

HILEC TURBO[®] 117F

THERMAL CLASS: 200°C

FLAME RETARDANT SILICONE RUBBER EXTRUDED FIBERGLASS SLEEVING



DESCRIPTION

TURBO[®] 117F is comprised of specially formulated high temperature silicone rubber extruded onto premium electrical grade braided fiberglass sleeving. 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.

TURBO[®] 117F is rated Class H by IEEE standards, acceptable for continuous service from -70°C thru 200°C. Operation at temperatures up to 315°C is tolerated for short durations.

TURBO[®] 117F exceeds all requirements of UL Subject 224 for 200°C, 600-volt operation. It also exceeds the requirements of MIL-1-3190, MIL-P-18057 and ASTM D372.

TURBO[®] 117F is UL recognized as VW-1, self-extinguishing. The coating maintains its electrical integrity, even under severe fire conditions by forming a non-conductive ash.

RECOMMENDED USE

TURBO[®] 117F is used for insulation of leads and connections in electrical and electronic components (transformers, coils, relays, solenoids etc.) where temperature extremes from -70°C through 200°C are encountered. Silicone rubber coated fiberglass sleeving is the only flexible insulating material which remains useful for continuous service in ambient temperatures from -70°C through +200°C.

- NEMA TS-1, TYPE 5**
- MIL-P-18057 (Grade A)**
- MIL-I-3190/6 (Grade A)**
- ASTM D372**

COATING PROPERTIES

Thermal Endurance:	-70°C-200°C
VW-1 Fire Retardancy	(temperatures up to 315°C tolerated for short duration)
RESISTANCE TO:	
Moisture	
Corona	
Ozone	
Radiation	
Compression set	
Fungus	
Most Chemicals/Solvents	
Weathering,	
Flexure Fatigue	

BRAND NAMES

TURBO[®] 117F, SRG-300[®]

SIZES

NEMA #20 AWG thru 1"

PUT-UP

Continuous Length Spools
Cut to Length

COLORS

Black (BK), White (WH)
Additional Colors On Following Page

Dielectric Grade	Product Number	Minimum Average Breakdown	Minimum Individual Breakdown
A	T117FA	7000V	5000V
B	T117FB	4000V	2500V
C-1	T117FC	2500V	1500V
C-2		1500V	800V
C-3		No Dielectric Value Guaranteed	

FILE #E123956

FILE #E86619

FILE #LR94072

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Manufactures and Fabricators of Electrical Sleeving for Industry

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PRODUCT SPECIFICATIONS

Flame Retardant Silicone Rubber Extruded Fiberglass Sleevings				T117FA Grade A 7 KV MIN AVG 5 KV MIN IND	T117FB Grade B 4 KV MIN AVG 2.5 KV MIN INDV	T117FC Grade C-1 2.5 KV MIN AVG 1.5 KV MIN INDV	Standard Put-Up			Bulk Put-Up (Add a -B to Part Number)		
Size	Nominal ID	Range		Part Number	Part Number	Part Number	Length (ft)	Spool Type*	lbs/Spool	Length (ft)	Spool Type*	lbs/Spool
		Min	Max									
22	0.027	0.024	0.032	T117FA22XX	T117FB22XX	T117FC22XX	500	B	1.3	2,500	D	5.7
20	0.034	0.032	0.039	T117FA20XX	T117FB20XX	T117FC20XX	500	B	1.3	2,500	D	5.7
19	0.040	0.036	0.044	T117FA19XX	T117FB19XX	T117FC19XX	500	B	1.3	2,500	D	5.7
18	0.042	0.040	0.049	T117FA18XX	T117FB18XX	T117FC18XX	500	B	2.0	2,000	D	7.5
17	0.050	0.045	0.054	T117FA17XX	T117FB17XX	T117FC17XX	500	B	2.0	2,000	D	7.5
16	0.053	0.051	0.061	T117FA16XX	T117FB16XX	T117FC16XX	500	B	2.0	2,000	D	7.5
15	0.059	0.057	0.067	T117FA15XX	T117FB15XX	T117FC15XX	500	B	1.9	2,000	D	7.2
14	0.066	0.064	0.074	T117FA14XX	T117FB14XX	T117FC14XX	500	B	1.9	2,000	D	7.2
13	0.076	0.072	0.082	T117FA13XX	T117FB13XX	T117FC13XX	250	B	1.6	2,000	D	10.5
12	0.085	0.081	0.091	T117FA12XX	T117FB12XX	T117FC12XX	250	B	1.6	1,500	D	8.1
11	0.095	0.091	0.101	T117FA11XX	T117FB11XX	T117FC11XX	250	B	1.6	1,500	D	8.1
10	0.106	0.102	0.112	T117FA10XX	T117FB10XX	T117FC10XX	250	C	1.9	1,500	D	9.6
9	0.118	0.114	0.124	T117FA9XX	T117FB9XX	T117FC9XX	250	C	1.9	1,000	D	6.7
8	0.133	0.129	0.141	T117FA8XX	T117FB8XX	T117FC8XX	250	D	2.9	1,000	D	8.8
7	0.148	0.144	0.158	T117FA7XX	T117FB7XX	T117FC7XX	250	D	2.9	1,000	D	8.8
6	0.166	0.162	0.178	T117FA6XX	T117FB6XX	T117FC6XX	250	D	3.1	1,000	D	9.8
5	0.186	0.182	0.198	T117FA5XX	T117FB5XX	T117FC5XX	250	D	3.3	1,000	D	10.5
4	0.208	0.204	0.224	T117FA4XX	T117FB4XX	T117FC4XX	250	D	3.3	1,000	D	10.5
2	0.263	0.258	0.278	T117FA2XX	T117FB2XX	T117FC2XX	250	D	4.2	750	D	10.8
1	0.294	0.289	0.311	T117FA1XX	T117FB1XX	T117FC1XX	100	D	2.7	500	D	9.7
0	0.330	0.325	0.347	T117FA0XX	T117FB0XX	T117FC0XX	100	D	2.7	500	D	9.7
3/8	0.387	0.375	0.399	T117FA3/8XX	T117FB3/8XX	T117FC3/8XX	100	D	3.6	500	D	14.1
7/16	0.450	0.438	0.462	T117FA7/16XX	T117FB7/16XX	T117FC7/16XX	100	D	4.6	250	D	10.1
1/2	0.512	0.500	0.524	T117FA1/2XX	T117FB1/2XX	T117FC1/2XX	100	D	4.6	250	D	10.1
5/8	0.640	0.625	0.655	T117FA5/8XX	T117FB5/8XX	T117FC5/8XX	100	D	5.8	200	D	10.6
3/4	0.768	0.750	0.786	T117FA3/4XX	T117FB3/4XX	T117FC3/4XX	100	D	7.7	150	D	11.0

COLOR CODES (XX)

STANDARD:

Black (BK)
White (WH)

ADDITIONAL COLORS:

Blue (BL) Red (RD)
Brown (BN) Red Oxide (RO)
Gray - Silver (GY) Yellow (YE)
Green (GN)
Orange (OR)
Purple (PU)

(Minimum order may be required)

*Spool Types

*Type	Outside Diameter	Traverse (width)	Core Diameter	Spools / Box
A	8 1/2"	3"	3"	1,2,4
B	10"	4"	3"	1,2,5
C	12"	4"	3"	1,2,3,5
D	16"	5"	6"	1,2,3

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