



MAGNEFLEX

MagneFlex features aluminum conductors insulated with a high temperature engineered resin. The advanced polymer coatings have been very successful in transformer applications.

Rea Material Code:
MAGXA

Rea Insulation Code: **6R**

Insulation Material
Description: **Poly Phenyl Sulfone**

Thermal Class: **200**

Shape: **Round**

Conductor: **Aluminum**

MARKETS

Transformers:
 General
 Utility Distribution
 Transformers
 Utility Power
 Transformers
 Specialty Transformers

TYPICAL APPLICATIONS

Utility transformers

FEATURES AND BENEFITS

- Provides uniformity of insulation thickness
- Excellent resistance to stress cracking
- Excellent dielectric properties
- Up to 100% reduction in test failures
- Increased winding speeds
- Lower water absorption
- Lower total unit cost
- Extremely durable
- Easy to strip

Edge Contours

Radius corner Full round

AVAILABILITY

Heavy

2-6 AWG

TYPICAL PROPERTIES

All values noted are typical on square or rectangular conductors. Actual properties of individual lots will vary within specification limits.

THERMAL

Heat Shock (20% 3X)

Pass 15% Elongation
@ 220°C
Pass 30% Elongation
@ 220 °C

Transition Temperature

220°C/428°F

Operating Temperature

200°C/392°F

Thermal Conductivity

2.42 Btu-in/hr-ft² °F
.35W/mk

MECHANICAL

Tensile	ksi	Mpa
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Strength	10.1	70
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Elongation @ break (23°C)	60-120%	
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Flexural Modus	ksi	Mpa
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	350	2400
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Flexibility

15 percent

ELECTRICAL

Dielectric Breakdown

@ 3 mil per side	3-8 kV
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Dielectric Constant

@ 60Hz	3.44
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@ 1kHz	3.45
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Volume Resistivity

>10¹⁵ ohm-cm

Dissipation Factor

@ 60Hz	0.0006
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CHEMICAL

Specific Gravity	1.29
Water Absorption @ 24 hr	0.0037
Insulation Thickness	6-8mils/0.1016-0.254 mm