DATASHEET ®

EXCEL RACING GP 78

MADE WITH BIO BASED Q

Excel Racing GP 78 offers an upgraded cover to Excel Racing. The Technora/Polyester blended cover offers superb abrasion resistance and added grip both in wet hands and cleats.



APPLICATIONS	High Grip Lines, Control Lines, Halyards, Backstays					
MATERIAL CORE:	Manufactured from Dyneema SK78 HMPE (High-Modulus Polyethylene) Very light weight - more than 8x lighter than steel wire for a given strength High strength - 80% stronger than steel wire for a given weight Low stretch - see table below Good resistance to chemicals and UV Zero water shrinkage Low creep Manufactured from Technora Polyester blend Good UV resistance Excellent abrasion and heat resistance					
CONSTRUCTION TWISTED FIBRE CONSTRUCT 12 STRAND BRAIDED CONSTRUCTION:	FION: Improved abrasion resistance Optimised pitch to yarn twist - improves strength and longevity Firmer rounder rope, aids handling Easy to splice Flexible product and easily handled Torque balanced					
24 PLAIT BRAIDED COVER CONSTRUCTION:	Protects load bearing core from dirt and abrasion Round and firm construction					
PROPERTIES RELATIVE DENSITY: CHEMICAL RESISTANCE: UV RESISTANCE: MELTING POINT: CRITICAL TEMPERATURE:	1.15 Exact figure varies with diameter Excellent resistance to most chemicals (additional information available on request) Good 140°C 80°C (exposure to temperatures over this will result in permanent strength loss)					

TERMINATIONS SPLICED EYE TERMINATION:

12 strand core splice

An allowance of 40x rope diameter should be made for the overall length of the splice.

To optimise the efficiency of a soft eye splice (without a thimble), the angle formed at the neck of the splice should be 30° or less, meaning that when flat, the length of the eye must be 2.7x the diameter of the object over which the splice will be used.

A splice will normally increase the diameter of the rope between 1.5x and 1.75x

N.B. KNOTS WILL SIGNIFICANTLY REDUCE THE STRENGTH OF ANY ROPE. THIS PRODUCT WILL TYPICALLY RETAIN APPROXIMATELY 40% OF ITS STRENGTH IF TERMINATED WITH A KNOT. THE EXACT FIGURE WILL DEPEND ON THE TYPE OF KNOT USED AND OTHER FACTORS.

ELONGATION

Typical working elongation (for a bedded in a rope):

@ 10% of break load: 0.51% @ 20% of break load: 0.89% To break: 3.60%



PERFORMANCE

DIAMETER		MASS		AVERAGE STRENGTH			MIN STRENGTH		
mm	Inch	g/m	lb/100 ft	kg	lb	kN	kg	lb	kN
4	5/32	11.2	0.75	995	2190	9.8	855	1880	8.4
5	3/16	19.5	1.31	1430	3160	14.1	1070	2360	10.5
6	7/32	27.2	1.82	2060	4530	20.2	1850	4080	18.1

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