

FLEXIBILITY AND ADHERENCE MANDREL WINDING TEST REQUIREMENTS FOR ENAMELLED ROUND ALUMINIUM WINDING WIRES (BASIS: IS 13730-.. AND IS 13778 – 3)

| Nominal Conductor Diameter | | | | Elongation | Mandrel Winding Test Requirement According to IS 13730-.. and IEC 60317-0-3 | | |
|----------------------------|-------------------|-------|-------------------|------------------------|---|--|---|
| Over | Up to & Including | From | Up to & Including | Before Mandrel winding | Part 9: Polyester Aluminium Wires, Class 130 | Part 15: Polyesterimide Aluminium Wires, Class 180 | Part 13: Dual coated PE (I) + PAI copper wires, Class 200 |
| (mm) | (mm) | (SWG) | (SWG) | (%) | | | |
| - | 1.6 | | | 0 | 3 d | 3 d | 3 d |
| 1.6 | 5 | | | 0 | 15% linear elongation | 15% linear elongation | 15% linear elongation |

Notes:

1. Definition of crack: An opening in the insulation, which exposes the conductor to view at the stated magnification.
2. Magnification : 10-15 times for Conductor dia. Up to & including 0.04 mm
6 – 10 times for Conductor dia. over 0.040 mm up to & including 0.5 mm
Normal vision or up to 6 times for Conductor dia. over 0.5 mm dia.