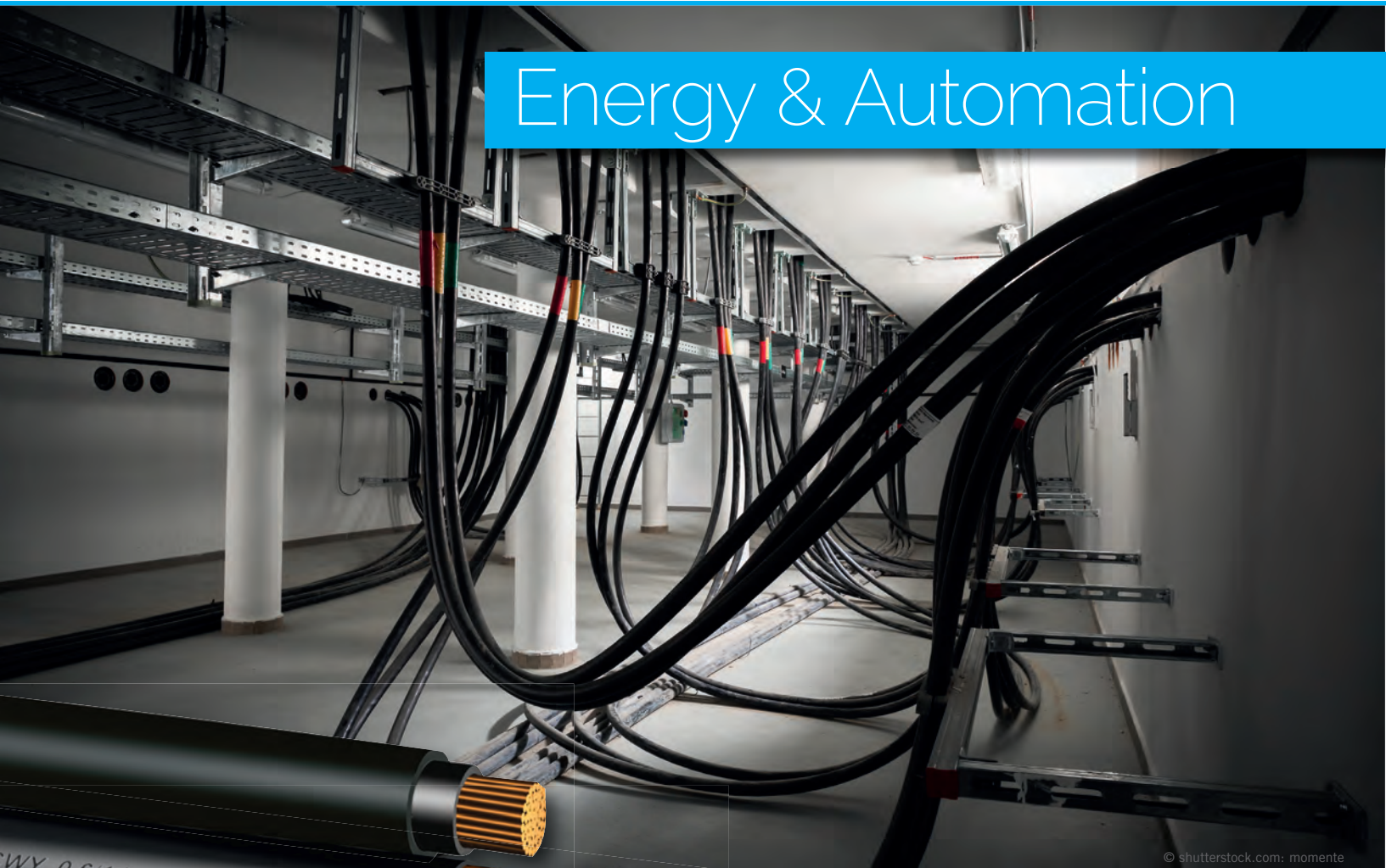


Energy & Automation



© shutterstock.com: momente

BayEnergy® & BayMotion®

■ Overview of energy-, flexible control-, VFD servo motor- and connecting cables

BAYERISCHE KABELWERKE AG



The whole
World of Cables
all from one source



*Ecology + know-how =
sustainability!*

The headquarter of the Bayerische Kabelwerke AG (Bayka) is based in Roth (Franconia). We produce cables for telecommunication, energy and transport networks as well as for industrial and systems engineering. Our modern company is certified by DIN ISO 9001, 14001 and 50001. The large portfolio we produce in according to national and international standards and specifications. It ranges from power-,telecommunications-,

signalling and special cables up to wires, cords and ropes.

Bayka is now one of the well-known manufacturers of power cables, insulated overhead cables, copper- and Al-ropes, multisystem widearea cables, telecommunication cables, railway cables and fibre optic cables. For over 130 years we have been one of the most successful actors in these markets exclusively:

“made in Germany”.

Bayka
seit 1885

BAYERISCHE KABELWERKE AG

Otto Schrimpf-Strasse 2
91154 Roth | Germany

Tel: +49 (0) 9171 806-111
Fax: +49 (0) 9171 806-222
E-mail : kabel@bayka.de
www.bayka.de

Chairman of the Supervisory Board: Christiane Wilms-Mester, Board of Directors: Johann Erich Wilms, Place of business: 91154 Roth - Germany, Filed under in the commercial register, HRB-Nr. 314 District Court of Nuremberg

BAYKA COLOR FARBKONZENTRATE GMBH



The production of color concentrates, compounds and masterbatches and plastic mixtures, initially for their own use, is now an independent company.

With powerful equipment for plastic processing the Bayka Color Farbkonzentrate GmbH manufactures highquality products for the plastics processing industry.

Bayka Color
Farbkonzentrate GmbH

BAYKA COLOR FARBKONZENTRATE GMBH

Otto-Schrimpf-Strasse 2
91154 Roth | Germany

Tel: +49 (0)9171 806-144
Fax: +49 (0)9171 806-139
E-Mail: farbkonzentrate@bayka.de
www.baykacolor.de

BAYKA BERLIN GMBH & CO. KG

The Bayka Berlin GmbH & Co. KG is a specialized company for the manufacture of power cables with aluminium conductors. A modern equipment and qualified staff ensures productivity at the highest quality standard.

We produce copper and aluminum cables in the standard range as well as special cables according to customer requirements for national and international markets.



BAYKA BERLIN GMBH & CO. KG
Soltauer Strasse 8
13509 Berlin | Germany
www.bayka.de



BGF- BERLINER GLASFASERKABEL GMBH

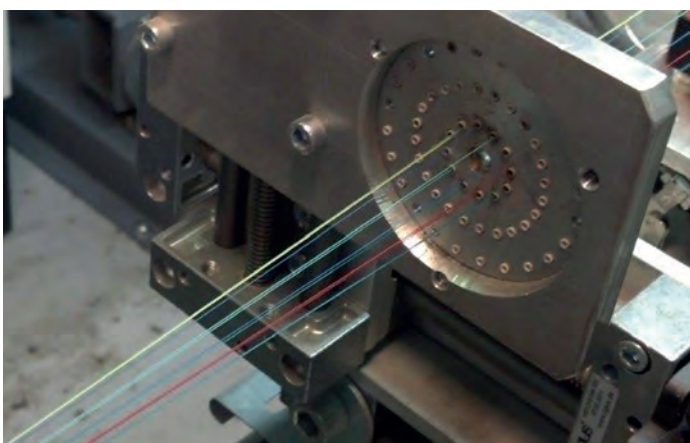
The Berlin fiber optic cables GmbH (BGF) was founded in 1986 and acquired by Bayka AG 2005.

This allowed us to complement our portfolio and the manufacturing spectrum with the important and pioneering field of fibre optic

cables. Today, well-known companies such as the German Telekom AG or the German Bahn AG are large customers for our outdoor, indoor, air and rail footcables.

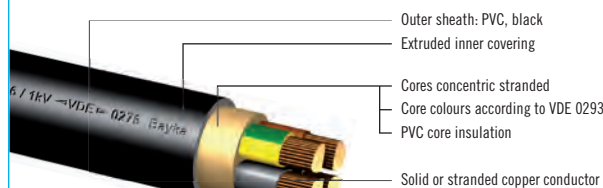


BGF - BERLINER GLASFASERKABEL GMBH
Wilhelminenhofstr. 76/77
12459 Berlin | Germany
www.bgf-kabel.de



BayEnergy® - Power cables, copper conductor - PVC insulation 0,6/1 kV

NYY-J 1- to multicore



Application

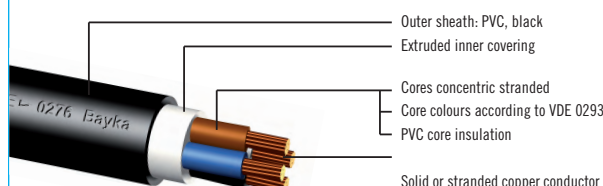
For power stations, industry and distribution boards or subscriber networks, where mechanical damage to the cable is not expected.

Cable temperature

during laying (min.): -5 °C, after laying (max.): +70 °C
Max. permissible operating temperature (conductor): +70 °C
Short-circuit temperature: +160 °C



NYY-O 1- to multicore



Application

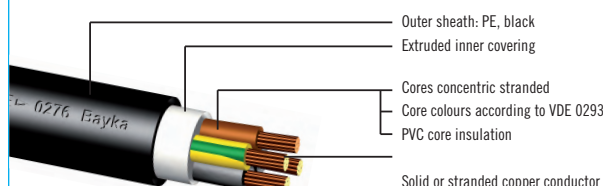
For power stations, industry and distribution boards or subscriber networks, where mechanical damage to the cable is not expected.

Cable temperature

during laying (min.): -5 °C, after laying (max.): +70 °C
Max. permissible operating temperature (conductor): +70 °C
Short-circuit temperature: +160 °C



NY2Y-J multicore



Application

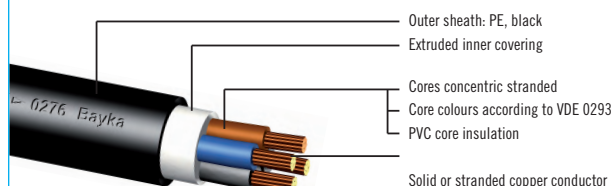
For power stations, industry and distribution boards or subscriber networks, where mechanical damage to the cable is not expected.

Cable temperature

during laying (min.): -5 °C, after laying (max.): +70 °C
Max. permissible operating temperature (conductor): +70 °C
Short-circuit temperature: +160 °C



NY2Y-O multicore



Application

For power stations, industry and distribution boards or subscriber networks, where mechanical damage to the cable is not expected.

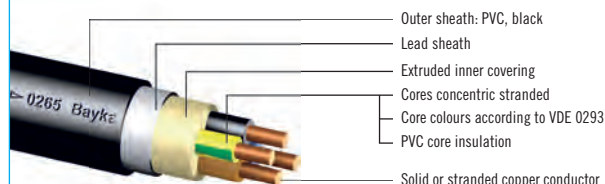
Cable temperature

during laying (min.): -5 °C, after laying (max.): +70 °C
Max. permissible operating temperature (conductor): +70 °C
Short-circuit temperature: +160 °C



BayEnergy® - Power cables, copper conductor - PVC insulation 0,6/1 kV

NYKY-J 1- to multicore



Application

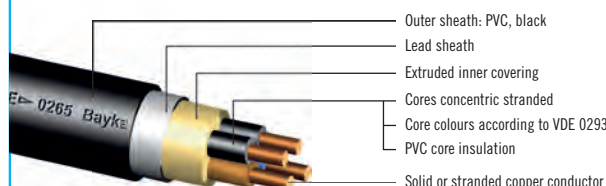
For indoor and outdoor installation, in the ground, especially in applications where there is the influence of solvents, fuels, oils, gasoline or similar must be expected (e.g., refineries and gas stations).

Cable temperature

during laying (min.): -5 °C, after laying (max.): +70 °C
Max. permissible operating temperature (conductor): +70 °C
Short-circuit temperature: +160 °C



NYKY-O 3- to multicore



Application

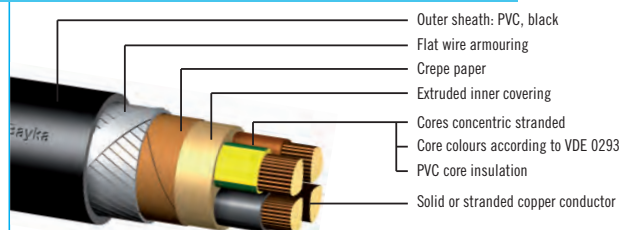
For indoor and outdoor installation, in the ground, especially in applications where there is the influence of solvents, fuels, oils, gasoline or similar must be expected (e.g., refineries and gas stations).

Cable temperature

during laying (min.): -5 °C, after laying (max.): +70 °C
Max. permissible operating temperature (conductor): +70 °C
Short-circuit temperature: +160 °C



NYFGY-J 3- to 4-cores



Application

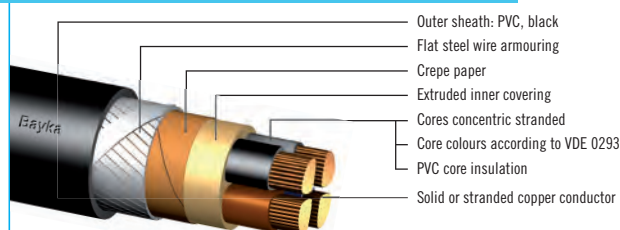
For power stations, industry and distribution boards or subscriber networks, where additional protection against mechanical damage is required and in the case of increased tensile forces during installation, laying and operation.

Cable temperature

during laying (min.): -5 °C, after laying (max.): +70 °C
Max. permissible operating temperature (conductor): +70 °C
Short-circuit temperature: +160 °C



NYFGY-O 1- to multicore



Application

For power stations, industry and distribution boards or subscriber networks, where additional protection against mechanical damage is required and in the case of increased tensile forces during installation, laying and operation.

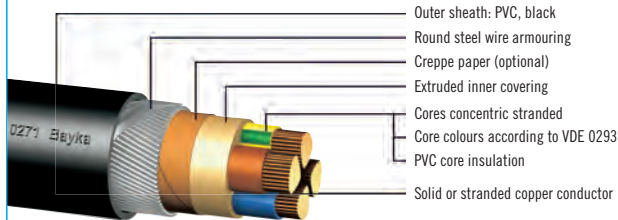
Cable temperature

during laying (min.): -5 °C, after laying (max.): +70 °C
Max. permissible operating temperature (conductor): +70 °C
Short-circuit temperature: +160 °C



BayEnergy® - Power cables, copper conductor - PVC insulation 0,6/1 kV

NYRGY-J 3- to multicore



Application

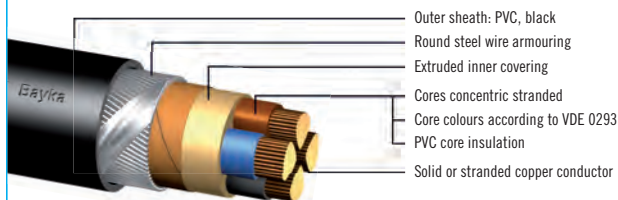
For power stations, industry and distribution boards or subscriber networks, where additional protection against mechanical damage is required and in the case of increased tensile forces during installation, laying and operation..

Cable temperature

during laying (min.): -5 °C, after laying (max.): +70 °C
Max. permissible operating temperature (conductor): +70 °C
Short-circuit temperature: +160 °C



NYRGY-O 3- to multicore



Application

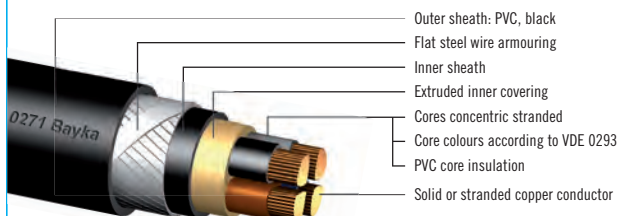
For power stations, industry and distribution boards or subscriber networks, where additional protection against mechanical damage is required and in the case of increased tensile forces during installation, laying and operation..

Cable temperature

during laying (min.): -5 °C, after laying (max.): +70 °C
Max. permissible operating temperature (conductor): +70 °C
Short-circuit temperature: +160 °C



NYYFGY-O 3- to 4-cores



Application

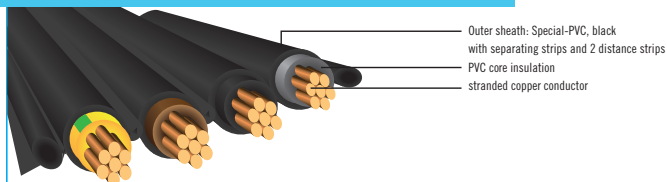
For power stations, industry and distribution boards or subscriber networks, where additional protection against mechanical damage is required and in the case of increased tensile forces during installation, laying and operation.

Cable temperature

during laying (min.): -5 °C, after laying (max.): +70 °C
Max. permissible operating temperature (conductor): +70 °C
Short-circuit temperature: +160 °C



NYDY 4-cores



Application

Roof pole entry cable for roof pole connections for entry into roof pole pipes. The cables are suitable for use in open air. The special PVC compound is weather-, ageing, cold, and UV-resistant.

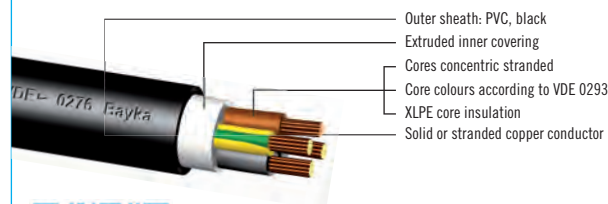
Cable temperature

after laying (max.): +70 °C
Max. permissible operating temperature (conductor): +70 °C



BayEnergy® - Power cables, copper conductor - XLPE insulation 0,6/1 kV

N2XY-J 1- to multicore



Application

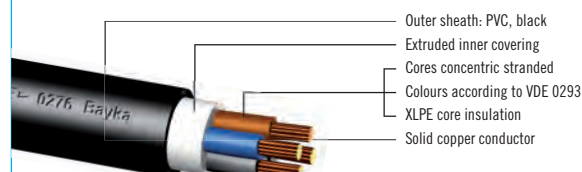
For power stations, industry and distribution boards or subscriber networks, where mechanical damage to the cable is not expected.

Cable temperature

during laying (min.): -5 °C, after laying (max.): +90 °C
Max. permissible operating temperature (conductor): +90 °C
Short-circuit temperature: +250 °C



N2XY-O 2- to multicore

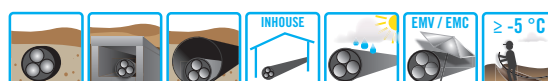


Application

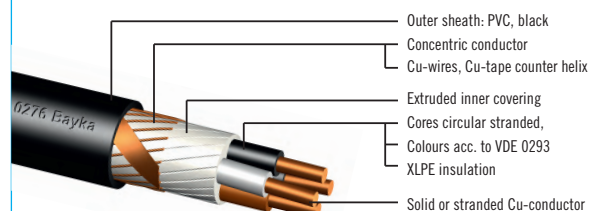
For power stations, industry and distribution boards or subscriber networks, where mechanical damage to the cable is not expected.

Cable temperature

during laying (min.): -5 °C, after laying (max.): +90 °C
Max. permissible operating temperature (conductor): +90 °C
Short-circuit temperature: +250 °C



N2XCY 1- to multicore

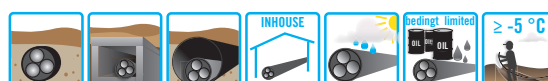


Application

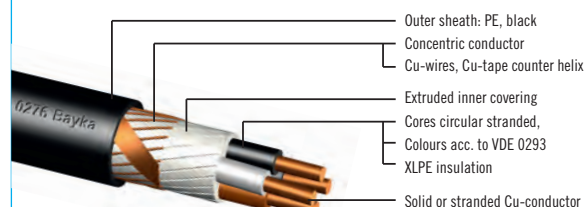
For power stations, industry and distribution boards or subscriber networks, where protection against contact voltage is required in the case of mechanical damage.

Cable temperature

during laying (min.): -5 °C, after laying (max.): +90 °C
Max. permissible operating temperature (conductor): +90 °C
Short-circuit temperature: +250 °C



N2XC2Y 1- to 4 1/2-core



4 1/2-core-Version
especially for TN-S systems (EMC optimized)

Application

For indoor and outdoor installation, in the ground, especially in applications where there is the influence of solvents, fuels, oils, gasoline or similar must be expected (e.g., refineries and gas stations).

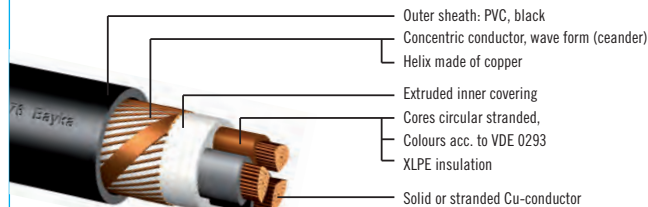
Cable temperature

during laying (min.): -20 °C, after laying (max.): +90 °C
Max. permissible operating temperature (conductor): +90 °C
Short-circuit temperature: +250 °C



BayEnergy® - Power cables, copper conductor - XLPE insulation 0,6/1 kV

N2XCWY 3- to 4 1/2-core



Application

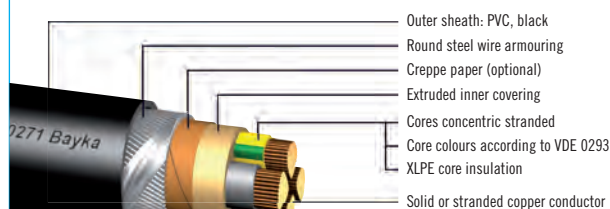
For indoor and outdoor installation, in the ground, especially in applications where protection against contact voltage is required in the case of mechanical damage.

Cable temperature

during laying (min.): -5 °C, after laying (max.): +90 °C
Max. permissible operating temperature (conductor): +90 °C
Short-circuit temperature: +250 °C



N2XRGY-J 1- to multicore



Application

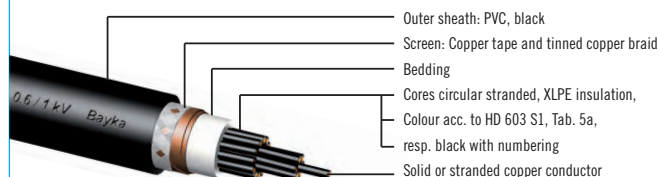
For power stations, industry and distribution boards or subscriber networks, where additional protection against mechanical damage is required and in the case of increased tensile forces during installation, laying and operation.

Cable temperature

during laying (min.): -5 °C, after laying (max.): +90 °C
Max. permissible operating temperature (conductor): +90 °C
Short-circuit temperature: +250 °C



2XSCY 1- to multicore



Application

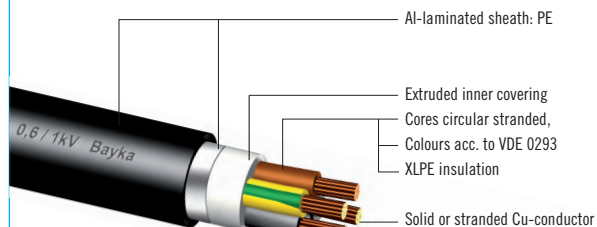
For power stations, industry and distribution boards or subscriber networks, for indoor and outdoor installation, in the ground.

Cable temperature

during laying (min.): -5 °C, after laying (max.): +70 °C
Max. permissible operating temperature (conductor): +90 °C
Short-circuit temperature: +250 °C



(N)2X(L)2Y-J 1- to multicore



Application

For power stations, industry and distribution boards or subscriber networks. For indoor and outdoor installation, in the ground, in open air, where protection against contact voltage is required in the case of mechanical damage.

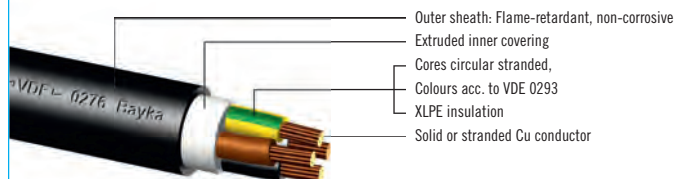
Cable temperature

during laying (min.): -20 °C, after laying (max.): +90 °C
Max. permissible operating temperature (conductor): +90 °C
Short-circuit temperature: +250 °C



BayEnergy® - Power cables, copper conductor - FRNC/LSOH 0,6/1 kV

N2XH-J 1- to multicore



low gas corrosivity acc. to EN 50267, low toxicity of gases acc. to DIN EN 50305, low smoke density acc. to DIN EN 61034-2, flame retardant acc. to IEC 60332-3, EN 50266-2-4

Application

For power stations, industry and distribution boards or subscriber networks, Cable with improved behaviour in the event of fire.

For in- and outdoor installation, in open air (protected against direct sun light), however not directly in the ground.

Cable temperature

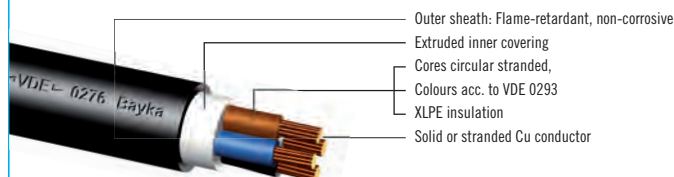
during laying (min.): -5 °C, after laying (max.): +90 °C

Max. permissible operating temperature (conductor): +90 °C

Short-circuit temperature: +250 °C



N2XH-O 1- to multicore



low gas corrosivity acc. to EN 50267, low toxicity of gases acc. to DIN EN 50305, low smoke density acc. to DIN EN 61034-2, flame retardant acc. to IEC 60332-3, EN 50266-2-4

Application

For power stations, industry and distribution boards or subscriber networks, Cable with improved behaviour in the event of fire.

For in- and outdoor installation, in open air (protected against direct sun light), however not directly in the ground.

Cable temperature

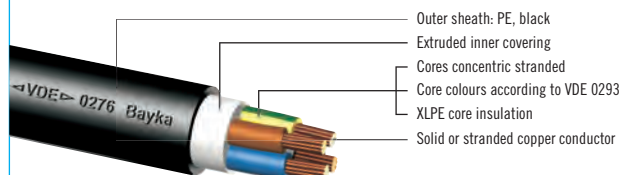
during laying (min.): -5 °C, after laying (max.): +90 °C

Max. permissible operating temperature (conductor): +90 °C

Short-circuit temperature: +250 °C



N2X2Y-J 1- to multicore



Application

For power stations, industry and distribution boards or subscriber networks, where mechanical damage to the cable is not expected.

Cable temperature

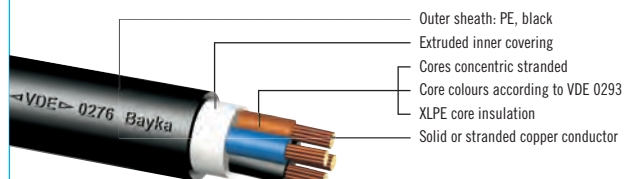
during laying (min.): -20 °C, after laying (max.): +90 °C

Max. permissible operating temperature (conductor): +90 °C

Short-circuit temperature: +250 °C



N2X2Y-O 1- to multicore



Application

For indoor and outdoor installation, in the ground, in open air, for power stations, industry and distribution boards or subscriber networks, where mechanical damage to the cable is not expected.

Cable temperature

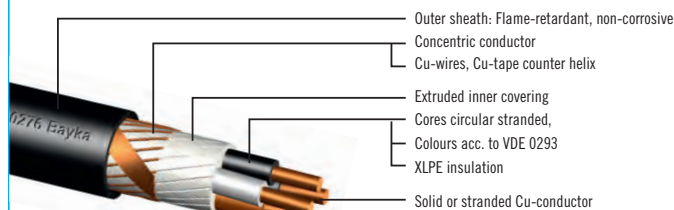
during laying (min.): -20 °C, after laying (max.): +90 °C

Max. permissible operating temperature (conductor): +90 °C

Short-circuit temperature: +250 °C



N2XCH 1- to multicore



4 1/2-core-Version
especially for TN-S systems (EMC optimized)

low gas corrosivity acc. to EN 50267, low toxicity of gases acc. to DIN EN 50305,
low smoke density acc. to DIN EN 61034-2, flame retardant acc. to IEC 60332-3, EN 50266-2-4

Application

For power stations, industry and distribution boards or subscriber networks, Cable with improved behaviour in the event of fire.

For in- and outdoor installation, in open air (protected against direct sun light), however not directly in the ground.

Cable temperature

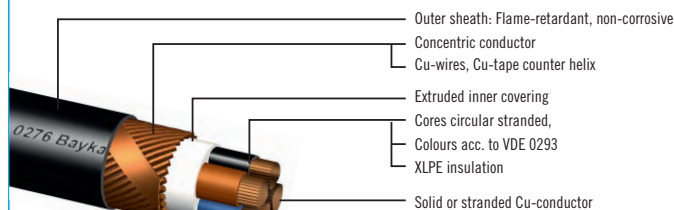
during laying (min.): -5 °C, after laying (max.): +90 °C

Max. permissible operating temperature (conductor): +90 °C

Short-circuit temperature: +250 °C



N2XCWH 3 1/2- to 4 1/2-core



4 1/2-core-Version
especially for TN-S systems (EMC optimized)

low gas corrosivity acc. to EN 50267, low toxicity of gases acc. to DIN EN 50305,
low smoke density acc. to DIN EN 61034-2, flame retardant acc. to IEC 60332-3, EN 50266-2-4

Application

For power stations, industry and distribution boards or subscriber networks, where protection against contact voltage is required in the case of mechanical damage. For in- and outdoor installation, in open air (protected against direct sun light), however not directly in the ground.

Cable temperature

during laying (min.): -5 °C, after laying (max.): +70 °C

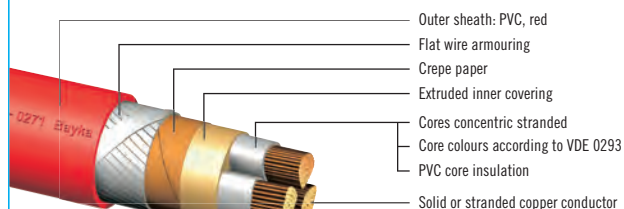
Max. permissible operating temperature (conductor): +70 °C

Short-circuit temperature: +160 °C



BayEnergy® - Power cables, copper conductor - PVC insulation 3,6/6 kV

NYFGY 3-cores



Application

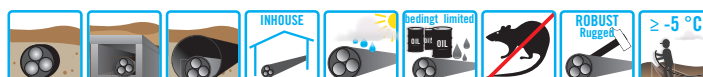
For power stations, industry and distribution boards or subscriber networks.

For indoor installation and in cable ducts, in open air, in the ground, where additional protection against mechanical damage is required and in the case of increased tensile forces during installation, laying and operation.

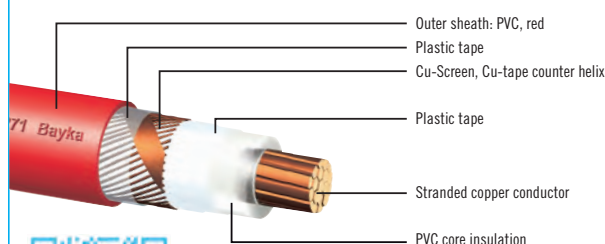
Cable temperature

during laying (min.): -5 °C, after laying (max.): +90 °C

Short-circuit temperature: +250 °C



NYSY 1-core



Application

For power stations, industry and distribution boards or subscriber networks.

For in- and outdoor installation, in open air, in the ground, where protection against contact voltage is required in the case of mechanical damage.

Cable temperature

during laying (min.): -5 °C, after laying (max.): +90 °C

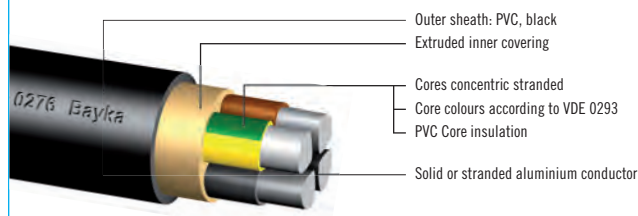
Max. permissible operating temperature (conductor): +90 °C

Short-circuit temperature: +250 °C



BayEnergy® - Power cables, aluminium conductor - PVC insulation 0,6/1 kV

NAYY 1- to 4-cores

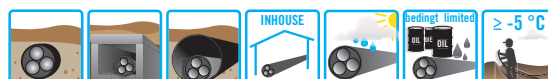


Application

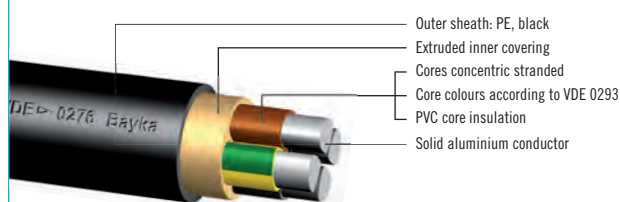
For power stations, industry and distribution boards or subscriber networks, where mechanical damage to the cable is not expected.

Cable temperature

during laying (min.): -5 °C, after laying (max.): +70 °C
Max. permissible operating temperature (conductor): +70 °C
Short-circuit temperature: +160 °C



NAY2Y-J 4-cores



Application

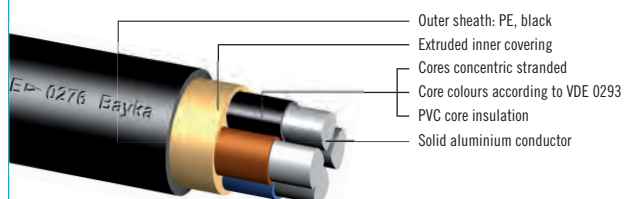
For power stations, industry and distribution boards or subscriber networks, where mechanical damage to the cable is not expected.

Cable temperature

during laying (min.): -5 °C, after laying (max.): +70 °C
Max. permissible operating temperature (conductor): +70 °C
Short-circuit temperature: +160 °C



NAY2Y-O 4-cores



Application

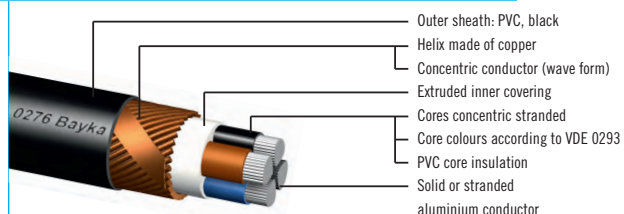
For power stations, industry and distribution boards or subscriber networks, where mechanical damage to the cable is not expected.

Cable temperature

during laying (min.): -5 °C, after laying (max.): +70 °C
Max. permissible operating temperature (conductor): +70 °C
Short-circuit temperature: +160 °C



NAYCWY 3- to 4½-core



4 ½-core-Version
especially for TN-S systems (EMC optimized)

Application

For power stations, industry and distribution boards or subscriber networks, where protection against contact voltage is required in the case of mechanical damage.

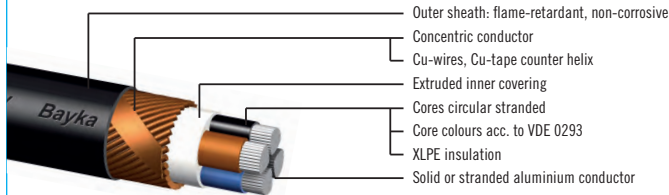
Cable temperature

during laying (min.): -5 °C, after laying (max.): +70 °C
Max. permissible operating temperature (conductor): +70 °C
Short-circuit temperature: +160 °C



BayEnergy® - Power cables, aluminium conductor - XLPE insulation 0,6/1 kV

NA2XCWH



FRNC / LSOH
4 1/2-core-Version
especially for TN-S systems (EMC optimized)

Application

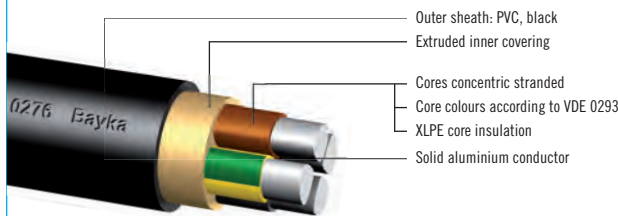
For power stations, industry and distribution boards or subscriber networks, where protection against contact voltage is required in the case of mechanical damage. For in- and outdoor installation, in open air (protected against direct sun light), however not directly in the ground.

Cable temperature

during laying (min.): -5 °C, after laying (max.): +70 °C
Max. permissible operating temperature (conductor): +70 °C
Short-circuit temperature: +160 °C



NA2XY-J 1- to 4-cores



Application

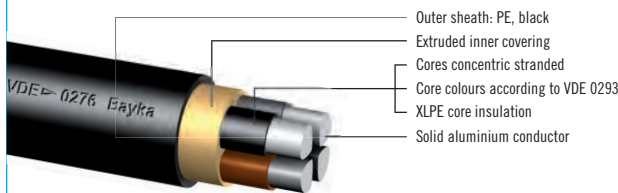
For power stations, industry and distribution boards or subscriber networks, where mechanical damage to the cable is not expected.

Cable temperature

during laying (min.): -5 °C, after laying (max.): +70 °C
Max. permissible operating temperature (conductor): +90 °C
Short-circuit temperature: +250 °C



NA2XY-O 1- and 4-cores



Application

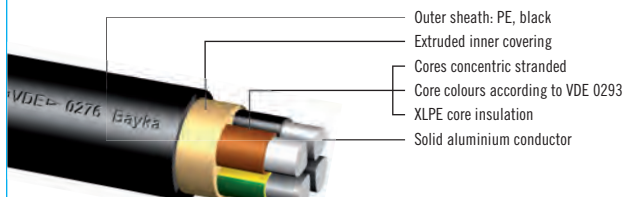
For power stations, industry and distribution boards or subscriber networks, where mechanical damage to the cable is not expected.

Cable temperature

during laying (min.): -5 °C, after laying (max.): +70 °C
Max. permissible operating temperature (conductor): +90 °C
Short-circuit temperature: +250 °C



NA2X2Y-J 1- to 4-cores



Application

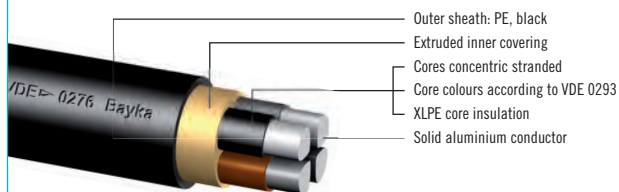
For power stations, industry and distribution boards or subscriber networks, where mechanical damage to the cable is not expected.

Cable temperature

during laying (min.): -20 °C, after laying (max.): +70 °C
Max. permissible operating temperature (conductor): +90 °C
Short-circuit temperature: +250 °C



NA2X2Y-O 1- to 4-cores



Application

For power stations, industry and distribution boards or subscriber networks, where mechanical damage to the cable is not expected.

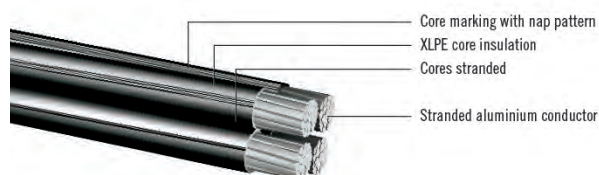
Cable temperature

during laying (min.): -20 °C, after laying (max.): +70 °C
Max. permissible operating temperature (conductor): +90 °C
Short-circuit temperature: +250 °C



BayEnergy® - Overhaed lines, aluminium conductor - XLPE insulation 0,6/1 kV

NFA2X 1- to 6-cores



Application

XLPE-insulated overhead line are used in open air for permanent laying on posts (e.g. in densely populated building areas or forests, where the use of bare overhead lines is not economical). They can also be laid along walls or ceilings with and without stress relief in special cases.

Cable temperature

during laying (min.): -20 °C, after laying (max.): +80 °C
Max. permissible operating temperature (conductor): +80 °C
Short-circuit temperature: +130 °C



BayEnergy® - Grounding cables, aluminium conductor - 0,6/1 kV

(N)AYY-J / (N)A(St)YY / (N)A(St)2XH



with theft defending properties

Application

Grounding cables are used as grounding connection resistant to short-circuit current, for potential equalisation between rails and conductive parts not under voltage (e.g. posts, brackets of train preheating equipment, acoustic barriers, handrails).

Cable temperature

during laying, installing and similar: -10 to +60 °C
after laying: -30 to +60 °C



(N)2X CuStAl



with theft defending properties

Application

Grounding cables are used as grounding connection resistant to short-circuit current, for potential equalisation between rails and other conductive parts not under voltage.

Cable temperature

during laying, installing and similar: -10 to +60 °C
after laying: -30 to +60 °C



BayEnergy® - Aluminium and copper ropes - 0,6/1 kV

Aluminium rope 1-core



Solid or stranded aluminium conductor



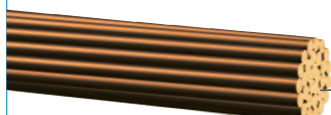
Application

For indoor installation, in the open air and in the ground, as lightning rod for industrial plants and buildings.

Technical Data

Conductor made of aluminium
Conductor design: Conductor class 2
stranded, uncompressed (RMu)
stranded, compressed (RMv)

Copper ropes bare



Solid or stranded copper conductor



Application

For indoor installation, in the open air and in the ground, as lightning rod for industrial plants and buildings.

Technical Data

Conductor made of copper
Conductor design: Conductor class 2
stranded, uncompressed (RMu)
stranded, compressed (RMv)

Copper ropes tin-plated



Solid or stranded copper conductor, tin plated



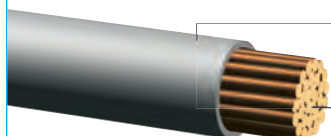
Application

For indoor installation, in the open air and in the ground, as lightning rod for industrial plants and buildings.

Technical Data

Conductor made of copper, tin-coated
Conductor design: Conductor class 2
stranded, uncompressed (RMu)
stranded, compressed (RMv)

Copper ropes lead sheath



Lead sheath

Solid or stranded copper conductor



Application

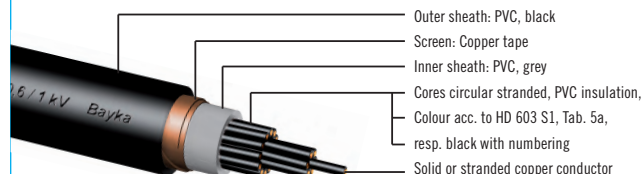
For indoor installation, in the open air and in the ground, as lightning rod for industrial plants and buildings, especially in applications where there is the influence of solvents, fuels, oils, gasoline or similar must be expected (e.g., refineries and gas stations).
The lead sheath is insensitive to humic acid and aggressive soil components.
cables acc. to standard

Technical Data

Conductor made of copper, bare and/or tin-coated
Stranded conductor design, uncompressed: Conductor class 2
Lead sheath

BayEnergy® - Power cables to international standards - 0,6/1 kV

YSY 2- to multicore



Application

For power stations, industry and distribution boards or subscriber networks.

Cable temperature

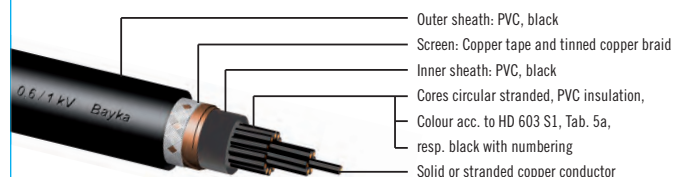
during laying (min.): -5 °C, after laying (max.): +70 °C

Max. permissible operating temperature (conductor): +90 °C

Short-circuit temperature: +250 °C



YSCY 2- to multicore



Application

For power stations, industry and distribution boards or subscriber networks.

Cable temperature

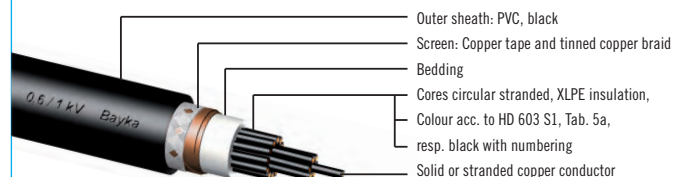
during laying (min.): -5 °C, after laying (max.): +70 °C

Max. permissible operating temperature (conductor): +90 °C

Short-circuit temperature: +250 °C



2XSCY 1- to multicore



Application

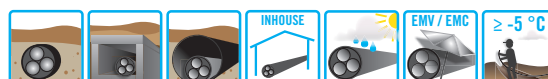
For power stations, industry and distribution boards or subscriber networks, for indoor and outdoor installation, in the ground.

Cable temperature

during laying (min.): -5 °C, after laying (max.): +70 °C

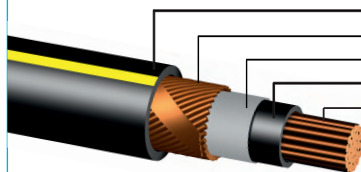
Max. permissible operating temperature (conductor): +90 °C

Short-circuit temperature: +250 °C



BayEnergy® - Power cables, copper conductor - 0,6/1 kV

GKN 1- to 5-cores



Outer sheath: PE with yellow stripes
Concentric conductor, Cu-wires, Cu-tape
Bedding
Elastomer insulation, HEPR
Copper conductor, circular shaped, stranded



Application

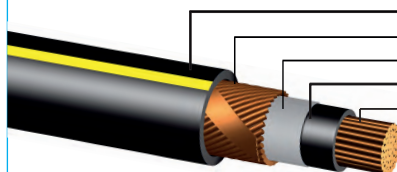
Suitable for installation in the ground, in protective conduits, cable ducts, in open air, for power stations, industry and distribution boards or low-voltage distribution systems.

Cable temperature

continuous operation: $\leq 90\text{ }^{\circ}\text{C}$
emergency operation (less than 8 h/d, less than 100 h/a): $\leq 130\text{ }^{\circ}\text{C}$
Short-circuit temperature: $\leq 250\text{ }^{\circ}\text{C}$



GKN Flex 1- to 5-cores



Outer sheath: PE with yellow stripes
Concentric conductor, Cu-wires, Cu-tape
Bedding
Elastomer insulation, HEPR
Copper conductor, circular shaped, finely stranded



Application

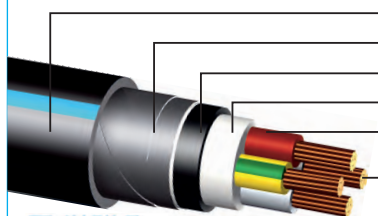
Suitable for installation in the ground, in protective conduits, cable ducts, in open air, for power stations, industry and distribution boards or low-voltage distribution systems.

Cable temperature

continuous operation: $\leq 90\text{ }^{\circ}\text{C}$
emergency operation (less than 8 h/d, less than 100 h/a): $\leq 130\text{ }^{\circ}\text{C}$
Short-circuit temperature: $\leq 250\text{ }^{\circ}\text{C}$



GN-CLN 4- to 5-cores



Outer sheath: PE with blue stripes
Steel tape armouring
Inner sheath: copolymer, halogenfree
Bedding
Elastomer insulation, HEPR
Copper conductor, circular shaped, solid or stranded



Application

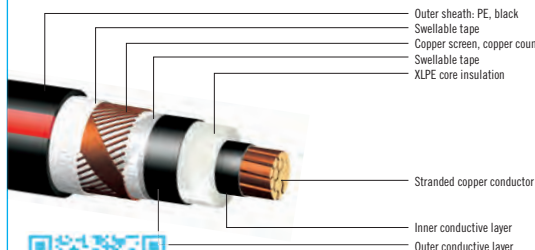
Suitable for installation in the ground, in protective conduits, cable ducts, in open air, for power stations, industry and distribution boards or low-voltage distribution systems.

Cable temperature

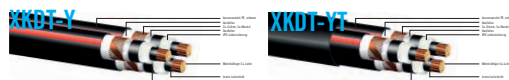
continuous operation: $\leq 90\text{ }^{\circ}\text{C}$
emergency operation (less than 8 h/d, less than 100 h/a): $\leq 130\text{ }^{\circ}\text{C}$
Short-circuit temperature: $\leq 250\text{ }^{\circ}\text{C}$



XKDT / XKDT-Y / XKDT-YT 1- to 3-cores



Outer sheath: PE, black
Swellable tape
Copper screen, copper counter helix
Swellable tape
XLPE core insulation



Application

For installation in open air, in the ground, for power stations, industry and distribution boards or subscriber networks. For indoor installation, taking into account that the PE sheath is halogen-free, however not flame retardant according DIN VDE 0472, part 804, test type B.


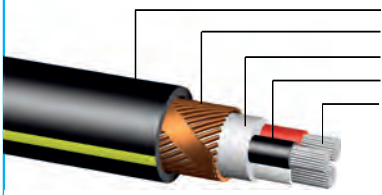
Cable temperature

during laying (min.): $-20\text{ }^{\circ}\text{C}$, after laying (max.): $+90\text{ }^{\circ}\text{C}$
Max. permissible operating temperature (conductor): $+90\text{ }^{\circ}\text{C}$
Short-circuit temperature: $\leq 250\text{ }^{\circ}\text{C}$



BayEnergy® - Power cables, aluminium conductor - 0,6/1 kV


GKN Alm 3-cores




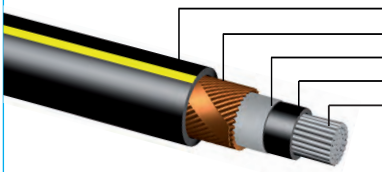
electro suisse 100% RoHS REACH Qualified CE

Application
Suitable for installation in the ground, in protective conduits, cable ducts, in open air, for power stations, industry and distribution boards or low-voltage distribution systems.

Cable temperature
continuous operation: ≤ 90 °C
emergency operation (less than 8 h/d, less than 100 h/a): ≤ 130 °C
Short-circuit temperature: ≤ 250 °C




GKN-Flex Alm 1- & 3-cores




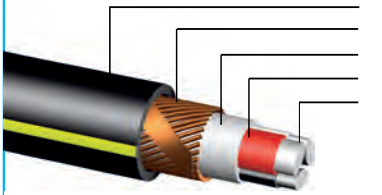
electro suisse 100% RoHS REACH Qualified CE

Application
Suitable for installation in the ground, in protective conduits, cable ducts, in open air, for power stations, industry and distribution boards or low-voltage distribution systems.

Cable temperature
continuous operation: ≤ 90 °C
emergency operation (less than 8 h/d, less than 100 h/a): ≤ 130 °C
Short-circuit temperature: ≤ 250 °C




GKN Alse 3-cores




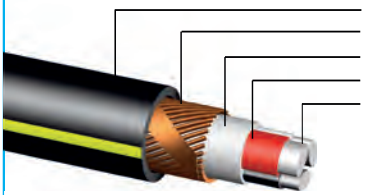
electro suisse 100% RoHS REACH Qualified CE

Application
Suitable for installation in the ground, in protective conduits, cable ducts, in open air, for power stations, industry and distribution boards or low-voltage distribution systems.

Cable temperature
continuous operation: ≤ 90 °C
emergency operation (less than 8 h/d, less than 100 h/a): ≤ 130 °C
Short-circuit temperature: ≤ 250 °C




XKN Alse 3-cores



100% RoHS REACH Qualified CE

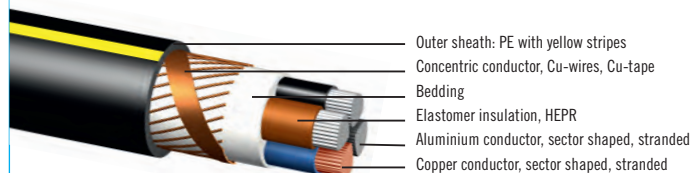
Application
Suitable for installation in the ground, in protective conduits, cable ducts, in open air, for power stations, industry and distribution boards or low-voltage distribution systems.

Cable temperature
continuous operation: ≤ 90 °C
emergency operation (less than 8 h/d, less than 100 h/a): ≤ 130 °C
Short-circuit temperature: ≤ 250 °C



BayEnergy® - Power cables, aluminium conductor - 0,6/1 kV

GKN Alsm 3- to 5-cores



4 Al-core+1 Cu-core-Version
especially for TN-S systems (EMC optimized)

Application

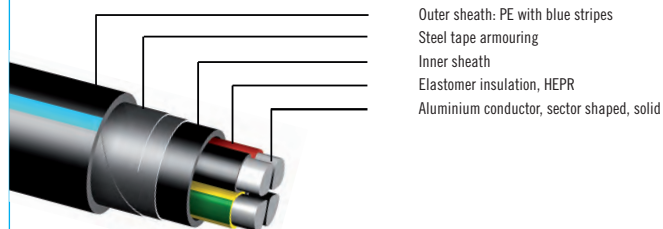
Suitable for installation in the ground, in protective conduits, cable ducts, in open air, for power stations, industry and distribution boards or low-voltage distribution systems.

Cable temperature

continuous operation: $\leq 90\text{ }^{\circ}\text{C}$
emergency operation (less than 8 h/d, less than 100 h/a): $\leq 130\text{ }^{\circ}\text{C}$
Short-circuit temperature: $\leq 250\text{ }^{\circ}\text{C}$



GN-CLN Al 4- to 5-cores



Application

Suitable for installation in the ground, in protective conduits, cable ducts, in open air, for power stations, industry and distribution boards or low-voltage distribution systems.

Cable temperature

continuous operation: $\leq 90\text{ }^{\circ}\text{C}$
emergency operation (less than 8 h/d, less than 100 h/a): $\leq 130\text{ }^{\circ}\text{C}$
Short-circuit temperature: $\leq 250\text{ }^{\circ}\text{C}$



XKDT / XKDT-Y / XKDT-YT 1- to 3-cores



Application

For installation in open air, in the ground, for power stations, industry and distribution boards or subscriber networks. For indoor installation, taking into account that the PE sheath is halogen-free, however not flame retardant according DIN VDE 0472, part 804, test type B.

Cable temperature

during laying (min.): $-20\text{ }^{\circ}\text{C}$, after laying (max.): $+90\text{ }^{\circ}\text{C}$
Max. permissible operating temperature (conductor): $+90\text{ }^{\circ}\text{C}$
Short-circuit temperature: $\leq 250\text{ }^{\circ}\text{C}$



■ most suitable
■ good suitable
■ suitable
■ limited suitable

	BayMotion® Flex	BayMotion® EMC-Flex	BayMotion® UV-Flex	BayMotion® EMC-UV-Flex	BayMotion® Flex-Oil	BayMotion® EMC-Flex-Oil	BayMotion® EMC-Flex	BayMotion® EMC-UV-Flex	BayMotion® EMC-UV-Flex FRNC	BayMotion® EMC-UV-Flex (VPE) FRNC	BayMotion® EMC UL® Flex	BayMotion® EMC-Flex 3+3	BayMotion® EMC-UV-Flex 3+3	BayMotion® EMC-UV-Flex (VPE)	BayMotion® EMC-UV-Flex 3+3 FRNC	BayMotion® EMC-UV-Flex 3+3 (VPE) FRNC	BayMotion® Flex EMC UL® Flex 3+3	BayMotion® Flex EMC PUR 3+3	BayMotion® 2X Flex EMC PUR FR 3+3
Connecting cable for universal use	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
EMC-optimized for servomotor/ drive engineering		■		■		■	■	■	■	■	■	■	■	■	■	■	■	■	■
Indoor, permanent laying*)	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Indoor, occasional moving	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Flame-retardant and self-extinguishing	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Non-halogen								■	■						■	■		■	■
Oil-resistant					■	■												■	■
UV-/ weather-proof			■					■	■	■			■	■	■	■	■	■	■
Outdoor, non-protected, permanent laying			■	■				■					■	■			■	■	■
Outdoor, protected against UV, permanent laying			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Outdoor, protected against UV, occasional moving			■	■				■					■	■			■	■	■
Burial			■	■			■			■		■	■			■			

BayMotion® - Flexible control cables - 0,6/1 kV

YSLY-JZ UL® Flex-Oil 3- to 5-cores

Application
Power and control cable for connecting and linking electrical systems. The flexible connection cables are suitable for permanent laying in dry, moist and wet rooms and for flexible use without additional mechanical load. The cable is to a large extent oil-resistant and therefore especially suitable for areas, which are contaminated by natural or synthetic oils, greases or similar substances.

Technical Data
Conductor resistance: Conductor class 5
UL Style 1015, 21098 + Canadian Standard: AWM I/II A/B



YSLCY-JZ EMC UL® Flex-Oil 4-cores

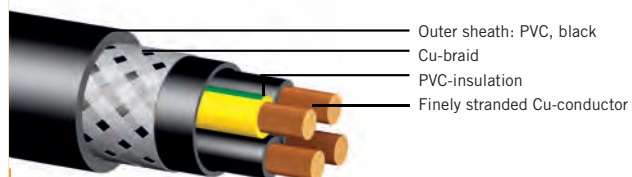
Application
Power and control cable for connecting and linking electrical systems, especially with increased electromagnetic compatibility (EMC) requirements. The flexible connection cables are suitable for permanent laying in dry, moist and wet rooms and for flexible use without additional mechanical load.

Technical Data
Conductor resistance: Conductor class 5
UL Style 1015, 21098 + Canadian Standard: AWM I/II A/B



BayMotion® - Flexible control cables - 0,6/1 kV

YSLCYK-JZ EMC-UV-Flex 3- to 4-cores



Application

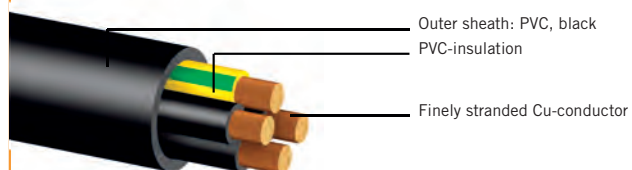
Power and control cable for connecting and linking electrical systems, especially with increased electromagnetic compatibility (EMC) requirements. The flexible connecting cables are suitable for permanent laying in dry, moist and wet rooms, for installation in open air and directly in the ground under normal mechanical loads, and for occasional flexible use with free movement and without additional mechanical load.

Cable temperature

Permissible operating temperature (conductor): +80 °C
permanent installation, occasionally moved (max): +70 °C



YSLYK-JZ UV-Flex 4- to 5-cores



Application

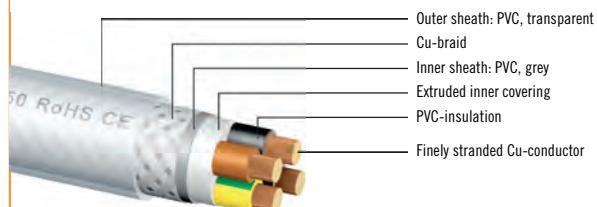
Power and control cable for connecting and linking electrical systems. The flexible connecting cables are suitable for permanent laying in dry, moist and wet rooms, for installation in open air and directly in the ground under normal mechanical loads, and for occasional flexible use with free movement and without additional mechanical load.

Cable temperature

Permissible operating temperature (conductor): +80 °C
permanent installation, occasionally moved (max): +70 °C



YSLCY-J EMC-Flex 4- to 5-cores



Application

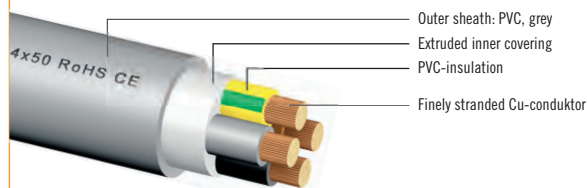
Power and control cable for connecting and linking electrical systems, especially with increased electromagnetic compatibility (EMC) requirements. The flexible connecting cables are suitable for permanent laying under normal loads and for occasional flexible use with free movement and without additional mechanical load in dry, moist and wet rooms.

Cable temperature

Permissible operating temperature (conductor): +80 °C
permanent installation, occasionally moved (max): +70 °C



YSLY-J Flex 3- to 5-core



Application

Power and control cable for connecting and linking electrical systems. The flexible connecting cables are suitable for permanent laying under normal loads and for occasional flexible use with free movement and without additional mechanical load in dry, moist and wet rooms.

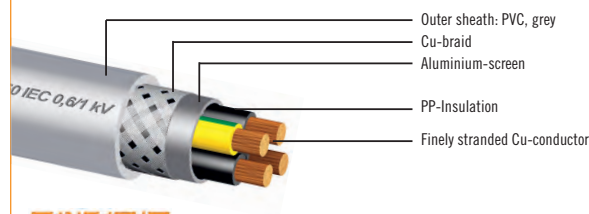
Cable temperature

Permissible operating temperature (conductor): +80 °C
permanent installation, occasionally moved (max): +70 °C



BayMotion® - VFD cables low capacitance motor connection cables - 0,6/1 kV

9YSLCY-JB GY EMC UL® Flex



Application

Low capacitance and double screened motor connection cable as power, control, connection and link cable for drive systems (e.g. three-phase AC motors) with frequency converter technology. The optimised, double screening enables fault-free operation in EMC-sensitive environments

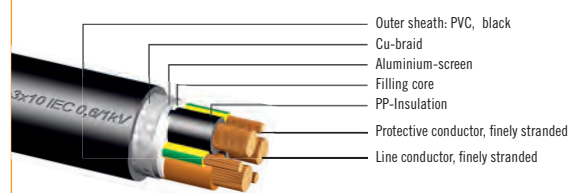
Technical Data

Conductor resistance: Conductor class 5

UL Style 10492, 2570 + Canadian Standard: AWM I/II A/B



9YSLCY-JB BK EMC-UV UL® Flex 3+3



Application

Low capacitance and double screened motor connection cable as power, control, connection and link cable for drive systems (e.g. three-phase AC motors) with frequency converter technology.

The optimised, double screening enables fault-free operation in EMC-sensitive environments

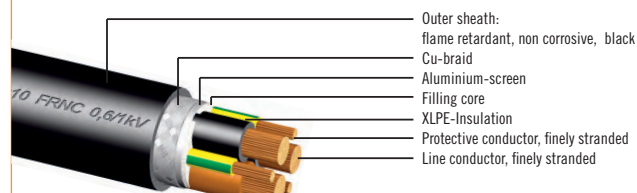
Technical Data

Conductor resistance: Conductor class 5

UL Style 10492, 2570 + Canadian Standard: AWM I/II A/B



2XSLCHK-J EMC-UV-Flex 3+3 (VPE) FRNC



free from halogen acc. to IEC 60754-1, flame-retardant and self-extinguishing acc. to IEC 60332-1-2, no fire propagation acc. to IEC 60332-3 cat. C, corrosivity of the fire gases acc. to DIN VDE 0482 Part 267-2-3 (EN 50267-2-3), smoke gas density acc. to DIN VDE 0482 Part 1034-2 (EN 61034-2).

Application

Low capacitance and double screened motor connection cable as power, control, connection and link cable for drive systems with frequency converter technology. The cables are halogen-free, fire retardant and self-extinguishing. Compared to conductors with PVC insulation and/or sheath, this conductor offers benefits in a fire due to: enhanced fire testing, low smoke density, low corrosivity (free from hydrochloric acid!).

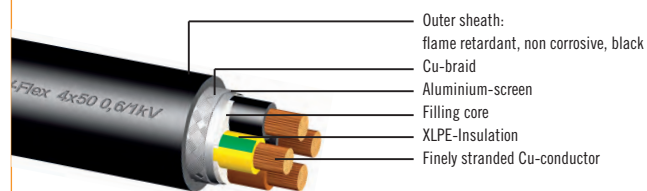
Cable temperature

Permissible operating temperature (conductor): +90 °C

permanent installation, occasionally moved (max): +90 °C



2XSLCHK-J EMC-UV-Flex (VPE) FRNC



free from halogen acc. to IEC 60754-1, flame-retardant and self-extinguishing acc. to IEC 60332-1-2, no fire propagation acc. to IEC 60332-3 cat. C, corrosivity of the fire gases acc. to DIN VDE 0482 Part 267-2-3 (EN 50267-2-3), smoke gas density acc. to DIN VDE 0482 Part 1034-2 (EN 61034-2).

Application

Power and control cable for connecting and linking electrical systems. The flexible connecting cables are suitable for permanent laying in dry, moist and wet rooms, for installation in open air and directly in the ground under normal mechanical loads, and for occasional flexible use with free movement and without additional mechanical load.

Cable temperature

Permissible operating temperature (conductor): +80 °C

permanent installation, occasionally moved (max): +70 °C



BayMotion® - VFD cables low capacitance motor connection cables - 0,6/1 kV

2YSLCHK-J EMC-UV-Flex 3+3 FRNC



free from halogen acc. to IEC 60754-1, flame-retardant and self-extinguishing acc. to IEC 60332-1-2, no fire propagation acc. to IEC 60332-3 cat. C, corrosivity of the fire gases acc. to DIN VDE 0482 Part 267-2-3 (EN 50267-2-3), smoke gas density acc. to DIN VDE 0482 Part 1034-2 (EN 61034-2).

Application

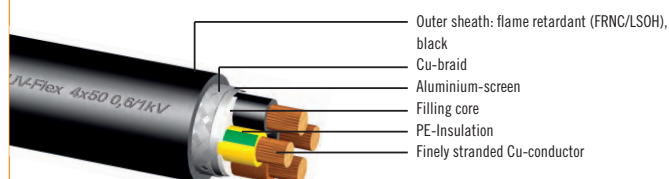
Low capacitance and double screened motor connection cable as power, control, connection and link cable for drive systems with frequency converter technology. The cables are halogen-free, fire retardant and self-extinguishing. Compared to conductors with PVC insulation and/or sheath, this conductor offers benefits in a fire due to: enhanced fire testing, low smoke density, low corrosivity (free from hydrochloric acid!)

Cable temperature

Permissible operating temperature (conductor): +70 °C
permanent installation, occasionally moved (max): +70 °C



2YSLCHK-J EMC-UV-Flex FRNC



free from halogen acc. to IEC 60754-1, flame-retardant and self-extinguishing acc. to IEC 60332-1-2, no fire propagation acc. to IEC 60332-3 cat. C, corrosivity of the fire gases acc. to DIN VDE 0482 Part 267-2-3 (EN 50267-2-3), smoke gas density acc. to DIN VDE 0482 Part 1034-2 (EN 61034-2).

Application

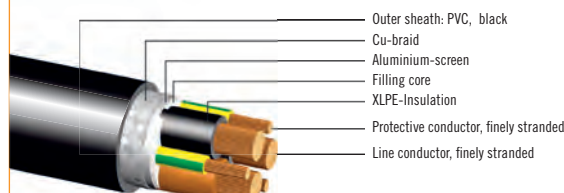
Low capacitance and double screened motor connection cable as power, control, connection and link cable for drive systems with frequency converter technology. The cables are halogen-free, fire retardant and self-extinguishing. Compared to conductors with PVC insulation and/or sheath, this conductor offers benefits in a fire due to: enhanced fire testing, low smoke density, low corrosivity (free from hydrochloric acid!)

Cable temperature

Permissible operating temperature (conductor): +70 °C
permanent installation, occasionally moved (max): +70 °C



2XSLCYK-J EMC-UV-Flex (VPE)



Application

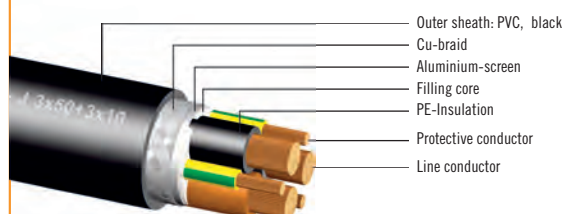
Low capacitance and double screened motor connection cable as power, control, connection and link cable for drive systems with frequency converter technology. The optimised, double screening enables fault-free operation in EMC-sensitive environments.

Cable temperature

Permissible operating temperature (conductor): +90 °C
permanent installation, occasionally moved (max): +90 °C



2YSLCYK-J EMC-UV-Flex 3+3

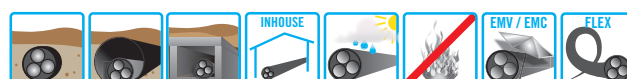


Application

Low capacitance and double screened motor connection cable as power, control, connection and link cable for drive systems with frequency converter technology. The optimised, double screening enables fault-free operation in EMC-sensitive environments

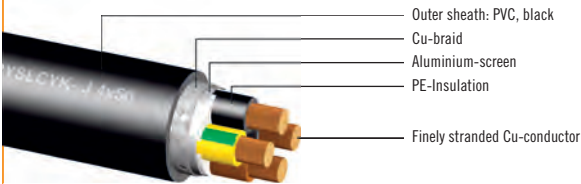
Cable temperature

Permissible operating temperature (conductor): +70 °C
permanent installation, occasionally moved (max): +70 °C



BayMotion® - VFD cables low capacitance motor connection cables - 0,6/1 kV

2YSLCYK-J EMC-UV-Flex

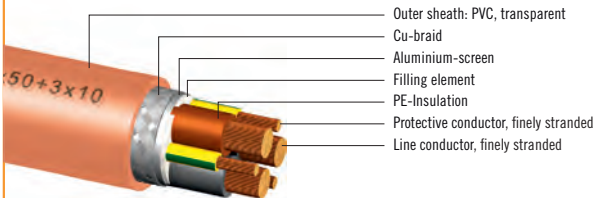


Application
Low capacitance and double screened motor connection cable as power, control, connection and link cable for drive systems with frequency converter technology. The optimised, double screening enables fault-free operation in EMC-sensitive environments.

Cable temperature
Permissible operating temperature (conductor): +70 °C
permanent installation, occasionally moved (max): +70 °C



2YSLCY-J EMC-Flex 3+3

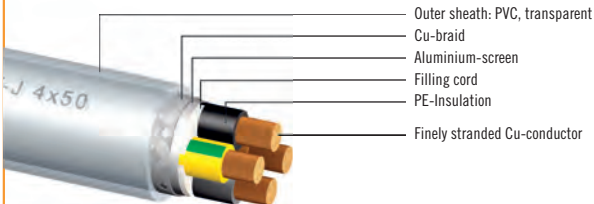


Application
Low capacitance and double screened motor connection cable as power, control, connection and link cable for drive systems with frequency converter technology. The optimised, double screening enables fault-free operation in EMC-sensitive environments.

Cable temperature
Permissible operating temperature (conductor): +70 °C
permanent installation, occasionally moved (max): +70 °C



2YSLCY-J EMC-Flex



Application
Low capacitance and double screened motor connection cable as power, control, connection and link cable for drive systems with frequency converter technology. The optimised, double screening enables fault-free operation in EMC-sensitive environments.

Cable temperature
Permissible operating temperature (conductor): +70 °C
permanent installation, occasionally moved (max): +70 °C



BayMotion® - Power connecting cables

Power + 1x... 0,6/1 kV or 1,8/3 kV

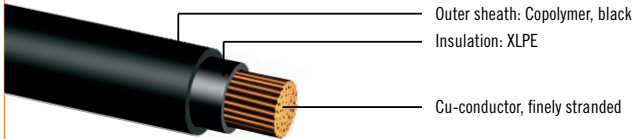


Application

Robust and flexible power, connection and link cable for use in plant and mechanical engineering, e.g. for connections of transformers. The special stranding of the single wires ensures a homogeneous stranding and facilitates the assembly of connectors and press fittings. The cable is oil resistant and ensures long life in aggressive environment.

Cable temperature

Permissible temperature range during operation: -40 to +90 °C
highest permissible operating temperature (conductor): +90 °C



Power PUR FR 1x... 0,6/1 kV



Application

FR flame-retardant and self-extinguishing connection cable as a robust and flexible power, connection and link cable for use in plant and mechanical engineering, e.g. for connections of transformers. The special stranding of the single wires ensures a homogeneous stranding and facilitates the assembly of connectors and press fittings. The cable is oil resistant, has a high flexibility and a high abrasion resistance and ensures long life.

Cable temperature

Permissible temperature range during operation: -40 to +90 °C
highest permissible operating temperature (conductor): +90 °C



oil resistance according to DIN EN 60811-404, free from halogen according to IEC 60754-1 flame retardant according to IEC 60332-1.



Flex Power Trafo TN-C 4x1x... 0,6/1 kV

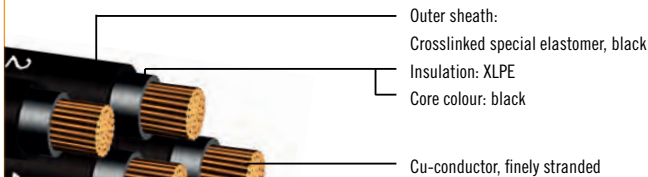


Application

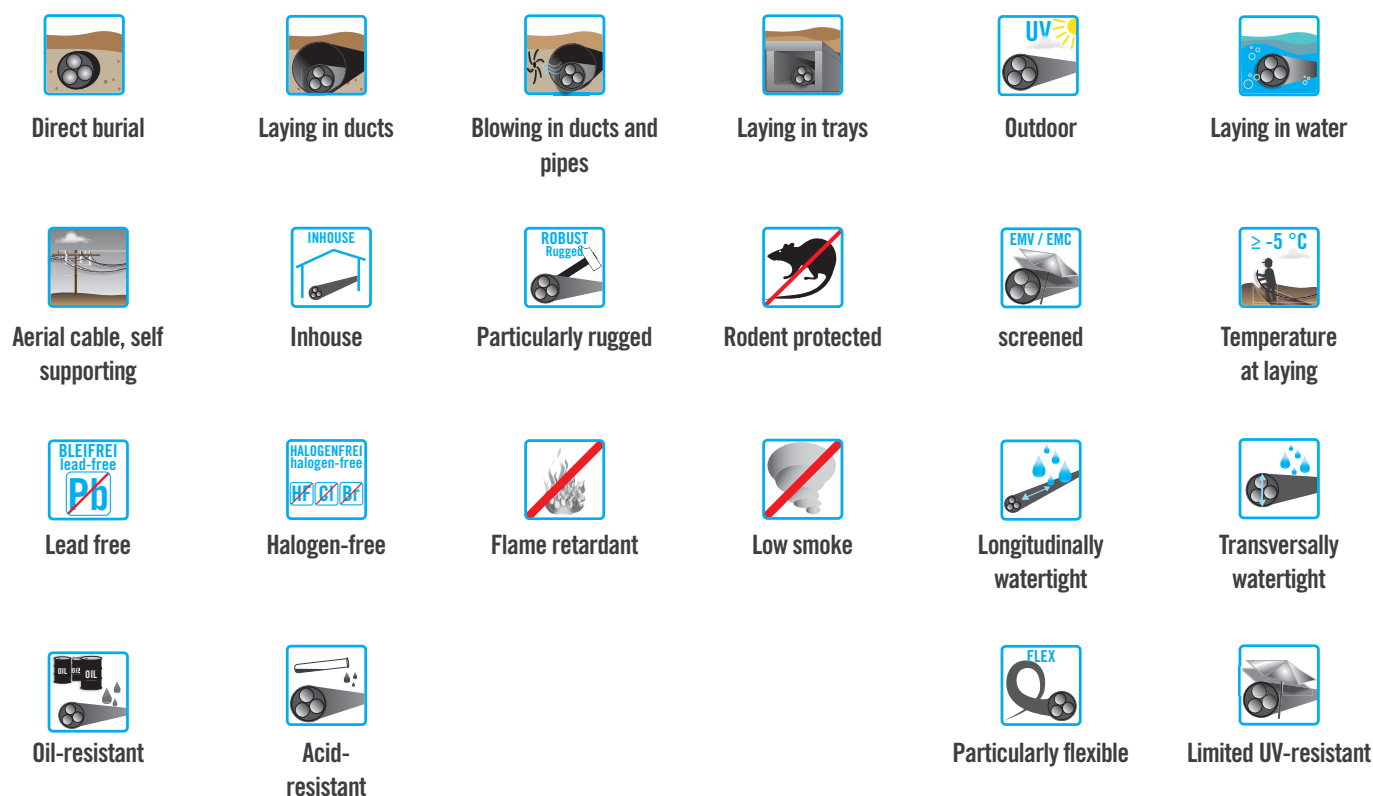
Power Trafo connection cable as a robust and flexible power, connection and link cable for use in plant and mechanical engineering, e.g. for connections of transformers. The special stranding of the single wires ensures a homogeneous stranding and facilitates the assembly of connectors and press fittings. The cable is oil resistant and ensures long life in aggressive environment.

Cable temperature

Permissible temperature range during operation: -40 to +90 °C
highest permissible operating temperature (conductor): +90 °C



Piktograms



Type designation codes for Power cables

Power cables with plastic insulation and plastic sheath according to DIN VDE 0262, DIN VDE 0263, DIN VDE 0265, DIN VDE 0266, DIN VDE 0267, DIN VDE 0271, DIN VDE 0273 and DIN VDE 0276 part 603, 604, 620, 622, 626

N	Cables acc. to standard	F	Overhead line cable (DIN VDE 0276)
A	Aluminum conductor	F	Armouring of galvanized flat steel wire
Y	Insulation of polyvinyl chloride (PVC)	FE	insulation sustaining
2Y	Insulation of thermoplastic polyethylene (PE)	(F)	Longitudinally watertight cable (screen)
X	Insulation of cross-linked polyvinyl chloride (XPVC)	B	Steel tape armouring
2X	Insulation of cross-linked polyethylene (XLPE)	R	Armouring of galvanized round steel wires
H	Field limiting conductive layers over the conductor and over the insulation	G	Helix of galvanized steel tape
HX	Insulation of cross-linked halogen-free polymer blend	HX	Sheath of cross-linked halogen-free polymer blend
C	Concentric conductor of copper	Y	Inner sheath of polyvinylchloride (PVC)
CW	Concentric conductor of copper, waveform (ceander)	Y	Outer sheath of polyvinylchloride (PVC)
CE	Concentric conductor in multi-core cables on each individual core	2Y	Outer sheath of polyethylene (PE)
S	Braided copper	1Y	Outer sheath of polyurethane (PUR)
SE	For multicore cables field limiting conductive layers over the conductor and the insulation and copper screen over each individual core (indicated by "H" is omitted here)		

Conductor cross-section, shape and structure

Further, the nominal voltage of the cable will be given in kV. Examples of complete identification of power cables:
NYCWY 3 x 120 SM/70 0,6/1 kV and NA2YSEY 3 x 70 SE/16 5,8/10 kV

R	Circular conductor	SE	Sector shaped conductor, solid
S	Sector shaped conductor	SM	Sector shaped conductor, stranded
E	Solid conductor	OM	Oval shaped conductor, stranded
M	Stranded conductor	H	Waveguide
RE	Circular conductor, solid	/V	Compacted conductor
RM	Circular conductor, stranded		

Type designation codes for Power cables – paper insulated

Power cables with impregnated paper insulation according to DIN VDE 0256, DIN VDE 0257, DIN VDE 0258 and DIN VDE 0276 part 621

N	Cables acc. to standard	u	Cables not stranded (only DIN VDE 0257 and DIN VDE 0258)
A	Aluminum conductor	St	Steel pipe(only DIN VDE 0257 und DIN VDE 0258)
H	Shielding (H-type cable)	B	Steel tape armouring
E	Cores with Individual metal sheath and corrosion protection	F	Armouring made of flat steel wires
K	Lead sheath	FO	Armouring made of flat steel wires, open
KL	Pressed aluminum sheath	R	Armouring made of round steel wires
KLD	Pressed aluminum sheath with strain elements	RO	Armouring made of round steel wires, open
u	Non-magnetic (only DIN VDE 0256)	GB	Counter helix (metal tape)
D	Bandage protection (only DIN VDE 0256)	A	Protective sheath and outer sheath made of fibrous material
E	Protective sheath with embedded layer (eg wrapping) of elastomer or plastic tape (not DIN VDE 0257)	AA	Double outer protective sheath of fibrous materials or fiberglass tape
D	Non-magnetic bandage protection (only DIN VDE 0257)	Y	Protective sheath made of polyvinylchloride (PVC)
v	Stranded cable (only DIN VDE 0257 aund DIN VDE 0258)	2Y	Protective sheath made of Polyethylene (PE)
F	Armouring made of flat steel wires with counter or helix, which is removed before the pulling of a cable into a steel pipe (only DIN VDE 0257 and DIN VDE 0258)	Z	Armouring of Z-shaped steel profile wire

THANK YOU VERY MUCH

THAT YOU ARE CONSIDERING US!

“Satisfied customers are the standard of our work!”

With this motto the management team runs the company. Over 130 years of experience in the cable production means a maximum of technical competence in development, design and production.

We use this know-how entirely for the success of our customers. We also offer highest flexibility in planning, product information and service and can also produce customer-specific special designs in short delivery times. Convince yourself of our sophisticated logistics system.

Thomas Schimpff

Speaker of the Management Board

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Fax: +49 (0) 09171 / 806-222
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Board of Directors: Johann Erich Wilms
Place of Business: 91154 Roth Germany, Field under in the commercial register,
HRB-No. 314 District Court of Nuremberg

Bayka
since 1885