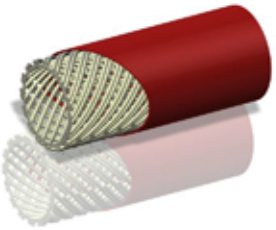
Coated Fiberglass Sleeve





NU-SLEEVE SG-200

NU-SLEEVE SG-200 is a braided fiberglass sleeve coated with a liquid silicone rubber.
The braid is heat treated to optimize coating adhesion and minimize surface irregularities.

NU-SLEEVE SG-200 is available in 5 electrical grades (A, B, C-1, C-2 and C-3). It is highly resistant to end-fray and coating fractures and is a **non-flammable** sleeve.

NU-SLEEVE SG-200 is the ideal choice for high stress applications over a wide temperature range from -55°C (-67°F) up to 200°C (392°F).

It is used extensively in high temperature applications where one or more of the following features are required: flexibility, expandability, abrasion resistance, cut-through resistance and chemical resistance.

Typical applications include: coil and winding industry (coils, motors, generators, transformers…); lighting fixtures; transportation (mass transit, rail cars, locomotives…); recreational vehicles; pleasure boats and commercial marine; 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.

Specifications:

- Grade A: UL File #E93101, CSA File #LR67735 (Electrical component) ; MIL-I-3190/6 ; QPL-3190
- Grades A & B: UL 1441 VW-1 Flame rated: UL File#E80713/#E93101
- NEMA TF-1 Type 5 and NEMA TF-1, Table 3-1
- UL1441 VW-1 flame rated
- RoHS and WEEE compliant

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Nu-Sleeve SG-200

Characteristics & Properties

Physical properties	Value
Op. temperature (NEMA class H)	-55°C / 200°C (-67°F / 392°F)
Dieletric strength	dry: 8,000 volts, 60 Hz AC @ 500 V/s rate of rise wet: >80% of the dry values
Dielectric constant	2.86 (10,000 Hz) 2.87 (100 Hz)
Volume resistivity	6.1 Ohm.cmx10^{13}
Dissipation factor	.0011 (10,00 Hz) .0016 (100 Hz)
Tensile strength	8.3 MPa
Hardness	37 Shore A
Elongation at break	420 %
Fungus resistance	Inert - none at 40x
Rate of burning	self-extinguishing with removal of heat source
Heat aging	no effect - 275°C (527°F) for 136hr
Flammability	UL 1441 VW-1 - pass
Abrasion resistance (SAEARP1536)	2,300 cycles
Chemical resistance	no effect: brake fluid, transmission fluid, antifreeze, washer solution, fuels, power steering fluid, diesel, battery electrolyte, oils...

Colors:

- Grade A and Grade B: black, white, natural (tan), red, red oxide, blue, yellow, green and orange.
- Grades C: black, natural (tan), red, blue, yellow, green and orange.

Other colors upon request.

Dielectric grades

NEMA Grades	Min. average breakdown	Min. individual breakdown
NU-SLEEVE SG-200 A	7000V	5000V
NU-SLEEVE SG-200 B	4000V	2500V
NU-SLEEVE SG-200 C-1	2500V	1500V
NU-SLEEVE SG-200 C-2	1500V	700V
NU-SLEEVE SG-200 C-3	no dielectric value	

Dimensions

Following sizes are from #24 thru 1 1/2".

Higher diameters available upon request.

Designation*	NEMA sizes	Minimum Ø (inches)	Maximum Ø (inches)	Indicative nominal Ø (inches)	Indicative nominal Ø (mm)
NU-SLEEVE SG-200 A AWG 24	24	0.020	0.027	0.024	0.61
NU-SLEEVE SG-200 A AWG 22	22	0.025	0.032	0.029	0.74
NU-SLEEVE SG-200 A AWG 20	20	0.032	0.039	0.036	0.91
NU-SLEEVE SG-200 A AWG 19	19	0.036	0.044	0.040	1.02
NU-SLEEVE SG-200 A AWG 18	18	0.040	0.049	0.045	1.14
NU-SLEEVE SG-200 A AWG 17	17	0.045	0.054	0.050	1.27
NU-SLEEVE SG-200 A AWG 16	16	0.051	0.061	0.056	1.42
NU-SLEEVE SG-200 A AWG 15	15	0.057	0.067	0.062	1.57
NU-SLEEVE SG-200 A AWG 14	14	0.064	0.074	0.069	1.75
NU-SLEEVE SG-200 A AWG 13	13	0.072	0.082	0.077	1.96
NU-SLEEVE SG-200 A AWG 12	12	0.081	0.091	0.086	2.18
NU-SLEEVE SG-200 A AWG 11	11	0.091	0.101	0.096	2.44
NU-SLEEVE SG-200 A AWG 10	10	0.102	0.112	0.107	2.72
NU-SLEEVE SG-200 A AWG 9	9	0.114	0.124	0.119	3.02
NU-SLEEVE SG-200 A AWG 8	8	0.129	0.141	0.135	3.43
NU-SLEEVE SG-200 A AWG 7	7	0.144	0.158	0.151	3.84
NU-SLEEVE SG-200 A AWG 6	6	0.162	0.178	0.170	4.32
NU-SLEEVE SG-200 A AWG 5	5	0.182	0.198	0.190	4.83
NU-SLEEVE SG-200 A AWG 4	4	0.204	0.224	0.214	5.44
NU-SLEEVE SG-200 A AWG 3	3	0.229	0.249	0.239	6.07
NU-SLEEVE SG-200 A AWG 2	2	0.258	0.278	0.268	6.81
NU-SLEEVE SG-200 A AWG 1	1	0.289	0.311	0.300	7.62
NU-SLEEVE SG-200 A 5/16	5/16"	0.313	0.334	0.324	8.23
NU-SLEEVE SG-200 A AWG 0	0	0.325	0.347	0.336	8.53
NU-SLEEVE SG-200 A 3/8	3/8"	0.375	0.399	0.387	9.83
NU-SLEEVE SG-200 A 7/16	7/16"	0.438	0.462	0.450	11.43
NU-SLEEVE SG-200 A 1/2	1/2"	0.500	0.524	0.512	13.00
NU-SLEEVE SG-200 A 5/8	5/8"	0.625	0.655	0.640	16.26
NU-SLEEVE SG-200 A 3/4	3/4"	0.750	0.786	0.768	19.51
NU-SLEEVE SG-200 A 7/8	7/8"	0.875	0.911	0.893	22.68
NU-SLEEVE SG-200 A 1	1"	1.000	1.036	1.018	25.86
NU-SLEEVE SG-200 A 1 1/8	1 1/8"	1.125	1.161	1.143	29.03
NU-SLEEVE SG-200 A 1 1/4	1 1/4"	1.250	1.286	1.268	32.21
NU-SLEEVE SG-200 A 1 1/2	1 1/2"	1.500	1.536	1.518	38.56

*Designation for grade A sleeve. For other dielectric grades, replace the *A* by *B, C-1, C-2,* or *C-3.*

Packaging

NU-SLEEVE SG-200 is delivered in spools, bulk spools or in cut lengths.