

Marlow[®] DATASHEET

EXCEL RACING GP 78

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

COVER:

Low creep
Manufactured from Technora Polyester blend
Good UV resistance
Excellent abrasion and heat resistance

CONSTRUCTION

TWISTED FIBRE CONSTRUCTION: 12 STRAND BRAIDED CONSTRUCTION:

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:

1.15 Exact figure varies with diameter

CHEMICAL RESISTANCE:

Excellent resistance to most chemicals (additional information available on request)

UV RESISTANCE:

Good

MELTING POINT:

140°C

CRITICAL TEMPERATURE:

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.

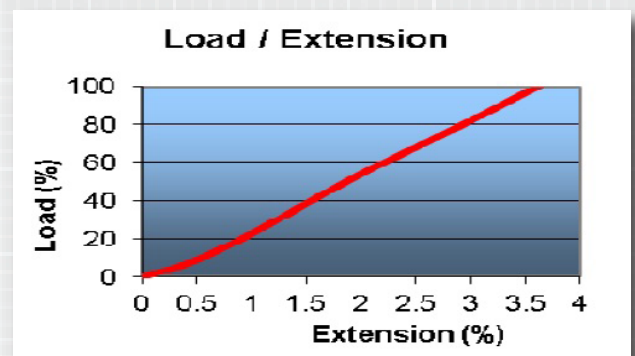
ELONGATION

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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