

DPP™ high performance micro-pultrusion profiles
 SPECIFICATIONS STANDARD PRODUCT RANGE | JANUARY 2014



Cross section Shape	Article code Reference for ordering	Product description Material cross section dimensions length Dimension in mm length in cm	Width [W] mm	Thickness [T] mm	Diameter		Radius [R] mm	Length [L] mm	Straightness mm	Weight gram/m	Resin system	Fibers
					Outer [OD] mm	Inner [ID] mm						
RECTANGULAR	C1RE 3B00 00d5	Carbon rectangular rod 3x0.60-50cm	3,00 - 0,15	0,60 +0,05				500 +3	2mm/1000mm	2,70	epoxy	UD Carbon HT
	C1RE 3B00 0001	Carbon rectangular rod 3x0.60-100cm	3,00 - 0,15	0,60 +0,05				1000 +5	2mm/1000mm	2,70	epoxy	UD Carbon HT
	C1RE 3B00 0002	Carbon rectangular rod 3x0.60-200cm	3,00 - 0,15	0,60 +0,05				2000 +5	2mm/1000mm	2,70	epoxy	UD Carbon HT
	H1RE 3B00 00d5	Highmod.carbon rectangular rod 3x0.60-50cm	3,00 - 0,15	0,60 +0,05				500 +3	2mm/1000mm	2,70	epoxy	UD Carbon HM
	H1RE 3B00 0001	Highmod.carbon rectangular rod 3x0.60-100cm	3,00 - 0,15	0,60 +0,05				1000 +5	2mm/1000mm	2,70	epoxy	UD Carbon HM
	C1EL 8A00 00d5	Carbon ellipse rod 8x5.65-50cm	8,00 - 0,15	5,65 ± 0,10				500 +3	2mm/1000mm	55,00	epoxy	UD Carbon HT
	C1EL 8A00 0001	Carbon ellipse rod 8x5.65-100cm	8,00 - 0,15	5,65 ± 0,10				1000 +5	2mm/1000mm	55,00	epoxy	UD Carbon HT
	C1EL 8A00 0002	Carbon ellipse rod 8x5.65-200cm	8,00 - 0,15	5,65 ± 0,10				2000 +5	2mm/1000mm	55,00	epoxy	UD Carbon HT

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Material properties



Base materials

Resin

- High performance bisphenol A epoxy resin.
- Standard Tg: 120 °C. Can be elevated up to 150 °C on request.

Standard Carbon Fiber

- Torayca T700 or equivalent
- Tensile strength (virgin fiber): 4900 Mpa
- Tensile modulus (virgin fiber): 230 Gpa
- Ultimate elongation: 2 %

High modulus carbon fiber

- Toho Tenax UMS45 F22 or equivalent
- Tensile strength (virgin fiber): 4500 Mpa
- Tensile modulus (virgin fiber): 430 Gpa
- Ultimate elongation: 1.1 %

Composite properties (typical values)

Standard Carbon Fiber

- Fiber volume fraction : +/- 63 %
- Tensile strength: 2500 Mpa
- Tensile modulus: 140 Gpa
- Compression strength: 1600 Mpa
- Ultimate elongation: 2 %

High modulus carbon fiber

- Fiber volume fraction : +/- 63 %
- Tensile strength: 2400 Mpa
- Tensile modulus: 240 Gpa
- Compression strength: 1000 Mpa
- Ultimate elongation: 1.1 %

Notes

- Pultrusions with deferring properties can be delivered on request.
- Above properties are typical values only.
- For design purposes please request specified properties.
- For more informations please check our MSDS-sheets on our website www.dpp-pultrusion.com