

Test Instructions for Twin & Earth Cable Grey 1.5mm

(50m - 150m Drum Sizes)

1. Visual Inspection

- Check for any visible damage to the cable, including cuts, abrasions, or deformations.
- Ensure the drum is intact and the cable is wound properly without tangles.

2. Dimensional Check

- Measure the conductor diameter using a micrometer to confirm it matches the 1.5mm² specification.
- Verify insulation and sheath thickness using a thickness gauge.

3. Conductor Continuity Test

- Use a multimeter or continuity tester to verify there are no breaks in the conductor.
- Connect the probes at both ends and check for a low resistance reading (less than 1 Ohm per meter).

4. Insulation Resistance Test

- Use a megohmmeter (insulation tester) set at 500V DC.
- Measure the resistance between:
 - * Live (Brown) & Earth (Bare Copper)
 - * Neutral (Blue) & Earth (Bare Copper)
 - * Live (Brown) & Neutral (Blue)
- The insulation resistance should be greater than or equal to 1 MOhm (as per BS 7671).

5. Voltage Withstand Test

- Apply 2500V AC for 1 minute between the conductors and sheath (for compliance with BS 6004).
- No breakdown or excessive leakage should occur.

6. Resistance Measurement

- Measure the DC resistance of the conductor per meter (typically less than or equal to 12.1 Ohm/km at 20°C).

7. Flexibility & Bend Test

- Bend the cable around a mandrel (10 times the outer diameter) to check for cracks in insulation/sheath.

- Straighten and check for any signs of permanent deformation.

8. Final Documentation & Approval

- Record all test results and compare them with the expected values.
- Approve or reject the cable based on compliance with BS 6004 standards.