Coated Fiberglass Sleeve





NU-SLEEVE T117-FR is UL recognized **VW-1 flame rated**. It is comprised of specially formulated high temperature silicone rubber extruded onto premium electrical grade braided fiberglass sleeve.

The extrusion process results in a higher density coating that is more homogeneous, has better concentricity and yields longer continuous lengths than the typical liquid dipped products common to the industry.

NU-SLEEVE T117-FR is rated Class H by IEEE standards, acceptable for continuous service from -70°C (-94°F) through 200°C (392°F) and operation at temperatures up to 315°C (600°F) is tolerated for short durations.

It exceeds all requirements of UL Subject 224 for 200°C, 600-volt operation.

The coating maintains its electrical integrity, even under severe fire conditions by forming a non-conductive ash.

The NU-SLEEVE T117 range is also available in a standard (NU-SLEEVE T117-E) or in a high voltage (NU-SLEEVE T117-HV) versions.

Typical applications include: coil and winding industry (coils, motors, generators, transformers...); industrial equipment (tow motors, overhead cranes, aerial platforms...); commercial cookware (fryers, rotisseries, steamers...); appliances; custom car markets; wind turbines and solar panels; mining and forestry industries; heating and cooling; heavy truck market; and in many other industrial fields.

It meets NFPA 130 specification for transportation applications (mass transit, rail cars, locomotives...).





Characteristics & Properties

- Operating temperature: -55°C / +200°C (-67°F / +392°F).
- Colors: standard colors are black, white, natural, red oxide, red, blue, yellow, green and orange. Other colors upon request.
- Printed logo: a logo can be printed using gold, black or white.
- Specifications: Grade A: UL File #E93101/#E80713, CSA File #LR94072, MIL-I-3190/6. NEMA TF-1, Type 5; ASTM D372.
- Flammability (UL 1441 VW-1): flame retardant.
- Surface flammability (ASTM E 162): pass.
- Toxic gas generation (Bombardier SMP 800-C & Boeing BSS7239): pass.
- Rate of smoke generation (ASTM E 662): pass.
- Heat & visible smoke rates (ASTM E 1354): pass.
- Chemical resistance (coating properties): moisture, corona, ozone, radiation, compression set, fungus, most chemicals/solvents, weathering, flexure fatigue, heat degradation.

Dielectric grades

NEMA Grades	Min. average breakdown	Min. individual breakdown	
NU-SLEEVE T117-FR A	7000V	5000V	
NU-SLEEVE T117-FR B	4000V	2500V	
NU-SLEEVE T117-FR C	2500V	1500V	

Dimensions

Designation*	NEMA sizes	Minimum Ø (inches)	Maximum Ø (inches)	Indicative nominal Ø	
				(inches)	(mm)
NU-SLEEVE T117-FR A AWG 24	24	0.020	0.027	0.024	0.61
NU-SLEEVE T117-FR A AWG 22	22	0.025	0.032	0.029	0.74
NU-SLEEVE T117-FR A AWG 20	20	0.032	0.039	0.036	0.91
NU-SLEEVE T117-FR A AWG 19	19	0.036	0.044	0.040	1.02
NU-SLEEVE T117-FR A AWG 18	18	0.040	0.049	0.045	1.14
NU-SLEEVE T117-FR A AWG 17	17	0.045	0.054	0.050	1.27
NU-SLEEVE T117-FR A AWG 16	16	0.051	0.061	0.056	1.42
NU-SLEEVE T117-FR A AWG 15	15	0.057	0.067	0.062	1.57
NU-SLEEVE T117-FR A AWG 14	14	0.064	0.074	0.069	1.75
NU-SLEEVE T117-FR A AWG 13	13	0.072	0.082	0.077	1.96
NU-SLEEVE T117-FR A AWG 12	12	0.081	0.091	0.086	2.18
NU-SLEEVE T117-FR A AWG 11	11	0.091	0.101	0.096	2.44
NU-SLEEVE T117-FR A AWG 10	10	0.102	0.112	0.107	2.72
NU-SLEEVE T117-FR A AWG 9	9	0.114	0.124	0.119	3.02
NU-SLEEVE T117-FR A AWG 8	8	0.129	0.141	0.135	3.43
NU-SLEEVE T117-FR A AWG 7	7	0.144	0.158	0.151	3.84
NU-SLEEVE T117-FR A AWG 6	6	0.162	0.178	0.170	4.32
NU-SLEEVE T117-FR A AWG 5	5	0.182	0.198	0.190	4.83
NU-SLEEVE T117-FR A AWG 4	4	0.204	0.224	0.214	5.44
NU-SLEEVE T117-FR A AWG 3	3	0.229	0.249	0.239	6.07
NU-SLEEVE T117-FR A AWG 2	2	0.258	0.278	0.268	6.81
NU-SLEEVE T117-FR A AWG 1	1	0.289	0.311	0.300	7.62
NU-SLEEVE T117-FR A 5/16	5/16"	0.313	0.334	0.324	8.23
NU-SLEEVE T117-FR A AWG 0	0	0.325	0.347	0.336	8.53
NU-SLEEVE T117-FR A 3/8	3/8"	0.375	0.399	0.387	9.83
NU-SLEEVE T117-FR A 7/16	7/16"	0.438	0.462	0.450	11.43
NU-SLEEVE T117-FR A 1/2	1/2"	0.500	0.524	0.512	13.00
NU-SLEEVE T117-FR A 5/8	5/8"	0.625	0.655	0.640	16.26
NU-SLEEVE T117-FR A 3/4	3/4"	0.750	0.786	0.768	19.51
NU-SLEEVE T117-FR A 7/8	7/8"	0.875	0.911	0.893	22.68
NU-SLEEVE T117-FR A 1	1"	1.000	1.036	1.018	25.86

Packaging

NU-SLEEVE T117-FR is delivered in standard spools, bulk spools or in cut lengths upon request.

* Designation for grade A sleeve. For other dielectric grades, replace the A by B or C.