

ENGINEERED FOR:



Marine



Lifting



Agriculture



Film & Events



Crane Slings



Recovery

HM12 is a 12-strand rope manufactured with HMPE (High Modulus Polyethylene), designed to meet the rigorous demands of industrial and marine applications.

This rope is engineered for exceptional strength, durability, and lightweight performance, making it an ideal replacement for traditional wire ropes. HM12 offers excellent tensile strength, lightweight handling, minimal stretch, and excellent abrasion resistance thanks to Marlow's ArmourCoat PU finish. Its versatility allows it to be customised for various applications, including marine, industrial, lifting and agricultural applications, ensuring reliable, value for money, and high performance in demanding environments.

KEY FEATURES:

- High strength • Easy handling • Extended service life • Superior flexibility • Lightweight
- Cost-effective • Excellent abrasion resistance • Good UV resistance

TECHNICAL INFORMATION:

DIAMETER		WEIGHT		AVG. BREAKLOAD SPLICED		MIN. BREAKLOAD SPLICED		*LINEAR BREAKLOAD	
mm	inch	kg/100m	lbs/100ft	kN	lbs	kN	lbs	kN	lbs
3	1/8	0.7	0.48	12.8	2870	11.7	2640	14.2	3190
4	5/32	1.2	0.81	21.3	4780	19.6	4400	23.6	5310
6	7/32	2.2	1.45	38.3	8610	35.2	7920	42.6	9580
8	5/16	3.9	2.59	67.4	15100	62	13900	74.9	16800
10	3/8	6	4.04	105	23500	96.3	21600	117	26200
11	7/16	7.2	4.85	126	28220	116	26000	140	314000
12	1/2	8.7	5.82	150	33700	138	31000	167	37500
14	43/78	10.8	7.27	181	40700	166	37400	201	45100
16	5/8	14.5	9.7	227	51000	209	46900	252	56600
18	23/32	19.5	13.1	297	66700	273	61400	330	74200
20	13/16	23.9	16	351	78900	323	72600	390	87700
22	7/8	28.9	19.4	411	92500	379	85100	457	103000
24	1	31.8	21.3	437	98200	402	90400	485	109000
26	1 1/32	39.1	26.2	517	116000	476	107000	574	129000
28	1 3/32	43.4	29.1	566	127000	521	117000	629	141000
30	1 3/16	52.1	34.9	679	153000	626	140000	755	170000
32	1 1/4	57.9	38.8	755	170000	694	156000	838	188000
34	1 11/32	63.6	42.7	830	187000	764	172000	922	207000
36	1 13/32	69.4	46.6	906	204000	833	187000	1010	226000
38	1 1/2	78.1	52.4	1020	229000	928	211000	1130	255000
40	1 9/16	86.8	58.2	1130	254000	1040	234000	1250	282000
44	1 23/32	104.1	70	1350	303000	1240	279000	1500	337000
48	1 7/8	121.5	81.5	1560	351000	1440	323000	1730	390000

*Linear breakload refers to unspliced ropes determined in accordance with ISO2307:2019

COLOURWAYS:



Black – Other colours available on request

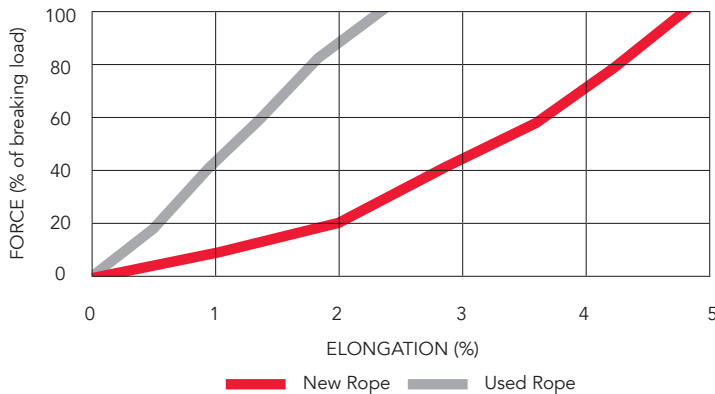


TECHNICAL INFORMATION:

RELATIVE DENSITY	0.97 (floats)
CHEMICAL RESISTANCE	Excellent
UV RESISTANCE	Good
MELTING POINT	140°C 284°F
CRITICAL TEMPERATURE	80°C 176°F

CONSTRUCTION	12-strand braided
MATERIAL	HMPE
COATING	Marlow ArmourCoat Polyurethane
LENGTHS	Available upon request
TERMINATIONS	Plain end, spliced eye, grommet or endless loop

ELONGATION:



TERMINATIONS:

Spliced eye termination

Diameters up to & including 44mm - 12-strand splice

Diameters 48mm and over - 12-strand tuck splice

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 Ropes recommend the minimum distance between splices of 35x rope diameter. The splice will normally increase the diameter of the rope between 1.5x and 1.75.

Grommet or endless loop

When calculating the strength of a grommet, a factor of 1.65 should be applied to the break load of the rope. It is important to recognise the D:d ratio of the fittings when specifying a grommet or endless loop. Marlow recommends a D:d ratio of 3x the rope diameter for optimum strength realisation.

The minimum circumference should be a factor of the splice length and optimum distance between splices and calculated as: $C = 2(dx60) + (dx35)$ where C = circumference and d = rope diameter. Divide C by 2 for the finished length.

N.B knots will significantly reduce the strength of any rope. This product will typically retain approximately 30% of its strength if terminated with a knot. The exact figure will depend on the type of knot used and other factors.

The information in this document is subject to change without prior notice. Please refer to our website for the most up-to-date version.

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