Self-Amalgamating Tapes

pro-POWER

Features:

- Excellent physical and electrical properties
- Electrical properties highly stable under prolonged use on cables at conductor temperature up to 130°C
- Compatible with a wide range of polymeric cable insulation materials including polyethylene, PVC, ethylene propylene rubber, cross-linked polyethylene and butyl rubbers and neoprene
- Tapes amalgamate rapidly when applied under tension to provide a void free homogenous insulation build up without the need for external heat or pressure
- Tapes are non tacky and easy to handle and apply
- Excellent resistance to prolonged immersion in water
- Ozone resistant
- Compatible with most hot pouring compounds used in joint boxes at pouring temperature up to 160°C
- Compatible with acrylic and epoxy resin systems
- Tapes remove cleanly from most surfaces when cut, allowing them to be used as temporary protection material

Description

Self-amalgamating tapes based on ethylene propylene rubber
Colour : Black

Uses

For jointing (splicing) and repair of a wide range of solid dielectric power cables up to 60 kV
The tapes have excellent physical and electrical properties
The temperature performance of the tapes in a joint will be compatible with the 90°C continuous, 130°C overload, rating of cross-linked polyethylene insulated cables
In addition to its used at high voltages, as noted above, the tapes are suitable for insulating and waterproofing electrical components and connections at lower voltage

Applications

Strip back the interleaving and stretch the tape to reduce its width by between one third and one half. Keep the tape under tension and wrap, overlapping successive layers by 50%, until the desired build-up of insulation is achieved. Finish the wrapping by holding the tape under thumb and snap by stretching. The high degree of stretch as describe above will prevent the inclusion of volts and ensure rapid amalgamation.

Average Properties		Test Method
Thickness	2517: 0.75 mm (0.03 inches)	-
Tensile Strength	3 MPa	BS903 Part A2 1989
Elongation at Break	80%	
Fusion and Tacklness	Passes	ASTM D 1373:70
Water Absorption	0.05% (24 hours)	ASTM D 570:63
Corrosion Liability	None	BS 3924:78
Flammability	Similar to that of polyethylene	-
Ozone Resistance	Passes	ASTM D 1373:70

Self-Amalgamating Tapes

pro-POWER

Average Properties		Test Method
Dielectric Strength	36 kV / mm (Short time method)	ASTM D 149:64
Dielectric Constant	2.8 (50 Hz)	ASTM D 150:74
Power Factor (Tan)	0.006 (50 Hz)	
Volume Resistivity (20°C)	10^{15} Ω-cm	ASTM D 257:75

Temperature Range

-40°C to 90°C continuous. Up to 130°C for limited periods during overload conditions

Durability

The life of the tape exposed out of doors in the UK is expected to be several years. In enclosed locations, such as cables, its life should be at least equal to that of the cable. Where the tape may be subjected to abrasion or exposure to weather an external covering of other rotunda 2702, 2705 or 2731 black PVC adhesive tape is recommended. The properties given above are average values except where otherwise stated and this information sheet should not be treated as a specification, not used for the purposes of writing specifications.

Storage

The rolls of tape must be stored flat on their cut edges in the original packing, until required for use and must be protected from dust, heat, moisture, direct sunlight, corrosive and solvent fumes
Under these conditions the storage life of the tape in a temperature climate will be not less than five years

Product Testing

Users are recommended to test the tape for its suitability in their particular application

Part Number Table

Description	Part Number
Tape, High Volt, Self Amalg, 19 mm	2517
Tape, Self Amalg, 25 mm	25170101900252