

**PULTRALL****V•ROD CARBON**

March 11

		#2 CFRP	#3 CFRP	#4 CFRP	#5 CFRP
		V•ROD	V•ROD	V•ROD	V•ROD
Nominal tensile strength	MPa	1518	1596	1899	1648
	ksi	220,1	231,4	275,4	239,0
Minimum guaranteed tensile strength*	MPa	1356	1431	1765	1532
	ksi	196,6	207,5	255,9	222,1
Nominal tensile modulus	GPa	127	120	144	140
	ksi	18415	17400	20880	20300
Tensile strain	%	1,20	1,33	1,32	1,18
Poisson's ratio	(-)	0,29	0,30	0,30	0,30
Nominal bond strength	MPa	16,3	16,5	16,3	16,3
	psi	2,4	2,4	2,4	2,4
Bond dependent coefficient	(-)	1	1	1	1
Longitudinal coefficient of thermal expansion	xE-6/°C	-2,3	-2,5	-2,3	-2,3
	xE-6/°F	-1,4	-1,4	-1,4	-1,4
Transverse coefficient of thermal expansion	xE-6/°C	38,0	38,0	38,0	38,0
	xE-6/°F	21,0	21,0	21,0	21,0
Nominal cross-sectional area	mm <sup>2</sup>	31,67	71,26	126,70	197,93

\* the minimum guaranteed tensile strength must not be used to calculate the strength of the bent portion of a bent bar.

Development and splice lengths are available upon request but should be properly calculated by a design engineer. Standard practice indicates that the splice length equals to 40 times the diameter of the bar.

*It is the responsibility of the design engineers to contact the bar manufacturer to get the latest updates of this technical data sheet.*