

RVV 2*0.5mm

1. General Specifications

- **Cable Type:** RVV (PVC Insulated, PVC Sheathed Flexible Cable).
- **Conductor Type:** Multi-strand Flexible Copper (Class 5).
- **Number of Cores:** 2.
- **Nominal Cross-Section:** 0.5 mm^2 (~20 AWG equivalent).
- **Standard Compliance:** IEC 60227, GB/T 5023.

2. Electrical Characteristics (at 20°C)

- **Rated Voltage (U_0/U):** 300/500V.
- **Current Rating:** ~4A to 9A (depending on installation environment).
- **Max. DC Conductor Resistance:** $\leq 39.0 \text{ } \Omega/\text{km}$ (standard for 0.5mm^2 class 5 copper).
- **Test Voltage:** 1,500V to 2,000V AC for 5 minutes.
- **Min. Insulation Resistance:** $>0.01 \text{ M}\Omega \cdot \text{km}$ at 70°C.

3. Mechanical & Thermal Properties

- **Operating Temperature Range:** -15°C to +70°C (standard).
 - *Extreme variants:* Can withstand down to -30°C.
- **Max. Short-Circuit Temperature:** 160°C (duration $\leq 5\text{s}$).
- **Minimum Bending Radius:** 4 to 10 times the outer diameter (O.D.).
- **Flame Retardancy:** IEC 60332.1 compliant (self-extinguishing).

4. Construction Details

- **Conductor:** High-purity, oxygen-free stranded copper.
- **Insulation:** Color-coded PVC (typically Brown and Blue).
- **Outer Sheath:** Flexible PVC (standard colors: Black, Grey, or White).
- **Estimated Outer Diameter:** ~5.0mm – 6.0mm (standard for 2-core 0.5mm^2).

5. Common Applications

- **Home/Office:** Power leads for table lamps, radios, and office equipment.
- **Security & Signal:** Anti-theft alarms, building intercoms, and signal transmission.
- **Industrial:** Internal wiring for control panels, sensors, and CNC machinery.