



The Aluminum foil windings combine a simple winding technique with a high degree of electrical safety. The insulation is subjected to less electrical stress than in other types of windings. In a conventional round-wire winding, the interturn voltage can add up to twice the interlayer voltage, while in a foil winding it never exceeds the voltage per turn because a layer consist of only one winding turn. Result: a high AC voltage and impulse-voltage withstand capacity. The thermal expansion coefficients of Aluminum and cast resin are so similar that thermal stresses resulting from load changes are kept to a minimum.

Aluminum Alloy type	A1060/ A1050/ A10350		Temper	O
Thickness (mm)	0,2 – 0,3	0,4 – 0,8	1,0 – 2,0	2,0 – 3,0
Thickness Tolerance (mm)	±0,015	±0,02	±0,01	±0,06
Width (mm)	30 - 1300	30 - 1300	30 - 1300	30 - 1300
Width Tolerance (mm)	±0,1	±0,2	±0,2	±1

Mechanical Property

U.S.T : 60 – 95 N/mm²

Elongation: > 25%

Density in 20°C : 2,703 Kg/ cm³

Max resistance in 20°C : ≤0,02825Ωmm²

Chemical Composition %

Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	V	Ti	Al
1050	0,25	0,4	0,05	0,05	0,05	-	-	0,05	-	99,5
1060	0,25	0,35	0,05	0,03	0,03	0,03	0,05	0,05	0,03	99,6
1100	0,95 (Si+Fe)	-	0,05 – 0,20	0,05	-	-	0,1	-	-	99
1350	0,1	0,4	0,05	0,01	-	-	-	0,05	-	99,5