



- 1. COMPACTED COPPER CONDUCTOR
 2. CONDUCTOR SEMI-CON
 3. XLPE INSULATION
 4. INSULATION SEMI-CON
 5. COPPER TAPE SCREEN
 6. FR PVC INNER SHEATH
 7. ALUMINIUM WIRE ARMOUR
 8. ER PVC OLITER SHEATH

- 8. FR PVC OUTER SHEATH

DATA SHEET

SINGLE CORE XLPE ARMOURED REDUCED FLAME PROPAGATION (FR) MEDIUM VOLTAGE CABLE

Single Core Cable Description: Copper Conductor, Semi-conducting conductor Screen, XLPE Insulated, Semi-conducting Insulation screen, Metallic screen over Individual Core,FR- PVC Inner Sheathed, Aluminium Wire Armoured, Overall FR-PVC Outer Sheathed, Medium Voltage Cable.

NEELKANTH CABLES LIMITED

Reference Standard As per IEC 60502-2

Voltage Rating (Uo / U) 3.6/6 kV 7.2 kV Maximum Operating Voltage (Um) Operating Temperature 90°C Max. Temp. During Short Circuit 250°C

Range of Product Single Core 10 Sq.mm up to 1000 Sq.mm

Application

These Medium Voltage Single Core Cables are Designed for Electricity Power Distributation, Suitable for Installation in Power Supply Stations, Commercial, Industrial and Urban Residential Networks, Indoors and in Cable Ducts, Outdoors, Undergrounds and as well as for Installation on Cable Trays for industries, Switchboards and the power Stations.

Construction

Conductor Annealed Plain Copper Compacted Round Stranded Conductors to carry Current and withstand Pulling Stresses During Cable Laying.

Conductors Complying with IEC 60228 Class-2

Inner Semi-Conducting Screen

Extruded Layer of Semi-Conducting Screen over Conductor to Smooth the Electric Field at the Conductor and Firmly Bonded to the Insulation to exclude all air voids ,and Prevent Concentration of electric field of the interface between the Insulation and the Inner Semi-Conductor. Semi-

Conducting Compound Complying with IEC 60502-2

Insulation The Insulation of XLPE (Cross-Linked Polyethylene)Rated Voltage, Lightning Overoltage, Switching Overvoltage, and Withstand the Various Voltage

Field Stress During the Cable Service Life as per IEC 60502-2

Core Semi-Conducting Screen

Extruded Layer of Semi-Conducting Screen over the Insulation . The Screen is Tightly Fitted to the Insulation to Exclude all air Voids, Prevent Concentration of electric field of the interface between the Insulation and the Semi-Conductor. Semi-Conducting Compound Complying with IEC

Metallic Screen The Metallic Screen Shall Consist of either Copper Tapes or a Concentric layer of Copper Wires. The Metallic Layer may be applied over the

Individual Cores .Metallic Screen Provide no Electric Field outer side the Cable, An Active Conductor for the Capactive and Zero-Sequence short-circuit

current, and Contribution to Mechanical Protection, as per IEC 60502-2

PVC or Polypropylene yarn Filler (Optional)

The Inner-sheath Comprises a layer of Extruded as per Requirement PVC Applied Under the Armour, Inner-sheath Compound Complying with IEC Inner

Sheath/Bedding

60502-2

The Armour Consists of Round Aluminium Wire for Single Core Cable, Applied over the Inner-sheath.Armour Material Compllying with IEC 60502-2 Armour

Outer Sheath The Over all Outer-sheath Comprises a layer of Extruded as per Requirement PVC and Applied Over the Armour to Insulate the Mettalic Screen From

the Surrounding Medium to Protact the Mettalic Screen From Corrosion to Reduce the contribution of cables to Fire Propagation and Contribute to

Mechanical Protection. Outer sheath Compound Complying with SANS IEC 60502-2.

Colour: Black with Red Stripe or as per Requirement

Technical Characteristic

Voltage Grade

Test Voltage 12.5 kV for 5 Minute (3.5 Uo r.m.s) Temperature Rating -15°C to +90°C

IEC 60885-3 Partial Discharge Resistivity of Semi-conducting Screen IEC 60502-2 IEC 60332 Part-3-24 Flame Retardent

Minimum Installation Bending Radius 15(D+d)

D= Nominal Diameter of the Cable, d=Nominal Diameter of the Conductor

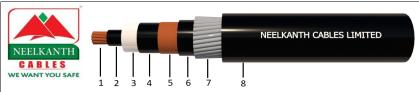
Marking & Packing

NEELKANTH CABLES, CABLE SIZE, 3.6/6 kV CU/XLPE/CTS/PVC-FR/AWA/PVC-FR ELECTRIC CABLE, YEAR Marking over the sheath

OF MANUFACTURING

Sequentail Length Marking Shall be provided on outer sheath at every one Meter

Data Sheet No.	10135	Page 1 of 1
Version	01	Issue Date: 29/04/2021



- COMPACTOR COPPER CONDUCTOR

- 2. CONTRACTOR SEMI-CON 2. CONDUCTOR SEMI-CON 3. XLPE INSULATION 4. INSULATION SEMI-CON 5. COPPER TAPE SCREEN 6. LHFR PVC INNER SHEATH 7. ALLIMINIUM MARCE
- 7. ALUMINIUM WIRE ARMOUR 8. LHFR PVC OUTER SHEATH

DATA SHEET

SINGLE CORE XLPE ARMOURED, REDUCED HALOGEN EMIISSION, REDUCED FLAME PROPAGATION (LHFR) MEDIUM VOLTAGE CABLE

Single Core Cable Description: Copper Conductor, Semi-conducting conductor Screen, XLPE Insulated, Semi-conducting Insulation screen, Metallic screen over Individual Core,LHFR- PVC Inner Sheathed, Aluminium Wire Armoured, Overall LHFR-PVC Outer Sheathed, Medium Voltage Cable.

NEEL KANTH CARLES LIMITED

Reference Standard As per IEC 60502-2

Voltage Rating (Uo / U) 3.6/6 kV Maximum Operating Voltage (Um) 7.2 kV Operating Temperature 90°C Max. Temp. During Short Circuit 250°C

Range of Product Single Core 10 Sq.mm up to 1000 Sq.mm

Application

These Medium Voltage Single Core Cables are Designed for Electricity Power Distributation, Suitable for Installation in Power Supply Stations, Commercial, Industrial and Urban Residential Networks, Indoors and in Cable Ducts, Outdoors, Undergrounds and as well as for Installation on Cable Trays for industries, Switchboards and the power Stations.

Construction

Annealed Plain Copper Compacted Round Stranded Conductors to carry Current and withstand Pulling Stresses During Cable Laying. Conductor

Conductors Complying with IEC 60228 Class-2

Inner Semi-Conducting Screen

Extruded Layer of Semi-Conducting Screen over Conductor to Smooth the Electric Field at the Conductor and Firmly Bonded to the Insulation to exclude

all air voids ,and Prevent Concentration of electric field of the interface between the Insulation and the Inner Semi-Conductor. Semi-Conductor

Compound Complying with IEC 60502-2

The Insulation of XLPE (Cross-Linked Polyethylene) Rated Voltage, Lightning Overoltage, Switching Overvoltage, and Withstand the Various Voltage Insulation

Field Stress During the Cable Service Life.as per IEC 60502-2

Core Semi-Conducting Screen

Metallic Screen

Extruded Layer of Semi-Conducting Screen over the Insulation . The Screen is Tightly Fitted to the Insulation to Exclude all air Voids, Prevent Concentration of electric field of the interface between the Insulation and the Semi-Conductor. Semi-Conducting Compound Complying with IEC 60502-

The Metallic Screen Shall Consist of either Copper Tapes or a Concentric layer of Copper Wires . The Metallic Layer may be applied over the Individual Cores .Metallic Screen Provide no Electric Field outer side the Cable, An Active Conductor for the Capactive and Zero-Sequence short-circuit current, and

Contribution to Mechanical Protection. as per IEC 60502-2

Filler (Optional) PVC or Polypropylene yarn

The Inner-sheath Comprises a layer of Extruded as per Requirement PVC-LHFR Applied Under the Armour, Inner-sheath Compound Complying with Inner

Sheath/Bedding SANS 1411-2

The Armour Consists of Round Aluminium Wire for Single Core Cable, Applied over the Inner-sheath. Armour Material Compllying with IEC 60502-2 Armour

Outer Sheath The Over all Outer-sheath Comprises a layer of Extruded as per Requirement PVC-LHFR and Applied Over the Armour to Insulate the Mettalic Screen

From the Surrounding Medium to Protact the Mettalic Screen From Corrosion to Reduce the contribution of cables to Fire Propagation and Contribute to

Mechanical Protection. Outer sheath Compound Complying with SANS 1411-2.

Colour: Black with Blue Stripe or as per Requirement

Technical Characteristic

Voltage Grade 3.6/6 kV

12.5 kV for 5 Minute (3.5 Uo r.m.s) Test Voltage

Temperature Rating -15°C to +90°C Partial Discharge IFC 60885-3 Resistivity of Semi-conducting Screen IFC 60502-2 Flame Retardent IEC 60332 Part-3-24 Reduced Halogen Emission SANS 5956 Minimum Installation Bending Radius 15(D+d)

D= Nominal Diameter of the Cable. d=Nominal Diameter of the Conductor

Marking & Packing

NEELKANTH CABLES . CABLE SIZE. 3.6/6 kV CU/XLPE/CTS/PVC-LHFR/AWA/PVC-LHFR ELECTRIC CABLE . Marking over the sheath

YEAR OF MANUFACTURING

Sequentail Length Marking Shall be provided on outer sheath at every one Meter

Data Sheet No.	10136	Page 1 of 1
Version	01	Issue Date: 29/04/2021





- 1. COMPACTED COPPER CONDUCTOR
 2. CONDUCTOR SEMI-CON
 3. XLPE INSULATION
 4. INSULATION SEMI-CON
 5. COPPER TAPE SCREEN
 6. NHLSFR INNER SHEATH
 7. ALUMINIUM WIRE ARMOUR
- 8. NHLSFR OUTER SHEATH

DATA SHEET

SINGLE CORE XLPE ARMOURED, ZERO HALOGEN EMISSION, REDUCED SMOKE EMISSION, REDUCED FLAME PROPAGATION (NHLSFR) MEDIUM VOLTAGE CABI F

Single Core Cable Description: Copper Conductor, Semi-conducting conductor Screen, XLPE Insulated, Semi-conducting Insulation screen, Metallic screen over Individual Core, NHLSFR (Polyolefin) Inner Sheathed, Aluminium Wire Armoured, Overall NHLSFR (Polyolefin) Outer Sheathed, Medium Voltage Cable.

NEELKANTH CABLES LIMITED Make

Reference Standard As per IEC 60502-2

Voltage Rating (Uo / U) 3.6/6 kV Maximum Operating Voltage (Um) 7.2 kV Operating Temperature 90°C Max. Temp. During Short Circuit 250°C

Range of Product Single Core 10 Sq.mm up to 1000 Sq.mm

Application

These Medium Voltage Single Core Cables are Designed for Electricity Power Distributation , Suitable for Installation in Power Supply Stations, Commercial , Industrial and Urban Residential Networks, Indoors and in Cable Ducts, Outdoors, Undergrounds and as well as for Installation on Cable Trays for industries, Switchboards and the power Stations.

Construction

Conductor Annealed Plain Copper Compacted Round Stranded Conductors to carry Current and withstand Pulling Stresses During Cable Laying

Conductors Complying with IEC 60228 Class-2

Inner Semi-Conducting Extruded Layer of Semi-Conducting Screen over Conductor to Smooth the Electric Field at the Conductor and Firmly Bonded to the Insulation to exclude all air voids and Prevent Concentration of electric field of the interface between the Insulation and the Inner Semi-Conductor. Semi-Conducting

Compound Complying with IEC 60502-2

Insulation The Insulation of XLPE (Cross-Linked Polyethylene)Rated Voltage, Lightning Overoltage, Switching Overvoltage, and Withstand the Various Voltage

Field Stress During the Cable Service Life.as per IEC 60502-2

Core Semi-Conducting Screen

Metallic Screen

Extruded Layer of Semi-Conducting Screen over the Insulation . The Screen is Tightly Fitted to the Insulation to Exclude all air Voids, Prevent

Concentration of electric field of the interface between the Insulation and the Semi-Conductor. Semi-Conducting Compound Complying with IEC 60502-

The Metallic Screen Shall Consist of either Copper Tapes or a Concentric layer of Copper Wires . The Metallic Layer may be applied over the Individual

Cores .Metallic Screen Provide no Electric Field outer side the Cable, An Active Conductor for the Capactive and Zero-Sequence short-circuit current, and

Contribution to Mechanical Protection, as per IEC 60502-2

Filler (Optional) PVC or Polypropylene yarn

The Inner-sheath Comprises a layer of Extruded as per Requirement NHLSFR (Polyolefin) Applied Under the Armour, Inner-sheath Compound Inner

Sheath/Bedding Complying with SANS 1411-5

Armour The Armour Consists of Round Aluminium Wire for Single Core Cable, Applied over the Inner-sheath.Armour Material Compllying with SANS 1411-6

Outer Sheath The Over all Outer-sheath Comprises a layer of Extruded as per Requirement NHLSFR (Polyolefin) and Applied Over the Armour to Insulate the

Mettalic Screen From the Surrounding Medium, to Protact the Mettalic Screen From Corrosion, to Reduce the contribution of cables to Fire

Propagation, and Contribute to Mechanical Protection. Outer sheath Compound Complying with SANS 1411-5.

Colour: Black with White Stripe or as per Requirement

Technical Characteristic

Voltage Grade 3.6/6 kV

Test Voltage 12.5 kV for 5 Minute (3.5 Uo r.m.s)

-15°C to +90°C Temperature Rating Partial Discharge IEC 60885-3 Resistivity of Semi-conducting Screen IEC 60502-2 IEC 60332 Part-3-24 Reduced Flame Retardent Zero Halogen Emission SANS 60754-2

Minimum Installation Bending Radius 15(D+d)

D= Nominal Diameter of the Cable. d=Nominal Diameter of the Conductor

Marking & Packing

NEELKANTH CABLES, CABLE SIZE, 3.6/6 kV CU/XLPE/CTS/NHLSFR/AWA/NHLSFR ELECTRIC CABLE, YEAR Marking over the sheath

OF MANUFACTURING

Sequentail Length Marking Shall be provided on outer sheath at every one Meter Cable Length Multiple of 250/500 or as per Requirement Type of Drum Wooden Drum Fully Packed with Lagging

10137 Data Sheet No. Page 1 of 1 01 Issue Date: 29/04/2021 Version





- 1. COMPACTED COPPER CONDUCTOR
 2. CONDUCTOR SEMI-CON
 3. XLPE INSULATION
 4. INSULATION SEMI-CON
 5. COPPER TAPE SCREEN
 6. PVC INNER SHEATH
 7. ALUMINIUM WIRE ARMOUR
 8. PE OUTER SHEATH

DATA SHEET

SINGLE CORE XLPE ARMOURED, UV STABILIZED POLYETHYLENE OUTER SHEATHED (PE) MEDIUM VOLTAGE CABLE

Single Core Cable Description: Copper Conductor, Semi-conducting conductor Screen, XLPE Insulated, Semi-conducting Insulation screen, Metallic screen over Individual Core, PVC-FR Inner Sheathed, Aluminium Wire Armoured, Overall UV Stabilized Polyethylene (PE) Outer Sheathed, Medium Voltage Cable.

NEELKANTH CABLES LIMITED Make

Reference Standard As per IEC 60502-2

3.6/6 kV Voltage Rating (Uo / U) Maximum Operating Voltage (Um) 7.2 kV Operating Temperature 90°C Max. Temp. During Short Circuit 250°C

Range of Product Single Core 10 Sq.mm up to 1000 Sq.mm

Application

These Medium Voltage Single Core Cores Cables are Designed for Electricity Power Distributation ,Suitable for Installation in Power Supply Stations, Commercial ,Industrial and Urban Residential Networks, Indoors and in Cable Ducts, Outdoors, Undergrounds and as well as for Installation on Cable Trays for industries, Switchboards and the power Stations.

Construction

Conductor Annealed Plain Copper Compacted Round Stranded Conductors to carry Current and withstand Pulling Stresses During Cable Laying.

Conductors Complying with IEC 60228 Class-2

Inner Semi-Conducting Screen

Extruded Layer of Semi-Conducting Screen over Conductor to Smooth the Electric Field at the Conductor and Firmly Bonded to the Insulation to exclude all air voids ,and Prevent Concentration of electric field of the interface between the Insulation and the Inner Semi-Conductor. Semi-Conducting

Compound Complying with IEC 60502-2

The Insulation of XLPE (Cross-Linked Polyethylene)Rated Voltage, Lightning Overoltage, Switching Overvoltage, and Withstand the Various Voltage Insulation

Core Semi-Conducting Screen

Extruded Layer of Semi-Conducting Screen over the Insulation . The Screen is Tightly Fitted to the Insulation to Exclude all air Voids, Prevent

Concentration of electric field of the interface between the Insulation and the Semi-Conductor. Semi-Conducting Compound Complying with IEC 60502-

Metallic Screen

The Metallic Screen Shall Consist of either Copper Tapes or a Concentric layer of Copper Wires .The Metallic Layer may be applied over the Individual Cores .Metallic Screen Provide no Electric Field outer side the Cable, An Active Conductor for the Capactive and Zero-Sequence short-circuit current, and Contribution to Mechanical Protection. as per IEC 60502-2

Filler (Optional) PVC or Polypropylene yarn

The Inner-sheath Comprises a layer of Extruded as per Requirement PVC-FR, Applied Under the Armour, Inner-sheath Compound Complying with Inner

Sheath/Bedding SANS 1411-2

Armour The Armour Consists of Round Aluminium Wire for Single Core Cable, Applied over the Inner-sheath.Armour Material Compllying with SANS 1411-6

The Over all Outer-sheath Comprises a layer of Extruded as per Requirement Polyethylene (PE) and Applied Over the Armour to Insulate the Mettalic **Outer Sheath**

Screen From the Surrounding Medium to Protact the Mettalic Screen From Corrosion to Reduce the contribution of cables to Fire Propagation and

Contribute to Mechanical Protection. Outer sheath Compound Complying with SANS 1411-7.

Colour: Black or as per Requirement

Technical Characteristic

Voltage Grade

Test Voltage 12.5 kV for 5 Minute (3.5 Uo r.m.s)

Temperature Rating -15°C to +90°C IEC 60885-3 Partial Discharge Resistivity of Semi-conducting Screen IEC 60502-2 Minimum Installation Bending Radius 15(D+d)

D= Nominal Diameter of the Cable, d=Nominal Diameter of the Conductor

Marking & Packing

Marking over the sheath NEELKANTH CABLES, CABLE SIZE, 3.8/6.6 kV CU/XLPE/CTS/PVC-FR/AWA/PE, ELECTRIC CABLE, YEAR OF

Sequentail Length Marking Shall be provided on outer sheath at every one Meter

Multiple of 250/500 or as per Requirement Cable Length Wooden Drum Fully Packed with Lagging Type of Drum

Data Sheet No.	10138	Page 1 of 1
Version	01	Issue Date: 29/04/2021



- 1. COMPACTER COPPER CONDUCTOR
- 2. CONDUCTOR SEMI-CON
 3. XLPE INSULATION
 4. INSULATION SEMI-CON
- COPPER TAPE SCREEN
- 6. FR PVC OUTER SHEATH

DATA SHEET

SINGLE CORE XLPE UNARMOURED REDUCED FLAME PROPAGATION (FR) MEDIUM VOLTAGE CABLE

Single Core Cable Description: Copper Conductor, Semi-conducting conductor Screen, XLPE Insulated, Semi-conducting Insulation screen, Metallic screen over Individual Core, Overall FR-PVC Outer Sheathed, Medium Voltage Cable.

Make NEELKANTH CABLES LIMITED

Reference Standard As per IEC 60502-2

3.6/6 kV Voltage Rating (Uo / U) Maximum Operating Voltage (Um) 72 kV Operating Temperature 90°C Max. Temp. During Short Circuit 250°C

Range of Product Single Core 10 Sq.mm up to 1000 Sq.mm

Application

These Medium Voltage Single Core Cables are Designed for Electricity Power Distributation, Suitable for Installation in Power Supply Stations, Commercial, Industrial and Urban Residential Networks, Indoors and in Cable Ducts, Outdoors, Undergrounds and as well as for Installation on Cable Trays for industries, Switchboards and the power Stations

Construction

Conductor Annealed Plain Copper Compacted Round Stranded Conductors to carry Current and withstand Pulling Stresses During Cable Laying.

Conductors Complying with IEC 60228 Class-2

Inner Semi-Conducting Screen

Extruded Layer of Semi-Conducting Screen over Conductor to Smooth the Electric Field at the Conductor and Firmly Bonded to the Insulation to exclude all air voids ,and Prevent Concentration of electric field of the interface between the Insulation and the Inner Semi-Conductor. Semi-Conducting

Compound Complying with IEC 60502-2

The Insulation of XLPE (Cross-Linked Polyethylene)Rated Voltage, Lightning Overoltage, Switching Overvoltage, and Withstand the Various Voltage Insulation

Field Stress During the Cable Service Life.as per IEC 60502-2

Core Semi-Conducting Screen

Extruded Layer of Semi-Conducting Screen over the Insulation . The Screen is Tightly Fitted to the Insulation to Exclude all air Voids, Prevent

Concentration of electric field of the interface between the Insulation and the Semi-Conductor. Semi-Conducting Compound Complying with IEC 60502-

2

The Metallic Screen Shall Consist of either Copper Tapes or a Concentric layer of Copper Wires . The Metallic Layer may be applied over the Individual Metallic Screen

Cores .Metallic Screen Provide no Electric Field outer side the Cable, An Active Conductor for the Capactive and Zero-Sequence short-circuit current, and

Contribution to Mechanical Protection. as per IEC 60502-2

Filler (Optional) PVC or Polypropylene yarn

Outer Sheath The Over all Outer-sheath Comprises a layer of Extruded as per Requirement PVC and Applied Over the Armour to Insulate the Mettalic Screen From

the Surrounding Medium,to Protact the Mettalic Screen From Corrosion,to Reduce the contribution of cables to Fire Propagation,and Contribute to

Mechanical Protection. Outer sheath Compound Complying with IEC 60502-2.

Colour: Black with Red Stripe or as per Requirement

Technical Characteristic

Voltage Grade

12.5 kV for 5 Minute (3.5 Uo r.m.s) Test Voltage -15°C to +90°C Temperature Rating

IEC 60885-3 Partial Discharge Resistivity of Semi-conducting Screen IEC 60502-2 IEC 60332 Part-3-24 Flame Retardent

Minimum Installation Bending Radius 20(D+d)

D= Nominal Diameter of the Cable, d=Nominal Diameter of the Conductor

Marking & Packing

NEELKANTH CABLES, CABLE SIZE, 3.6/6 kV CU/XLPE/CTS/PVC-FR ELECTRIC CABLE, YEAR OF

Marking over the sheath MANUFACTURING

Sequentail Length Marking Shall be provided on outer sheath at every one Meter

Multiple of 250/500 or as per Requirement Cable Length Type of Drum Wooden Drum Fully Packed with Lagging

Data Sheet No.	10139	Page 1 of 1
Version	01	Issue Date: 29/04/2021



1. COMPACTED COPPER CONDUCTOR 2. CONDUCTOR SEMI-COM 3. XLPE INSULATION 4. INSULATION SEMI-CON

5. COPPER TAPE SCREEN 6. LHFR PVC OUTER SHEATH

NEELKANTH CABLES LIMITED

DATA SHEET

SINGLE CORE XLPE UNARMOURED, REDUCED HALOGEN EMIISSION, REDUCED FLAME PROPAGATION (LHFR) MEDIUM VOLTAGE CABLE

Single Core Cable Description: Copper Conductor, Semi-conducting conductor Screen, XLPE Insulated, Semi-conducting Insulation screen, Metallic screen over Individual Core, Overall LHFR-PVC Outer Sheathed, Medium Voltage Cable.

NEELKANTH CABLES LIMITED Make

As per IEC 60502-2 Reference Standard

3.6/6 kV Voltage Rating (Uo / U) Maximum Operating Voltage (Um) 7.2 kV Operating Temperature 90°C Max. Temp. During Short Circuit 250°C

Range of Product Single Core 10 Sq.mm up to 1000 Sq.mm

Application

These Medium Voltage Single Core Cables are Designed for Electricity Power Distributation, Suitable for Installation in Power Supply Stations, Commercial, Industrial and Urban Residential Networks, Indoors and in Cable Ducts, Outdoors, Undergrounds and as well as for Installation on Cable Trays for industries, Switchboards and the power Stations.

Construction

Conductor Annealed Plain Copper Compacted Round Stranded Conductors to carry Current and withstand Pulling Stresses During Cable Laying.

Conductors Complying with IEC 60228 Class-2

Inner Semi-Conducting Screen

Extruded Layer of Semi-Conducting Screen over Conductor to Smooth the Electric Field at the Conductor and Firmly Bonded to the Insulation to exclude all air voids ,and Prevent Concentration of electric field of the interface between the Insulation and the Inner Semi-Conductor. Semi-Conducting

Compound Complying with IEC 60502-2

The Insulation of XLPE (Cross-Linked Polyethylene)Rated Voltage, Lightning Overoltage, Switching Overvoltage, and Withstand the Various Voltage Insulation

Field Stress During the Cable Service Life.as per IEC 60502-2

Core Semi-Conducting Screen

Metallic Screen

Extruded Layer of Semi-Conducting Screen over the Insulation . The Screen is Tightly Fitted to the Insulation to Exclude all air Voids, Prevent

Concentration of electric field of the interface between the Insulation and the Semi-Conductor. Semi-Conducting Compound Complying with IEC 60502-

The Metallic Screen Shall Consist of either Copper Tapes or a Concentric layer of Copper Wires . The Metallic Layer may be applied over the Individual

Cores .Metallic Screen Provide no Electric Field outer side the Cable, An Active Conductor for the Capactive and Zero-Sequence short-circuit current, and

Contribution to Mechanical Protection. as per IEC 60502-2

Filler (Optional) PVC or Polypropylene yarn

The Over all Outer-sheath Comprises a layer of Extruded as per Requirement PVC-LHFR and Applied Over the Armour to Insulate the Mettalic Screen **Outer Sheath**

From the Surrounding Medium,to Protact the Mettalic Screen From Corrosion,to Reduce the contribution of cables to Fire Propagation, and Contribute to

Mechanical Protection. Outer sheath Compound Complying with SANS 1411-2.

Colour: Black with Blue Stripe or as per Requirement

Technical Characteristic

Voltage Grade 3.6/6 kV

12.5 kV for 5 Minute (3.5 Uo r.m.s) Test Voltage

Temperature Rating -15°C to +90°C IEC 60885-3 Partial Discharge Resistivity of Semi-conducting Screen IEC 60502-2 SANS 60332 Part-3-24 Reduced Flame Retardent

SANS 5956 Reduced Halogen Emission Minimum Installation Bending Radius 20(D+d)

D= Nominal Diameter of the Cable, d=Nominal Diameter of the Conductor

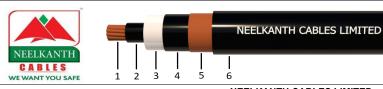
Marking & Packing

NEELKANTH CABLES, CABLE SIZE, 3.6/6 kV CU/XLPE/CTS/PVC-LHFR ELECTRIC CABLE, YEAR OF Marking over the sheath

MANUFACTURING

Sequentail Length Marking Shall be provided on outer sheath at every one Meter

Data Sheet No.	10140	Page 1 of 1
Version	01	Issue Date: 29/04/2021



COMPACTED COPPER CONDUCTOR

- 2. CONDUCTOR SEMI-CON 3. XLPE INSULATION 4. INSULATION SEMI-CON 5. COPPER TAPE SCREEN 6. NHLSFR OUTER SHEATH

NEELKANTH CABLES LIMITED

DATA SHEET

SINGLE CORE XLPE UNARMOURED, ZERO HALOGEN EMISSION, REDUCED SMOKE EMISSION, REDUCED FLAME PROPAGATION (NHLSFR) MEDIUM VOLTAGE CABLE

Single Core Cable Description: Copper Conductor, Semi-conducting conductor Screen, XLPE Insulated, Semi-conducting Insulation screen, Metallic screen over Individual Core, Overall NHLSFR(Polyolefin) Outer Sheathed, Medium Voltage Unarmoured Cable.

NEELKANTH CABLES LIMITED Make

Reference Standard As per IEC 60502-2

3.6/6 kV Voltage Rating (Uo / U) Maximum Operating Voltage (Um) 7.2 kV Operating Temperature 90°C Max. Temp. During Short Circuit 250°C

Range of Product Single Core 10 Sq.mm up to 1000 Sq.mm

Application

These Medium Voltage Single Core Cables are Designed for Electricity Power Distributation, Suitable for Installation in Power Supply Stations, Commercial, Industrial and Urban Residential Networks, Indoors and in Cable Ducts, Outdoors, Undergrounds and as well as for Installation on Cable Trays for industries, Switchboards and the power Stations

Construction

Conductor Annealed Plain Copper Compacted Round Stranded Conductors to carry Current and withstand Pulling Stresses During Cable Laying.

Conductors Complying with IEC 60228 Class-2

Inner Semi-Extruded Layer of Semi-Conducting Screen over Conductor to Smooth the Electric Field at the Conductor and Firmly Bonded to the Insulation to exclude all air voids and Prevent Concentration of electric field of the interface between the Insulation and the Inner Semi-Conductor. Semi-Conducting Conducting

Screen Compound Complying with IEC 60502-2

The Insulation of XLPE (Cross-Linked Polyethylene) Rated Voltage, Lightning Overoltage, Switching Overvoltage, and Withstand the Various Voltage Insulation

Field Stress During the Cable Service Life.as per IEC 60502-2

Core Semi-Extruded Layer of Semi-Conducting Screen over the Insulation . The Screen is Tightly Fitted to the Insulation to Exclude all air Voids, Prevent

Conductina Concentration of electric field of the interface between the Insulation and the Semi-Conductor. Semi-Conducting Compound Complying with IEC 60502-

Screen

The Metallic Screen Shall Consist of either Copper Tapes or a Concentric layer of Copper Wires .The Metallic Layer may be applied over the Individual Metallic Screen

Cores Metallic Screen Provide no Electric Field outer side the Cable, An Active Conductor for the Capactive and Zero-Sequence short-circuit current, and

Contribution to Mechanical Protection. as per IEC 60502-2

Filler (Optional) PVC or Polypropylene yarn

Outer Sheath The Over all Outer-sheath Comprises a layer of Extruded as per Requirement NHLSFR (Polyolefin) and Applied Over the Armour to Insulate the Mettalic

Screen From the Surrounding Medium, to Protact the Mettalic Screen From Corrosion, to Reduce the contribution of cables to Fire Propagation, and

Contribute to Mechanical Protection. Outer sheath Compound Complying with SANS 1411-5.

Colour: Black with White Stripe or as per Requirement

Technical Characteristic

Voltage Grade 3.6/6 kV

Test Voltage 12.5 kV for 5 Minute (3.5 Uo r.m.s)

Temperature Rating -15°C to +90°C IEC 60885-3 Partial Discharge Resistivity of Semi-conducting Screen IEC 60502-2 Reduced Flame Retardent SANS 60332 Part-3-24

Zero Halogen Emission SANS 60754-2 Minimum Installation Bending Radius 20(D+d)

> D= Nominal Diameter of the Cable. d=Nominal Diameter of the Conductor

Marking & Packing

NEELKANTH CABLES, CABLE SIZE, 3.6/6 kV CU/XLPE/CTS/NHLSFR ELECTRIC CABLE, YEAR OF Marking over the sheath

MANUFACTURING

Sequentail Length Marking Shall be provided on outer sheath at every one Meter

Data Sheet No.	10141	Page 1 of 1
Version	01	Issue Date: 29/04/2021





1. COMPACTED COPPER CONDUCTOR

1. COMPACTED COPPER CO 2. CONDUCTOR SEMI-CON 3. XLPE INSULATION 4. INSULATION SEMI-CON 5. COPPER TAPE SCREEN

6. PE OUTER SHEATH

NEELKANTH CABLES LIMITED

DATA SHEET

SINGLE CORE XLPE UNARMOURED, UV STABILIZED POLYETHYLENE OUTER SHEATHED (PE) MEDIUM VOLTAGE CABLE

Single Core Cable Description: Copper Conductor, Semi-conducting conductor Screen, XLPE Insulated, Semi-conducting Insulation screen, Metallic screen over Individual Core, Overall UV Stabilized Polyethylene (PE) Outer Sheathed, Medium Voltage Unarmoured Cable.

NEELKANTH CABLES LIMITED Make

Reference Standard As per IEC 60502-2

3.6/6 kV Voltage Rating (Uo / U) Maximum Operating Voltage (Um) 7.2 kV Operating Temperature 90°C Max. Temp. During Short Circuit 250°C

Single Core 10 Sq.mm up to 1000 Sq.mm Range of Product

Application

These Medium Voltage Single Core Cores Cables are Designed for Electricity Power Distributation, Suitable for Installation in Power Supply Stations, Commercial, Industrial and Urban Residential Networks, Indoors and in Cable Ducts, Outdoors, Undergrounds and as well as for Installation on Cable Trays for industries, Switchboards and the power Stations.

Construction

Annealed Plain Copper Compacted Round Stranded Conductors to carry Current and withstand Pulling Stresses During Cable Laying. Conductor

Conductors Complying with IEC 60228 Class-2

Inner Semi-Conducting Screen

Extruded Layer of Semi-Conducting Screen over Conductor to Smooth the Electric Field at the Conductor and Firmly Bonded to the Insulation to exclude all air voids ,and Prevent Concentration of electric field of the interface between the Insulation and the Inner Semi-Conductor. Semi-Conducting

Compound Complying with IEC 60502-2

Insulation The Insulation of XLPE (Cross-Linked Polyethylene) Rated Voltage, Lightning Overoltage, Switching Overvoltage, and Withstand the Various Voltage

Field Stress During the Cable Service Life.as per IEC 60502-2

Core Semi-Conducting Screen

Metallic Screen

Extruded Layer of Semi-Conducting Screen over the Insulation . The Screen is Tightly Fitted to the Insulation to Exclude all air Voids, Prevent

Concentration of electric field of the interface between the Insulation and the Semi-Conductor. Semi-Conducting Compound Complying with IEC 60502-

The Metallic Screen Shall Consist of either Copper Tapes or a Concentric layer of Copper Wires . The Metallic Layer may be applied over the Individual

Cores .Metallic Screen Provide no Electric Field outer side the Cable, An Active Conductor for the Capactive and Zero-Sequence short-circuit current, and

Filler (Optional) PVC or Polypropylene yarn

Outer Sheath The Over all Outer-sheath Comprises a layer of Extruded as per Requirement Polyethylene (PE) and Applied Over the Armour to Insulate the Mettalic

Screen From the Surrounding Medium, to Protact the Mettalic Screen From Corrosion, to Reduce the contribution of cables to Fire Propagation, and

Contribute to Mechanical Protection. Outer sheath Compound Complying with SANS 1411-7.

Colour: Black or as per Requirement

Technical Characteristic

Voltage Grade 3 6/6 kV

Test Voltage 12.5 kV for 5 Minute (3.5 Uo r.m.s)

-15°C to +90°C Temperature Rating IEC 60885-3 Partial Discharge Resistivity of Semi-conducting Screen IEC 60502-2 Minimum Installation Bending Radius 20(D+d)

> D= Nominal Diameter of the Cable, d=Nominal Diameter of the Conductor

Marking & Packing

Marking over the sheath NEELKANTH CABLES, CABLE SIZE, 3.6/6 kV CU/XLPE/CTS/PE, ELECTRIC CABLE, YEAR OF

Sequentail Length Marking Shall be provided on outer sheath at every one Meter

Data Sheet No.	10142	Page 1 of 1
Version	01	Issue Date: 29/04/2021