

Flexible Insulation – NPN Nomex®/PET (Polyester Film)/Nomex®

GENERAL

Nomex®/Polyester Film/Nomex® laminates, commonly known as NPN or NMN, uses electrical grade polyester film bonded with a special bonding system designed to prevent delamination.

These three-ply laminates have Underwriters Laboratories Class H (180°) recognition for motors, transformers and coil assemblies.

APPLICATIONS

These laminates are suitable for use as slot, phase and end turn insulation as well as ground and wrapper insulation in dry type transformers and a variety of punched and fabricated parts.

THERMAL

A Class H (180°C) Electrical insulation system allows the use of NPN (Aramid paper/Polyester film Triplex laminates as both major and minor insulation without additional varnish.

PROPERTIES

Type	Total Thickness (mm. Nom.)	Nomex Thickness (µm)	Polyester Film Thickness (µm)	Breakdown Voltage kV (>=)	Tensile Strength (N/m) (Approx)		Weight g/m ²	Yield M ² /kg
					DM	TM		
NPN 2-2-2	0.17	50	50	9	140	110	176	5.68
NPN 2-5-2	0.24	50	125	16	220	200	281	3.56
NPN 2-7.5-2	0.31	50	190	18	280	260	372	2.69
NPN 2-10-2	0.37	50	250	20	330	300	456	2.19
NPN 3-3-3	0.25	80	75	12	240	180	260	3.84
NPN 3-5-3	0.31	80	125	16	280	220	330	3.03
NPN 3-7.5-3	0.36	80	190	18	360	300	421	2.37
NPN 3-10-3	0.43	80	250	21	420	380	505	1.98
NPN 5-3-5	0.35	130	75	13	130	110	384	2.6
NPN 5-5-5	0.40	130	125	18	220	210	425	2.35
NPN 5-10-5	0.53	130	250	21	430	420	600	1.67
For thicknesses other than those listed please refer to you nearest OBA office								