

OPTIMA™

*Polyester & HMPE
Synthetic Fiber Rope*

4C



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

The OPTIMA™ 4C is made of an Ultra-High-Molecular-Weight Polyethylene (HMPE) fiber core and a wear-resistant Polyester cover which have a longer service life.

OPTIMA™ 4C is an excellent and cost-effective alternative to steel wire rope. Its overall Construction is round and firm, with a Polyester sheath enhanced by a special wear resistant coating that provides exceptional durability and grip. This will not only prevent slipping but also effectively protect the inner core from damage. Additionally, the coordinated double braid construction design minimizes sheath slippage and improves the service life of the rope.



Can be certified by



ROPERS
RELIABLE TO THE CORE



TECHNICAL INFORMATION

CORE	HMPE
COVER	Polyester
SPECIFIC GRAVITY	1.03
CONSTRUCTION	Double Braided
MELTING POINT	482°F (250 °C) / 280°F (140 °C)
CRITICAL TEMP	350°F (177 °C) / 150°F (65 °C)
ELONGATION AT 30% BREAK	3.2%
WATER ABSORPTION	0-1%



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
10	3/8	8.9	6.0	10,600	23,200
11	7/16	10.0	6.7	12,900	28,300
12	1/2	13.8	9.3	16,700	36,700
14	9/16	17.5	11.7	21,100	46,400
16	5/8	25.7	17.2	27,300	60,100
18	3/4	33.7	22.6	36,300	79,900
22	7/8	46.7	31.3	51,100	112,400
24	1	55.0	36.9	57,800	127,100
26	1 1/16	67.5	45.3	67,900	149,300
28	1 1/8	79.2	53.1	75,600	166,200
30	1 1/4	87.5	58.7	86,100	189,400
32	1 5/16	101.7	68.2	101,100	222,400
38	1 1/2	123.5	82.8	114,400	251,800
40	1 5/8	156.7	105.1	148,900	327,600
44	1 3/4	191.7	128.5	163,300	359,300
48	2	213.3	143.0	182,200	400,900
52	2 1/8	261.7	175.5	220,000	484,000

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.

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