



## CARBON FIBER

### IDEAL FOR STRONG LIGHTWEIGHT TUBULAR STRUCTURES VARIETY OF DIAMETERS, WALL THICKNESSES, & BRAID PATTERNS

Fabricators know that resin coated carbon fiber structures are stronger and lighter than virtually any other construction types. Carbon Fiber (CA) construction techniques are appearing in everything from state-of-the-art military and aerospace airframes to hockey sticks, fishing rods and model cars. Our Carbon Fiber braided sleeving provides a strong, biaxial carbon fiber matrix for stiff, lightweight tubular structures up to 3" in diameter without seams or overlap. The tightly braided thick flexible sleeving will form itself to accommodate elliptical or asymmetrical profiles and provide the full coverage required for radial stability and torsional strength or hand tools.

#### SIZING CHART

Nominal Size	Part #	Wall Thickness	Min Expansion	Max Expansion	*Put-Ups		Available Colors	Lbs/100'
					M	L		
<b>CARBON LIGHT</b>								
¼"	CAL0.25BK	.013"	⅛"	5/16"	100'	500'	1	0.38
½"	CAL0.50BK	.013"	¼"	5/8"	50'	250'	1	0.75
¾"	CAL0.75BK	.013"	5/16"	7/8"	50'	250'	1	1.21
1"	CAL1.00BK	.013"	3/8"	1 1/16"	50'	200'	1	1.51
1 ¼"	CAL1.25BK	.013"	½"	1 ½"	25'	125'	1	1.81
1 ½"	CAL1.50BK	.013"	5/8"	1 ¾"	25'	100'	1	2.26
2"	CAL2.00BK	.013"	¾"	2 3/16"	25'	100'	1	2.72
<b>CARBON MEDIUM</b>								
½"	CAN0.50BK	.020"	¼"	5/8"	50'	250'	1	1.21
¾"	CAN0.75BK	.020"	5/16"	7/8"	50'	250'	1	1.81
1"	CAN1.00BK	.020"	7/16"	1 1/16"	50'	200'	1	2.42
1 ¼"	CAN1.25BK	.020"	9/16"	1 ½"	25'	125'	1	3.02
1 ½"	CAN1.50BK	.020"	¾"	1 ¾"	25'	100'	1	3.62
2"	CAN2.00BK	.020"	7/8"	2 3/16"	25'	100'	1	4.52
2 ½"	CAN2.50BK	.020"	1 1/16"	3"	25'	100'	1	5.43
<b>CARBON HEAVY</b>								
¾"	CAH0.75BK	.030"	3/8"	7/8"	50'	250'	1	2.72
1"	CAH1.00BK	.030"	½"	1 1/16"	50'	200'	1	3.62
1 ¼"	CAH1.25BK	.030"	11/16"	1 ½"	25'	125'	1	4.83
1 ½"	CAH1.50BK	.030"	13/16"	1 ¾"	25'	100'	1	5.43
2"	CAH2.00BK	.030"	1"	2 3/16"	25'	100'	1	7.25
2 ½"	CAH2.50BK	.030"	1 ¼"	3"	25'	100'	1	9.09
3"	CAH3.00BK	.030"	1 ½"	3 ½"	25'	50'	1	10.87

\*Put-Ups: "M" = Shop Spool and "L" = Bulk Spool





## FEATURES

Material	Polyacrylonitrile (PAN)
Grade	CAL, CAN, CAH
Monofilament Diameter	.013"-.030"
Drawing Number	TF001CAL-WD
Cutting	Scissors

## ABRASION

Abrasion Resistance	LOW
Abrasion Test Machine	Taber 5150
Abrasion Test Wheel	Calibrase H-18
Abrasion Test Load	500g
Room Temperature	70°F
Humidity	59 %
Visible Moderate Wear	20 Test Cycles
Material Destroyed - Material Completely Worn Through	40 Test Cycles
Pre-Test Weight	3,450.9 mg
Post-Test Weight	2,551.7 mg
Test End Loss Of Mass Point Of Destruction	899.2 mg

## PHYSICAL PROPERTIES

Monofilament Diameter (ASTM D-204)	NA
Flammability Rating	Non Flammable
Recommended Cutting	Scissors
Colors	1
Wall Thickness	.013"-.030"
Tensile Strength (Yarn) (ASTM D-2256 Lbs)	NA
Specific Gravity (ASTM D-792)	1.75-1.85
Moisture Absorption % (ASTM D-570)	NA
Hard Vacuum Data (ASTM E-595 at 10-5 torr)	NA
TML	NA
CVCM	NA
WVR	NA
Smoke D-Max (ASTM E-662)	NA
Outgassing	NA
Oxygen Index (ASTM D-2863)	NA

## CERTIFICATIONS



## COLORS



Black (BK)

## FLAMMABILITY

Rating	Non Flammable
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## OPERATING TEMPERATURES

Melt Point (ASTM D-2117)	°F / °C
Maximum Continuous (Mil-I-23053)	°F / °C
Minimum Continuous (Mil-I-23053)	°F / °C

## CHEMICAL RESISTANCE

1=No Effect 2=Little Effect 3=Affected 4=More Affected 5=Severely Affected

Aromatic Solvents	
Aliphatic Solvents	
Chlorinated Solvents	
Weak Bases	
Salts	
Strong Bases	
Salt Water (0-S-1926)	
Hydraulic Fluid (MIL-H-5606)	
Lube Oil (MIL-L-7808)	
De-Icing Fluid (MIL-A-8243)	
Strong Acids	
Strong Oxidants	
Esters/Ketones	1
UV Light	1
Petroleum	
Fungus (ASTM G-21)	
Halogen Free	
RoHS	
SVHC	

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