Filmterm NMN5



Three layers flexible insulating laminates, used for the insulation of electric motors and transformers in thermal class F(155 °C)/H(180 °C).

Electrical insulation product

Characteristics

Insulating flexible laminates NMN5 belong to Filmterm family.

NMN5 is composed by a PET film (23 to 350 μ m) laminated to two layers of 50 micron calendered aramid paper (2 mils) bonded with a solventless glue at controlled reticulation, according to ASTM D1830 standard.

NMN5 is a three layers laminate, the PET film is giving the product mechanical and dielectric features, while the two layers of aramid paper are giving the thermal resistance.

After impregnation at the customer side with varnishes and resins, the product reaches the H Class (180° C) as stated by the UL certification of the product (UL file E476331).

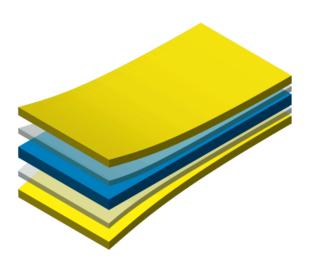
Business notes

The product can be supplied in tapes from 8 mm width upwards, in rolls until 2000 mm, cut in sheets or die-cut according to customer's specifications.

Core internal diameter 76 or 152 mm (3 or 6 inches).

Structure





Technical Data

| Properties | Unit | Tolerance | Values | | | | | | | | |
|------------------------|---------|-----------|--------|------|------|------|------|------|------|------|------|
| Film Thickness | micron | ±10% | 23 | 50 | 75 | 100 | 125 | 190 | 250 | 300 | 350 |
| Total Thickness | mm | ±10% | 0,13 | 0,17 | 0,19 | 0,22 | 0,25 | 0,30 | 0,37 | 0,42 | 0,47 |
| Yield | m²/kg | ±10% | 8,20 | 6,25 | 5,13 | 4,35 | 3,77 | 2,82 | 2,27 | 2,00 | 1,71 |
| Weight | g/m² | ±10% | 122 | 160 | 195 | 230 | 265 | 355 | 440 | 500 | 585 |
| Breaking Strength (MD) | N/10 mm | min | 85 | 95 | 105 | 120 | 150 | 200 | 300 | 320 | 350 |
| Elongation | | min | 15 | 15 | 15 | 15 | 20 | 20 | 20 | 20 | 20 |
| Breakdown voltage | kV | min | 5 | 7 | 11 | 12 | 14 | 19 | 23 | 28 | 28 |

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