

OPTIMA™

General HMPE
Synthetic Fiber Rope

3

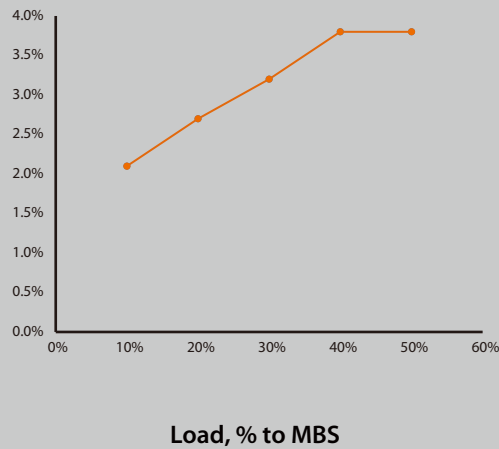


The OPTIMA™ Series is our premium rope line created by ROPERS, crafted from high-quality Ultra-High-Molecular-Weight Polyethylene (HMPE).

OPTIMA™ 3 has many benefits, such as high-strength, light weight, wear-resistance, impact-resistance, low-temperature-resistance and more. It is an ideal rope for maritime and industrial markets. With the same strength, OPTIMA™ 3 weighs only 1/8 that of a steel wire rope. This rope already features high corrosion and aging-resistance, thus no lubrication is required for it during use. Therefore the operation cost is greatly reduced and maintenance is easy. The OPTIMA™ 3 has been designed to provide enhanced fatigue strength and a longer service life. We guarantee safety and reliability with this rope.



ELONGATION



TECHNICAL INFORMATION

MATERIAL | HMPE

SPECIFIC GRAVITY | 0.98

CONSTRUCTION | 12 Strand

MELTING POINT | 280°F (140°C)

CRITICAL TEMP | 150°F (65°C)

ELONGATION AT 30% BREAK | 3.2%

WATER ABSORPTION | 0%



High wear resistance



Extremely high strength



UV resistance



Chemical resistance



Customizable in length and color

Diameter		Weight		Minimum Strength ISO Unspliced Rope	
mm	inch	kg/100m	lbs/100ft	kgf	lbs
12 Strand					
5	3/16	1.4	0.9	2,800	6,100
6	1/4	2.4	1.7	4,300	9,500
8	5/16	3.7	2.5	6,700	14,700
9	3/8	5.3	3.6	9,400	20,700
11	7/16	6.0	4.0	10,900	24,000
12	1/2	8.3	5.6	15,900	35,000
14	9/16	10.5	7.0	19,200	42,300
16	5/8	15.4	10.3	26,100	57,400
18	3/4	20.2	13.5	34,600	76,100
22	7/8	28.8	18.8	48,900	107,500
24	1	34.0	22.8	55,400	122,000
26	1 1/16	40.0	26.8	65,700	144,400
28	1 1/8	47.0	31.5	73,300	161,300
30	1 1/4	53.0	35.5	83,300	183,300
32	1 5/16	62.0	41.6	98,900	217,600
38	1 1/2	75.0	50.3	112,200	246,900
12x12					
40	1 5/8	95.0	63.7	145,600	320,200
44	1 3/4	116.0	77.8	160,000	352,000
48	2	129.0	86.5	179,000	393,800
52	2 1/8	158.0	105.9	216,700	476,700

Diameter, weight and MBS are determined in accordance with ISO 2307:2019. Specifications are for unspliced strengths, strength will decrease by about 10% after splicing. Custom diameter and length and color available by request.

Warning: The minimum breaking strength must never be regarded as the safe working load of the rope.

