

# T700G PRELIMINARY DATA SHEET

Enhanced tensile modulus and adhesion properties over T700S. Applications of this never twisted fiber include aircraft and high performance sporting goods where demanding conditions require superior composite properties.

## FIBER PROPERTIES

		<i>English</i>	<i>Metric</i>	<i>Test Method</i>
Tensile Strength		711 ksi	4,900 MPa	TY-030B-01
Tensile Modulus		34.8 Msi	240 GPa	TY-030B-01
Strain		2.0 %	2.0 %	TY-030B-01
Density		0.065 lbs/in <sup>3</sup>	1.80 g/cm <sup>3</sup>	TY-030B-02
Filament Diameter		2.8E-04 in.	7 μm	
Yield	12K	1,862 ft/lbs	800 g/1000m	TY-030B-03
	24K	903 ft/lbs	1,650 g/1000m	TY-030B-03
Sizing Type & Amount	31E		0.5 %	TY-030B-05
	Twist	Never twisted		

## COMPOSITE PROPERTIES \*

Tensile Strength	340 ksi	2,350 MPa	ASTM D-3039
Tensile Modulus	20.5 Msi	140 GPa	ASTM D-3039
Tensile Strain	--- %	--- %	ASTM D-3039
Compressive Strength	230 ksi	1,570 MPa	ASTM D-695
Flexural Strength	245 ksi	1,670 MPa	ASTM D-790
Flexural Modulus	19.5 Msi	135 GPa	ASTM D-790
ILSS	16 ksi	11 kgf/mm <sup>2</sup>	ASTM D-2344
90° Tensile Strength	12.5 ksi	86 MPa	ASTM D-3039

\* Toray 250°F Epoxy Resin. Normalized to 60% fiber volume.

# T700G

## COMPOSITE PROPERTIES \* \*

Tensile Strength	355 ksi	2,450 MPa	ASTM D-3039
Tensile Modulus	20.5 Msi	140 GPa	ASTM D-3039
Tensile Strain	--- %	--- %	ASTM D-3039
Compressive Strength	230 ksi	1,570 MPa	ASTM D-695
Compressive Modulus	--- Msi	--- GPa	ASTM D-695
In-Plane Shear Strength	--- ksi	--- MPa	ASTM D-3518
ILSS	--- ksi	--- kgf/mm <sup>2</sup>	ASTM D-2344
90° Tensile Strength	13.5 ksi	93 MPa	ASTM D-3039

\*\* Toray Semi-Toughened 350°F Epoxy Resin. Normalized to 60% fiber volume.

See Section 4 for Safety & Handling information. The above properties do not constitute any warranty or guarantee of values.

These values are for material selection purposes only. For applications requiring guaranteed values, contact our sales and technical team to establish a material specification document.

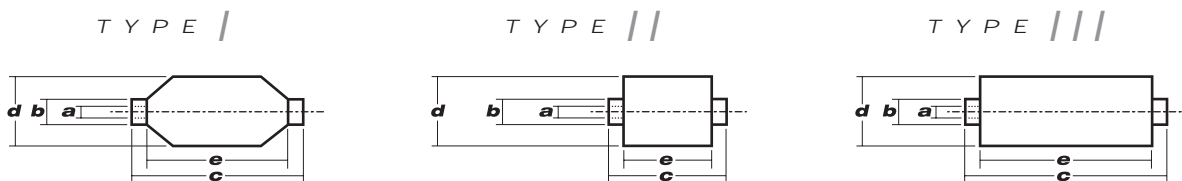
## PACKAGING

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	Twist <sup>1</sup>	Sizing	Bobbin Net Weight (kg)	Bobbin Type <sup>2</sup>	Bobbin Size (mm)					Spools per Case	Case Net Weight (kg)
					a	b	c	d	e		
12K	C	31E	6.0	///	76.5	82.5	280	200	252	4	24
24K	C	31E	6.0	///	76.5	82.5	280	200	252	4	24

<sup>1</sup> **Twist** A: Twisted yarn B: Untwisted yarn made from a twisted yarn through an untwisting process C: Never twisted yarn

<sup>2</sup> **Bobbin Type** See Diagram below



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