# DATASHEET ®

# Arbor 12

Arbor 12 is a highly versatile rigging and lowering line from Marlow. Using supple and easily spliced 12 strand rope with ArmourCoat for reduced water uptake. The ArmourCoat also improves abrasion resistance by 30%. Available in five colour-coded diameters.

**APPLICATIONS:** All rigging applications

**MATERIAL:** Polyester

# **CHARACTERISTICS:**

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

# 12 STRAND BRAIDED CONSTRUCTION:

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

# **PHYSICAL PROPERTIES:**

#### **CHEMICAL RESISTANCE:**

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

RELATIVE DENSITY: 1.38
UV RESISTANCE: UV s

UV RESISTANCE:UV stabilisedMELTING POINT:260°CLENGTHS:200 metre reels

GREAT PRODUCT FOR ON -SITE SPLICING.



#### **TERMINATION:**

12 strand splice

An allowance of  $50 \times \text{rope}$  diameter should be made for the overall length of the splice

To optimise the efficiency of the soft eye splice (without a thimble the angle formed at the neck of the splice should be  $30^{\circ}$  or less, meaning that when flat, the length of the eye must be  $2.7 \times$  the diameter of the object over which the splice will be used. A splice will normally increase the diameter of the rope between  $1.5 \times$  and 1.75.

#### **ELONGATION**

Typical working elongation (for a bedded in rope):

@ 10% of break load: 2%@ 20% of break load: 3%To break: 12%

#### **PERFORMANCE**

#### **ROPE PROPERTIES:**

DIAMETER		MASS		AVERAGE STRENGTH			MIN STRENGTH		
mm	Inch	g/m	lb/100 ft	kg	lb	kN	kg	lb	kN
9	3/8	61.3	4.11	3430	7570	33.7	3090	6810	30.3
11	7/16	92.0	6.17	5060	11200	49.6	4550	10000	44.7
13	1/2	122.7	8.23	6620	14600	65.0	5960	13100	58.5
16	5/8	184.0	12.34	9750	21500	95.7	8780	19300	86.1
18	11/16	245.0	16.45	13200	29100	130.0	11900	26200	117.0

#### **SPLICED ROPE PROPERTIES:**

DIAMETER		AVERAGE STRENGTH			MIN STRENGTH			COLOURS
mm	Inch	kg	lb	kN	kg	lb	kN	
9	3/8	3090	6810	30.3	2780	6130	27.3	ORANGE
11	7/16	4550	10100	44.6	4100	9000	40.2	BLUE
13	1/2	5960	13100	58.5	5360	11800	52.7	GREEN
16	5/8	8780	19400	86.1	7900	17400	77.5	RED
18	1/2	11900	26200	117	10700	23600	105.0	YELLOW

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

	DIAMETER	WLL				
mm	Inch	kg	lb	kN		
9	3/8	397	876	3.9		
11	7/16	585	1290	5.8		
13	1/2	766	1680	7.5		
16	5/8	1130	2480	11.1		
18	1/2	1700	3740	16.7		

Marlow Ropes Ltd Ropemaker Park Hailsham East Sussex, BN27 3GU England Marlow Ropes, Inc. Cordage Business Park Plymouth MA 02360 USA

www.marlowropes.com UK: +44 (0) 1323 444 444 sales@marlowropes.com US: +1 508 830 444 salesusa@marlowropes.com



Marlow Ropes Ltd endeavours to ensure that all products are manufactured to the highest standard, these guidelines are not intended and do not create any warranties, express or implied.

Marlow Ropes Ltd expressly disclaims warranties or representations of any kind, express or implied, including the implied warranties of merchantability and fitness for a particular purpose.

Marlow Ropes Ltd shall not be liable for any consequential, incidental or contingent damages whatsoever stemming from the use of these guidelines. Marlow Ropes Ltd shall not be liable for any consequential, incidental or contingent damages whatsoever stemming from the use of these guidelines. Marlow Ropes Ltd has a policy of continual improvement which may result in specification and colour changes without prior notice.



