Silflex Sleeving

Flexible Fiberglass Sleeving

 $(-56^{\circ}\text{C to } +200^{\circ}\text{C}) (-69^{\circ}\text{F to } +392^{\circ}\text{F})$

Description

Silflex Sleeving is flexible, secondary insulation made from closely braided, continuous filament fiberglass which, after heat cleaning to remove impurities such as starch, oils and binders, is impregnated with a high-temperature silicone resin.

Specifications

Silflex Sleeving conforms to NEMA TF-2 and is made from glass fibers conforming to Military Specification MIL-Y-1140 (latest revision), Class C, Form 1 (continuous filament yarns).

Under the Component Program of Underwriters Laboratories, Silflex Sleeving complies with VW-1 flammability requirements under UL File #E53690.

Applications

Silflex Sleeving is used in areas where flexibility as well as resistance to radiation, moisture, high temperature, and flame are essential. It offers space factor electrical insulation of approximately 650 volts with minimum outgassing, particularly after a pre-bake, and readily accepts potting compounds thereby enhancing electrical properties in systems work.

Sizes

AWG #24 through 2" I.D. Other sizes subject to inquiry.

Standard Color

Natural. Other colors made to order.

Standard Packaging

Coils or spools at manufacturer's option unless otherwise specified.

Silflex Typical Properties

Property	Performance
Physical	
Specific Gravity, g/cu. cm.	2.55 – 2.58
Elongation at Break, percent	4.5 – 4.9
Tensile Strength, psi @ 22°C	500,000 - 550,000
Water Absorbency @ 22°C, 65% R.H.	None
Chemical	
Resistance to Acids and Alkalies	Excellent in weak solutions. Fair in concentrated solutions
Resistance to Solvents	Fair
Resistance to the Elements	Good Sunlight and weathering properties.
Compatibility	Improved compatibility with most potting compounds and varnishes.
Moisture Vapor Resistance	Excellent
Electrical	
Dielectric Strength	Provides only space factor electrical insulation of approximately 650 volts.
Volume Resistivity @ 22°C and 500 volts dc, ohm-cm	$10^{15} - 10^{16}$
Dielectric Constant @ 22°C, 60 Hz	6.5 – 6.8
Dissipation Factor @ 22°C, 1 MHz	0.001 – 0.005
Thermal	
Thermal Endurance	Up to 200°C indefinitely.
Brittleness Temperature	- 56°C per ASTM D746
Flame Resistance	Passes UL 1441 (VW-1). Will not burn.

Notes:

Average properties of bulk S Glass as reported in Owens Corning Publication No. 5-TEX-18027, considered to be applicable to bare glass filaments. Information contained here is precise and reliable. However being unique, each end-use should be evaluated to satisfy its specific requirements.



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