

## NEELKANTH CABLES LIMITED

### DATA SHEET

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

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

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

Three Core 25 Sq.mm up to 300 Sq.mm

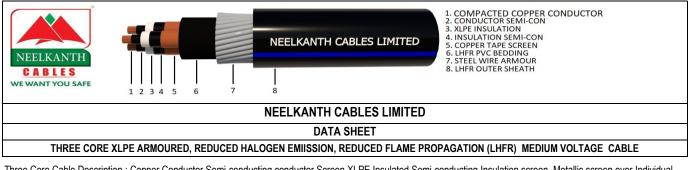
### Range of Product

#### Application

These Medium Voltage Three 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 Compac	cted Round Stranded Conductors to carry Current and withstand Pulling Stresses During Cable Laying.	
	Conductors Complying with IEC	C 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 SANS 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 Capactive and Zero-Sequence short-circu current, and Contribution to Mechanical Protection. as per IEC 60502-2		
Filler (Optional)	I) 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 Galvanised Steel Wire for Three Core Cable, Applied over the Inner-sheath. Armour Material Compliying with IEC 6050 2		
Outer Sheath	ath The Over all Outer-sheath Comprises a layer of Extruded as per Requirement PVC-FR and Applied Over the Armour to Insulate the Mettalic Screee From the Surrounding Medium, to Protact the Mettalic Screen From Corrosion, to Reduce the contribution of cables to Fire Propagation, and Contribut to Mechanical Protection. Outer sheath Compound Complying with IEC 60502-2. Colour: Black with Red Stripe or as per Requirement		
Technical Charact	teristic		
Voltage Grade		12/20 kV 42 kV for 5 Minute ( 3.5 Uo r.m.s)	
Test Voltage Temperature Rating		-15°C to +90°C	
Partial Discharge		IEC 60885-3	
Resistivity of Semi-conducting Screen Flame Retardent		IEC 60502-2 IEC 60332 Part-3-24	
Minimum Installation Bending Radius		12(D+d) D= Nominal Diameter of the Cable, d=Nominal Diameter of the Conductor	
Marking & Packin	g		
Marking over the sl	neath	NEELKANTH CABLES , CABLE SIZE, 12/20 kV CU/XLPE/CTS/PVC-FR/SWA/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		wooden Drum Fully Packed with Lagging	

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

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

### Range of Product

Three Core 25 Sq.mm up to 300 Sq.mm

### Application

These Medium Voltage Three 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 Compa Conductors Complying with IE	cted Round Stranded Conductors to carry Current and withstand Pulling Stresses During Cable Laying. C 60228 Class-2
Inner Semi- Conducting Screen		cting Screen over Conductor to Smooth the Electric Field at the Conductor and Firmly Bonded to the Insulation to nt Concentration of electric field of the interface between the Insulation and the Inner Semi-Conductor. Semi- ing with IEC 60502-2
Insulation		-Linked Polyethylene )Rated Voltage, Lightning Overoltage,Switching Overvoltage, and Withstand the Various Voltage Service Life.as per SANS IEC 60502-2
Core Semi- Conducting Screen		cting Screen over the Insulation . The Screen is Tightly Fitted to the Insulation to Exclude all air Voids, Prevent f the interface between the Insulation and the Semi-Conductor. Semi-Conducting Compound Complying with IEC
Metallic Screen	Individual Cores .Metallic Scree	ist of either Copper Tapes or a Concentric layer of Copper Wires .The Metallic Layer may be applied over the In Provide no Electric Field outer side the Cable, An Active Conductor for the Capactive and Zero-Sequence short-circuit chanical 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-LHFR Applied Under the Armour, Inner-sheath Compound Complyin h/Bedding SANS 1411-2	
Armour	The Armour Consists of Round Galvanised Steel Wire for Three Core Cable, Applied over the Inner-sheath. Armour Material Compllying with IEC 6 2	
Outer Sheath	er Sheath The Over all Outer-sheath Comprises a layer of Extruded as per Requirement PVC-LHFR and Applied Over the Armour to Insulate the Mettali From the Surrounding Medium, to Protact the Mettalic Screen From Corrosion, to Reduce the contribution of cables to Fire Propagation, and Co to Mechanical Protection. Outer sheath Compound Complying with SANS 1411-2. Colour: Black with Blue Stripe or as per Requirement	
Technical Charac	teristic	
Voltage Grade Test Voltage Temperature Rating Partial Discharge Resistivity of Semi-conducting Screen Reduced Flame Retardent Reduced Halogen Emission Minimum Installation Bending Radius		12/20 kV 42 kV for 5 Minute ( 3.5 Uo r.m.s) -15°C to +90°C IEC 60885-3 IEC 60502-2 IEC 60332 Part-3-24 SANS 5956 12(D+d) D= Nominal Diameter of the Cable, d=Nominal Diameter of the Conductor
Marking & Packir	ng	
Marking over the s	heath	NEELKANTH CABLES , CABLE SIZE, 12/20 kV CU/XLPE/CTS/PVC-LHFR/SWA/PVC-LHFR ELECTRIC CABLE , YEAR OF MANUFACTURING
Sequentail Length	Marking	Shall be provided on outer sheath at every one Meter
Cable Length Type of Drum		Multiple of 250/500 or as per Requirement Wooden Drum Fully Packed with Lagging
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## DATA SHEET

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

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

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

Range of Product

Version

Three Core 25 Sq.mm up to 300 Sq.mm

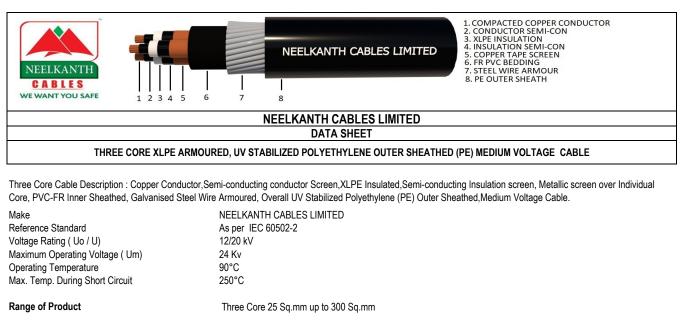
### Application

These Medium Voltage Three 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 SANS 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 Capactive and Zero-Sequence short-circuit current, an 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 Galvanised Steel Wire for Three Core Cable, Applied over the Inner-sheath. Armour Material Compllying with IEC 60502- 2		
Outer Sheath	Duter Sheath The Over all Outer-sheath Comprises a layer of Extruded as per Requirement NHLSFR (Polyolefin) and Applied Over the Screen From the Surrounding Medium, to Protact the Mettalic Screen From Corrosion, to Reduce the contribution of cable Contribute to Mechanical Protection. Outer sheath Compound Complying with SANS 1411-5.		sion, to Reduce the contribution of cables to Fire Propagation, and
Colour: Black with White Stripe of		as per Requirement	
Technical Charact	teristic		
Voltage Grade		12/20 kV	
Test Voltage Temperature Rating	~	42 kV for 5 Minute ( 3.5 Uo r.m.s) -15°C to +90°C	
Partial Discharge	y	IEC 60885-3	
Resistivity of Semi-conducting Screen Reduced Flame Retardent		IEC 60502-2	
		IEC 60332 Part-3-24	
Zero Halogen Emission Minimum Installation Bending Radius		SANS 60754-2 12(D+d)	
		D= Nominal Diameter of the Cable,	
		d=Nominal Diameter of the Conductor	
Marking & Packing	g		
Marking over the sheath		NEELKANTH CABLES , CABLE SIZE, 12/20 k	/ CU/XLPE/CTS/NHLSFR/SWA/NHLSFR ELECTRIC CABLE , YEAR
		Shall be provided on outer sheath at every one	Meter
		Multiple of 250/500 or as per Requirement	
Type of Drum		Wooden Drum Fully Packed with Lagging	
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### Application

These Medium Voltage Three 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 exclu 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 SANS IEC 60502-2		reroltage,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 6050 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 Capactive and Zero-Sequence short-circuit current, a 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		plied Under the Armour, Inner-sheath Compound Complying with
Armour	The Armour Consists of Round Galvanised Steel Wire for Three Core Cable, Applied over the Inner-sheath. Armour Material Compllying with SANS 6		lied over the Inner-sheath.Armour Material Compllying with SANS 1411-
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 Screen From the Surrounding Medium,to Protact the Mettalic Screen From Corrosion,to Reduce the contribution of cables to Fire Propagation Contribute to Mechanical Protection. Outer sheath Compound Complying with SANS 1411-7.		sion, to Reduce the contribution of cables to Fire Propagation, and
	Colour: Black or as per Requiren	nent	
Technical Charact Voltage Grade Test Voltage Temperature Rating Partial Discharge Resistivity of Semi- Minimum Installatio	g conducting Screen	12/20 kV 42 kV for 5 Minute ( 3.5 Uo r.m.s) -15°C to +90°C IEC 60885-3 IEC 60502-2 12(D+d) D= Nominal Diameter of the Cable, d=Nominal Diameter of the Conductor	
Marking & Packing	g		
Marking over the sh		MANUFACTURING	/ CU/XLPE/CTS/PVC-FR/SWA/PE, ELECTRIC CABLE , YEAR OF
Sequentail Length MarkingShall be provided on outer sheath at every one MeterCable LengthMultiple of 250/500 or as per RequirementType of DrumWooden Drum Fully Packed with Lagging		Meter	
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# DATA SHEET

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

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

NEELKANTH CABLES LIMITED
As per IEC 60502-2
12/20 kV
24 Kv
90°C
250°C

### Range of Product

Three Core 25 Sq.mm up to 300 Sq.mm

### Application

These Medium Voltage Three 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 exclu 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 SANS IEC 60502-2		eroltage,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 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 Indivi Cores .Metallic Screen Provide no Electric Field outer side the Cable, An Active Conductor for the Capactive and Zero-Sequence short-circuit curren Contribution to Mechanical Protection. as per IEC 60502-2		
Filler (Optional)	al) 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 6 2		Under the Armour, Inner-sheath Compound Complying with IEC 60502-
Outer Sheath	The Over all Outer-sheath Comprises a layer of Extruded as per Requirement PVC-FR and Applied Over the Armour to Insulate the Mettalic Screer From the Surrounding Medium, to Protact the Mettalic Screen From Corrosion, to Reduce the contribution of cables to Fire Propagation, and Contrib Mechanical Protection. Outer sheath Compound Complying with IEC 60502-2. Colour: Black with Red Stripe or as per Requirement		
<b>Technical Characteristic</b> Voltage Grade Test Voltage Temperature Rating Partial Discharge Resistivity of Semi-conducting Screen Flame Retardent Minimum Installation Bending Radius		12/20 kV 42 kV for 5 Minute ( 3.5 Uo r.m.s) -15°C to +90°C IEC 60885-3 IEC 60502-2 IEC 60332 Part-3-24 15(D+d) D= Nominal Diameter of the Cable, d=Nominal Diameter of the Conductor	
Marking over the sheath		NEELKANTH CABLES , CABLE SIZE, 12/20 kV CU/XLPE/CTS/PVC-FR/PVC-FR ELECTRIC CABLE , YEAR OF MANUFACTURING Shall be provided on outer sheath at every one Meter	
Cable Length		Multiple of 250/500 or as per Requirement Wooden Drum Fully Packed with Lagging	
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1. COMPACTED COPPER CONDUCTOR 2. CONDUCTOR SEMI-CON 3. XLPE INSULATION 4. INSULATION SEMI-CON 5. COPPER TAPE SCREEN 6. LHFR BEDDING 7. LHFR OUTER SHEATH

# NEELKANTH CABLES LIMITED

DATA SHEET

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

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

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

### Range of Product

Three Core 25 Sq.mm up to 300 Sq.mm

### Application

These Medium Voltage Three 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 SANS 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 Capactive 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-LHFR Applied Under the Armour, Inner-sheath Compound Complying with SANS 1411-2	
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 Charac Voltage Grade Test Voltage Temperature Ratin Partial Discharge Resistivity of Semi Reduced Flame Re Reduced Halogen Minimum Installatio	g -conducting Screen etardent Emission	12/20 kV 42 kV for 5 Minute ( 3.5 Uo r.m.s) -15°C to +90°C IEC 60885-3 IEC 60502-2 IEC 60332 Part-3-24 SANS 5956 15(D+d) D= Nominal Diameter of the Cable, d=Nominal Diameter of the Conductor
Marking & Packin Marking over the s Sequentail Length Cable Length Type of Drum	heath	NEELKANTH CABLES , CABLE SIZE, 12/20 kV CU/XLPE/CTS/PVC-LHFR/PVC-LHFR ELECTRIC CABLE , YEAR OF MANUFACTURING Shall be provided on outer sheath at every one Meter Multiple of 250/500 or as per Requirement Wooden Drum Fully Packed with Lagging

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NEELKANTH CABLES LIMITED

1. COMPACTED COPPER CONDUCTOR 2. CONDUCTOR SEMI-CON 3. XLPE INSULATION 4. INSULATION SEMI-CON 5. COPPER TAPE SCREEN 6. NHISFR BEDDING 7. NHLSFR OUTER SHEATH

### NEELKANTH CABLES LIMITED DATA SHEET

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

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

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

### **Range of Product**

Version

Three Core 25 Sq.mm up to 300 Sq.mm

### Application

These Medium Voltage Three 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 SANS 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 Capactive 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		
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 CharacteristicVoltage Grade12/20 kVTest Voltage42 kV for 5 Minute ( 3.5 Uo r.m.s)Temperature Rating-15°C to +90°CPartial DischargeIEC 60885-3Resistivity of Semi-conducting ScreenIEC 60502-2Reduced Flame RetardentIEC 60332 Part-3-24Zero Halogen EmissionSANS 60754-2Minimum Installation Bending Radius15(D+d)D= Nominal Diameter of the Cable, d=Nominal Diameter of the Conductor			
Marking & Packing	9		
Marking over the sh	arking over the sheath NEELKANTH CABLES, CABLE SIZE, 12/20 kV CU/XLPE/CTS/NHLSFR/NHLSFR ELECTRIC CABLE, YEAR C MANUFACTURING		/ CU/XLPE/CTS/NHLSFR/NHLSFR ELECTRIC CABLE , YEAR OF
Sequentail Length I Cable Length Type of Drum	Marking	arking Shall be provided on outer sheath at every one Meter Multiple of 250/500 or as per Requirement Wooden Drum Fully Packed with Lagging	
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Issue Date: 29/04/2021





NEELKANTH CABLES LIMITED

1. COMPACTED COPPER CONDUCTOR 2. CONDUCTOR SEMI-CON 3. XLPE INSULATION 4. INSULATION SEMI-CON 5. COPPER TAPE SCREEN 6. FR PVC BEDDING 7. PE OUTER SHEATH

### NEELKANTH CABLES LIMITED

# DATA SHEET THREE CORE XLPE UNARMOURED, UV STABILIZED POLYETHYLENE OUTER SHEATHED (PE) MEDIUM VOLTAGE CABLE

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

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

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#### **Range of Product**

Three Core 25 Sq.mm up to 300 Sq.mm

### Application

These Medium Voltage Three 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		
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 SANS 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 Capactive 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 iec 60502-2		
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 CharacteristicVoltage Grade12/20 kVTest Voltage42 kV for 5 Minute ( 3.5 Uo r.m.s)Temperature Rating-15°C to +90°CPartial DischargeIEC 60885-3Resistivity of Semi-conducting ScreenIEC 60502-2Minimum Installation Bending Radius15(D+d)D= Nominal Diameter of the Cable, d=Nominal Diameter of the Conductor			
Marking & Packin	g		
Marking over the sl	heath	NEELKANTH CABLES , CABLE SIZE, 12/20 k <sup>v</sup> MANUFACTURING	V CU/XLPE/CTS/PVC-FR/PE, ELECTRIC CABLE , YEAR OF
Sequentail Length Cable Length Type of Drum			
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