

/// Sterlite



Acccc

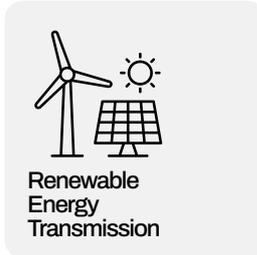
CONDUCTOR CATALOGUE

ACCC CASABLANCA (PLUS)

i OVERVIEW

A breakthrough conductor enabling cost-effective voltage upgrades, ACCC Casablanca Plus maximizes corridor efficiency, reduces losses, and enhances transmission capacity with advanced composite core and optimized aluminum design.

≡ APPLICATIONS



FEATURES & BENEFITS

High Reliability

Advanced materials improve corrosion resistance and service life under severe conditions

Upto 2.5x Higher Power Transfer

Unlocks up to four times the capacity of conventional conductors

Upto 30% Lower Losses

Significant energy savings under identical load conditions

Minimal Infrastructure Change

Existing tower design remains, only minor reinforcement needed

Reduced Sag

1 metre less sag compared to conventional conductors of same size

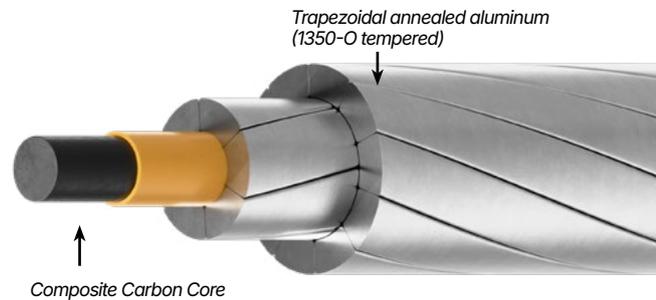
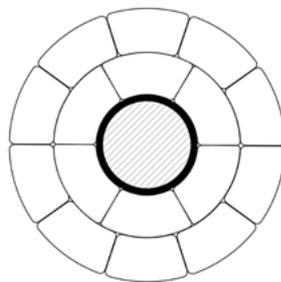
Optimized Right of Way and Land Use

Shrinks corridor footprint, saving valuable land

Reduced Carbon Emissions

Cleaner, more efficient power transmission

◎ CROSS SECTION



✓ APPLICABLE STANDARDS



B609 · B857 · B987



BSEN 50540



IEC 62219



TECHNICAL SPECIFICATIONS

Conductor	ACCC Casablanca (Plus)-657 kcmil	
Total Sectional Area	332.7 mm ²	0.5157 in ²
Aluminum sectional area	293 mm ²	0.4541 in ²
Composite Core sectional area	39.7 mm ²	0.0615 in ²
Construction/Stranding details		
No. of Aluminum wire	16 Nos.	16 Nos.
No. of Composite Core & diameter	1 × 711 mm	1 × 0.2799 in.
Overall diameter	21.0 mm	0.8268 in.
Weight	0.883 kg/m	0.5934 lb/ft
Rated strength of Conductor	101.9 kN	22908 lbs
Rated strength of Core	85 kN	19109 lbs
DC Resistance @ 20°C (68°F)	0.0954 Ω/Km	0.1535 Ω/mile
Current Capacity @ 180°C (356°F)	1220 A	
Current Capacity @ 200°C (392°C)	1285 A	
Max. Operating Temperature	180°C	356°F
Direction of lay	Right hand	
Coefficient of thermal expansion	18.55 × 10 ⁻⁶ /°C	10.31 × 10 ⁻⁶ /°F
Final modulus of elasticity	64.48 Gpa	9352 ksi

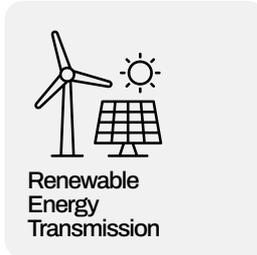
Note: Current capacity based on referenced conductor temperature, 0.6 m/s (2 ft/s) wind, 0m (0 ft) Elevation, 0.5 Emissivity, 0.5 absorptivity, 25°C (77°F) Ambient temperature, 1033 W/m² (96 w/ft²) solar radiation.

ACCC COPENHAGEN

i OVERVIEW

A next-generation conductor engineered for efficient reconductoring, ACCC Copenhagen enhances ampacity, minimizes sag, and boosts reliability using an advanced composite core and optimized aluminum design.

≡ APPLICATIONS



FEATURES & BENEFITS

High Reliability

Advanced materials improve corrosion resistance and service life under severe conditions

Upto 2.5x Higher Power Transfer

Unlocks up to four times the capacity of conventional conductors

Upto 25% Lower Losses

Significant energy savings under identical load conditions

Minimal Infrastructure Change

Existing tower design remains, only minor reinforcement needed

Reduced Sag

1 metre less sag compared to conventional conductors of same size

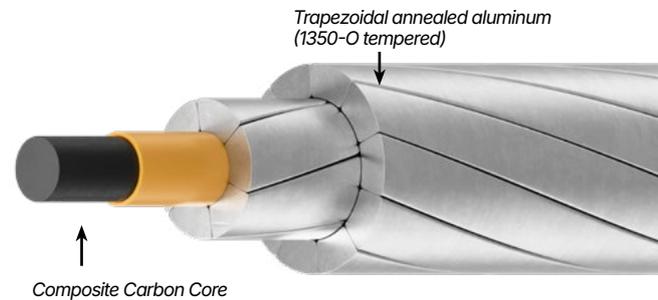
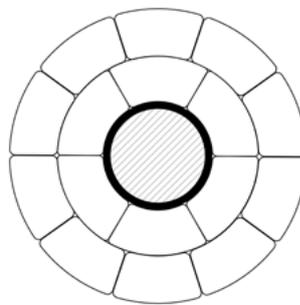
Optimized Right of Way and Land Use

Shrinks corridor footprint, saving valuable land

Reduced Carbon Emissions

Cleaner, more efficient power transmission

⊙ CROSS SECTION



✓ APPLICABLE STANDARDS



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IEC 62219

⚡ TECHNICAL SPECIFICATIONS

Parameter	ACCC Copenhagen (Plus)-657 kcmil	
Total sectional area	248.66 mm ²	0.385 in ²
Aluminum sectional area	220.66 mm ²	0.342 in ²
Composite Core sectional area	28.0 mm ²	0.043 in ²
Construction/Stranding details		
No. of Aluminum wire	16 Nos.	16 Nos.
No. of Composite Core & diameter	1 × 5.97 mm	1 × 0.235 in.
Overall diameter	18.29 mm	0.72 in.
Weight	0.663 kg/m	0.446 lb/ft
Rated strength of Conductor	72.8 kN	16366 lbs
Rated strength of Core	60.2 kN	13533 lbs
DC Resistance @ 20°C (68°F)	0.1266 Ω/Km	0.2037 Ω/mile
Current Capacity @ 180°C (356°F)	1015 A	
Current Capacity @ 200°C (392°F)	1069 A	
Max. Operating Temperature	180°C	356°F
Direction of lay	Right hand	
Coefficient of thermal expansion	18.78 × 10 ⁻⁶ /°C	10.31 × 10 ⁻⁶ /°F
Final modulus of elasticity	64.1 Gpa	9297 ksi

Note: Current capacity based on referenced conductor temperature, 0.6 m/s (2 ft/s) wind, 0m (0 ft) Elevation, 0.5 Emissivity, 0.5 absorptivity, 25°C (77°F) Ambient temperature, 1033 W/m² (96 w/ft²) solar radiation.

ACCC DHAKA

i OVERVIEW

A high-performance conductor for 400 kV lines, ACCC Dhaka delivers superior ampacity, reduced sag, and lasting reliability through its advanced composite core and optimized multi-layer aluminum design.

≡ APPLICATIONS

Renewable Energy Transmission

High and Extra High-Voltage Transmission Lines

Long-Span Crossings for Rivers, Valleys and Mountains

FEATURES & BENEFITS

Stronger Infrastructure

Powering regional grid stability with cross-border supply

Upto 3x Higher Power Transfer

Unlocks up to four times the capacity of conventional conductors

Upto 20% Lower Losses

Significant energy savings under identical load conditions

Minimal Infrastructure Change

Existing tower design remains, only minor reinforcement needed

Reduced Sag

Upto 2 metre less sag compared to conventional conductors of same size

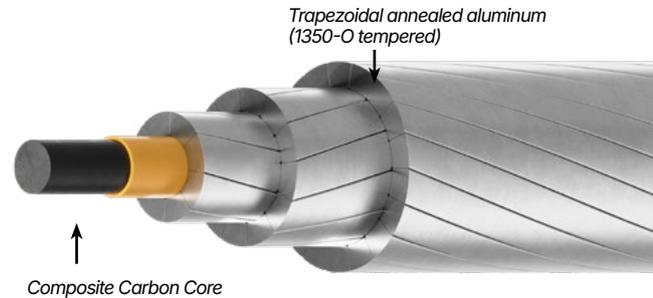
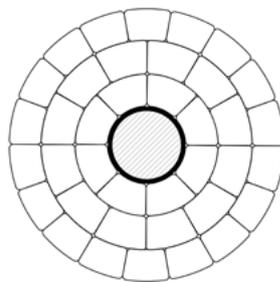
Optimized Right of Way and Land Use

Shrinks corridor footprint, saving valuable land

Reduced Carbon Emissions

Cleaner, more efficient power transmission

◎ CROSS SECTION



✓ APPLICABLE STANDARDS

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⚡ TECHNICAL SPECIFICATIONS

Conductor	ACCC Dhaka (1429 kcmil)	
Total Sectional Area	795 mm ²	1.232 in ²
Aluminum sectional area	724 mm ²	1.122 in ²
Composite Core sectional area	71 mm ²	0.110 in ²
Construction/Stranding details		
No. of Aluminum wire	38 Nos./3 layer	38 Nos./3 layer
No. of Composite Core & diameter	1 × 9.53 mm	1 × 0.375 in.
Overall diameter	32.87 mm	1.294 in.
Weight	2.134 kg/m	1.434 lb/ft
Rated strength of Conductor	194.5 kN	43725 lbs
Rated strength of Core	151.7 kN	34104 lbs
DC Resistance @ 20°C (68°F)	0.0387 Ω/Km	0.0623 Ω/mile
Current Capacity @ 180°C (356°F)	2194 A	
Current Capacity @ 200°C (392°C)	2318 A	
Max. Operating Temperature	180°C	356°F
Direction of lay	Right hand	
Coefficient of thermal expansion	19.4 × 10 ⁻⁶ /°C	10.78 × 10 ⁻⁶ /°F
Final modulus of elasticity	59.4 Gpa	8615 ksi

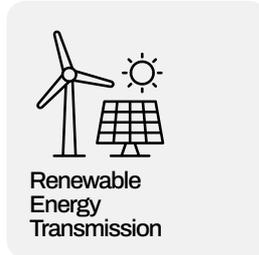
Note: Current capacity based on referenced conductor temperature, 0.6 m/s (2 ft/s) wind, 0m (0 ft) Elevation, 0.5 Emissivity, 0.5 absorptivity, 25°C (77°F) Ambient temperature, 1033 W/m² (96 w/ft²) solar radiation.

ACCC 19.95 mm (ORIOLE)

i OVERVIEW

An advanced conductor for 132kV lines, ACCC Oriole enhances ampacity, minimizes sag, and improves reliability with a high-strength composite core and precision-engineered aluminum design.

≡ APPLICATIONS



FEATURES & BENEFITS

Unique Design

Custom-engineered configurations with minimum bill-of-materials (BOM)

Upto 3x Higher Power Transfer

Unlocks up to four times the capacity of conventional conductors

Upto 10% Lower Losses

Significant energy savings under identical load conditions

Minimal Infrastructure Change

Existing tower design remains, only minor reinforcement needed

Reduced Sag

1 metre less sag compared to conventional conductors of same size

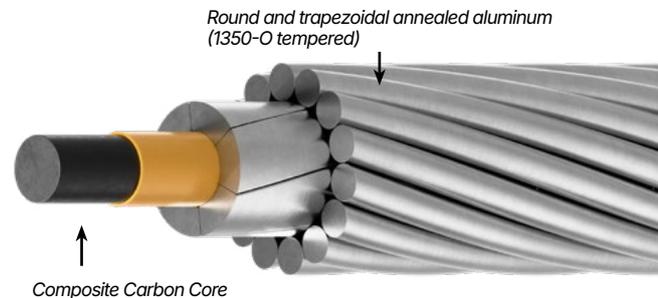
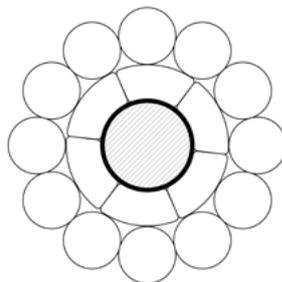
Optimized Right of Way and Land Use

Shrinks corridor footprint, saving valuable land

Reduced Carbon Emissions

Cleaner, more efficient power transmission

⊙ CROSS SECTION



✓ APPLICABLE STANDARDS



⚡ TECHNICAL SPECIFICATIONS

Conductor	ACCC-19.95mm (Oriole)-433 kcmil	
Total Sectional Area	2591 mm ²	0.402 in ²
Aluminum sectional area	219.4 mm ²	0.340 in ²
Composite Core sectional area	39.7 mm ²	0.0615 in ²
Construction/Stranding details		
No. of Aluminum wire	20 Nos./2 layer	20 Nos./2 layer
No. of Composite Core & diameter	1 × 711 mm	1 × 0.28 in.
Overall diameter	19.95 mm	0.785 in.
Weight	0.6809 kg/m	0.458 lb/ft
Rated strength of Conductor	97.5 kN	21920 lbs
Rated strength of Core	85 kN	19109 lbs
DC Resistance @ 20°C (68°F)	0.1276 Ω/Km	0.2054 Ω/mile
Current Capacity @ 180°C (356°F)	1037 A	
Current Capacity @ 200°C (392°C)	1092 A	
Max. Operating Temperature	180°C	356°F
Direction of lay	Right hand	
Coefficient of thermal expansion	17.25 × 10 ⁻⁶ /°C	9.58 × 10 ⁻⁶ /°F
Final modulus of elasticity	63.69 Gpa	9240 ksi

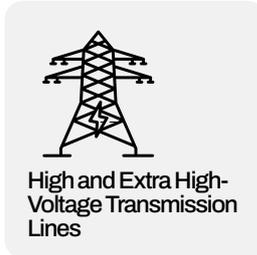
Note: Current capacity based on referenced conductor temperature, 0.6 m/s (2 ft/s) wind, 0m (0 ft) Elevation, 0.5 Emissivity, 0.5 absorptivity, 25°C (77°F) Ambient temperature, 1033 W/m² (96 w/ft²) solar radiation.

ACCC ULS BRAHMAPUTRA (NON-SPECULAR)

i OVERVIEW

A pioneering solution for 400kV river crossings, ACCC ULS Brahmaputra delivers ultra-low sag, exceptional tensile strength, and long-span capability, enabling safe, cost-efficient transmission across challenging terrains.

≡ APPLICATIONS



FEATURES & BENEFITS

Customised Solution

Unique configuration with higher strength for river crossing

Ultra-Low Sag

Composite core minimizes expansion, maintaining stable line clearance

Higher Tension Stringing

Higher Modulus of elasticity, Higher resistance to Aeolian vibrations

Longer Span Capability

Supports wider spans, reducing tower count and construction cost

Extended Service Life

Minimized stress and expansion ensure long-term operational reliability

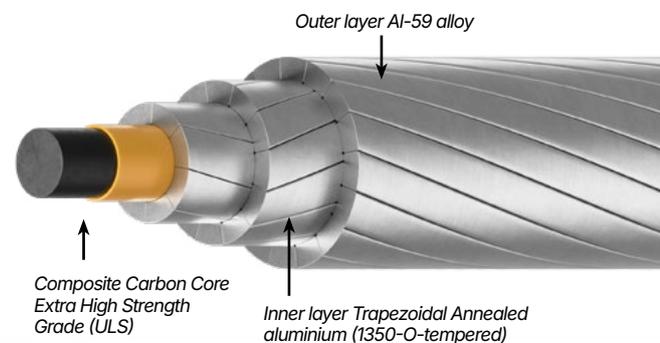
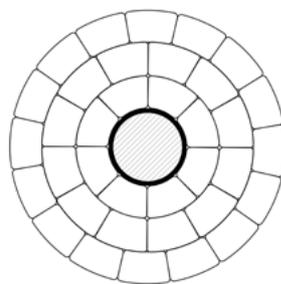
Corrosion & Fatigue Resistant

Non-metallic core prevents corrosion, enhancing durability and strength

All-Weather Reliability

Smooth surface resists wind drag and ice buildup effectively

◎ CROSS SECTION



✓ APPLICABLE STANDARDS



B987
B979



BSEN 50540



IS 398 P-VI



IEC 62641

⚡ TECHNICAL SPECIFICATIONS

Conductor	ACCC ULS Brahmaputra (non-specular) (999 kcmil)	
Total Sectional Area	593 mm ²	0.9191 in ²
Aluminum sectional area	506 mm ²	0.7843 in ²
Composite Core sectional area	87 mm ²	0.1348 in ²
Construction/Stranding details		
No. of Aluminum wire	36 Nos./3 layer	36 Nos./3 layer
No. of Composite Core & diameter	1 × 10.54 mm	1 × 0.415 in.
Overall diameter	28.62 mm	1.127 in.
Weight	1.560 kg/m	1.048 lb/ft
Rated strength of Conductor	291 kN	65419 lbs
Rated strength of Core	225 kN	50582 lbs
DC Resistance @ 20°C (68°F)	0.0565 Ω/Km	0.0909 Ω/mile
Current Capacity @ 85°C (185°F)	803 A	
Max. Operating Temperature	95°C	203°F
Direction of lay	Right hand	
Coefficient of thermal expansion	16.1 × 10 ⁻⁶ /°C	8.95 × 10 ⁻⁶ /°F
Final modulus of elasticity	68.24 Gpa	10620 ksi

Note:

Current capacity based on referenced conductor temperature, 0.56 m/s (1.84 ft/s) wind, 0m (0 ft) Elevation, 0.6 Emissivity, 0.8 absorptivity, 45°C (113°F) Ambient temperature, 1045 W/m² (97.08 w/ft²) solar radiation.

ACCC ULS WARWICK (NON-SPECULAR)

i OVERVIEW

A high-efficiency, ultra-low sag conductor, ACCC ULS Warwick enhances ampacity, reliability, and grid performance with a lightweight hybrid composite core and optimized aluminum design.

≡ APPLICATIONS

Renewable Energy Transmission

Upgradation of Transmission Lines

High and Extra High-Voltage Transmission Lines

Long-Span Crossings for Rivers, Valleys and Mountains

FEATURES & BENEFITS

Higher Ampacity

Upto 2x more current than conventional ACSR conductors

Ultra-Low Sag

Composite core minimizes expansion, maintaining stable line clearance

Improved Efficiency

Low-resistance aluminum strands reduce line losses and save energy

Longer Span Capability

Supports wider spans, reducing tower count and construction cost

Extended Service Life

Minimized stress and expansion ensure long-term operational reliability

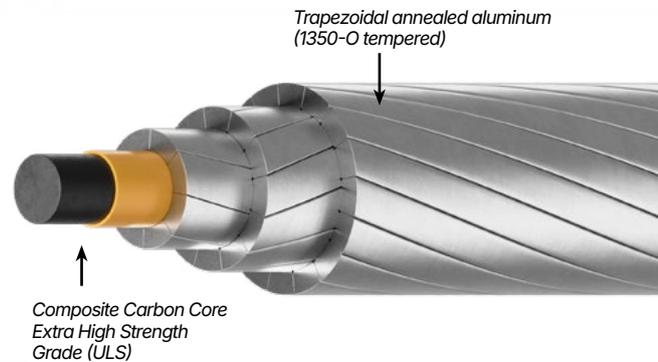
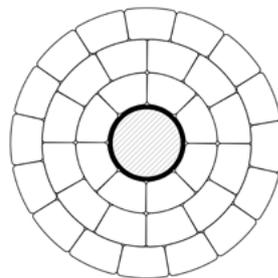
Enhanced Aesthetics

Non-specular finish blends with surroundings, improving visual appeal

Weather and Corrosion Resistant

Smooth, non-metallic design resists wind, ice, and corrosion effectively

⊙ CROSS SECTION



✓ APPLICABLE STANDARDS



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⚡ TECHNICAL SPECIFICATIONS

Conductor	ACCC ULS Warwick (non-specular) (1479 kcmil)	
Total Sectional Area	836.8 mm ²	1.297 in ²
Aluminum sectional area	749.5 mm ²	1.162 in ²
Composite Core sectional area	87.25 mm ²	0.135 in ²
Construction/Stranding details		
No. of Aluminum wire	36 Nos./3 layer	36 Nos./3 layer
No. of Composite Core & diameter	1 × 10.54 mm	1 × 0.415 in.
Overall diameter	33.40 mm	1.315 in.
Weight	2.236 kg/m	1.503 lb/ft
Rated strength of Conductor	267.8 kN	60204 lbs
Rated strength of Core	225 kN	50582 lbs
DC Resistance @ 20°C (68°F)	0.0373 Ω/Km	0.0600 Ω/mile
Current Capacity @ 180°C (356°F)	2358 A	
Current Capacity @ 200°C (392°C)	2500 A	
Max. Operating Temperature	180°C	356°F
Direction of lay	Right hand	
Coefficient of thermal expansion	18 × 10 ⁻⁶ /°C	10 × 10 ⁻⁶ /°F
Final modulus of elasticity	67.3 Gpa	9761 ksi

Note: Current capacity based on referenced conductor temperature, 0.6 m/s (2 ft/s) wind, 0m (0 ft) Elevation, 0.68 Emissivity, 0.5 absorptivity, 25°C (77°F) Ambient temperature, 1033 W/m² (96 w/ft²) solar radiation.

ACCC UPG HYDERABAD

i OVERVIEW

A cost-effective voltage upgrade solution, ACCC UPG Hyderabad boosts transmission capacity, reduces losses, and optimizes corridor use with a composite core and advanced aluminum design. i.e., from 132kV to 220kV using insulated cross arm.

≡ APPLICATIONS

Renewable Energy Transmission

Upgradation of Transmission and Distribution Lines

FEATURES & BENEFITS

4x Higher Power Transfer

Unlocks up to four times the capacity of conventional conductors

Reduced Line Losses

Achieves around 41% lower losses under identical load conditions

Reduced Sag

1 m less sag, ensuring clearance compliance for 220 kV on 132 kV towers

Regulatory Compliance

Meets Corona and RIV standards for 220 kV operations

Minimal Infrastructure Change

Requires no tower redesign, only minor reinforcement upgrades

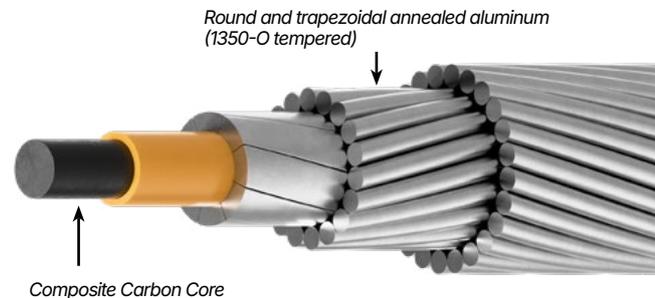
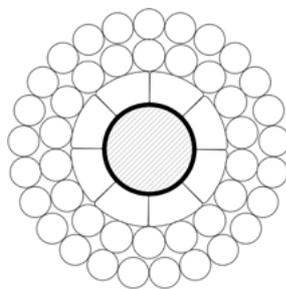
Optimized Right of Way and Land Use

Shrinks corridor footprint, saving valuable land

Lightweight & Strong

Superior strength minimizes sag and enhances current-carrying capacity

⊙ CROSS SECTION



✓ APPLICABLE STANDARDS

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⚡ TECHNICAL SPECIFICATIONS

Conductor	ACCC UPG Hyderabad (665 kcmil)	
Total Sectional Area	397.27 mm ²	0.6157 in ²
Aluminum sectional area	337 mm ²	0.5223 in ²
Composite Core sectional area	60.27 mm ²	0.0934 in ²
Construction/Stranding details		
No. of Aluminum wire	50 Nos./3 layer	50 Nos./3 layer
No. of Composite Core & diameter	1 × 8.76 mm	1 × 0.345 in.
Overall diameter	25.02 mm	0.985 in.
Weight	1.043 kg/m	0.701 lb/ft
Rated strength of Conductor	148.41 kN	33364 lbs
Rated strength of Core	129 kN	29000 lbs
DC Resistance @ 20°C (68°F)	0.08291 Ω/Km	0.1334 Ω/mile
Current Capacity @ 180°C (356°F)	1380 A	
Current Capacity @ 200°C (392°C)	1456 A	
Max. Operating Temperature	180°C	356°F
Direction of lay	Right hand	
Coefficient of thermal expansion	17.5 × 10 ⁻⁶ /°C	9.72 × 10 ⁻⁶ /°F
Final modulus of elasticity	66.24 Gpa	9607 ksi

Note: Current capacity based on referenced conductor temperature, 0.6 m/s (2 ft/s) wind, 0m (0 ft) Elevation, 0.5 Emissivity, 0.5 absorptivity, 25°C (77°F) Ambient temperature, 1033 W/m² (96 w/ft²) solar radiation.



Corporate Office

5th Floor, RMZ Infinity, Plot No. 15,
Udyog Vihar – IV, Gurugram - 122015,
Haryana, India

Manufacturing Units

Haridwar

Sector-5, Vardhman Industrial Estate,
Behind Patanjali Yogpeeth, Haridwar, Uttarakhand 249 405

Jharsuguda

At-Bhurkhamunda, PO - Kalimandir Road,
District - Jharsuguda, Odisha 768 202

Piparia

Survey NO.209, Phase -II, Piparia, Piparia
Industrial Estate, Silvassa, Maharashtra 396 230

Rakholi

Survey NO.99/2/22, & 23, Rakholi, Madhuban Dam
Road Rakholi, Silvassa, Maharashtra 396 230

For any queries or suggestions

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