Nylon PA12 Carbon Fiber

Nylon 12 CF, PA12CF, Nylon 12 Carbon Fiber

Nylon PA12 CF (carbon fiber) is a high-performance material used industrially for metal replacement practices. Among its excellent mechanical properties, it is characterized by a high lightness and rigidity. Processed with FDM 3D Printing, it allows remarkable design freedom.

Material properties

Density	ISO 1183	**1,06**	g/cm³
Tensile strength	ISO 527	**69,3**	MPa
Elongation at break	ISO 527	**2,9**	%
Elastic modulus	ISO 527	**3750**	MPa
Flexural strength	ISO 178	**114,1**	MPa
Resilience	ISO 179	**9,2**	kJ/m²
HDT 0.45 MPa	ISO 75	**131**	°C
HDT 1.8 MPa	ISO 75	**105**	°C
Melting temperature	ISO 11357	**165**	°C

Printing layer height
0,15 mm (0,006 in)

Maximum dimensions
250x250x250 mm (9.8x9.8x9.8 in)

Infill
30%

Shell thickness
1,8 mm (0,07 in)

Tolerances
± 0,60mm < 100mm / ± 0,75% > 100mm

Applications
Excellent for conceptual and functional prototypes. Good chemical resistance and excellent flexural rigidity due to the addition of short carbon fibres. Suitable for mechanical components, tooling and brackets.