



PYROFIL™ – Typical Properties of Carbon Fiber

Fiber Type	Number of Filaments	Strength* Ksi (MPa)	Modulus* Msi (GPa)	Density lb/in ³ (g/cm ³)	Yield yds/lb (mg/m)	Denier (Tex)	X-Sectional Area in ² (mm ²)	Elongation %	Filament Diameter μ m
TR30S	3,000	640 (4,410)	34 (235)	0.065 (1.79)	2,480 (200)	1,800 (200)	1.73x10 ⁻⁴ (0.112)	1.9	7
TR50S ^Δ	6,000	710 (4,900)	34 (235)	0.066 (1.82)	1,240 (400)	3,600 (400)	3.46x10 ⁻⁴ (0.223)	2.1	7
TR50S	12,000	710 (4,900)	35 (240)	0.066 (1.82)	620 (800)	7,200 (800)	6.83x10 ⁻⁴ (0.440)	2.0	7
TR50S	15,000	710 (4,900)	35 (240)	0.066 (1.82)	496 (1,000)	9,000 (1,000)	8.54x10 ⁻⁴ (0.550)	2.0	7
TRH50	12,000	710 (4,900)	37 (255)	0.065 (1.81)	620 (800)	7,200 (800)	6.85x10 ⁻⁴ (0.442)	1.9	7
TRH50 ^Δ	18,000	770 (5,300)	36 (250)	0.066 (1.82)	496 (1,000)	9,000 (1,000)	8.52x10 ⁻⁴ (0.549)	2.1	6
MR40	12,000	640 (4,410)	43 (295)	0.064 (1.76)	825 (600)	5,400 (600)	5.30x10 ⁻⁴ (0.340)	1.5	6
MR60H	24,000	825 (5,680)	42 (290)	0.065 (1.81)	517 (960)	8,640 (960)	7.20x10 ⁻⁴ (0.464)	2.0	5
MS40	12,000	640 (4,410)	50 (345)	0.064 (1.77)	825 (600)	5,400 (600)	5.30x10 ⁻⁴ (0.340)	1.3	6
HR40	12,000	640 (4,410)	57 (395)	0.066 (1.82)	825 (600)	5,400 (600)	5.10x10 ⁻⁴ (0.329)	1.2	6
HS40	12,000	670 (4,610)	66 (455)	0.067 (1.85)	1155 (430)	3,870 (430)	3.60x10 ⁻⁴ (0.232)	1.0	5

Tested to the requirements of JISR 7601 unless otherwise indicated

^Δ Tested to the requirements of ASTM D4018

* Measured on impregnated strand

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