

OPTIMA™³

General UHMWPE Synthetic Fiber Rope

OPTIMA™ is made of Ultra-High Molecular Weight Polyethylene (UHMWPE) fiber and this highest strength synthetic fiber rope available made by ROPERS.

OPTIMA™ 3 has many characteristics, such as high strength, light weight, wear resistance, impact resistance, low temperature resistance, ect. It is an ideal rope for marine and industrial markets.

Under the same strength, the weight of OPTIMA™ 3 is only 1/8 of that of steel wire rope.



Excellent wear characteristics



Floats



High strength



Easy to splice



Technical Information



0.98
SPECIFIC GRAVITY



1×12 / 12×12
CONSTRUCTION



280°F (140°C)
MELTING POINT



150°F (65°C)
CRITICAL TEMP



3.2%
ELONGATION
AT 30% BREAK



0
WATER
ABSORPTION

Can be certified by



Diameter inch	Weight lbs/100ft	Minimum Strength Spliced Rope lbs	Minimum Strength ISO Unspliced Rope lbs
1×12			
1	22.8	109,800	122,000
1 1/16	26.8	130,000	144,400
1 1/8	31.5	145,200	161,300
1 1/4	35.5	165,000	183,300
1 5/16	41.6	195,800	217,600
1 1/2	50.3	222,200	246,900
12×12			
1 5/8	63.7	288,200	320,200
1 3/4	77.8	316,800	352,000
2	86.5	354,400	393,800
2 1/8	105.9	429,000	476,700
2 1/4	115.3	479,600	532,900
2 1/2	144.2	539,000	598,900
2 5/8	154.2	596,400	662,700
2 3/4	171.6	660,000	733,300
3	213.9	783,200	870,200
3 1/8	234.7	853,600	948,400
3 1/4	260.2	942,900	1,047,700
3 5/8	346.0	1,249,600	1,388,400
4	422.4	1,518,000	1,686,700
4 1/8	459.3	1,603,600	1,781,800

Diameter, weight and MBS are determined in accordance with ISO 2307:2010.
Custom size and length available by request.



ROPERS ROPE



sales@ropers.com.tw



www.ropersrope.com



ROPERS
RELIABLE TO THE CORE



OPTIMA™ 3



General UHMWPE Synthetic Fiber Rope

- High strength
- General Purpose
- Available in multiple colors

OPTIMA™ 5



Premium UHMWPE Synthetic Fiber Rope

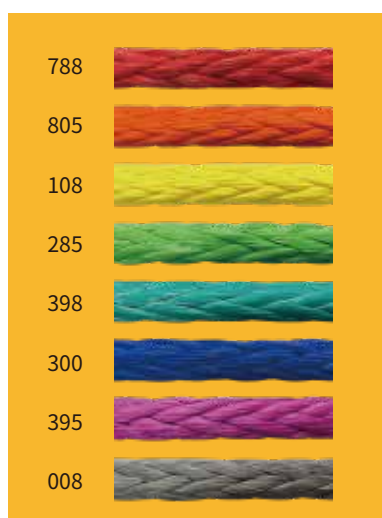
- Superior strength
- Twist resistant identification
- Various coating design

OPTIMA™ 7



Ultra High Performance HMPE Rope

- Ultra high strength
- Lighter weight
- Ultra low stretch



Coating Type



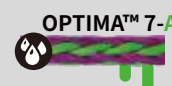
H type, Improve rope grip and stability



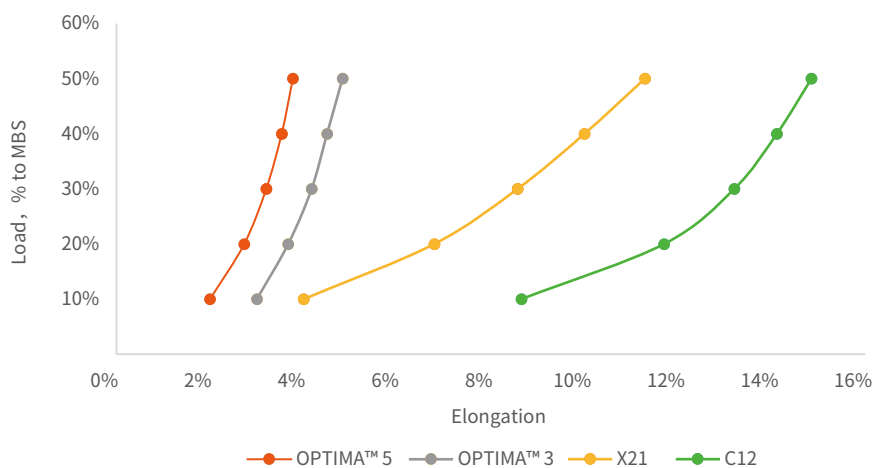
L type, Optimizes the rope's surface wear resistance, making it smoother



A type, functional for water repellent, oil repellent and antifouling



Elongation



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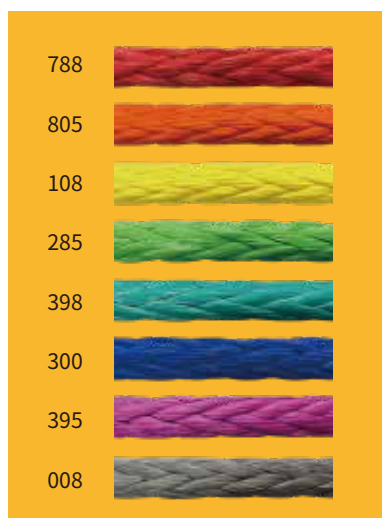


ROPERS
RELIABLE TO THE CORE

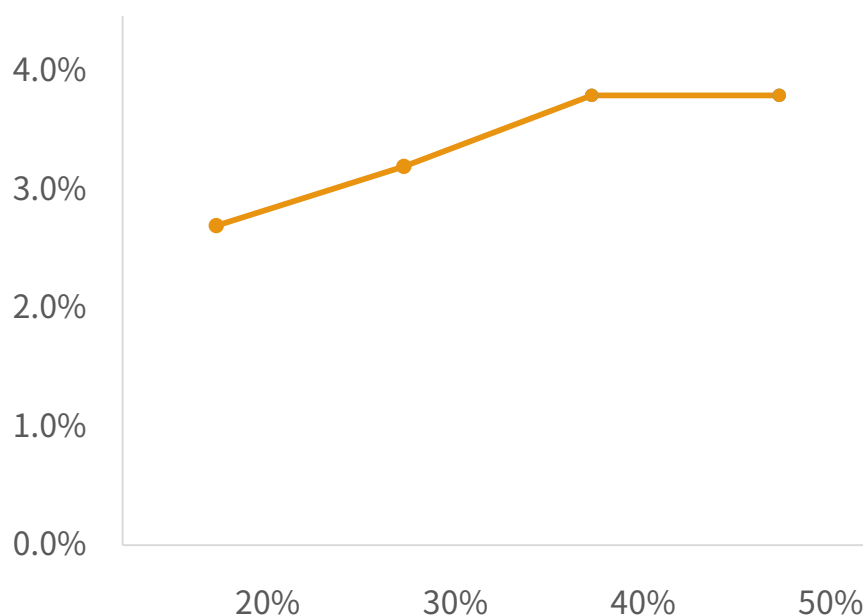
Can be certified by



OPTIMATM 3



Elongation



Test Procedure:

- Initial setting cycles: 10 times from 1% to 50% of spliced breaking strength
- Load 50% of the MBS to measure elongation of rope
- Pin diameter minimum 3X diameter of rope
- Result: 3.8%



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