Technical Specifications

Feature	Specification Details
Conductor Area	2.5 mm^2 (per core)
Equivalent Gauge	Approximately 13–14 AWG
Conductor Material	Oxygen-Free Copper (OFC) or Copper Clad Aluminum (CCA)
Stranding Structure	Typically 50 x 0.25mm or 161 x 0.12mm for high flexibility
Insulation Material	Flexible PVC or Low Smoke Zero Halogen (LSZH)
Outer Diameter	Approximately 8.0 mm to 8.5 mm (Round)

Electrical Characteristics

- **Voltage Rating**: 300V – 500V (depending on insulation grade).
- **Conductor Resistance**: ≤ 7.65 Ω/km (at 20°C for pure copper).
- **Current Capacity**: Safely handles up to 20–25 Amps in standard installations.
- **Max Load**: Suitable for power amplifiers delivering up to 1200W–5750W (load dependent).

Mechanical & Environmental Properties

- **Temperature Range**:
    - **Fixed Installation**: -30°C to +70°C.
    - **Mobile Installation**: -10°C to +60°C.
- **Minimum Bending Radius**: 6 to 8 times the outer diameter.
- **Polarity Identification**: Distinct color-coding (typically Red/Black) or physical ridges/imprints on the sheath.

Typical Applications

- High-fidelity (HiFi) residential audio systems.
- Professional PA and live sound installations.
- Automotive speaker and subwoofer wiring.
- Commercial recording studios and public announcement systems.