

Carbon Fibre Sections

Part #PM020A - Full Section, #PM021 Half Section, #PM022 Quarter Section

The Polecam Super Lightweight, High Strength and Rigidity is achieved using composite tubes constructed from high strength and high modulus carbon re-inforced fibres in a high strength epoxy resin matrix. Production method is pre-preg roll-wrap using woven materials with multiple fibre angles. Composite materials are orthotropic which means that, unlike most metals, they do not exhibit the same properties in all directions.

Physical and Thermal properties:

- Density 1523kg/m³
- Max Temp (T_g) 150 deg C
- Axial Thermal Expansion 7.8-07 strain/K

Tube Dimensions :

- Internal Diameter - I.D.(mm) 38.1
- Outside Diameter - O.D. (mm) 41.5
- Lengths available (mm)

1120	Part #PM020A
560	Part #PM021
280	Part #PM022



- Max 5 Section using "Long Head" - Part #PU070
- Max 7 Sections using "Narrow Head" - Part #PU029
- Max 1 Full Section beyond "Elbow" Part #PM001

Part #FF181

Using the identical Carbon Fibre composite as specified above, the carbon is precisely drilled for "submersible venting" allowing the boom of the Polecam to be operated from "Air to Water to Air" in very fluid and sweeping actions - enabling the operator to follow all the action from Surface to Subsurface as required. Although it is possible to use 4 sections of the #FF181 vented carbon, typical applications for Aquadrome Events such as High Diving, Long Course and Short Course Swim meets, Pool End Turn and Stroke Analysis, including WaterPolo utilise 1 section. Available as an addition to the Polecam Fishface Systems

Tube Dimensions :

- Internal Diameter - I.D.(mm) 38.1
- Outside Diameter - O.D. (mm) 41.5
- Length available (mm) **1120** **Part #FF181**



- Max 4 Sections, typical applications utilise 1 Section for Aquadrome events
- Also suitable for all types of Natural History applications

Part PM001

The "Elbow" enables the Polecam boom to bend by 30deg in the horizontal, this is especially useful when using the system in an Operating theatre, Confined headroom space, Corporate meeting rooms or merely gaining that previously unobtainable crane view where access is highly restricted or complex

Physical properties

- 16 SWG & 10SWG Aluminium 6082T6

Tube Dimensions :

- Internal Diameter - I.D.(mm) 38.1 & 35
- Outside Diameter - O.D. (mm) 44.4 & 38.2
- Lengths available (mm) **400** **Part #PM001**



- Max recommended reach extension beyond Elbow - 1x Full Carbon section Part #PM020A
- Wire Strut System Part #PE100 compatible (only on products purchased after June 1st 2015 "with a mid section lacing hole")