

Marlow[®] DATASHEET

12 STRAND POLYSTEEL

12 Strand Polysteel ropes offer similar tenacity to polyester, but offer a significant weight reduction and non-water absorption properties. Torque balanced construction with firm round profile, 12-Strand Polysteel is easily spliced, and used for general working lines, secondary mooring lines, mooring pendants, and slings and strops.



APPLICATIONS

Mooring Pendants, Secondary Mooring Lines, General Working Lines, Slings, Strops

MATERIAL

MANUFACTURED FROM POLYSTEEL:

Floats on water
Hard wearing
UV stabilised
Low elongation
Light weight

CONSTRUCTION

TWISTED FIBRE CONSTRUCTION:

Improved abrasion resistance

12 STRAND BRAIDED 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

PROPERTIES

RELATIVE DENSITY:

0.91 Exact figure varies with diameter

CHEMICAL RESISTANCE:

Very good resistance to most chemicals (additional information available on request)

UV RESISTANCE:

Stable

MELTING POINT:

150°C

TERMINATIONS

SPliced EYE TERMINATION:

12 strand core splice

An allowance of 50x 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

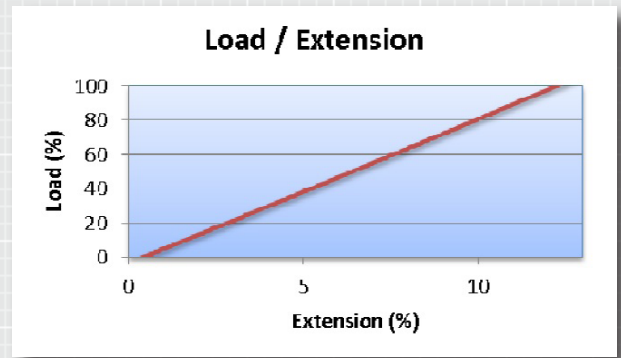
ELONGATION

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

@ 10% of break load: 1.70%

@ 20% of break load: 2.80%

To break: 12.6%



PERFORMANCE

DIAMETER	CIRCUMFERENCE	MASS		MIN STRENGTH		
		mm	Inch	g/m	lb/100 ft	kg
8	5/16	29	1.94	1230	2706	12.1
10	13/32	45	3.04	1920	4224	18.8
12	15/32	65.2	4.37	2740	6028	26.9
14	9/16	88.8	5.96	3710	8162	36.4
16	5/8	116	7.78	4813	10589	47.2
18	3/4	147	9.86	6047	13303	59.3
20	13/16	181	12.14	7423	16331	72.8
22	7/8	219	14.69	8912	19606	87.4
24	15/16	261	17.50	10605	23331	104.0
28	1 1/8	355	23.81	14174	31183	139.0
32	1 1/4	464	31.12	18253	40157	179.1
36	1 27/64	587	39.37	22842	50252	224.1
40	1 37/64	725	48.62	27940	61468	274.1
44	1 3/4	877	58.81	33345	73359	327.1
48	1 7/8	1040	69.75	39259	86370	385.1
52	2 3/64	1220	81.82	45683	100503	448.2
56	2 13/64	1420	95.23	52413	115309	514.2
60	2 3/8	1630	109.31	59449	130788	583.2
64	2 1/2	1860	124.74	66995	147389	657.2
68	2 11/16	2100	140.83	75153	165337	737.3
72	2 7/8	2350	157.60	83617	183957	820.3
76	3	2618	175.57	93200	205040	914.3
80	3 5/32	2900	194.48	101462	223216	995.3
88	3 1/2	3510	235.39	121346	266961	1190.4
96	3 3/4	4170	279.65	142760	314072	1400.5
104	4 1/16	4900	328.61	165194	363427	1620.6
112	4 3/8	5680	380.92	191707	421755	1880.6
120	4 3/4	6520	437.25	217200	477840	2130.7

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