

Marlow®

DATASHEET

EXCEL TAPER

Excel Taper is ideal for tapered spinnaker sheets. The soft outer cover is easily handled and easily removed to reveal the light weight high strength excel racing core.



APPLICATIONS

Spinnaker Sheets

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 Matt Spunstaple Polyester
High Grip
Easy to handle

CONSTRUCTION

TWISTED FIBRE CONSTRUCTION:

Improved abrasion resistance

12 STRAND BRAIDED

CORE CONSTRUCTION:

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

16 PLAIT BRAIDED

COVER CONSTRUCTION:

Outer Cover: high grip, easy to handle
Inner Cover: protects load bearing core from dirt and abrasion
Round and firm construction

PROPERTIES

RELATIVE DENSITY:

1.3 Exact figure varies with diameter

CHEMICAL RESISTANCE:

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

UV RESISTANCE:

Very good

MELTING POINT:

Cover 260°C / Core 140°C

CRITICAL TEMPERATURE:

80°C for core

(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

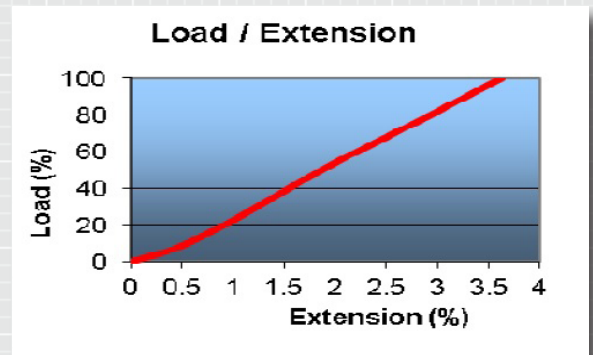
ELONGATION

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	lb	kN
6	7/32	29.2	1.96	995	2189	9.8	855	1881	8.4		
9	3/8	45.9	3.08	2056	4523	20.2	1905	4191	18.7		

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