

# PA12 CF-FDM

## Details

The blend of Nylon 12 resin with chopped carbon fibre gives this material excellent structural properties. The carbon fibre occupies 35% of its weight. This allows for distinct freedom of design. It has wide applications in automobile, industrial and recreational industries.

## Key Features

Excellent structural properties • Lightweight

## Thermal Properties

Property	Value
Heat deflection [°C]	143
Glass transition temperature [°C]	41
Vicat softening temperature [°C]	166
Coefficient of thermal expansion [K <sup>-1</sup> · 10 <sup>-6</sup> ]	25

## Datasheet >

### Mechanical Properties

Property	Value
Tensile strength [MPa]	76
Modulus of elasticity [GPa]	7.6
Flexural strength [MPa]	142
Flexural modulus [GPa]	10.3
IZOD Impact [J/m]	85
Elongation at break [%]	1.9

### Physical Properties

Property	Value
Density [g/cm <sup>3</sup> ]	1.15
Water Absorption [%]	0.5
Electrical Resistivity [ohm-cm]	1.4 × 10 <sup>5</sup>