

Marlow[®] DATASHEET

12 STRAND POLYESTER



Traditional 12-strand polyester ropes used in numerous applications. Polyester has low elongation and high tenacity with excellent flex fatigue. Torque balanced construction with firm round profile, 12-Strand PES is easily spliced and used for general working lines, secondary mooring lines, mooring pendants, slings and strops.

APPLICATIONS

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

MATERIAL

MANUFACTURED FROM POLYESTER:

Unaffected by water
Low creep
Zero shrinkage
Good UV resistance
Good abrasion and heat resistance

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:

1.38 Exact figure varies with diameter

CHEMICAL RESISTANCE:

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

UV RESISTANCE:

Good

MELTING POINT:

260°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

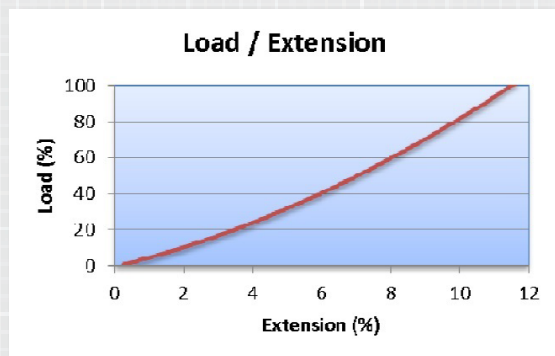
ELONGATION

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

@ 10% of break load: 1.90%

@ 20% of break load: 3.50%

To break: 11.5%



PERFORMANCE

DIAMETER		CIRCUMFERENCE		MASS		MIN STRENGTH		
mm	Inch	g/m	lb/100 ft	kg	lb	kN		
8	5/16	48	3.22	1130	2486	11.1		
10	13/32	77	5.16	1770	3894	17.4		
12	15/32	113	7.58	2549	5608	25.0		
14	9/16	145	9.72	3470	7634	34.0		
16	5/8	194	13.01	4334	9535	42.5		
18	3/4	242	16.23	5470	12034	53.7		
20	13/16	307	20.59	6832	15030	67.0		
24	15/16	420	28.17	9687	21311	95.0		
28	1 1/8	603	40.44	12746	28041	125.0		
32	1 1/4	770	51.64	16315	35893	160.1		
36	1 27/64	980	65.72	20394	44867	200.1		
40	1 37/64	1190	79.80	25493	56085	250.1		
44	1 3/4	1401	93.95	30591	67300	300.1		
48	1 7/8	1681	112.73	36200	79640	355.1		
52	2 3/64	1961	131.51	43338	95344	425.1		
56	2 13/64	2311	154.98	48436	106559	475.2		
60	2 3/8	2661	178.45	54045	118899	530.2		
64	2 1/2	3011	201.93	61183	134603	600.2		
68	2 11/16	3361	225.40	69100	152020	677.9		
72	2 7/8	3851	258.26	76479	168253	750.3		
76	3	4202	281.80	85300	187660	836.8		
80	3 5/32	4727	317.01	96873	213121	950.3		
88	3 1/2	5602	394.33	114208	251258	1120.4		
96	3 3/4	6653	468.77	134603	296127	1320.5		
104	4 1/16	7878	550.58	163155	358941	1600.6		
112	4 3/8	9279	638.44	183549	403808	1800.6		
120	4 3/4	10854	730.98	203943	448675	2000.7		

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