FRANKLIN LAMITEX, LLC

Composites For Today's Challenges

(302) 652-3621

info@lamitex.com

Lamitex® G10 Tube

Lamitex® G10 is a non-brominated glass/epoxy convolute wound composite with excellent mechanical and electrical insulation properties. It meets or exceeds NEMA G10 and Mil-I-24768/2 specifications, has excellent resistance to chemicals and retains its electrical properties in high humidity environments.

				Conditioning	
Mechanical Properties		**Standard**	**Test Specimen**	**IEC 212**	**Values**
Flexural Strength		ISO 178	id>3.937 inches	1	50,760 psi
Compressive Strength, Axial		ISO 604		1	36,260 psi
Cohesion between layers		EN 61212-2	id<3.937 inches	1	69,600 psi
Electrical Properties					
Electric Strength in oil @ 90C:					
Perpendicular to Laminations		IEC 243-1	.118 inch wall thk	2	279 Vpm
Parallel to Laminations		IEC 243-1	>.118 inch wall thk	2	61 kV/inch
Insulation resistance after immersion in water		IEC 167	id>.315 inch and	4	10,000 M ohm
Permittivity:	50Hz	IEC 250	or od>.394 inchs	3	4.5
	1 MHz	IEC 250		3	4.5
Dissipation Factor:	50Hz	IEC 250		3	0.01
	1 MHz	IEC 250		3	0.01
Physical and Thermal Properties					
Thermal endurance index @ 20,000 hrs		IEC 216		-	140°C
Density		IEC 1183-A	All	1	1.8 g/cm^3
Water Absorption		ASTM D348		D_1-24/23	0.60%

Conditioning: 1: 24h @ 23°C & 50%RH
2: 24h @ 23°C & 50%RH + 1hr in oil at 90°C
3: 96h @ 105°C + 1hr @ 23°C & 20%RH
4: 24h @ 50°C + 24hr in water at 23°C

The standard length(s) for inside diameters .118" to .472" is 48 inches and for IDs >.472" to 49.2" is 48 and 63 inches