the Construction Products Regulation, halogen-free, flame-retardant and low-smoke for use in buildings with very high safety requirements, for power stations, industrial and switchgear installations

- copper conductor, solid or stranded
- Insulation: XLPE
- core color code acc. to VDE 0293
- cores stranded concentrically
- inner covering
- concentric conductor, copper applied in a wave shape with copper holding helix
- outer sheath, halogen-free, flame retardant, black

## BayEnergy® nonfire N2XSH 0,6/1 kV B2ca


100% RoHS 100% REACH CE


Halogen-free, highly flame-retardant cable for special applications, e.g. as a single-core web supply cable for AC railways and for traction current return for voltages up to 0.6/1 kV

- copper conductor, stranded
- Insulation: XLPE
- wrapping, plastic foil
- copper screen with counter helix
- wrapping
- outer sheath, halogen-free, flame retardant, black

## Low voltage, highly flame-retardant – 0,6/1 kV

### BayEnergy® nonfire N2XS(F)H 0,6/1 kV B2ca


100% REACH 100% RoHS CE


**Highly flame-retardant cable for special applications, e.g. as a single-core web supply cable for AC railways and for traction current return for voltages up to 0.6/1 kV**

- copper conductor, stranded
- Insulation: XLPE
- screen area filled dryly, longitudinally watertight
- wrapping, swellable tape
- copper screen with counter helix
- wrapping
- outer sheath, halogen-free, flame retardant, black

## Low-voltage, highly flame-retardant – 300/500 V

### B2ca NHXMH ...x... 300/500 V B2ca


100% RoHS 100% REACH CE


**Sheath cable with improved characteristics in case of fire, halogen-free, flame-retardant and low-smoke**

- copper conductor, solid or stranded
- Insulation: halogen-free
- core color code acc. to VDE 0293
- cores stranded concentrically
- inner covering
- outer sheath, halogen-free, flame retardant, grey


More references:

# EMC-compliant, flame-retardant cable with two neutral conductors for high, unbalanced loads

Data centers are the circulatory system of digitalization. In particular, the increasing importance of power electronics and the growing number of consumers with non-linear electrical power consumption present entirely new challenges for power supply systems. Innovative solutions are needed to ensure voltage quality, EMC protection, and supply reliability. In the field of cable technology, Bayka stands out as a cable manufacturer that can respond flexibly to the constantly changing requirements in large data centers like no other.

## Challenge

In theory, in a conventional three-phase TN-S system with a neutral conductor and a protective conductor, the phase currents cancel each other out under symmetrical loading. In this case, the balancing current in the neutral conductor is 0 amperes. Single-phase loads such as computers, power supplies, LED lighting, uninterruptible power supplies, electronic ballasts, or frequency converters convert the sinusoidal line voltage into non-linear voltage waveforms. These non-linear voltage waveforms and the phase shift caused by the asymmetrical load result in a balancing current in the neutral conductor containing harmonic overtones.

Particularly critical – and often underestimated in practice – are the total currents of the third harmonic. These add up in the neutral conductor and can lead to significant overloading and thermal stress. In extreme cases, this results in damage to or failure of the cable, which in turn can lead to a power outage in critical infrastructure or even a fire.

The current flowing in the neutral conductor generates, particularly in the case of conventional single-core cable installation, significant additional alternating magnetic fields. These fields induce currents in adjacent conductive structures such as metal enclosures, cable support systems and pipework. The resulting stray currents can lead to EMC interference in electronic equipment, cause excessively high leakage currents that are hazardous to humans, and unintentionally trip residual current devices (RCDs). Furthermore, there is a risk of electrochemical corrosion on metal pipework. These effects further compromise the operational safety of the system.

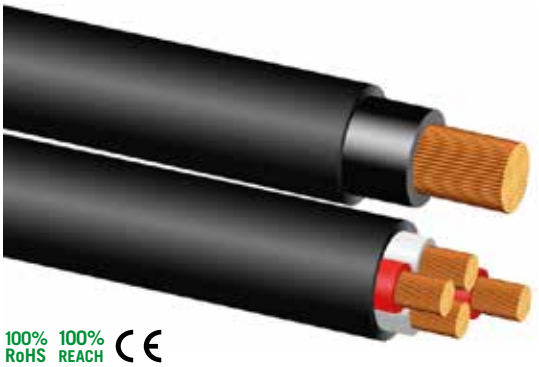
## Solution

At the request of an expert in critical infrastructure, Bayka developed the flexible, halogen-free, and flame-retardant BayMotion SoilHarmonics power distribution cable for the Frankfurt data center. As an extension of the classic three-phase TN-S system, it features a second neutral conductor and is used to connect special busbar systems with the L1/N1/L2/N2/L3/PE configuration, which are specifically designed to prevent the formation of magnetic fields.

The pre-stranding of all conductors in the cable meets the particularly high requirements for EMC protection, as this eliminates a potential source of error during installation with individual conductors. Furthermore, it meets the requirements of fire protection class B2ca in accordance with the German Building Regulations (BauPVO). In Frankfurt, two variants of the "BayMotion SoilHarmonics" cable were used. Variant 1 consists of three phase conductors, each with a cross-section of 95 $mm^2$, as well as two neutral conductors and one protective conductor. Variant 2 consists of three phase conductors, each with a cross-section of 150 $mm^2$, as well as two neutral conductors and one protective conductor. With this project, Bayka was once again able to demonstrate its ability to deliver customized cable solutions even in relatively small quantities.

Bayka® since 1885

## BayMotion® CPR feedIN DC ...x... max. 1800 V DC Eca



100% RoHS 100% REACH CE


Highly flexible, halogen-free, flame-retardant, UV and weather-resistant, directly buriable direct current connection and interconnecting cable with a very temperature-resistant conductor insulation for DC use in plant and enclosure manufacturing

- copper conductor, finely stranded, class 5
- Insulation: special elastomer, crosslinked
- outer sheath, halogen-free, black

This product is also available in a highly flame-retardant version: Page 27

## BayMotion® CPR feedIN DC ...x.../... max. 1800 V DC Eca

100% RoHS 100% REACH CE

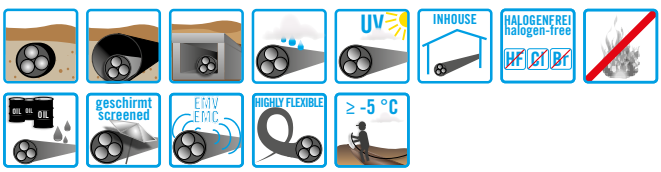

Highly flexible, halogen-free, flame-retardant, UV and weather-resistant, directly buriable direct current connection and interconnecting cable with a concentric conductor and a very temperature-resistant conductor insulation for DC use in plant and enclosure manufacturing

- copper conductor, finely stranded, class 5
- Insulation: special elastomer, crosslinked
- wrapping, swellable tape (screen longitudinally watertight)
- copper screen with counter helix
- wrapping
- outer sheath, halogen-free, black

This product is also available in a highly flame-retardant version: Page 27

## BayMotion® CPR feedIN DC EMC max. 1800 V DC Eca

100% RoHS 100% REACH CE



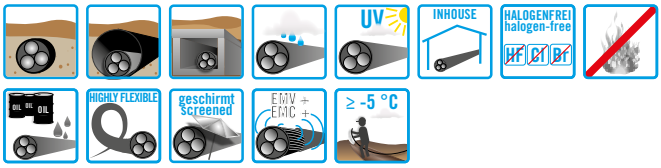

Highly flexible, double shielded, halogen-free, flame-retardant, UV and weather-resistant, directly buriable direct current connection and interconnecting cable with a very temperature-resistant conductor insulation for DC use in plant and enclosure manufacturing, especially for increased requirements on electromagnetic compatibility (EMC)

- copper conductor, finely stranded, class 5
- Insulation: special elastomer, crosslinked
- screen, Al-foil and tinned copper braid
- outer sheath, halogen-free, black

This product is also available in a highly flame-retardant version: Page 28

## BayMotion® CPR feedIN DC EMC+ max. 1800 V DC Eca

100% RoHS 100% REACH CE

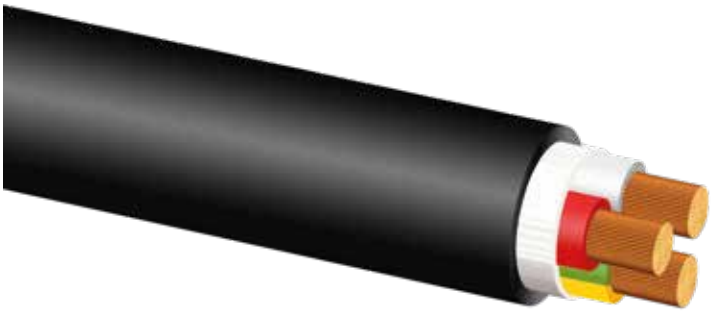



**Highly flexible, tripple shielded, halogen-free, flame-retardant, UV and weather-resistant, directly buriable direct current connection and interconnecting cable with a concentric conductor and a very temperature-resistant conductor insulation for DC use in plant and enclosure manufacturing, especially for high requirements on electromagnetic compatibility (EMC)**

- copper conductor, finely stranded, class 5
- Insulation: special elastomer, crosslinked
- filling sheath
- concentric conductor, copper with counter-helix
- inner sheath, halogen-free, black
- screen, Al-foil and tinned copper braid
- outer sheath, halogen-free, black

This product is also available in a highly flame-retardant version: Page 28

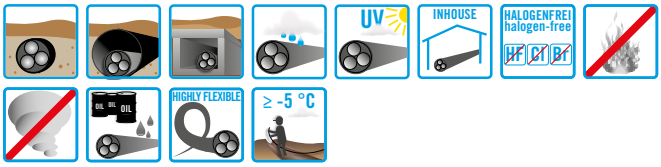
## BayMotion® nonfire Power MDC 0,6/1 kV B2ca



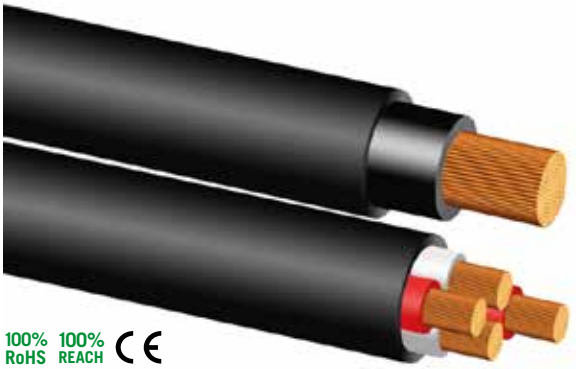
Highly flame retardant, flexible power, connection and interconnecting cable for power supply of IT-components with battery backup systems (e.g. USP) in critical infrastructures like micro data centers

- copper conductor, finely stranded, class 5
- Insulation: special elastomer, crosslinked
- core designation: red, white (, green-yellow)
- inner covering
- outer sheath, halogen-free, flame retardant, black

100% RoHS 100% REACH CE



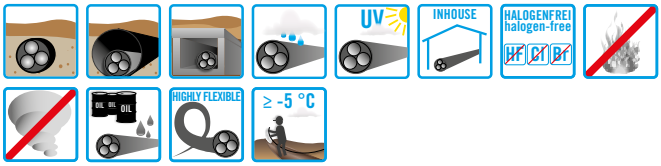

## BayMotion® nonfire feedIN DC ...x... max. 1800 V DC B2ca



Highly flame-retardant, halogen-free, flexible, UV and weather-resistant, directly buriable direct current connection and interconnecting cable with a very temperature-resistant conductor insulation for DC use in plant and enclosure manufacturing

- copper conductor, finely stranded, class 5
- Insulation: special elastomer, crosslinked
- outer sheath, halogen-free, flame retardant, black

100% RoHS 100% REACH CE




## BayMotion® nonfire feedIN DC ...x.../... max. 1800 V DC B2ca

Highly flame-retardant, halogen-free, flexible, UV and weather-resistant, directly buriable direct current connection and interconnecting cable with a concentric conductor and a very temperature-resistant conductor insulation for DC use in plant and enclosure manufacturing

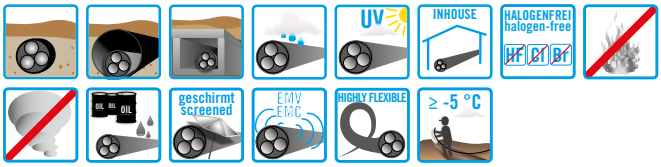
- copper conductor, finely stranded, class 5
- Insulation: special elastomer, crosslinked
- wrapping, swellable tape (screen longitudinally watertight)
- copper screen with counter helix
- wrapping
- outer sheath, halogen-free, flame retardant, black

100% RoHS 100% REACH CE

# Low voltage DC, highly flame-retardant – flexible max. 1800 V DC

## BayMotion® nonfire feedIN DC EMC max. 1800 V DC B2ca

100% REACH 100% RoHS CE

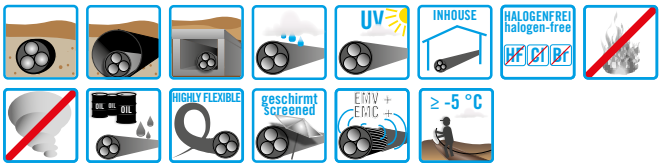



Highly flame-retardant, double shielded, halogen-free, flexible, UV and weather-resistant, directly buriable direct current connection and interconnecting cable with a very temperature-resistant conductor insulation for DC use in plant and enclosure manufacturing, especially for increased requirements on electromagnetic compatibility (EMC)

- copper conductor, finely stranded, class 5
- Insulation: special elastomer, crosslinked
- filling element (optional)
- screen, Al-foil and tinned copper braid
- outer sheath, halogen-free, flame retardant, black

## BayMotion® nonfire feedIN DC EMC+ max. 1800 V DC B2ca

100% RoHS 100% REACH CE




Highly flame-retardant, tripple shielded, halogen-free, flexible, UV and weather-resistant, directly buriable direct current connection and interconnecting cable with a concentric conductor and a very temperature-resistant conductor insulation for DC use in plant and enclosure manufacturing, especially for high requirements on electromagnetic compatibility (EMC)

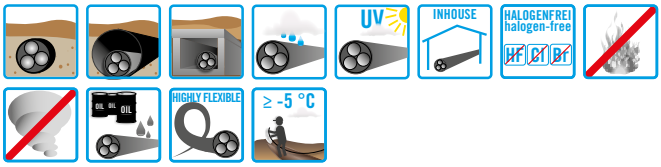
- copper conductor, finely stranded, class 5
- Insulation: special elastomer, crosslinked
- filling sheath
- concentric conductor, copper with counter-helix
- inner sheath, halogen-free, black
- screen, Al-foil and tinned copper braid
- outer sheath, halogen-free, flame retardant, black

## CFW PowerCable® CPDC4 Z1+S FE05 max. 1800 V DC B2ca

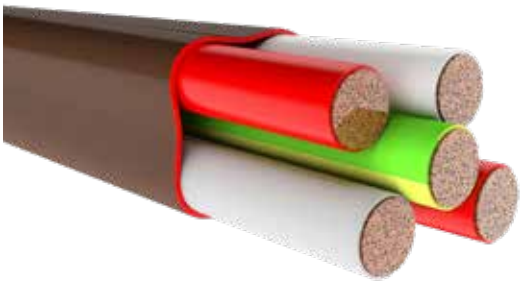
Highly flame-resistant, flexible, symmetrically arranged DC cable for high EMC requirements in buildings with high fire protection and technical safety requirements, e.g. in data centers, hospitals, schools, offices, commercial and industrial facilities, research and development

- copper conductor, finely stranded, class 5
- Insulation: special elastomer, crosslinked
- outer sheath, halogen-free, flame retardant, brown

100% RoHS 100% REACH CE cfw



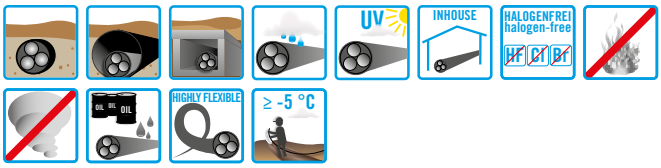

## CFW PowerCable® CPDC5 Z1+S FE05 max. 1800 V DC B2ca



Highly flame-resistant, flexible, symmetrically arranged DC cable for high EMC requirements in buildings with high fire protection and technical safety requirements, e.g. in data centers, hospitals, schools, offices, commercial and industrial facilities, research and development

- copper conductor, finely stranded, class 5
- Insulation: special elastomer, crosslinked
- Symmetrically stranded around the PE conductor
- outer sheath, halogen-free, flame retardant, brown

100% REACH 100% RoHS CE cfw



## (N)HXH ...x... FE180/E90 0,6/1 kV

100% RoHS 100% REACH CE

INHOUSE | HALOGENFREI halogen-free HF CI BI | E90 | FE180 | ≥ -5 °C

Cable with circuit integrity E90 and insulation integrity FE180 on all standard support systems, halogen-free, flame-retardant and low-smoke

- copper conductor, solid or stranded
- Insulation: halogen-free
- core color code acc. to VDE 0293
- cores stranded concentrically
- inner covering
- outer sheath, halogen-free, flame retardant, orange

## (N)HXCH ...x.../... FE180/E90 0,6/1 kV

100% RoHS 100% REACH CE

INHOUSE | HALOGENFREI halogen-free HF CI BI | geschirmt screened | E90 | FE180 | ≥ -5 °C

Screened cable with circuit integrity E90 and insulation integrity FE180 on all standard support systems, halogen-free, flame-retardant and low-smoke

- copper conductor, solid or stranded
- Insulation: XLPE
- core color code acc. to VDE 0293
- cores stranded concentrically
- inner covering
- concentric conductor, copper with counter-helix
- outer sheath, halogen-free, flame retardant, orange

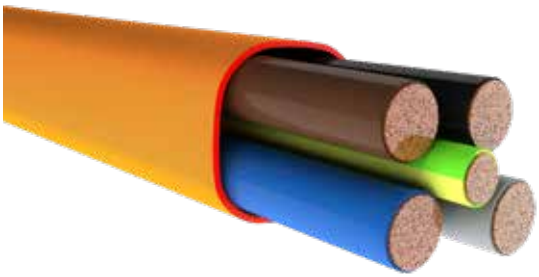
## CFW PowerCable® TN-C/Z1+S (N)HXH FE180 E30 0,6/1 kV

100% RoHS 100% REACH CE cfw


Highly flame-resistant, flexible, stranded transformer cable with circuit integrity E30 and insulation integrity FE180 for high EMC requirements in buildings with high fire protection and technical safety requirements, e.g. in data centers, hospitals, schools, offices, commercial and industrial facilities, research and development

- copper conductor, finely stranded, class 5
- Insulation: special elastomer, crosslinked
- outer sheath, halogen-free, flame retardant, orange

## CFW PowerCable® TN-S/Z1+S (N)HXH FE180 E30 0,6/1 kV



100% RoHS 100% REACH CE cfw


Highly flame-resistant, flexible, symmetrically arranged safty cable with circuit integrity E30 and insulation integrity FE180 for high EMC requirements in buildings with high fire protection and technical safety requirements, e.g. in data centers, hospitals, schools, offices, commercial and industrial facilities, research and development

- copper conductor, finely stranded, class 5
- Insulation: special elastomer, crosslinked
- Symmetrically twisted around the PE conductor
- outer sheath, halogen-free, flame retardant, orange


# CABLES FOR BATTERY STORAGES (BESS)

## DC POWER: BATTERY to DC bus / PCS

**CFW PowerCable® CPDC**
(DC up to max. 1800 V DC)
**BayMotion® CPR feedIN DC**
(UV resistant, direct-burial; incl. EMC variants and higher CPR class if required)

## AC POWER: PCS to transformer / LV distribution / grid

**BayEnergy® 0.6/1 kV - 1.8/3 kV power cables**
(CU or AL, CPR up to B2ca)
**BayMotion® Flex Power + and Power Soil**
(flexible, installation-friendly)

## EMC / converter environment (PCS)

**BayMotion® CPR feedIN DC EMC**
(UV resistant, direct-burial; incl. concentric conductor and higher CPR class if required)
**BayMotion® nonfire soilblack**
(UV resistant, direct-burial; incl. EMC variants if required)

## Controls & communications (BMS/EMS/SCADA)

**BayCom® fibre optics**
(indoor/universal/outdoor + accessories)
**VOKA-LAN Cat 6A–8.2**
(bandwidth + CPR/FRNC as needed)

## Safety: Fire & Gas / E-Stop / doors

**VOKA-LAN Cat 6A–8.2**
(bandwidth + CPR/FRNC as needed)
**Low frequency data cables**
(EMC variants if required)

## Grounding & accessories

**BayEnergy® grounding conductors**
Indoor/Outdoor, flexible and/or anti-theft design
**BayEnergy® and Baykaplus accessories**
(lugs/connectors, patch cords/connectors/pigtails, ...)

## N2XS2Y 6/10 kV


100% RoHS 100% REACH

UV HALOGENFREI halogen-free HF HCl HBr geschirmt screened ≥ -20 °C

UV-resistant medium-voltage cable for outdoor and underground installation in power stations, industrial and switchgear plants as well as local networks

- copper conductor, stranded
- conductor screen
- Insulation: XLPE
- insulation screen
- conductive tape
- copper screen with counter helix
- wrapping, separating foil, plastic
- outer sheath, PE, black

## N2XS2Y 12/20 kV

100% RoHS 100% REACH

UV HALOGENFREI halogen-free HF HCl HBr geschirmt screened ≥ -20 °C

UV-resistant medium-voltage cable for outdoor and underground installation in power stations, industrial and switchgear plants as well as local networks

- copper conductor, stranded
- conductor screen
- Insulation: XLPE
- insulation screen
- conductive tape
- copper screen with counter helix
- wrapping, separating foil, plastic
- outer sheath, PE, black

## N2XS2Y 18/30 kV

100% REACH 100% RoHS

UV HALOGENFREI halogen-free HF HCl HBr geschirmt screened ≥ -20 °C

UV-resistant medium-voltage cable for outdoor and underground installation in power stations, industrial and switchgear plants as well as local networks

- copper conductor, stranded
- conductor screen
- Insulation: XLPE
- insulation screen
- conductive tape
- copper screen with counter helix
- wrapping, separating foil, plastic
- outer sheath, PE, black

## N2XS(F)2Y 6/10 kV


100% RoHS 100% REACH

UV HALOGENFREI halogen-free HF HCl HBr geschirmt screened ≥ -20 °C

UV-resistant medium-voltage cable with longitudinally water-tight screen area for outdoor and underground installation in power stations, industrial and switchgear plants as well as local networks

- copper conductor, stranded
- conductor screen
- Insulation: XLPE
- insulation screen
- swellable tape
- copper screen with counter helix
- swellable tape
- outer sheath, PE, black

## N2XS(F)2Y 12/20 kV

100% RoHS 100% REACH

UV HALOGENFREI halogen-free HF HCl HBr geschirmt screened ≥ -20 °C

UV-resistant medium-voltage cable with longitudinally water-tight screen area for outdoor and underground installation in power stations, industrial and switchgear plants as well as local networks

- copper conductor, stranded
- conductor screen
- Insulation: XLPE
- insulation screen
- swellable tape
- copper screen with counter helix
- swellable tape
- outer sheath, PE, black

## N2XS(F)2Y 18/30 kV

100% REACH 100% RoHS

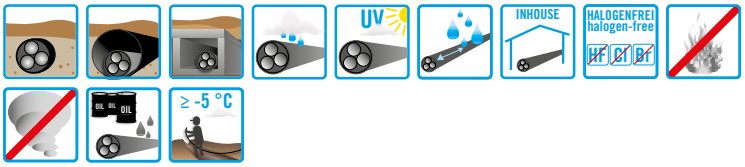
UV HALOGENFREI halogen-free HF HCl HBr geschirmt screened ≥ -20 °C

UV-resistant medium-voltage cable with longitudinally water-tight screen area for outdoor and underground installation in power stations, industrial and switchgear plants as well as local networks

- copper conductor, stranded
- conductor screen
- Insulation: XLPE
- insulation screen
- swellable tape
- copper screen with counter helix
- swellable tape
- outer sheath, PE, black

## BayEnergy® nonfire Metro MV 6/10 kV B2ca

100% RoHS 100% REACH CE

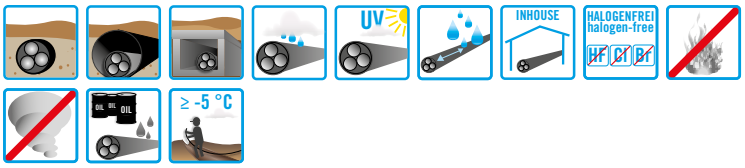



**Halogen-free and highly flame-retardant medium voltage cable for areas with high fire protection requirements**

- copper conductor, stranded
- conductor screen
- Insulation: XLPE
- insulation screen
- wrapping, swellable tape (screen longitudinally watertight)
- copper screen with counter helix
- wrapping
- outer sheath, halogen-free, flame retardant, black

## BayEnergy® nonfire Metro MV 12/20 kV B2ca

100% REACH 100% RoHS CE

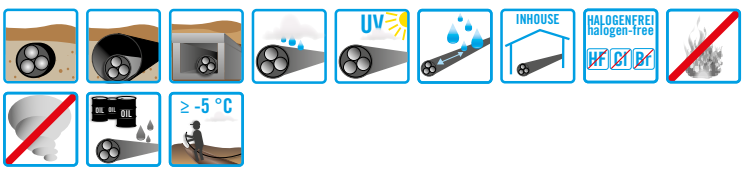



**Halogen-free and highly flame-retardant medium voltage cable for areas with high fire protection requirements**

- copper conductor, stranded
- conductor screen
- Insulation: XLPE
- insulation screen
- wrapping, swellable tape (screen longitudinally watertight)
- copper screen with counter helix
- wrapping
- outer sheath, halogen-free, flame retardant, black

## BayEnergy® nonfire Metro MV 18/30 kV B2ca

100% RoHS 100% REACH CE




**Halogen-free and highly flame-retardant medium voltage cable for areas with high fire protection requirements**

- copper conductor, stranded
- conductor screen
- Insulation: XLPE
- insulation screen
- wrapping, swellable tape (screen longitudinally watertight)
- copper screen with counter helix
- wrapping
- outer sheath, halogen-free, flame retardant, black

## NA2XS2Y 6/10 kV


100% RoHS 100% REACH

UV HALOGENFREI halogen-free HF DI BF geschirmt screened ≥ -20 °C

Medium-voltage cables for outdoor and underground installation for power stations, industrial and switchgear plants, as well as local networks

- aluminium conductor, stranded
- conductor screen
- Insulation: XLPE
- insulation screen
- conductive tape
- copper screen with counter helix
- wrapping, separating foil, plastic
- outer sheath, PE, black

## NA2XS2Y 12/20 kV


100% RoHS 100% REACH

UV HALOGENFREI halogen-free HF DI BF geschirmt screened ≥ -20 °C

Medium-voltage cables for outdoor and underground installation for power stations, industrial and switchgear plants, as well as local networks

- aluminium conductor, stranded
- conductor screen
- Insulation: XLPE
- insulation screen
- conductive tape
- copper screen with counter helix
- wrapping, separating foil, plastic
- outer sheath, PE, black

## NA2XS2Y 18/30 kV


100% REACH 100% RoHS

UV HALOGENFREI halogen-free HF DI BF geschirmt screened ≥ -20 °C

UV-resistant medium-voltage cable for outdoor and underground installation in power stations, industrial and switchgear plants as well as local networks

- aluminium conductor, stranded
- conductor screen
- Insulation: XLPE
- insulation screen
- conductive tape
- copper screen with counter helix
- wrapping, separating foil, plastic
- outer sheath, PE, black

## NA2XS(F)2Y 6/10 kV


100% RoHS 100% REACH


UV-resistant medium-voltage cable with longitudinally watertight screen area for outdoor and underground installation in power stations, industrial and switchgear plants as well as local networks

- aluminium conductor, stranded
- conductor screen
- Insulation: XLPE
- insulation screen
- swellable tape
- copper screen with counter helix
- swellable tape
- outer sheath, PE, black

## NA2XS(F)2Y 12/20 kV


100% RoHS 100% REACH


Medium-voltage cables with longitudinally watertight shielding area for outdoor and underground installation for power stations, industrial and switchgear plants, as well as local networks

- aluminium conductor, stranded
- conductor screen
- Insulation: XLPE
- insulation screen
- swellable tape
- copper screen with counter helix
- swellable tape
- outer sheath, PE, black

This product is also available in a highly flame-retardant version: Page 38

## NA2XS(F)2Y 18/30 kV


100% REACH 100% RoHS


Medium-voltage cables with longitudinally watertight shielding area for outdoor and underground installation for power stations, industrial and switchgear plants, as well as local networks

- aluminium conductor, stranded
- conductor screen
- Insulation: XLPE
- insulation screen
- swellable tape
- copper screen with counter helix
- swellable tape
- outer sheath, PE, black

# Medium voltage aluminium – 12/20 kV

## NA2XS(FL)2Y 12/20 kV


100% RoHS 100% REACH

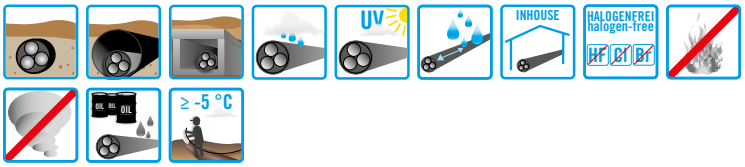

**UV-resistant and transversely water-tight medium-voltage cable with longitudinally water-tight shielding area for laying outdoors and underground for power stations, industrial and switchgear plants as well as local networks**

- aluminium conductor, stranded
- conductor screen
- Insulation: XLPE
- insulation screen
- swellable tape
- copper screen with counter helix
- swellable tape
- composite layer sheath, Al-tape and PE, black

# Medium voltage aluminium, highly flame-retardant – 12/20 kV

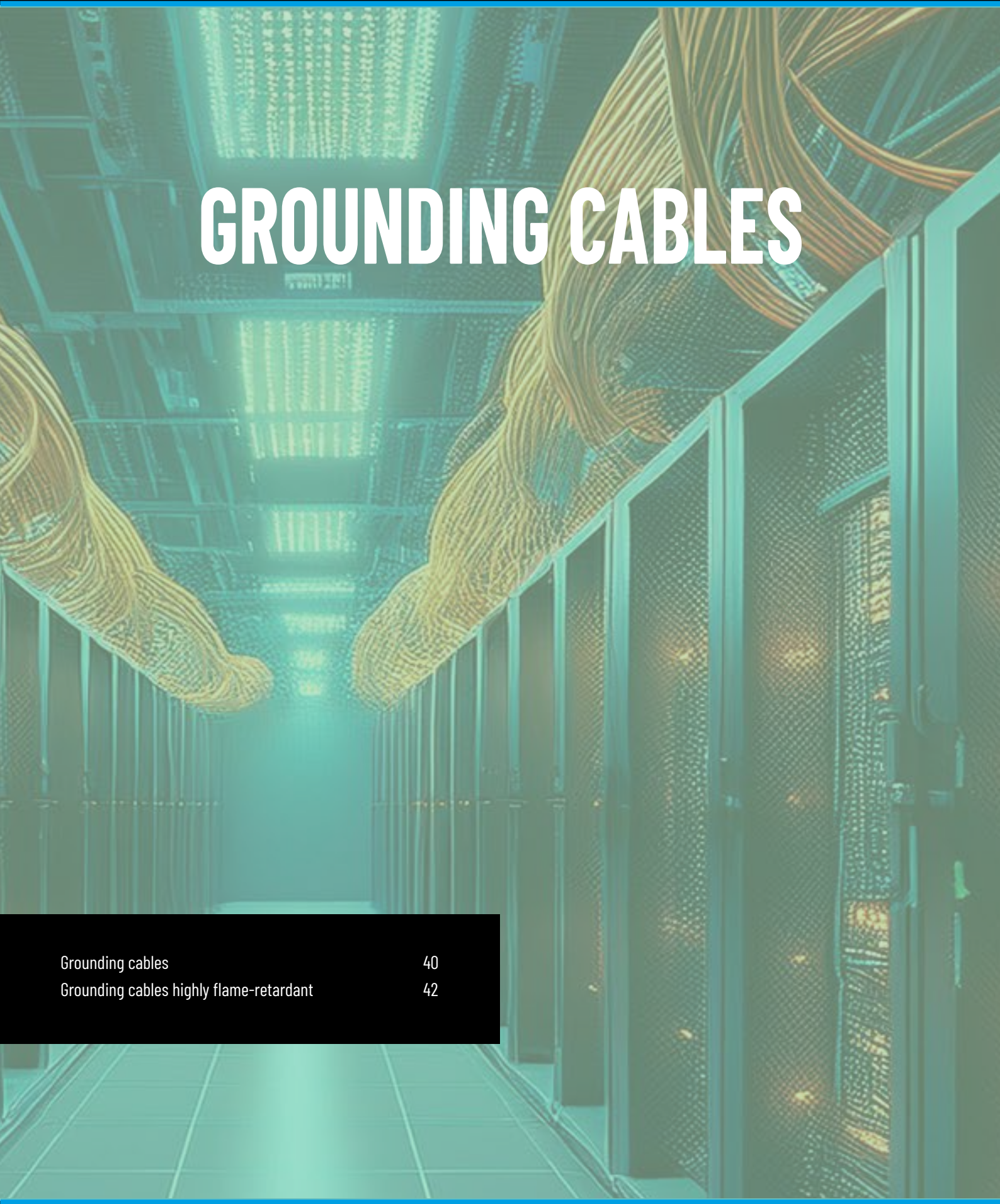
## BayEnergy® nonfire Metro MV AL 12/20 kV B2ca


100% RoHS 100% REACH CE




**halogen-free and highly flame-retardant medium voltage cable for areas with high fire protection requirements**

- aluminium conductor, stranded
- conductor screen
- Insulation: XLPE
- insulation screen
- wrapping, swellable tape (screen longitudinally watertight)
- copper screen with counter helix
- wrapping
- outer sheath, halogen-free, flame retardant, black



# GROUNDING CABLES

## BayMotion® TramSafe GC 70

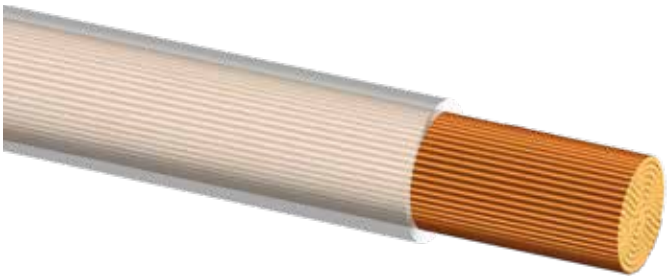

100% RoHS 100% REACH


Anti-theft flexible railway grounding cable for short-circuit current-proof grounding and for potential equalisation between rails and conductive but not live parts (e.g. overhead line masts, supports of the train preheating system, sound insulation walls, railings)

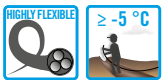
- CUSTAL conductor, finely stranded
- outer sheath, HEPR, black with blue cable designation stripes®

This product is also available in a highly flame-retardant version: Page 42

## ESY



100% RoHS 100% REACH

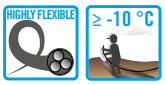



Highly flexible conductor for Earthing and short-circuiting devices (EaS)

- Copper conductor, finely stranded
- PVC insulation, transparent

## LiCY (ESUY)

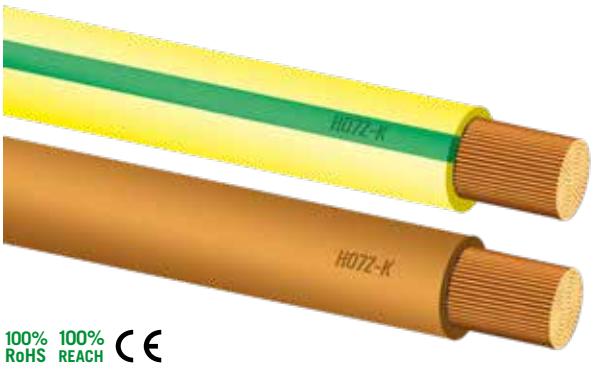
100% REACH 100% RoHS




LiCY (ESUY) are copper ground wires with additional braid

- Copper conductor, finely stranded, with additional braid
- PVC insulation, transparent

## CPR H07Z-K Eca




100% RoHS 100% REACH CE


**H07Z-K are halogen-free, flame-retardant and flexible core cables for laying in pipes and in closed installation ducts, within devices, switchgear and distributors**

- Copper, finely stranded, bare
- Insulation: halogen-free, cross-linked

## BayMotion® nonfire MetroSafe GC B2ca

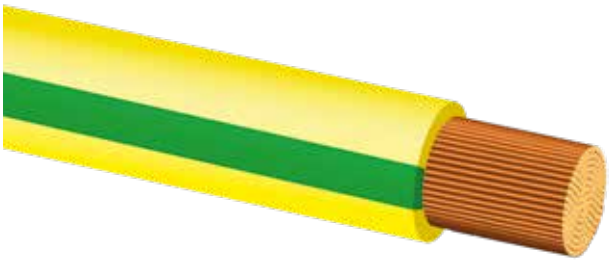

100% RoHS 100% REACH CE


Highly flame-retardant and flexible grounding cable for short-circuit current-resistant ground connection and for potential equalisation between railings and other conductive but not live parts in areas with high fire protection requirements

- CUSTAL conductor, finely stranded
- outer sheath, halogen-free, flame retardant, black with blue cable designation stripes®



## BayMotion® nonfire (N)HA B2ca



100% REACH 100% RoHS CE


Highly flame-retardant grounding wires for indoor use as alternative to H07...-K EN 50525-3-41 (VDE 0285-525-3-41)

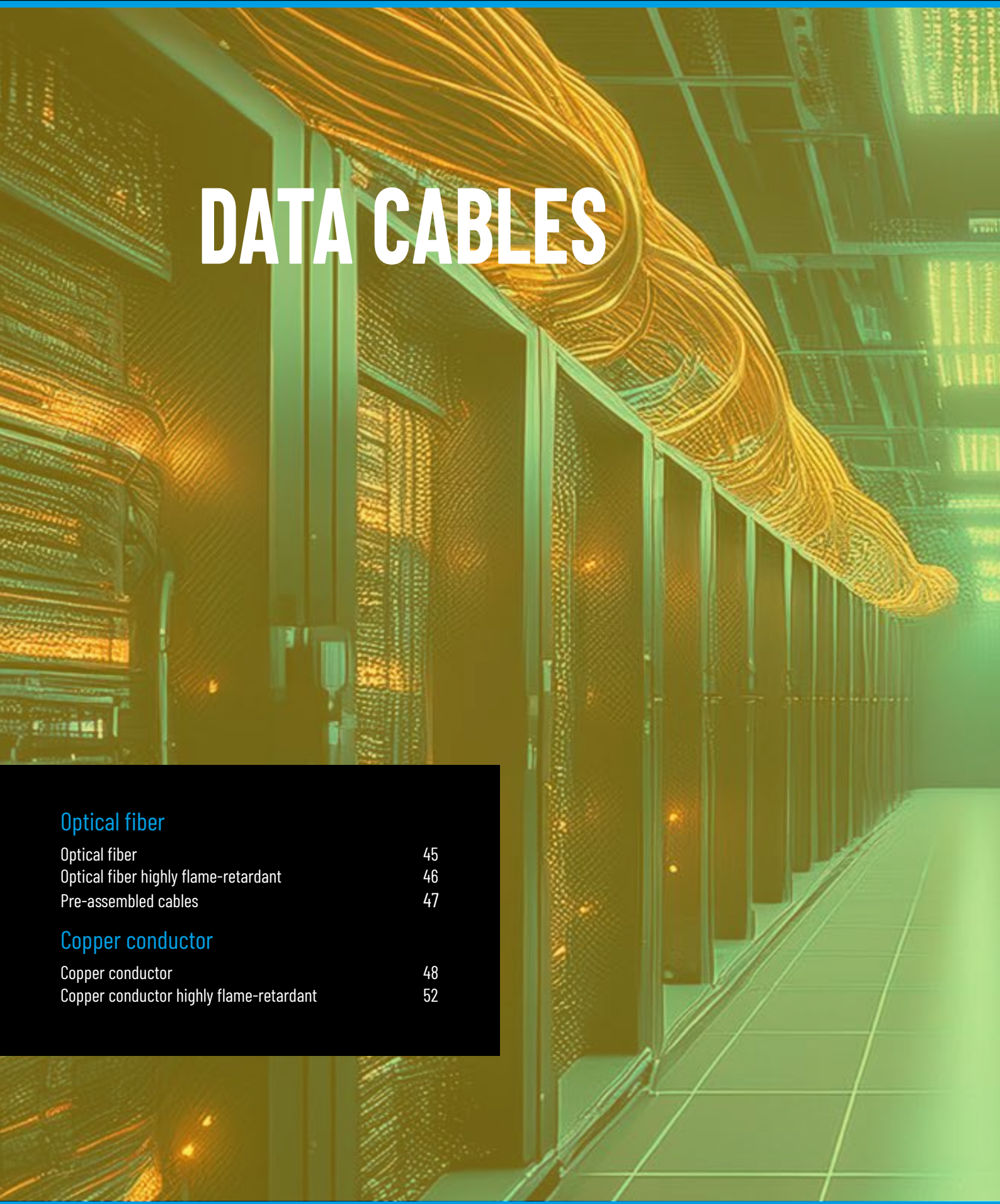
- copper conductor, finely stranded, class 5
- Insulation: halogen-free, flame-retardant, green-yellow

## BayEnergy® nonfire MetroSafe GC Al B2ca


100% RoHS 100% REACH CE


Highly flame-retardant, anti-theft aluminium grounding cable for public transport

- ALMG-conductor, stranded; with steel wire
- outer sheath, halogen-free, flame-retardant, black with blue cable designation stripes®



# DATA CABLES

## Optical fiber



## Copper conductor

Pre-assembled cables Page 47

To the product:

# FIBER-OPTIC CABLE REPAIR KIT / DAMAGE SLEEVE

Fast, durable and safe repair

RELIABILITY AND STABILITY IN THE NETWORK

## NO TIME FOR STANDSTILL

All parts enclosed

fast installation

reduced downtimes

Baykaplus

Discover more accessories in our BaykaPlus range.
Just get in touch with us. We will be happy to advise you.

## BayCom® A-DQ(ZN)2Y

100% RoHS 100% REACH CE

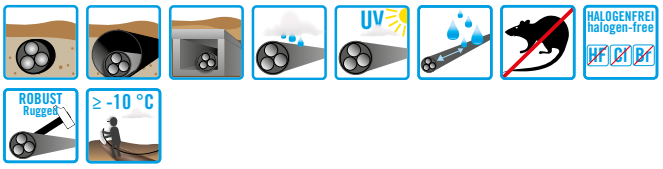

**Robust metal-free fibre optic outdoor cable without rodent protection, as connection cable in wide area and local networks, in private branch exchanges, for telecommunication and data transmission**

- central non-metallic support element
- optical fibers (E9/125, G50/125 or G62,5/125)
- filled loose tubes with 2 to 24 fibers each
- cable core filled dryly, longitudinally watertight
- non-metallic strain-relief elements
- outer sheath, PE, black

This product is also available in a highly flame-retardant version: Page 46

## BayCom® A-DQ(ZN)2Y(SR)2Y

100% RoHS 100% REACH CE



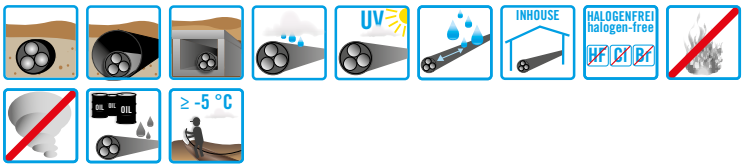

**Robust fibre optic outdoor cable with metal rodent protection (steel wire sheath), as connecting cable in wide area and local networks, in private branch exchanges, for telecommunication and data transmission**

- central non-metallic support element
- optical fibers (E9/125, G50/125 or G62,5/125)
- filled loose tubes with 2 to 24 fibers each
- cable core filled dryly, longitudinally watertight
- non-metallic strain-relief elements
- corrugated steel tape armouring
- outer protective covering, PE, black

This product is also available in a highly flame-retardant version: Page 46

## BayCom® nonfire Metro OFC B2ca

100% RoHS 100% REACH CE




Metal-free, halogen-free and highly flame-retardant optical fibres for telecommunication and data transmission for use in areas with high fire protection requirements

- optical fibers (E9/125, G50/125 or G62,5/125)
- filled loose tubes with 2 to 24 fibers each
- cable core filled dryly, longitudinally watertight
- reinforced glass rovings as strain-relief and rodent protection
- outer sheath, halogen-free, flame retardant, grey

## BayCom® nonfire Metro OFC csta Cca

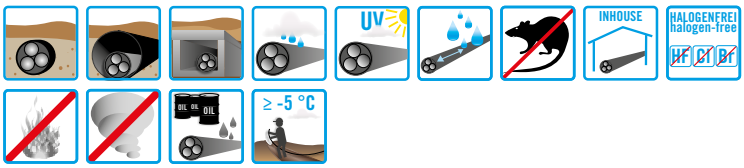
100% RoHS 100% REACH CE


Halogen-free, highly flame-retardant and armoured optical fibre cable for telecommunication and data transmission for use in areas with high fire protection requirements

- optical fibers (E9/125, G50/125 or G62,5/125)
- filled loose tubes with 2 to 24 fibers each
- cable core filled dryly, longitudinally watertight
- glass rovings as strain-relief
- inner sheath, halogen-free, flame retardant, black
- corrugated steel tape armouring
- outer sheath, halogen-free, flame retardant, grey

## BayCom® nonfire OFC TUSI® B2ca

100% REACH 100% RoHS CE




Halogen-free and flame-retardant optical fibres with metallic armouring for telecommunication and data transmission for use in areas with high fire protection requirements

- optical fibers (E9/125, G50/125 or G62,5/125)
- filled loose tubes with 2 to 24 fibers each
- cable core filled dryly, longitudinally watertight
- non-metallic strain-relief elements
- composite layer sheath, Al-tape and compound, halogen-free, flame retardant
- steel wire armouring
- outer protective covering, halogen-free, flame retardant, grey

## Breakout cables

**Breakout cables are fiber optic cables pre-assembled on one or both sides for establishing connections between cabinets over longer distances**

- Pre-assembled on one or both sides
- Production according to customer specifications - cable type, fiber type, length, color and connector type freely selectable
- Length up to 1000m
- With kink-proof protective tube for safe installation

## Fiber optic patch cords

**Patch cords are on both sides pre-assembled simplex or duplex cables and are suitable for use in housings and are used in structured communication networks in accordance with ISO/IEC 11801 and EN 50173. Duplex cables are available in figure-0 and figure-8. Our patch cords are manufactured entirely according to customer specifications, i.e. fiber type, length, color and connector types are freely selectable**

- Production according to customer specifications - fiber type, length, color and connector type freely selectable
- Pre-assembled on both sides
- Not suitable for laying using the pull-in or blow-in method
- For use in cabinets, sleeves and, to a limited extent, in cable ducts

## Fiber-optic cable repair kit / damage sleeve

**Fiber-optic cable, pre-assembled on both ends with gel joints FIST-GC0G2**

- Easy handling
- Significantly faster installation in the event of an accident
- All small components are enclosed
- Cost savings due to significantly reduced downtimes

DB


BayCom®

## VOKA-LAN XLAN 2000 S/FTP 4PR AWG 22/1 FRNC Dca

100% RoHS 100% REACH CE VO KA


**Data cable Category 8.2 class I and II up to 2000 MHz**

- copper conductor, solid, bare, AWG 22/1
- Insulation: SFS-PE
- core diameter: 1,55 ± 0.05 mm
- core identification acc. to IEC 708-1: ws-bl, ws-or, ws-gn, ws-br
- pair screen: plastic-laminated aluminium foil
- screen: tinned copper wire braid
- Sheath, halogen-free, flame retardant (FRNC), yellow

Also available in B2ca upon request

## VOKA-LAN XLAN 1500 S/FTP AWG 22/1 FRNC Dca

100% REACH 100% RoHS CE VO KA


**Data cable Category 7a better than class Fa up to 1000 MHz**

- copper conductor, solid, bare, AWG 22/1
- insulation, SFS-PE
- core diameter: 1,55 ± 0,05 mm
- core identification: ws-bl, ws-or, ws-gn, ws-br (IEC 708-1)
- pair screen, plastic-laminated aluminium foil
- screen, tinned copper braid
- sheath, halogen-free, flame retardant, yellow

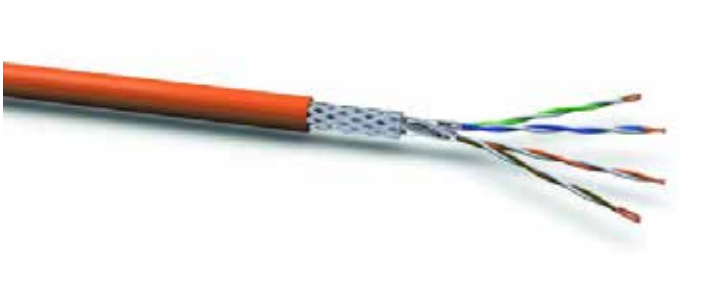
## VOKA-LAN SLAN 1500 S/FTP AWG 22/1 FRNC Dca

100% RoHS 100% REACH CE VO KA


**Data cable Category 7a better than class Fa up to 1000 MHz**

- copper conductor, solid, bare, AWG 22/1
- insulation, SFS-PE
- core diameter: 1,55 ± 0,05 mm
- core identification: ws-bl, ws-or, ws-gn, ws-br (IEC 708-1)
- pair screen, plastic-laminated aluminium foil
- screen, tinned copper braid
- sheath, halogen-free, flame retardant, yellow

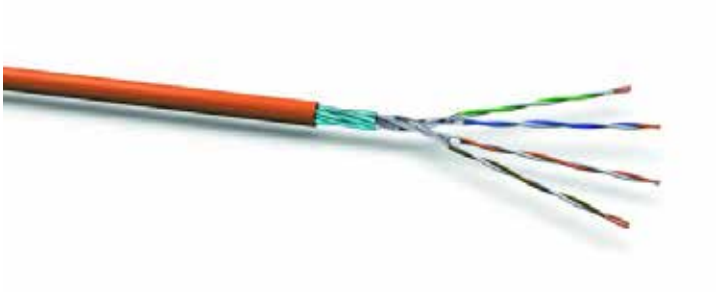
## VOKA-LAN SLAN 1000 S/FTP AWG 23/1 FRNC Dca



**Data cable Category 7 better than class F up to 600 MHz**

- copper conductor, solid, bare, AWG 23/1
- insulation, SFS-PE
- core diameter: 1,37 ± 0,05 mm
- core identification: ws-bl, ws-or, ws-gn, ws-br (IEC 708-1)
- pair screen, plastic-laminated aluminium foil
- screen, tinned copper braid
- sheath, halogen-free, flame retardant, orange


## VOKA-LAN XLAN 500 F/FTP AWG 23/1 FRNC Dca



**Data cable Category 6A and as class Ea up to 500 MHz**

- copper conductor, solid, bare, AWG 23/1
- insulation, SFS-PE
- core diameter: 1,35 ± 0,05 mm
- core identification: ws-bl, ws-or, ws-gn, ws-br (IEC 708-1)
- pair screen, plastic-laminated aluminium foil
- screen, aluminium foil
- sheath, halogen-free, flame retardant, orange

## VOKA-LAN XLAN 1000 Water Proof S/FTP 4PR AWG 23/1 (L)PE Fca

**Data cable for underground installation Category 7 better than class F up to 600 MHz**

- copper conductor, solid, bare, AWG 23/1
- insulation, SFS-PE
- core diameter: 1,38 ± 0,05 mm
- core identification: ws-bl, ws-or, ws-gn, ws-br (IEC 708-1)
- pair screen, plastic-laminated aluminium foil
- screen, tinned copper braid
- composite layer sheath, Al-tape and PE, black

100% RoHS 100% REACH CE VO KA


## VOKA-LAN XLAN 1000 Outdoor S/FTP 4PR AWG 23/1 PE Fca

**Data cable for outdoor installation Category 7 better than class F up to 600 MHz**

- copper conductor, solid, bare, AWG 23/1
- insulation, SFS-PE
- core diameter: 1,38 ± 0,05 mm
- core identification: ws-bl, ws-or, ws-gn, ws-br (IEC 708-1)
- pair screen, plastic-laminated aluminium foil
- screen, tinned copper braid
- Sheath, PE, black

100% RoHS 100% REACH CE VO KA

## Li-2YCYv


Li-2YCYv are data lines especially for wiring data systems with transmission rates up to 10 Mb/s. They are suitable for the RS 422 and RS 485 interfaces and are used in particular as a connecting cable for measurement, control and regulation technology

- Copper, finely stranded, bare
- Insulation: special Polyolefin
- Screen: braid, copper tinned
- Sheath: PVC, black

100% RoHS 100% REACH CE

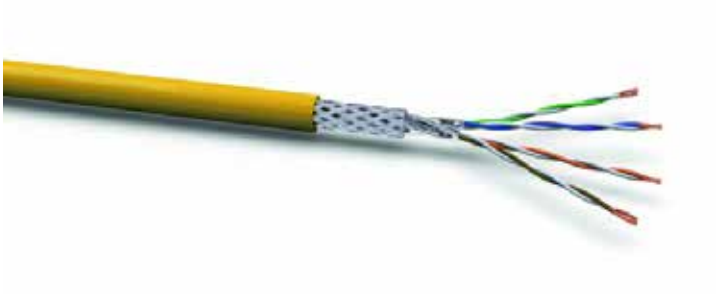

## CPR LiYCY


LiYCY are data lines for low-frequency applications. The cable is intended for fixed installation and conditionally flexible use and can be used in dry and damp rooms

- Copper, finely stranded, bare
- Insulation: PVC
- Screen: braid, copper tinned
- Sheath: PVC, grey

100% RoHS 100% REACH CE

## VOKA-LAN XLAN 1500 S/FTP AWG 22/1 FRNC B2ca



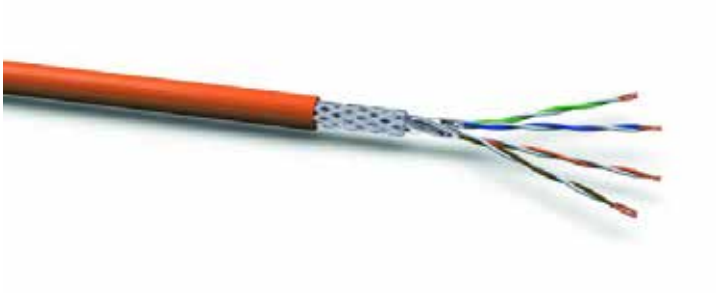
100% RoHS 100% REACH CE VO KA

INHOUSE | HALOGENFREI halogen-free HF Cl Br | geschirmt screened | EMV EMC | PoE + | PoE 4P | ≥ 0 °C

**Data cable Category 7a better than class Fa up to 1000 MHz**

- copper conductor, solid, bare, AWG 22/1
- Insulation: SFS-PE
- core diameter: 1,55 ± 0.05 mm
- core identification acc. to IEC 708-1: ws-bl, ws-or, ws-gn, ws-br
- pair screen: plastic-laminated aluminium foil
- screen: tinned copper wire braid
- Sheath, halogen-free, flame retardant (FRNC), yellow

## VOKA-LAN SLAN 1000 S/FTP AWG 23/1 FRNC B2ca



100% REACH CE VO KA

INHOUSE | HALOGENFREI halogen-free HF Cl Br | geschirmt screened | EMV EMC | PoE + | ≥ 0 °C

**Data cable Category 7 better than class F up to 600 MHz**

- copper conductor, solid, bare, AWG 23/1
- insulation, SFS-PE
- core diameter: 1,37 ± 0,05 mm
- core identification: ws-bl, ws-or, ws-gn, ws-br (IEC 708-1)
- pair screen, plastic-laminated aluminium foil
- screen, tinned copper braid
- sheath, halogen-free, flame retardant, orange

## VOKA-LAN XLAN 500 F/FTP AWG 23/1 FRNC B2ca

100% RoHS 100% REACH CE VO KA

INHOUSE | HALOGENFREI halogen-free HF Cl Br | geschirmt screened | PoE + | ≥ 0 °C

**Data cable Category 6A and as class Ea up to 500 MHz**

- copper conductor, solid, bare, AWG 23/1
- insulation, SFS-PE
- core diameter: 1,35 ± 0,05 mm
- core identification: ws-bl, ws-or, ws-gn, ws-br (IEC 708-1)
- pair screen, plastic-laminated aluminium foil
- screen, aluminium foil
- sheath, halogen-free, flame retardant, orange

# ACCESSORIES

## Caps

### End caps

- Heat shrinkable end caps
- Heat shrinkable live end seals
- Heat shrinkable end caps with pull eye

### Breakout caps

## Shrink-tubing

### Heat shrinkable

- Heat shrinkable tubing, medium-wall
- Heat shrinkable tubing, thick-wall
- Heat shrink tubing LSTT (without adhesive)

### Cold shrinkable

- Cold shrinkable tubing

## Joints and sleeves

### Power cables 0,6/1 kV

- Heat shrinkable straight-through joint for polymeric cables without screen
- Heat shrinkable straight-through joint for screened polymeric cables / cables with concentric conductor

### Control and safety technology & telecommunications

- Shrink connection sleeve SVSM
- Shrink connection and branch sleeve VASM-B
- Shrink protection sleeve VASS

### Repair sleeves

- Cable repair sleeve
- Adhesive repair sleeve

To the products:

# CONNECTION COMPONENTS

easy, fast,
and safe installation

LOW AND MEDIUM VOLTAGE

## RELIABLE IN EVERY APPLICATION

Connection technology (lugs)

Connection technology (connectors)

Shrinking technology

Baykaplus

Discover more accessories in our BaykaPlus range.
Just get in touch with us. We will be happy to advise you.

## Cable lugs and terminations

### Pressing technology

- Copper compression cable lug, DIN 46235
- AL- compression cable lug, DIN 46329
- Baykaplus BayEnergy® Joining and connection elements for railway earthing cables with Al/AlSt-conductors
- Baykaplus BayEnergy® Joining and connection elements for railway earthing cables with Cu/CuStAl-conductors

### Screwdriving technology

- Screw cable lug with shear head for up to 0,6/1 kV

### Terminations

- Termination for screened single core polymeric cables 6/10kV to 20,8/36 kV

## Connectors

### Pressing technology

- Copper compression connector, DIN 46267 T.1
- Aluminium compression connector, DIN 46267 T.2
- Crimp connector Cembre WL-M
- Baykaplus BayEnergy® Joining and connection elements for railway earthing cables with Al/AlSt-conductors

### Screwdriving technology

- Screw connector with shear head for up to 0,6/1 kV

## Plugs and cable glands


### Plugs

- MC4-Evo2 plug/jack for solar cables
- Fiber optic connectors

### Cable glands

- Pflitsch® blueglobe TRI® EMC cable gland

## Joints

**Low voltage**

- Heat shrinkable straight-through joint for polymeric cables without screen
- Heat shrinkable straight-through joint for screened polymeric cables / cables with concentric conductor

**Medium voltage**

- Straight-through joint for screened single core polymeric cables 6/10kV to 20,8/36 kV

## Fiber optic joints

**Fiber optics**

- Fiber-optic dome joint FIST-GC0G2

## Miscellaneous

**Miscellaneous**

- Shield connection cable SHC0
- Contacting kit LK
- Earthing rope EPPA

## Tools

Tools

- Cable stripping tool
- Cable stripper for external insulation
- Mechanical crimping tool Cembre HPH1

## Aids

Aids

- Cable jointing jig
- Paper insulating sleeves
- Waxed binding twine

## PASSION FOR CABLES

In 1898 , we manufactured the first power supply line. Since then, we have been motivated by our passion for cables and its diverse applications within the sectors of telecommunication, railway and public transport, building construction and civil engineering as well as machinery and plant engineering.

## PRODUCT DIVERSITY

Bayka is the one-stop provider when it comes to cables and wires for energy distribution and data transmission. Apart from our standard range, we develop individual cable solutions which are exactly adapted for their application.

## MADE IN GERMANY

All Bayka locations emerge from traditional companies of the German cable industry. They have accompanied the pioneering days of the electrical industry as well as of the information and communication technology. Until today, they are driving innovations forward.

## RESPONSIBILITY FOR PEOPLE AND NATURE

Our employees not only ensure the high quality of Bayka products, but also ensure effective environmental management at all our locations. For us, environmental protection encompasses the entire product development and life cycle. Through dialogue with the relevant authorities, we ensure that applicable environmental regulations and laws are strictly adhered to and monitored. We reduce energy consumption, waste, and wastewater to a minimum. Emission control and the responsible handling of hazardous substances are our top priorities.

## INNOVATION

Current topics like industry 4.0, changes in the transport industry or the energy revolution are on the minds of our customers. As a medium-sized company we have the flexibility to meet the demands of the market in a fast and innovative way.

## LOGISTICS

Our reliable and mature logistics system ensures that our cables arrive at their destination and on time. Via our own truck with crane, we deliver your cables directly to construction sites.

## SERVICE

Whether during the planning of a project or directly on the construction site, Bayka has been supplying helpful tools for many years. Technical data can be found at:
www.bayka.de/en/service/

## CONTACT

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Bayka® since 1885