Overhead Transmission and Distribution Conductors

Southwire® System Hardening Products



Overhead Conductor

- Southwire's High Temperature, Low Sag (HTLS) conductor with a carbon fiber composite multi-strand core
- ACCS or ZTACCR constructions
- TP- Thermoplastic 180C | 225C
- TS- Thermoset 180C | 200C
- Features:
- ° Flexibility
- ° Thermal stability
- ° Excellent corrosion resistance
- ° Low coefficient of thermal expansion



ACSS/HS285® Overhead Conductor

- Southwire's patented ultra-high strength mischmetal coated steel core
- Features:
- ° HTLS when used in ACSS or ACSS/TW
- ° High modulus
- ° Excellent corrosion resistance



MaxStorm® Overhead Conductor

- Designed for improved sag under extreme ice and wind loads
- ZTACSR/TW/MA5 construction
- Trapezoidal Wire (TW) stranding allows for reduced diameter (i.e. reduced ice and wind loads)
- High temperature capability allows for a smaller conductor OD
- Features:
 - ° High modulus
- ° High resiliency
- ° 210C | 240C Ratings



VR^{2®} Overhead Conductor

- Two conductors twisted together to an engineered lay length based on conductor size
- Presents a varying profile to the wind to resist galloping and Aeolian vibration
- Available using ACSR, ZTACSR, AAC, or AAAC Conductors



MRC Motion-Resistant Conductor (Oval)

- Strands in the outer layer vary in diameter and shape to create an oval shape
- Presents a varying profile to the wind to resist galloping and Aeolian vibration

Southwire[®] Legacy Products



AAC All-Aluminum Conductor

- 1350-H19 Aluminum Strands
- 61.2% IACS conductivity
- Excellent corrosion resistance
- Superior conductivity-to-weight ratio



AAAC All-Aluminum Alloy Conductor

- 6201-T81 Aluminum Alloy Strands
- 52.5% IACS conductivity
- Excellent corrosion resistance
- Excellent strength-to-weight ratio



ACAR Aluminum Conductor, Aluminum Alloy Reinforced

- 1350-H19 Aluminum Outer Strands
- 61.2% IACS conductivity
- 6201-T81 Aluminum Alloy Inner Strands
- 52.5% IACS conductivity
- Excellent corrosion resistance



ACSR Aluminum Conductor, Steel Reinforced

- 1350-H19 Aluminum Outer Strands
- 61.2% IACS conductivity
- Coated steel core strands



ACSS Aluminum Conductor, Steel Supported

- 1350-O Temper Aluminum Outer Strands
- 63% IACS conductivity
- Mischmetal-coated steel core strand
- 250°C continuous operating temperature
- Self-damping



AACSR Aluminum Alloy Conductor, Steel Reinforced

- 6201-T81 Aluminum Alloy Outer Strands
- 52.5% IACS conductivity
- Coated steel core strands

Options

Color Key

- C^{7®} Core
- Steel Core
- Al-Zr
- Aluminum Alloy
- Aluminum

Aluminum Alloys

- 1350-H19
- 1350-O Temper
- Aluminum-Zirconium (Al-Zr)
- 6201-T81

Corrosion Protection

- •Zinc-Coated (Galvanized)
- Zinc-5% Aluminum-Mischmetal Alloy Coated
- Aluminum-Clad (AW)
- Greased Core and/or Inner Aluminum Layers
- C^{7®} Composite Core

Other Options

Trapezoidal Wire (TW)
 Non-Specular

