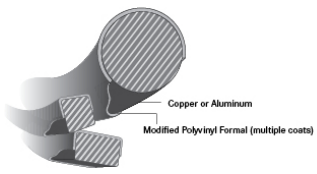

FORMVAR

Proven performance in oil-filled applications. Excellent hydrolytic stability.

Rea Material Code: F

Rea Insulation Code: 02

Insulation Material Description: Polyvinyl Formal

Thermal Class: 105

Shape: Shaped

Conductor: Copper

NEMA Specification: MW 18-C

IEC Specification: 60317-17

MARKETS

Transformers:
- General
- Utility Distribution
- Transformers

TYPICAL APPLICATIONS

Oil-filled transformers, superconducting coils for cryogenic applications, and motors

FEATURES AND BENEFITS

- Resistant to mechanical and winding abuse due to superior flexibiity and abrasion resistance
- Performs well in in-line flattening processes.
- Compatible with most varnishes and impregnation compounds.
- Retains insulating properties when exposed to cryogenic temperatures.
- Compatible with transformer oils.

AVAILABILITY

Heavy	
	1-14 AWG

Rectangle Availability	
Min. Width	.081
Max. Width	.750
Min. Thickness	.030
Max. Thickness	.292

TYPICAL PROPERTIES

This data is typical of 18 AWG copper, heavy build insulation only. It is not intended to be used to create specification limits.

THERMAL

Thermal Endurance	
	>110°C

Thermoplastic Flow	minimum	typical
	180°C	230°C

Heat Shock (20% 3X)	
	20% 3x 175°C

Stress Relief Temperature	
	150°C

MECHANICAL

Mandrel Flexibility	minimum	typical
After Elongation	20% 3x OK	30% 1x OK
After Snap	3x OK	1x OK
Elongation	32%	40%

Unilateral Scrape	minimum	typical
Avg. of 3 sides	1150 gms	1600 gms

ELECTRICAL

Dielectric Breakdown	
@RT	10 kV
@ 105° C	7 kV

High Voltage Continuity	
NEMA @ 1500 V DC	5 faults/100 ft max
Typical @ 2000 DC	0-1 faults/100 ft

CHEMICAL

Completeness of Cure	
	5 min boil 70/30

Transfer Oil System	
	Retained Flexibility- 1x OK Retained Flexibility-90% of original breakdown voltage

Resistance to Solvents	
After 24 hrs @ RT	Xylene 50/50 Cellosolve/Xylene Perchloroethylene

1% NaOH
28% Sulfuric Acid
Gasohol