



## GRAFIL – Typical Properties of Carbon Fiber

| Fiber Type       | Number of Filaments | Strength*<br>Ksi<br>(MPa) | Modulus*<br>Msi<br>(GPa) | Density<br>lb/in <sup>3</sup><br>(g/cm <sup>3</sup> ) | Yield<br>yds/lb<br>(mg/m) | Denier<br>(Tex)   | X-Sectional<br>Area<br>in <sup>2</sup><br>(mm <sup>2</sup> ) | Elongation<br>% | Filament<br>Diameter<br>μ m |
|------------------|---------------------|---------------------------|--------------------------|-------------------------------------------------------|---------------------------|-------------------|--------------------------------------------------------------|-----------------|-----------------------------|
| 34-700           | 12,000              | 700<br>(4,830)            | 34<br>(234)              | 0.065<br>(1.80)                                       | 620<br>(800)              | 7,200<br>(800)    | 6.89x10 <sup>-4</sup><br>(0.444)                             | 2.0             | 7                           |
| 34-700           | 24,000              | 700<br>(4,830)            | 34<br>(234)              | 0.065<br>(1.80)                                       | 310<br>(1,600)            | 14,400<br>(1,600) | 13.78x10 <sup>-4</sup><br>(0.888)                            | 2.0             | 7                           |
| 34-700WD         | 12,000              | 700<br>(4,830)            | 34<br>(234)              | 0.065<br>(1.80)                                       | 620<br>(800)              | 7,200<br>(800)    | 6.89x10 <sup>-4</sup><br>(0.444)                             | 2.0             | 7                           |
| 34-700WD         | 24,000              | 700<br>(4,830)            | 34<br>(234)              | 0.065<br>(1.80)                                       | 310<br>(1,600)            | 14,400<br>(1,600) | 13.78x10 <sup>-4</sup><br>(0.888)                            | 2.0             | 7                           |
| 34-600           | 48,000              | 650<br>(4,500)            | 34<br>(234)              | 0.065<br>(1.80)                                       | 155<br>(3,200)            | 28,800<br>(3,200) | 27.56x10 <sup>-4</sup><br>(1.776)                            | 1.9             | 7                           |
| 34-600WD         | 48,000              | 650<br>(4,500)            | 34<br>(234)              | 0.065<br>(1.80)                                       | 155<br>(3,200)            | 28,800<br>(3,200) | 27.56x10 <sup>-4</sup><br>(1.776)                            | 1.9             | 7                           |
| 34-700<br>Unsize | 12,000              | 700<br>(4,830)            | 34<br>(234)              | 0.065<br>(1.80)                                       | 626<br>(793)              | 7,137<br>(793)    | 6.89x10 <sup>-4</sup><br>(0.444)                             | 2.0             | 7                           |

\* Impregnated Strand Test – SACMA Methodology

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