

SILICONE RUBBER-HD FIBERGLASS SLEEVING

Class 220°C • Silicone Rubber-HD Fiberglass Sleeving for High Temperature Applications

MIL-I-003190/6 (Grade A) Class 200°C, NEMA TF-1

UL Recognized Component 600V - 200°C Grade A VW-1 File # E66526

Canadian Standards Association 600V - 200°C Grade A File # 37065



DESCRIPTION

Silicone Rubber-HD fiberglass sleeving consists of a silicone elastomer securely bonded to its supporting fiberglass braid. It is designed to remain flexible over wide operating temperature extremes (-75°C to 220°C).

FEATURES

Its resistance to ozone, corona, radiation, moisture, compression set, weathering, fungus, and chemical attack provides many advantages to electrical systems. Silicone Rubber-HD sleeving gives top performance in high temperature applications where no other sleeving can be used.

APPLICATIONS

Silicone Rubber-HD sleeving is suitable for high altitude and

aerospace applications. It is recommended for apparatus leads, appliance and fixture wire insulation, heating cable, ignition systems, relay leads and aircraft wire where a 200°C+ thermal rating is required. It is particularly well suited as heavy duty insulation where subjected to high heat such as in diecasting and plastic molding, and in numerous military electronic applications.

APPLICABLE SPECIFICATIONS

ASTM D372, MIL-I-003190/6, NEMA TF-1

STANDARD COLOR

White.

Other colors: consult factory for availability

DIMENSIONS

Size	I.D. Maximum		I.D. Minimum		Feet in Standard Package
	Inch	(mm)	Inch	(mm)	
24	.027	(.69)	.020	(.51)	500
22	.032	(.81)	.025	(.64)	500
20	.039	(.99)	.032	(.81)	500
18	.049	(1.24)	.040	(1.02)	500
17	.054	(1.37)	.045	(1.19)	500
16	.061	(1.55)	.051	(1.30)	500
15	.067	(1.70)	.057	(1.45)	500
14	.074	(1.88)	.064	(1.63)	500
13	.082	(2.08)	.072	(1.83)	250
12	.091	(2.31)	.081	(2.06)	250
11	.101	(2.57)	.091	(2.31)	250
10	.112	(2.84)	.102	(2.59)	250
9	.124	(3.15)	.114	(2.90)	250
8	.141	(3.58)	.129	(3.28)	250
7	.158	(4.01)	.144	(3.66)	250
6	.178	(4.52)	.162	(4.11)	250
5	.198	(5.03)	.182	(4.62)	250
4	.224	(5.69)	.204	(5.18)	250
3	.249	(6.32)	.229	(5.82)	250
2	.278	(7.06)	.258	(6.55)	250
1	.311	(7.90)	.289	(7.34)	100
0	.347	(8.81)	.325	(8.26)	100
3/8"	.399	(10.13)	.375	(9.53)	100
7/16"	.462	(11.74)	.438	(11.13)	100
1/2"	.524	(13.31)	.500	(12.70)	100
5/8"	.655	(16.64)	.625	(15.88)	100
3/4"	.786	(19.96)	.750	(19.05)	100
7/8"	.911	(23.14)	.875	(22.23)	100
1"	1.036	(26.31)	1.000	(25.40)	100

PERFORMANCE CHARACTERISTICS

Dielectric Breakdown (ASTM D372) Grade	Typical Test Results			
	Requirements		Test Results	
	Min. Avg. Volts	Min. Indiv. Volts	Min. Avg. Volts	Min. Indiv. Volts
A - C-48/23/50 C-96/23/96	8,000	6,000	8,700	7,800
	80% of above		8,700	7,800
B - C-48/23/50 C-96/23/96	4,000	2,500	5,000	4,500
	1,200	750	4,750	4,100
C-1 - C-48/23/50 C-96/23/96	2,500	1,500	3,000	2,500
	Not Applicable		Not Applicable	

Property	Requirements	Results
Aging	No cracking after 168 hrs. exposure to 250°C	No cracking
Oil Immersion	No disintegration or swelling after 24 hrs. in ASTM Oil #2 @ 105°C	No disintegration or swelling
MIL-I-003190 Flammability (Method B)	Shall require at least 45 seconds to burn 1 inch	Self Extinguishing
Compatibility with Magnet Wire (Method A)	Magnet wire shall have 50% of original dielectric strength after exposure to sleeving for 672 hrs. @ 200°C	Passes
Thermal Endurance	Extrapolated temperature 200°C for 15,000 hrs.	220°C
Pushback Test (MIL-I-003190)	Shall not crack when length is reduced 20% after aging 168 hrs. @ 250°C	No cracks with 50% reduction in length