

Marlow[®] DATASHEET

EXCEL ELITE³

Super high strength core gives the option to down size. The Technora/Dyneema[®] cover provides ultimate abrasion resistance, heat resistance and grip for halyards, control line and sheets.



APPLICATIONS

High strength lines, high grip lines, halyards, backstays, runners

MATERIAL

CORE:

Manufactured from Dyneema SK99
HMPE (High-Modulus Polyethylene)
Very light weight - more than 8x lighter than steel wire for a given strength
Low stretch - see table below
Good resistance to chemicals and UV

COVER:

Zero water shrinkage
Manufactured from Technora Dyneema[®] blend
Good UV resistance
Excellent abrasion and heat resistance

CONSTRUCTION

TWISTED FIBRE CONSTRUCTION:

Improved abrasion resistance

12 STRAND BRAIDED

CORE CONSTRUCTION:

Optimised pitch to yarn twist - improves strength & longevity
Firmer rounder rope, aids handling
Easy to splice
Flexible product and easily handled
Torque balanced

24 PLAIT COVER CONSTRUCTION:

Protects load bearing core from dirt and abrasion
Round and firm construction

PROPERTIES

RELATIVE DENSITY:

1.1 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.

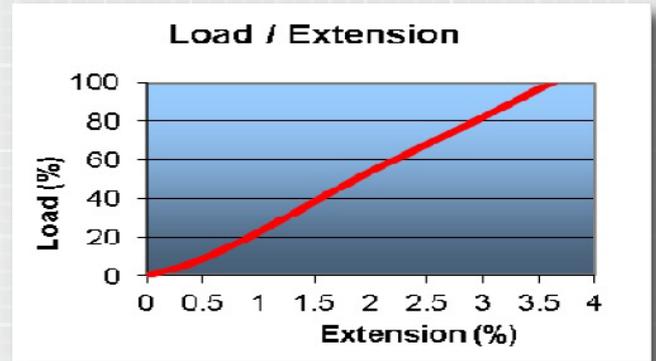
ELONGATION

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		CIRCUMFERENCE		MASS		AVERAGE STRENGTH			MIN STRENGTH		
mm	Inch	g/m	lb/100 ft	kg	lb	kN	kg	lb	kN		
4	5/32	9.9	0.66	1180	2610	11.6	1070	2350	10.5		
5	3/16	14.7	0.99	1710	3760	16.7	1540	3390	15.1		

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