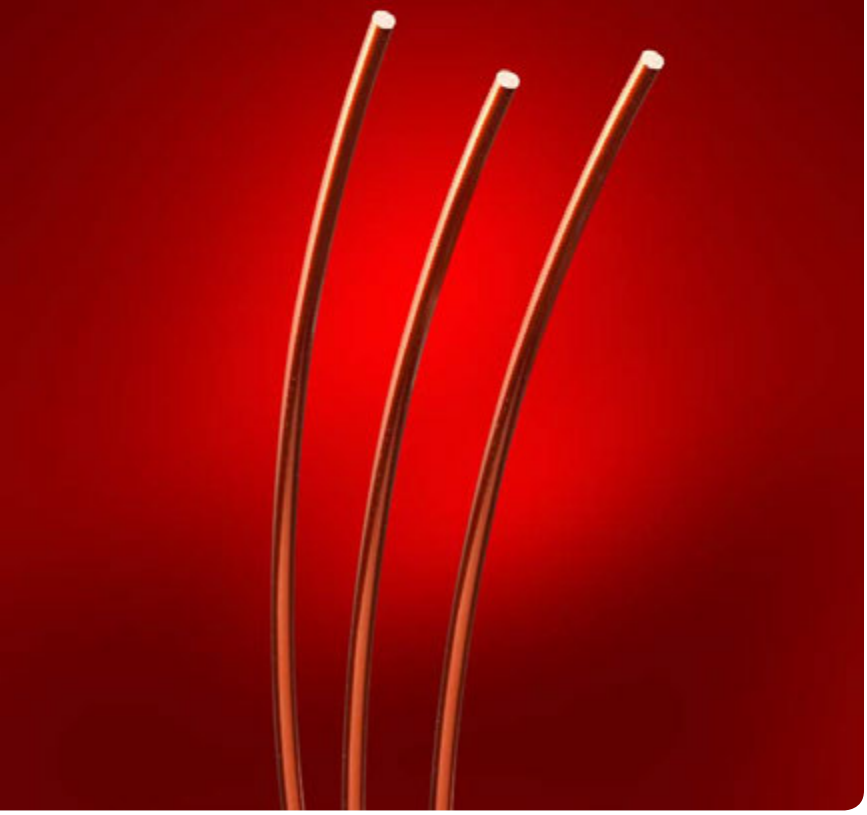
Super Hyslik 220®

TAIHT

Thermal Class: 220°C



Features and Benefits

- Excellent moisture resistance
- Improved dual insulation system, modified to optimize scrape resistance and surface lubricity
- Improved windability and processibility. Specially engineered topcoat designed for improved surface lubricity and toughness
- Superior performance in hermetics (see chemical data on following page)

Basecoat

Excellent adhesion and flexibility

High thermal endurance

High temperature dielectric

Overload resistant

Resists thermoplastic flow

Topcoat

Improved surface toughness

Improved surface lubricity

Abrasion resistant

Heat shock resistant

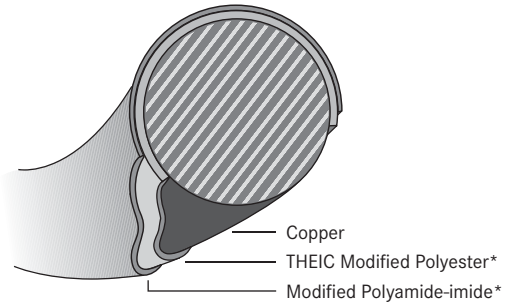
Moisture resistant

Chemical resistant

Varnish craze resistant

Typical Applications

High speed motor windings with difficult insertion and winding characteristics, dry-type transformers, automotive alternator stators, and solenoids



*multiple coats

General Information

References are provided for comparative purposes

Round

NEMA: MW 37-C
UL: File No. E37683

Rectangular

NEMA: MW 38-C

Availability

Round	single	heavy
copper		4-30 AWG
Rectangle		**heavy**
copper		
Min. Width		.081"
Max. Width		.750"
Min. Thickness		.030"
Max. Thickness		.292"

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Typical Properties

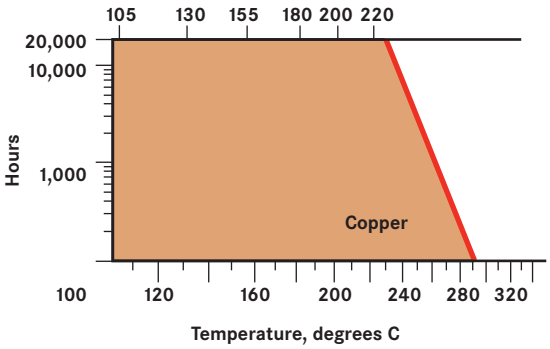
This data is typical of 18 AWG copper, heavy build insulation only. It is not intended to be used to create specification limits.

Thermal

Thermal Endurance		
20,000 hr life	>220°C on copper	
Thermoplastic Flow	**minimum**	**typical**
	300°C	350°C
Heat Shock (20%3x)		
1/2 hr at 240°C no cracks		
Stress Relief temp		
160°C		

Measured Thermal Endurance

Expected Thermal Life (ASTM D 2307),
18 AWG, Heavy Build Insulation



Mechanical

Mandrel Flexibility	minimum	typical
After Elongation	20% 3x OK	30% 1x OK
After Snap	min. 3x OK	1x OK
Unilateral Scrape		
Taken at 120° Increments		
Avg. of 3 sides	1150 gms	1700 gms
Repeated Scrape		
700 gms	90 strokes	120 strokes
Dynamic C of F		
		0.06

Electrical

Dialectric Breakdown	
@ RT	11.0 kV
@ 200°C	7.0 kV
Insulation Resistance	
@ RT	$5x10^{13}$ ohms
@ 200°C	$9.2x10^{10}$ ohms

Corona Inception Voltage	minimum	typical
Typical		580V

High Voltage Continuity	
NEMA @ 1500 V DC:	5 faults/100 feet max
typical @ 2000 V DC:	0-1 faults/100 feet max

Chemical

Retained Dialectric	
72 hrs + 300°C conditioning:	3.5 kV
72 hrs + 150°C conditioning:	10.0 kV

R-22 Extractables
<.08%

Resistance to Solvents
After 30 min @ 60°C:
Xylene
Butyl Cellosolve/Xylene
After 24 hrs @ RT:
Perchloroethylene
1% NaOH
28% Sulfuric Acid
Gasohol and others

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