

Technical Datasheet

UMT450-12K-EP

Carbon fibre produced from polyacrylonitrile precursor. It features high tensile modulus so it can be used in various industrial applications including certain specific applications for high modulus fibre.

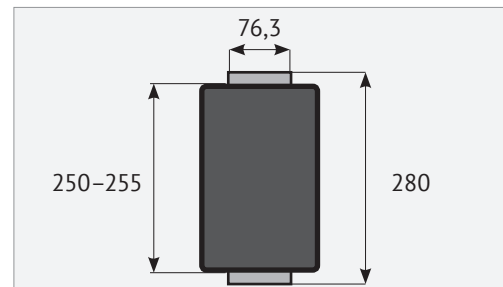
Typical Carbon Fiber Properties

| | |
|-----------------------------|------------------------|
| Tensile strength | 4.2 GPa |
| Tensile modulus | 450 GPa |
| Elongation at break | 0.9 % |
| Linear density | 680 tex |
| Density | 1.85 g/cm ³ |
| Carbon content | More than 95 % |
| Sizing ¹ | EP |
| Sizing content ² | 1.0–1.5 % |



Bobbin Properties

| | |
|-----------------------------------|------------|
| Bobbin weight ³ | 1 kg |
| Length of fiber on bobbin | 1500 m |
| Bobbin diameter with coiled fiber | 250–255 mm |
| Height of fiber on bobbin | 120 mm |
| Spool height | 280 mm |
| Spool diameter | 76.3 mm |



¹ CF can be produced with VE finish (compatible with vinyl ester resins).

² The sizing content (from 0.5%) and type can be varied based on customer's request.

³ 0.5 kg, 1.5 kg, 2 kg bobbins are available on request (may affect the price depending on the volume of the non-standard package batch).

Packaging

Carbon fiber is wound untwisted onto cardboard spool, sealed with heat shrunk PE or PVC foil and placed in cardboard box.

Certification

The products are produced in full compliance with ISO 9001-certified Quality Management System.