

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. FR PVC OUTER SHEATH

NEELKANTH CABLES LIMITED

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.

Make	NEELKANTH CABLES LIMITED
Reference Standard	As per IEC 60502-2
Voltage Rating (U _o / U)	12/20 kV
Maximum Operating Voltage (Um)	24 kV
Operating Temperature	90°C
Max. Temp. During Short Circuit	250°C

Range of Product Single Core 25 Sq.mm up to 1000 Sq.mm

Application

These Medium Voltage Single Core Cables are Designed for Electricity Power Distribution , 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 Overvoltage, 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 60502-2
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 Capacitive and Zero-Sequence short-circuit current, and Contribution to Mechanical Protection. as per IEC 60502-2
Filler (Optional)	PVC or Polypropylene yarn
Inner Sheath/Bedding	The Inner-sheath Comprises a layer of Extruded as per Requirement PVC Applied Under the Armour, Inner-sheath Compound Complying with IEC 60502-2
Armour	The Armour Consists of Round Aluminium Wire for Single Core Cable, Applied over the Inner-sheath. Armour Material Complying with IEC 60502-2
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 Protect 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

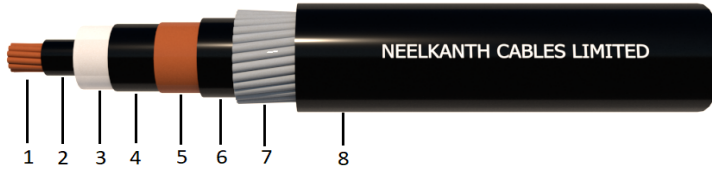
Technical Characteristic

Voltage Grade	12/20 kV
Test Voltage	42 kV for 5 Minute (3.5 U _o r.m.s)
Temperature Rating	-15°C to +90°C
Partial Discharge	IEC 60885-3
Resistivity of Semi-conducting Screen	IEC 60502-2
Flame Retardent	IEC 60332 Part-3-24
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, 12/20 kV CU/XLPE/CTS/PVC-FR/AWA/PVC-FR ELECTRIC CABLE , YEAR 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

Data Sheet No.	10183	Page 1 of 1
Version	01	Issue Date: 29/04/2021



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

NEELKANTH CABLES LIMITED

DATA SHEET

SINGLE CORE XLPE ARMoured, REDUCED HALOGEN EMISSION, REDUCED FLAME PROPAGATION (LHFVR) MEDIUM VOLTAGE CABLE

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

Make	NEELKANTH CABLES LIMITED
Reference Standard	As per IEC 60502-2
Voltage Rating (U _o / U)	12/20 kV
Maximum Operating Voltage (U _m)	24 kV
Operating Temperature	90°C
Max. Temp. During Short Circuit	250°C

Range of Product Single Core 25 Sq.mm up to 1000 Sq.mm

Application

These Medium Voltage Single Core Cables are Designed for Electricity Power Distribution, 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 Overvoltage, 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 60502-2

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 Capacitive and Zero-Sequence short-circuit current, and Contribution to Mechanical Protection. as per IEC 60502-2

Filler (Optional) PVC or Polypropylene yarn

Inner Sheath/Bedding The Inner-sheath Comprises a layer of Extruded as per Requirement PVC-LHFVR Applied Under the Armour, Inner-sheath Compound Complying with SANS 1411-2

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

Outer Sheath The Over all Outer-sheath Comprises a layer of Extruded as per Requirement PVC-LHFVR and Applied Over the Armour to Insulate the Metallic Screen From the Surrounding Medium, to Protect the Metallic 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

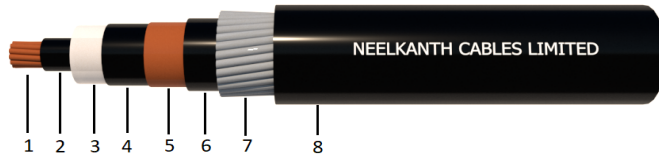
Technical Characteristic

Voltage Grade	12/20 kV
Test Voltage	42 kV for 5 Minute (3.5 U _o r.m.s)
Temperature Rating	-15°C to +90°C
Partial Discharge	IEC 60885-3
Resistivity of Semi-conducting Screen	IEC 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

Marking over the sheath	NEELKANTH CABLES, CABLE SIZE, 12/20 kV CU/XLPE/CTS/PVC-LHFVR/AWA/PVC-LHFVR ELECTRIC CABLE, YEAR 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

Data Sheet No.	10184	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

NEELKANTH CABLES LIMITED
DATA SHEET
SINGLE CORE XLPE ARMoured, 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, NHLSFR (Polyolefin) Inner Sheathed, Aluminium Wire Armoured, Overall NHLSFR (Polyolefin) Outer Sheathed, Medium Voltage Cable.

Make	NEELKANTH CABLES LIMITED
Reference Standard	As per IEC 60502-2
Voltage Rating (U _o / U)	12/20 kV
Maximum Operating Voltage (U _m)	24 kV
Operating Temperature	90°C
Max. Temp. During Short Circuit	250°C

Range of Product Single Core 25 Sq.mm up to 1000 Sq.mm

Application

These Medium Voltage Single Core Cables are Designed for Electricity Power Distribution , 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

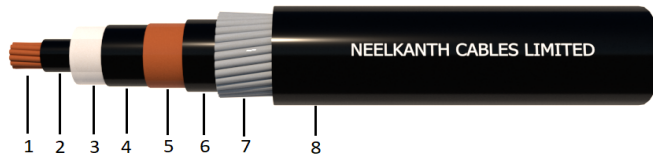
Conductor	Annealed Plain Copper Compacted Round Stranded Conductors to carry Current and withstand Pulling Stresses During Cable Laying. Conductors Complying with IEC 60228 Class-2
Inner Semi-Conducting Screen	Extruded Layer of Semi-Conducting Screen over Conductor to Smooth the Electric Field at the 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 Overvoltage, 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 60502-2
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 Capacitive and Zero-Sequence short-circuit current, and Contribution to Mechanical Protection. as per IEC 60502-2
Filler (Optional)	PVC or Polypropylene yarn
Inner Sheath/Bedding	The Inner-sheath Comprises a layer of Extruded as per Requirement NHLSFR (Polyolefin) Applied Under the Armour, Inner-sheath Compound Complying with SANS 1411-5
Armour	The Armour Consists of Round Aluminium Wire for Single Core Cable, Applied over the Inner-sheath. Armour Material Complying 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 Metallic Screen From the Surrounding Medium, to Protect the Metallic 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	12/20 kV
Test Voltage	42 kV for 5 Minute (3.5 U _o r.m.s)
Temperature Rating	-15°C to +90°C
Partial Discharge	IEC 60885-3
Resistivity of Semi-conducting Screen	IEC 60502-2
Reduced Flame Retardent	IEC 60332 Part-3-24
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

Marking over the sheath	NEELKANTH CABLES , CABLE SIZE, 12/20 kV CU/XLPE/CTS/NHLSFR/AWA/NHLSFR ELECTRIC CABLE , YEAR 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



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

NEELKANTH CABLES LIMITED

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.

Make	NEELKANTH CABLES LIMITED
Reference Standard	As per IEC 60502-2
Voltage Rating (U _o / U)	12/20 kV
Maximum Operating Voltage (U _m)	24 kV
Operating Temperature	90°C
Max. Temp. During Short Circuit	250°C

Range of Product Single Core 25 Sq.mm up to 1000 Sq.mm

Application

These Medium Voltage Single Core Cores Cables are Designed for Electricity Power Distribution ,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
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
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 Capacitive and Zero-Sequence short-circuit current,and Contribution to Mechanical Protection. as per IEC 60502-2
Filler (Optional)	PVC or Polypropylene yarn
Inner Sheath/Bedding	The Inner-sheath Comprises a layer of Extruded as per Requirement PVC-FR, Applied Under the Armour,Inner-sheath Compound Complying with SANS 1411-2
Armour	The Armour Consists of Round Aluminium Wire for Single Core Cable, Applied over the Inner-sheath.Armour Material Complying with SANS 1411-6
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	12/20 kV
Test Voltage	42 kV for 5 Minute (3.5 U _o r.m.s)
Temperature Rating	-15°C to +90°C
Partial Discharge	IEC 60885-3
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, 12/20 kV CU/XLPE/CTS/PVC-FR/AWA/PE, ELECTRIC CABLE , YEAR 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

Data Sheet No.	10186	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
5. COPPER TAPE SCREEN
6. FR PVC OUTER SHEATH

NEELKANTH CABLES LIMITED

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
Voltage Rating (U _o / U)	12/20 kV
Maximum Operating Voltage (U _m)	24 kV
Operating Temperature	90°C
Max. Temp. During Short Circuit	250°C

Range of Product Single Core 25 Sq.mm up to 1000 Sq.mm

Application

These Medium Voltage Single Core Cables are Designed for Electricity Power Distribution ,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 60502-2
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 Capacitive 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	12/20 kV
Test Voltage	42 kV for 5 Minute (3.5 U _o r.m.s)
Temperature Rating	-15°C to +90°C
Partial Discharge	IEC 60885-3
Resistivity of Semi-conducting Screen	IEC 60502-2
Flame Retardent	IEC 60332 Part-3-24
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, 12/20 kV CU/XLPE/CTS/PVC-FR ELECTRIC CABLE , YEAR 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

Data Sheet No.	10187	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 EMISSION, 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.

Make	NEELKANTH CABLES LIMITED
Reference Standard	As per IEC 60502-2
Voltage Rating (U _o / U)	12/20 kV
Maximum Operating Voltage (U _m)	24 kV
Operating Temperature	90°C
Max. Temp. During Short Circuit	250°C

Range of Product Single Core 25 Sq.mm up to 1000 Sq.mm

Application

These Medium Voltage Single Core Cables are Designed for Electricity Power Distribution ,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 60502-2
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 Capacitive 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-LHFR and Applied Over the Armour to Insulate the Mettalic Screen From the Surrounding Medium,to Protect 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	12/20 kV
Test Voltage	42 kV for 5 Minute (3.5 U _o r.m.s)
Temperature Rating	21 kV for 5 Minute (3.5 U _o r.m.s)
Partial Discharge	-15°C to +90°C
Resistivity of Semi-conducting Screen	IEC 60885-3
Reduced Flame Retardent	IEC 60502-2
Reduced Halogen Emission	SANS 60332 Part-3-24
Minimum Installation Bending Radius	SANS 5956
	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, 12/20 kV CU/XLPE/CTS/PVC-LHFR ELECTRIC CABLE , YEAR 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

Data Sheet No.	10188	Page 1 of 1
Version	01	Issue Date: 29/04/2021

 	<ol style="list-style-type: none"> 1. COMPACTED COPPER CONDUCTOR 2. CONDUCTOR SEMI-CON 3. XLPE INSULATION 4. INSULATION SEMI-CON 5. COPPER TAPE SCREEN 6. NHLFR OUTER SHEATH
	NEELKANTH CABLES LIMITED DATA SHEET SINGLE CORE XLPE UNARMoured, ZERO HALOGEN EMISSION, REDUCED SMOKE EMISSION, REDUCED FLAME PROPAGATION (NHLFR) 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 NHLFR (Polyolefin) Outer Sheathed, Medium Voltage Unarmoured Cable.

Make	NEELKANTH CABLES LIMITED
Reference Standard	As per IEC 60502-2
Voltage Rating (U _o / U)	12/20 kV
Maximum Operating Voltage (U _m)	24 kV
Operating Temperature	90°C
Max. Temp. During Short Circuit	250°C

Range of Product Single Core 25 Sq.mm up to 1000 Sq.mm

Application

These Medium Voltage Single Core Cables are Designed for Electricity Power Distribution, 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 Overvoltage, 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 60502-2
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 Capacitive 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 NHLFR (Polyolefin) and Applied Over the Armour to Insulate the Metallic Screen From the Surrounding Medium, to Protect the Metallic 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	12/20 kV
Test Voltage	42 kV for 5 Minute (3.5 U _o r.m.s)
Temperature Rating	21 kV for 5 Minute (3.5 U _o r.m.s)
Partial Discharge	-15°C to +90°C
Resistivity of Semi-conducting Screen	IEC 60885-3
Reduced Flame Retardent	IEC 60502-2
Zero Halogen Emission	SANS 60332 Part-3-24
Minimum Installation Bending Radius	SANS 60754-2
	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, 12/20 kV CU/XLPE/CTS/NHLFR ELECTRIC CABLE, YEAR 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



1. COMPACTED COPPER CONDUCTOR
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.

Make	NEELKANTH CABLES LIMITED
Reference Standard	As per IEC 60502-2
Voltage Rating (U _o / U)	12/20 kV
Maximum Operating Voltage (U _m)	24 kV
Operating Temperature	90°C
Max. Temp. During Short Circuit	250°C

Range of Product Single Core 25 Sq.mm up to 1000 Sq.mm

Application

These Medium Voltage Single Core Cores Cables are Designed for Electricity Power Distribution ,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 60502-2
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 Capacitive 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 Protect 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	12/20 kV
Voltage Grade	42 kV for 5 Minute (3.5 U _o r.m.s)
Test Voltage	21 kV for 5 Minute (3.5 U _o r.m.s)
Temperature Rating	-15°C to +90°C
Partial Discharge	IEC 60885-3
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, 12/20 kV CU/XLPE/CTS/PE, ELECTRIC CABLE , YEAR 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

Data Sheet No.	10190	Page 1 of 1
Version	01	Issue Date: 29/04/2021