

Marlow®

DATASHEET

RAPTOR RIGGING

Raptor Rigging line is the next generation of lowering lines from Marlow. Using soft and supple DoubleBraid rope with colour coded ArmourCoat for reduced water uptake. The ArmourCoat also improves abrasion resistance by a massive 30%. Available in 12mm (blue), 14mm (green), 16mm (red) and 18mm (yellow) diameters for lowering lines and bull ropes.



APPLICATIONS

Arboriculture bull ropes, Arboriculture lowering line

MATERIAL

MANUFACTURED FROM POLYESTER:

Unaffected by water
Low creep
Zero shrinkage
Good UV resistance
Very good abrasion resistance (ArmourCoat improves abrasion resistance by 30%)
Good heat resistance

CONSTRUCTION

Twisted fibre construction:

Improved abrasion resistance

DOUBLE BRAIDED CONSTRUCTION:

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

PROPERTIES

RELATIVE DENSITY:

1.38

CHEMICAL RESISTANCE:

Good resistance to most chemicals, except strong alkalis
(additional information available on request)

UV RESISTANCE:

UV stabilised

MELTING POINT:

260°C

TERMINATIONS

SPLICED EYE TERMINATION:

Doublebraid splice.

An allowance of 25x 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.

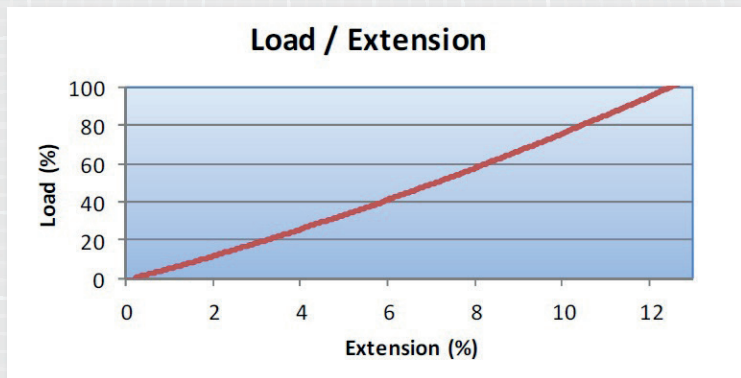
ELONGATION

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

@ 10% of break load: 1.70%

@ 20% of break load: 3.20%

To break: 12.40%



PERFORMANCE

DIAMETER		CIRCUMFERENCE		MASS		AVERAGE STRENGTH			MIN STRENGTH		
mm	Inch	g/m	lb/100 ft	kg	lb	kN	kg	lb	kN		
12	1/2	111	7.44	4760	10500	46.7	4380	9650	43.0		
14	9/16	156	10.43	6050	13300	59.4	5570	12300	54.6		
16	5/8	193	12.94	7230	15900	70.9	6650	14700	65.3		
18	3/4	232	15.54	7910	17400	77.6	7280	16000	71.4		

SPLICED ROPE PERFORMANCE

DIAMETER		CIRCUMFERENCE		AVERAGE STRENGTH			MIN STRENGTH		
mm	Inch	kg	lb	kN	kg	lb	kN		
12	1/2	4280	9450	42.0	3940	8690	38.7		
14	9/16	5450	12000	53.5	5010	11100	49.1		
16	5/8	6510	14300	63.8	5990	13200	58.8		
18	3/4	7120	15700	69.8	6550	14400	64.3		

WORKING LOAD LIMITS FOR SPLICED ROPES AT 7:1 UTILISATION FACTOR AS IN EN 1492-4:2004

DIAMETER		CIRCUMFERENCE		WORKING LOAD LIMITS		
mm	Inch	kg	lb	kN		
12	1/2	563	1240	5.5		
14	9/16	716	1590	7.0		
16	5/8	856	1890	8.4		
18	3/4	936	2060	9.2		

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