

# OPTIMA™

General HMPE  
Synthetic Fiber Rope

# 3



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

OPTIMA™ 3 is made of Ultra-High-Molecular-Weight-Polyethylene (HMPE)-fiber, a high-strength synthetic fiber rope made by ROPERS.

OPTIMA™ 3 has many characteristics making it especially suitable for all kinds of vessels, such as high-strength, light weight, wear-resistance, impact-resistance, low-temperature-resistance, etc. It is an ideal rope for both marine and industrial markets.

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



Can be certified by



**ROPERS**  
RELIABLE TO THE CORE

## TECHNICAL INFORMATION

SPECIFIC GRAVITY | 0.98

CONSTRUCTION | 12 Strand / 12×12

MELTING POINT | 280°F (140°C)

CRITICAL TEMP | 150°F (65°C)

ELONGATION AT 30% BREAK | 3.2%

WATER ABSORPTION | 0%



Good wear-resistance



Floating



High-strength



Easy to splice



Excellent flex-fatigue-resistance



Easy to inspect

Diameter		Weight		Minimum Strength ISO Unspliced Rope	
mm	inch	kg/100m	lbs/100ft	kgf	lbs
12 Strand					
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
12×12					
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
56	2 1/4	172.0	115.3	242,200	532,900
60	2 1/2	215.0	144.2	272,200	598,900
64	2 5/8	230.0	154.2	301,200	662,700
68	2 3/4	256.0	171.6	333,300	733,300
72	3	319.0	213.9	395,600	870,200
76	3 1/8	350.0	234.7	431,100	948,400
80	3 1/4	388.0	260.2	476,200	1,047,700
88	3 5/8	516.0	346.0	631,100	1,388,400
96	4	630.0	422.4	766,700	1,686,700
100	4 1/8	685.0	459.3	809,900	1,781,800

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 size and length and color available by request.

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

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