



RAILWAY CABLES

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SHIELDED RAILWAY POWER CABLES



TECHNICAL DATA

- Operating Temperature: -40°C - +70°C
- Rated Voltage: 0,6/1kV

COLOUR CODE of CABLE

- Insulation Colours code could be according to the International Standards or customer's request/demand.
* Other colours can be produced upon the customer requests.

CONSTRUCTION

Conductor: Electrolytic bare annealed copper wire

Insulation: Cross linked polyethylene compound (XLPE)

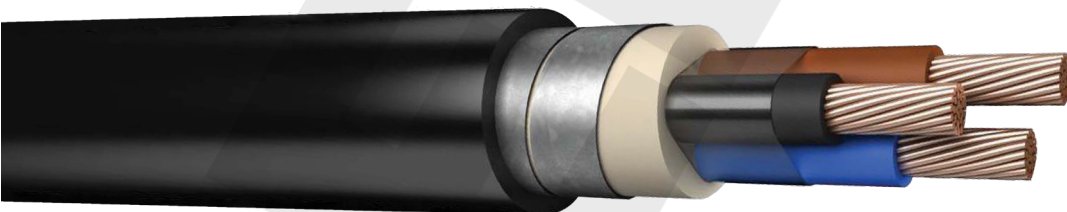
Polyester Tape Separator:

Inner Sheath: Polyethylene

Metallic Shield: Galvanised steel metal strips with a minimum thickness of 0,500 mm \pm 10%. metal strips shall be wrapped around the commoncasing in two folds helicoidal/y by remaining a gap between adjacent strips at most equal to 20 percent of the strip width

Outer Sheath: Polyethylene (PE)

HALOGEN FREE SHIELDED RAILWAY POWER CABLES



TECHNICAL DATA

- Operating Temperature: -40°C - +70°C
- Rated Voltage: 0,6/1kV

COLOUR CODE of CABLE

- Insulation Colours code could be according to the International Standards or customer's request/demand.
* Other colours can be produced upon the customer requests.

CONSTRUCTION

Conductor: Electrolytic bare annealed copper wire

Insulation: Cross linked polyethylene compound (XLPE)

Polyester Tape Separator:

Inner Sheath: Halogen free compound

Metallic Shield: Galvanised steel metal strips with a minimum thickness of 0,500 mm \pm 10%. metal strips shall be wrapped around the commoncasing in two folds helicoidal/y by remaining a gap between adjacent strips at most equal to 20 percent of the strip width

Outer Sheath: Halogen free compound

SCREENED & SHIELDED RAILWAY POWER CABLES



TECHNICAL DATA

- Max. Operating Temperature: -40°C - +70°C
- Rated Voltage: 0,6/1kV

COLOUR CODE of CABLE

- Insulation Colours code could be according to the International Standards or customer's request/demand.
* **Other colours can be produced upon the customer requests.**

CONSTRUCTION

Conductor: Electrolytic bare annealed copper wire

Insulation: Cross linked polyethylene compound (XLPE)

Self Wrapping Tape: Non - hygroscopic tape with minimum width of 0,2 mm and PVC based filling material

Metallic Screen: A copper plate with a minimum thickness of 0,2 mm shall be wrapped around the common casing in two folds helicoidally by remaining a gap between adjacent strips at most equal to 20 percent of the strip width

Inner Sheath: Polyethylene

Metallic Shield: Galvanised steel metal strips with a minimum thickness of 0,500 mm \pm 10%. metal strips shall be wrapped around the common casing in two folds helicoidal/y by remaining a gap between adjacent strips at most equal to 20 percent of the strip width

Outer Sheath: Polyethylene (PE)

SCREENED & SHIELDED HALOGEN FREE RAILWAY POWER CABLES



TECHNICAL DATA

- Operating Temperature: -40°C - +70°C
- Rated Voltage: 0,6/1kV

COLOUR CODE of CABLE

- Insulation Colours code could be according to the International Standards or customer's request/demand.
* Other colours can be produced upon the customer requests.

CONSTRUCTION

Conductor: Electrolytic bare annealed copper wire

Insulation: Cross linked polyethylene compound (XLPE)

Self Wrapping Tape: Non - hygroscopic tape with minimum width of 0,2 mm and PVC based filling material

Metallic Screen: A copper plate with a minimum thickness of 0,2 mm shall be wrapped around the common casing in two folds helicoidally by remaining a gap between adjacent strips at most equal to 20 percent of the strip width

Inner Sheath: Halogen free compound

Metallic Shield: Galvanised steel metal strips with a minimum thickness of 0,500 mm \pm 10%. metal strips shall be wrapped around the common casing in two folds helicoidal/y by remaining a gap between adjacent strips at most equal to 20 percent of the strip width

Outer Sheath: Halogen free compound

SCREENED & ALUMINIUM ARMoured POWER & SIGNALLING CABLES 1,8/3kV



TECHNICAL DATA

- Max. Operating Temperature: -40°C - +70°C
- Rated Voltage: 1,8/3kV

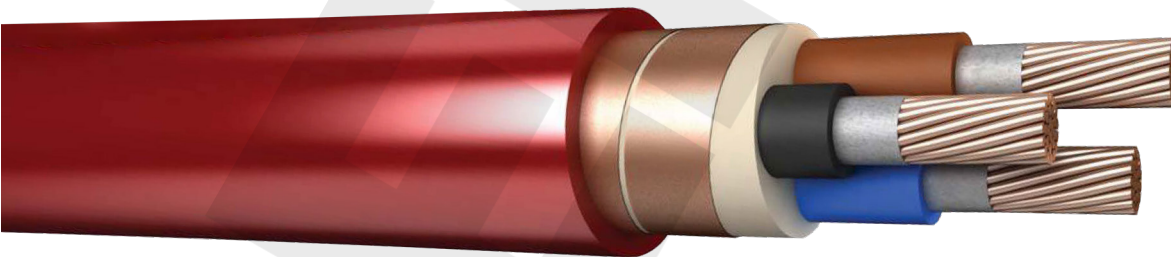
COLOUR CODE of CABLE

- Insulation Colours code could be according to the International Standards or customer's request/demand.
- * Other colours can be produced upon the customer requests.

CONSTRUCTION

- Conductor:** Single or multi wire annealed bare copper class 2
- Insulation:** Cross linked polyethylene compound (XLPE)
- Screen:** Copper tape with min. 20% overlap and 100% coverage ratio
- Inner Sheath:** LSOH polymer termop/astik
- Aluminium Armour:** 500 µ Aluminium tape with min. 20% over/eap and 100% coverage ratio
- Outer Sheath:** Flame reterdant LSOH polymer

HALOGEN FREE & FIRE RESISTANCE SCREENED POWER & SIGNALLING CABLES



TECHNICAL DATA

- Operating Temperature: -30°C - +90°C
- Rated Voltage: 0,6/1kV
- Halogen Free: IEC 60754-1
- Flame Reterdancy: IEC 60332-3
- Low Smoke Emission: IEC 61034-2
- Functionality at Fire: 750-800 °C 180 minutes - IEC 60331

COLOUR CODE of CABLE

- Insulation Colours code could be according to the International Standards or customer's request/demand.

CONSTRUCTION

- Conductor:** Single or multi wire annealed bare copper class 2
- Fire Resistant Layer:** Special mica tape applied on conductors for fire resistancy up to minimum 180 minutes
- Insulation:** Cross linked polyethylene compound (XLPE)
- Inner Sheath:** LSOH polymer
- Screen:** Copper tape with min. 20% overlap and 100% coverage ratio
- Outer Sheath:** Flame reterdant LSOH polymer

RAILWAY CONTROL & SIGNALLING CABLES



TECHNICAL DATA

- Max. Operating Temperature: -30°C - +70°C
- Rated Voltage: 750V
- Halogen Free: IEC 60754-1
- Flame Reterdancy: IEC 60332-1

COLOUR CODE of CABLE

- Insulation Colours code could be according to the International Standards or customer's request/demand.
* **Other colours can be produced upon the customer requests.**

CONSTRUCTION

Conductor: Electrolytic bare annealed copper wire

Insulation: Polyethylene (PE) Two twisted conductors that form a pair

Inner Sheath: Polyethylene (PE)

Polyester Tape Separator:

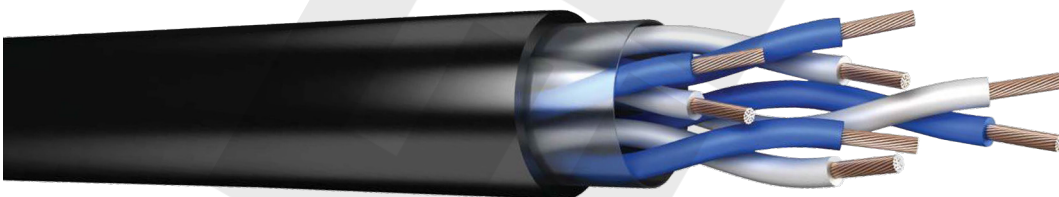
Metalic Screen: Corrugated copper tape, anti-inductive

Intermediate Sheath: Polyethylene separating layer

Armour: Two helically applied steel tapes all be wrapped around the common casing in two folds helicoidally by remaining a gap between adjacent strips at most equal to 20 percent of the strip with

Outer Sheath: PVC outer sheath

RAILWAY NETWORK EQUIPMENT CABLES



TECHNICAL DATA

- Max. Operating Temperature: -30°C - +70°C
- Rated Voltage: 250V
- Halogen Free: IEC 60754-1
- Flame Reterdancy: IEC 60332-1

COLOUR CODE of CABLE

- Insulation Colours code could be according to the International Standards or customer's request/demand.
* **Other colours can be produced upon the customer requests.**

CONSTRUCTION

Conductor: Multi-wire stranded, tinned copper - class 5

Insulation: Special PVC, two conductor are twisted to form a pair

Inner Sheath: Polyester tape with overlapping

Outer Sheath: Resistant to sun light, enviromental conditions and flame retardant special PVC component

0,6/1kV ROLLING STOCK CABLES



TECHNICAL DATA

- Max. Operating Temperature: -40°C - +120°C
- Rated Voltage: 0,6/1kV

COLOUR CODE of CABLE

- Insulation Colours code could be according to the International Standards or customer's request/demand.
* Other colours can be produced upon the customer requests.

CONSTRUCTION

Conductor: Electrolytic tinned annealed copper wire

Insulation: Halogen-free, heat resistant, cross-linked elastomeric special compound

0,6/1kV SCREENED ROLLING STOCK CABLES



TECHNICAL DATA

- Max. Operating Temperature: -40°C - +120°C
- Rated Voltage: 0,6/1kV

COLOUR CODE of CABLE

- Insulation Colours code could be according to the International Standards or customer's request/demand.
* Other colours can be produced upon the customer requests.

CONSTRUCTION

Conductor: Electrolytic tinned annealed copper wire

Insulation: Halogen-free, heat resistant, cross-linked elastomeric special compound

(Requirements based on type El 709 according to DIN EN 50264)

Metallic Screen: Braiding with tinned copper wires

Outer Sheath: Halogen-free, heat resistant, cross-linked elastomeric special compound

(Requirements based on type EM 104 according to DIN EN 50264)

1,8/3kV ROLLING STOCK CABLES



TECHNICAL DATA

- Max. Operating Temperature: -40°C - +120°C
- Rated Voltage: 1,8/3kV

COLOUR CODE of CABLE

- Insulation Colours code could be according to the International Standards or customer's request/demand.
* Other colours can be produced upon the customer requests.

CONSTRUCTION

Conductor: Electrolytic tinned annealed copper wire

Insulation: Halogen-free, heat resistant, cross-linked elastomeric special compound

1,8/3kV SCREENED ROLLING STOCK CABLES



TECHNICAL DATA

- Max. Operating Temperature: -40°C - +120°C
- Rated Voltage: 1,8/3kV

COLOUR CODE of CABLE

- Insulation Colours code could be according to the International Standards or customer's request/demand.
* Other colours can be produced upon the customer requests.

CONSTRUCTION

Conductor: Electrolytic tinned annealed copper wire

Insulation: Halogen-free, heat resistant, cross-linked elastomeric special compound

(Requirements based on type El 709 according to DIN EN 50264)

Metallic Screen: Braiding with tinned copper wires

Outer Sheath: Halogen-free, heat resistant, cross-linked elastomeric special compound

(Requirements based on type EM 104 according to DIN EN 50264)

FIRE RESISTANT ROLLING STOCK CABLES



TECHNICAL DATA

- Max. Operating Temperature: -40°C - +120°C
- Rated Voltage: 1,8/3kV

COLOUR CODE of CABLE

- Insulation Colours code could be according to the International Standards or customer's request/demand.
* **Other colours can be produced upon the customer requests.**

CONSTRUCTION

Conductor: Electrolytic tinned annealed copper wire

Flame Barrier Separator:

Insulation: : Halogen-free, heat resistant, cross-linked elastomeric special compound

(Requirements based on type EI 109 according to DIN EN 50264)

FIRE RESISTANT SCREENED ROLLING STOCK CABLES



TECHNICAL DATA

- Max. Operating Temperature: -40°C - +120°C
- Rated Voltage: 1,8/3kV

COLOUR CODE of CABLE

- Insulation Colours code could be according to the International Standards or customer's request/demand.
* **Other colours can be produced upon the customer requests.**

CONSTRUCTION

Conductor: Electrolytic tinned annealed copper wire

Flame Barrier Separator:

Insulation: : Halogen-free, heat resistant, cross-linked elastomeric special compound (Requirements based on type EI 109 according to DIN EN 50264)

Metalic Screen: Braiding with tinned copper wires

Outer Sheath: Halogen-free, heat resistant, cross-linked elastomeric special compound (Requirements based on type EM 104 according to DIN EN 50264)

POINT HEATING CABLE



TECHNICAL DATA

- Max. Operating Temperature: 90°C
- Max. Short Circuit Temperature: (max. 5 sec.) 200°C
- Rated Voltage: 300/500V
- Min. Bending Radius: 7,5x Cable Outer Diameter
- Flame Retardant: BS EN 60332-1-2

COLOUR CODE of CABLE

- Insulation Colours code could be according to the International Standards or customer's request/demand.
* Other colours can be produced upon the customer requests.

CONSTRUCTION

Conductor: Electrolytic annealed, class 5 stranded tinned copper wires

Insulation: GP4 Type elastomer compound

Sheath: EM2 Type elastomer compound

SECTION RANGE

- From 1.5mm² up to 6mm²

CONDUCTOR QUANTITY

- From 4 cores up to 8 cores