



Carbon Fiber

Carbon Fiber Sleeve for High Strength Tubular Structures

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. Carbon Fiber constructions can be cut, drilled, sanded and tooled with commonly available power or hand tools. They can be painted or left with the braid structure exposed.



- **Ideal for Strong Lightweight Tubular Structures**
- **Variety of Diameters, Wall Thicknesses, and Braid Patterns**
- **Fast Turnaround on Custom Requirements**
- **Custom Lengths Available**

	Nominal Size	Part #	Wall Thickness	Expansion Range		Standard Spool Put-Ups		Available Colors	Lbs/100'
				Min.	Max.	Bulk Spool	Shop Spool		
CARBON LIGHT	1/4"	CAL0.25BK	.013"	1/8"	5/16"	500'	100'	Black (BK)	0.38
	1/2"	CAL0.50BK	.013"	1/4"	5/8"	250'	50'	Black (BK)	0.75
	3/4"	CAL0.75BK	.013"	5/16"	7/8"	250'	50'	Black (BK)	1.21
	1"	CAL1.00BK	.013"	3/8"	1 1/16"	200'	50'	Black (BK)	1.51
	1 1/4"	CAL1.25BK	.013"	1/2"	1 1/2"	125'	25'	Black (BK)	1.81
	1 1/2"	CAL1.50BK	.013"	5/8"	1 3/4"	100'	25'	Black (BK)	2.26
CARBON MEDIUM	2"	CAL2.00BK	.013"	3/4"	2 3/16"	100'	25'	Black (BK)	2.72
	1/2"	CAN0.50BK	.020"	1/4"	5/8"	250'	50'	Black (BK)	1.21
	3/4"	CAN0.75BK	.020"	5/16"	7/8"	250'	50'	Black (BK)	1.81
	1"	CAN1.00BK	.020"	7/16"	1 1/16"	200'	50'	Black (BK)	2.42
	1 1/4"	CAN1.25BK	.020"	9/16"	1 1/2"	125'	25'	Black (BK)	3.02
	1 1/2"	CAN1.50BK	.020"	3/4"	1 3/4"	100'	25'	Black (BK)	3.62
CARBON HEAVY	2"	CAN2.00BK	.020"	7/8"	2 3/16"	100'	25'	Black (BK)	4.52
	2 1/2"	CAN2.50BK	.020"	1 1/16"	3"	100'	25'	Black (BK)	5.43
	3/4"	CAH0.75BK	.030"	3/8"	7/8"	250'	50'	Black (BK)	2.72
	1"	CAH1.00BK	.030"	1/2"	1 1/16"	200'	50'	Black (BK)	3.62
	1 1/4"	CAH1.25BK	.030"	11/16"	1 1/2"	125'	25'	Black (BK)	4.83
	1 1/2"	CAH1.50BK	.030"	13/16"	1 3/4"	100'	25'	Black (BK)	5.43
	2"	CAH2.00BK	.030"	1"	2 3/16"	100'	25'	Black (BK)	7.25
	2 1/2"	CAH2.50BK	.030"	1 1/4"	3"	100'	25'	Black (BK)	9.09
	3"	CAH3.00BK	.030"	1 1/2"	3 1/2"	50'	25'	Black (BK)	10.87



Strong, lightweight and stable carbon fiber tubes are easy to machine and finish, and mate well with metal fittings.





CARBON FIBER

- Ideal For Strong Lightweight Tubular Structures
- Variety Of Diameters, Wall Thicknesses, And Braid Patterns
- Fast Turnaround On Custom Requirements



Cut Cleanly
Scissors

Material
Polyacrylonitrile (PAN)

Grade
CAL, CAN, CAH

Wall Thickness
.013" - .030"

Drawing Number
TF001CAL-WD

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	2"	CAH2.00BK	0.030"	1"	2 3/16"	100'	25'	Black	7.25
	2 1/2"	CAH2.50BK	0.030"	1 1/4"	3"	100'	25'	Black	9.09
	3"	CAH3.00BK	0.030"	1 1/2"	3 1/2"	50'	25'	Black	10.87

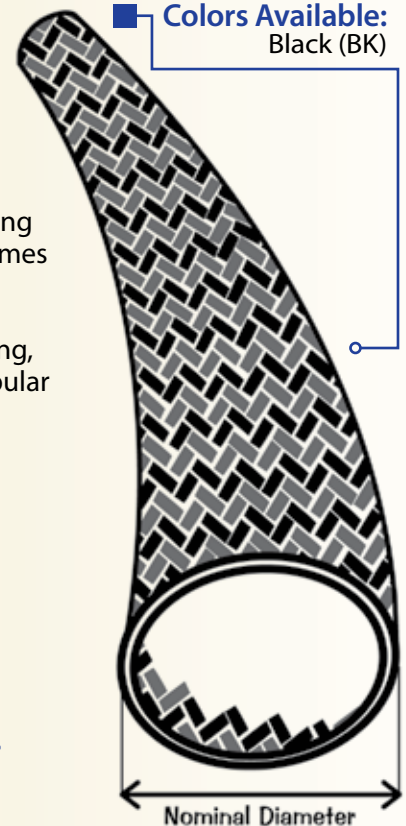
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Colors Available:
Black (BK)





CARBON FIBER



Abrasion Resistance
Medium

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 Completely Worn Through
Material Destroyed
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



Rating _____ Non Flammable



Chemical Resistance

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

Esters/Keytones _____ 1

UV Light _____ 2

PHYSICAL PROPERTIES

Monofilament Diameter _____ NA
ASTM D-204

Recommended Cutting _____ Scissor

Colors _____ 1

Wall Thickness _____ .013-.030

Specific Gravity *ASTM D-792* ___ 1.75-1.85