



## Product Description

High strength roll wrapped carbon fibre tube with a glossy, woven carbon fibre finish making them a great choice for a huge range of both structural and cosmetic applications including drones, UAVs, camera rigs, automation, tripods, lightweight structures and much more.

This tube has an outside diameter (OD) of 18mm and an inside diameter (ID) of 16mm, resulting in a 1mm wall thickness and is manufactured using alternating layers of high strength unidirectional carbon fibre running length-ways down the tube for stiffness and at 90° around the tube to provide hoop strength and resilience to crush, burst and torsional loads. Externally the tube is finished with a smooth, UV stable clear coat showing off the classic appearance of its 2x2 twill woven carbon fibre outer layer.

## Typical Uses

- Lightweight Structural/Engineering Projects
- UAVs, quadcopters, muticopters
- Radio controlled models (planes, boats etc.)
- Engineering & automation
- Recreational equipment (tripods, sporting goods)

## Specification

The mechanical data following applies to the following size of tube.

### Carbon Fibre Tube - Round 1 & 2m lengths

5mm(3mm), 6mm(4mm), 7mm(5mm), 8mm(6mm), 10mm(8mm), 10mm(9mm), 12mm(10mm), 12mm(11mm), 14mm(12mm) 16mm(14mm), 18mm(16mm), 20mm(18mm), 22mm(20mm), 25mm(23mm) 25mm(22mm), 30mm(27mm), 40mm(37mm), 50mm(47mm), 60mm(57mm)

## Key Features

- Roll Wrapped Construction
- 120C Maximum Service Temperature
- Glossy Woven Fibre finish

## Mechanical Properties

The Following Data is representative of a typical tube.

Property	Units	Value
Tensile Strength Lengthways	MPa	650
Tensile Modulus Lengthways	GPa	64
Maximum Service Temperature	°C	120

## Dimensional Tolerance

The Following Data is representative of typical dimensional tolerances for the inner and outer diameters of the tube sizes shown..

Tube Size Nominal OD mm	Units	ID Tolerance	OD Tolerance
5, 6, 7, 8, 10	+ - mm	0.20	0.20
12, 14, 16	+ - mm	0.20	0.15
18, 20, 22, 25	+ - mm	0.20	0.20
30	+ - mm	0.25	0.25
40, 50, 60	+ - mm	0.3	0.3

## Disclaimer

This data is not to be used for specifications. Values listed are for typical properties and should not be considered minimum or maximum.

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