

# Marlow<sup>®</sup> DATASHEET

## OCEANUS SK99 32 PLAIT

Marlow Oceanus is a high strength, low elongation "Jacketed" rope. Firm and round in profile, Oceanus has been specifically designed for use on captive or traction winches. The Dyneema / Technora cover significantly improves abrasion and cut resistance, whilst offering excellent grip and protection of the load bearing core. Oceanus has excellent drum spooling properties.



### APPLICATIONS

Winch lines, Lifting lines, Seismic arrays, Escort and ocean towing lines

### MATERIAL

#### CORE:

Manufactured from Dyneema SK75  
HMPE (High-Modulus Polyethylene)  
Very light weight - 8x lighter than steel wire for a given strength  
High strength - 70% stronger than steel wire for a given weight  
Low stretch - see table below  
Good resistance to chemicals and UV  
Zero water shrinkage

#### ADDITIONAL FEATURES OF DYNEEMA SK78:

Very low creep HMPE fibre  
Exhibits approximately 20% of the creep experienced by SK75.  
Further information available.

#### COVER:

Hyperblend: Dyneema / Technora blend, excellent abrasion and cut resistance, very good heat resistance, increased coefficient of friction over 100% Dyneema.

### CONSTRUCTION

#### 12 STRAND BRAIDED CORE CONSTRUCTION:

Optimised pitch to yarn twist - improves strength & longevity  
Easy to splice  
Flexible product and easily handled  
Torque balanced  
Marlow GripCoat supplied as standard for core / cover bonding and self healing properties  
Core can be used without covered

#### 32 PLAIT BRAIDED COVER CONSTRUCTION:

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

### SPECIAL OPTIONS

#### FILTER FABRIC LAYER: DYNEEMA XBO:

Prevent ingress of marine particulates  
Improves flex fatigue experienced in continuous cyclic bending  
Reduces yarn on yarn abrasion and heat generation by a factor of 5  
Applied at yarn manufacture stage - can be used in conjunction with any of the coatings

**MACHINE FINISHED SPLICE:** Improved finish and splice protection

## PROPERTIES

### RELATIVE DENSITY:

1 (Neutrally buoyant, exact figure will vary with rope size)

### CHEMICAL RESISTANCE:

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

### UV RESISTANCE:

Very good

### MELTING POINT (CORE):

140°C

### CRITICAL TEMPERATURE (CORE):

80°C

(exposure to temperatures over this will result in permanent strength loss)

## TERMINATIONS

### SPliced EYE TERMINATION:

12 strand bury splice (core)

An allowance of 60x 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.

In a sling configuration, attention must be paid to the distance between the two splices. For optimum strength realisation, Marlow recommend the minimum distance between splices of 35x rope diameter.

## ELONGATION

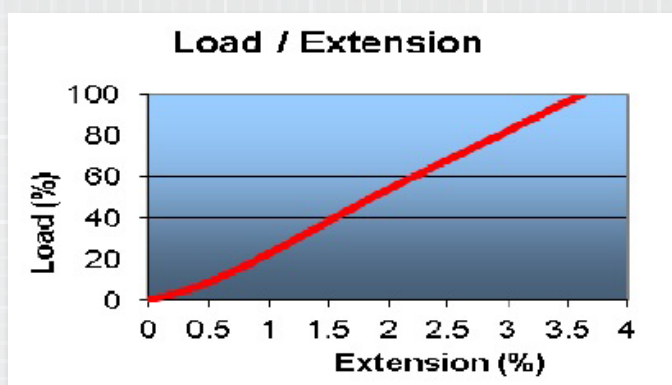
Permanent elongation on first loading: Up to 2%

Typical working elongation (for a bedded in 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		
		g/m	lb/100 ft	kg	lb	kN	kg	lb	kN
mm	Inch								
22	2 3/4	272	20.5	41,700	91,800	409	37,500	82,700	368
24	3	332	23.4	47,900	106,700	470	43,100	95,000	423
26	3 1/4	419	32.5	59,500	131,000	584	53,000	118,000	525
28	3 1/2	490	38.4	71,000	157,000	697	63,900	141,000	627
30	3 3/4	530	41.1	79,500	175,000	780	71,500	158,000	702
32	4	587	46.0	87,800	194,000	862	79,000	174,000	775
34	4 1/4	644	48.8	96,100	212,000	943	86,500	191,000	848
36	4 1/2	742	57.5	113,000	249,000	1,110	102,000	224,000	997
38	4 3/4	816	63.6	121,000	267,000	1,190	109,000	240,000	1,070
40	5	889	69.6	129,000	284,000	1,260	116,000	256,000	1,140
42	5 1/4	963	74.6	137,000	301,000	1,340	123,000	271,000	1,210
44	5 1/2	1061	82.2	153,000	337,000	1,500	138,000	303,000	1,350
46	5 3/4	1175	91.0	169,000	373,000	1,660	152,000	336,000	1,500
48	6	1289	99.7	186,000	410,000	1,820	167,000	369,000	1,640
50	6 1/4	1420	109.6	202,000	444,000	1,980	181,000	400,000	1,780

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



Certification Number 315

ISO 9001

### Disclaimer

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 has a policy of continual improvement which may result in specification and colour changes without prior notice.