

Flexible Insulation Nomex 410

GENERAL

Type 410 is a calendared insulation paper which offers high inherent dielectric strength, mechanical toughness, flexibility and resilience. Type 410 is the original form of Nomex paper and is widely used in a majority of electrical equipment applications.

THERMAL

The effects of long-time exposure of Nomex to high temperature are the basis for the recognition of Nomex paper as insulation suitable for use in 220°C by Underwriters laboratories, the U.S. Navy, and others, and are confirmed by more than 25 years' commercial experience.

APPLICATIONS

Type 410 is used in almost every known application for electrical sheet insulation such as electric motor and generator windings, (slot lining and phase insulation) and transformers (coil separation to earth).

CHEMICAL STABILITY

The compatibility of Nomex aramid paper with virtually all classes of electrical varnishes and adhesives (polyimide's, silicones, epoxies, polyesters, acrylics, phenolics, synthetic rubbers, etc.) is demonstrated by the many UL recognised systems. Nomex papers are also fully compatible with transformer fluids (mineral and silicone oils and other synthetics) and with lubricating oils and refrigerants used in hermetic systems.

PROPERTIES

Nominal Thickness	mm	.051	.076	.13	.18	.25	.30	.38	.51	.61	.74	.76
Dielectric Strength												
AC Rapid Rise (ASTM D-149)	kV /mm	17	21	25	33	31	33	32	31	32	30	27
Full Wave Impulse (ASTM D-3426)	kV /mm	39	39	55	55	63	N/A	55	55	N/A	N/A	49
Dielectric Constant (ASTM D-150)	60Hz	1.6	1.6	2.4	2.7	2.7	2.9	3.2	3.4	3.7	3.7	3.7
Dissipation Factor (ASTM D-150)	60Hz	.004	.005	.006	.006	.006	.007	.007	.007	.007	.007	.007