

T1100G

INTERMEDIATE MODULUS CARBON FIBER

Next-generation intermediate modulus fiber with excellent processability in traditional manufacturing methods (weaving, prepreg, etc). Manufactured in the U.S.

PRODUCT DESIGNATION

T1100G	C	12,000	7	1	E
Fiber Type	Twist*	Filament Count	Sizing Type	Surface Treatment	Sizing Amount

*C: Never Twisted

FIBER PROPERTIES

PROPERTY	ENGLISH	METRIC	METHOD
Tensile Strength	1,017 kpsi	7,000 MPa	TY-030B-01
Tensile Modulus	47.0 Mpsi	324 GPa	TY-030B-01
Strain at Failure		2.0%	TY-030B-01
Density		1.79 g/cm ³	TY-030B-02
Filament Diameter		5 μm	
Yield	12K	505 g/1000m	TY-030B-03
	24K	1,010 g /1000m	TY-030B-03

FUNCTIONAL PROPERTIES

PROPERTY	VALUE
CTE	-0.5 α · 10 ⁻⁶ /°C
Specific Heat	0.748 J/g · °C
Thermal Conductivity	0.130 J/cm · s · °C
Electric Resistivity	1.4 x 10 ⁻³ Ω · cm
Chemical Composition: Carbon	>96%
Na + K	<50 ppm

RESIN SYSTEM COMPATIBILITY

SIZING TYPE & AMOUNT	RESIN SYSTEM COMPATIBILITY	METHOD
71E (0.6%)	Epoxy, phenolic, polyester, vinyl ester	TY-030B-05

COMPOSITE PROPERTIES

PROPERTY	ENGLISH	METRIC	METHOD
Tensile Strength*	502 Ksi	3,460 MPa	ASTM D-3039
Tensile Modulus*	27 Msi	185 GPa	ASTM D-3039
Tensile Strain		1.82%	ASTM D-3039
Compressive Strength*	271 Ksi	1,870 MPa	SACMASRM1R-94
Flexural Strength*	278 Ksi	1,920 MPa	ASTM D-790
Flexural Modulus*	23 Msi	159 GPa	ASTM D-790
ILSS	15 Ksi	104.5 MPa	SACMASRM1R-94
In Plain Shear Strength	23 Ksi	160 MPa	ASTM D-3518
90° Tensile Strength	12 Ksi	80 MPa	ASTM D-3039

*Normalized to 60% fiber volume. Cured with #2574 epoxy at 130 °C.



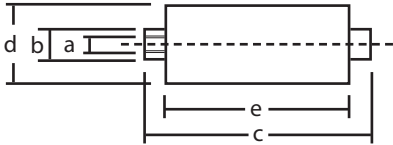
PACKAGING

The table below summarizes the tow sizes, twists, sizing types, and packaging available for standard material. Other bobbin sizes may be available on a limited basis.

TOW SIZES	BOBBIN NET WEIGHT (kg)	BOBBIN TYPE	BOBBIN SIZE (mm)					SPOOL PER CASE	CASE NET WEIGHT (kg)
			a	b	c	d	e		
12K	2.0	III	76.5	82.5	280	125	252	12	24
24K	4.0	III	76.5	82.5	280	160	252	6	24

Bobbin Type:

Type III



Please refer to SDS for handling and disposal.

For more information or purchasing inquiries:
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