

OPTIMA 4S

UHMWPE Durable Double Braid Rope

Optima is made of Ultra-High Molecular Weight Polyethylene (UHMWPE) fiber and is the highest strength synthetic fiber rope available made by ROPERS. Comprised of high strength UHMWPE as its core and an overbraided UHMWPE cover for wear resistance, it performs exceptionally well in mooring, towing, and other offshore applications.

The Optima 4S features a tightly braided structure, with both its cover and core working together to prevent excessive cover slack during mooring operations. Its cover is coated with a special abrasion-resistant material that enhances its wear resistance and effectively shields the load-bearing core from dust and sand particles that can cause fiber-to-fiber wear.



Extremely high bending fatigue strength



Minimize sliding between core and cover in design



Smooth and tight



Good wear resistance



UV and chemical resistance



Technical Information



UHMWPE
CORE



UHMWPE
COVER



0.98
SPECIFIC GRAVITY



Double Braided
STRUCTURE



280°F (140°C)
MELTING POINT



150°F (65°C)
CRITICAL TEMP



3.5%~3.8%
ELONGATION
AT 50% BREAK



0
WATER
ABSORPTION



Diameter	Weight	Minimum Strength Spliced Rope	Minimum Strength ISO Unspliced Rope
mm	kg/100m	kg	kg
10	6.5	9,000	10,000
11	7.3	11,000	12,200
12	9.6	12,500	13,900
14	11.0	14,000	15,600
16	15.0	18,400	20,400
18	20.5	24,200	26,900
22	30.6	33,500	37,200
24	39.4	44,000	48,900
26	41.3	46,100	51,200
28	48.6	54,400	60,400
30	58.8	65,800	73,100
32	64.5	72,100	80,100
34	73.6	79,400	88,200
36	82.0	91,600	101,800
40	92.2	103,000	114,400
44	99.1	113,000	125,600
48	144.1	152,000	168,900
52	167.6	165,000	183,300

Diameter, weight and MBS are determined in accordance with CI1500-02. Custom size and length available by request.



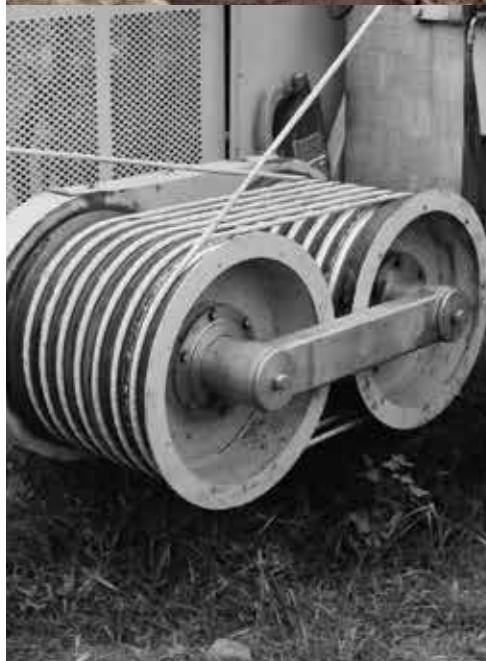
ROPERS ROPE



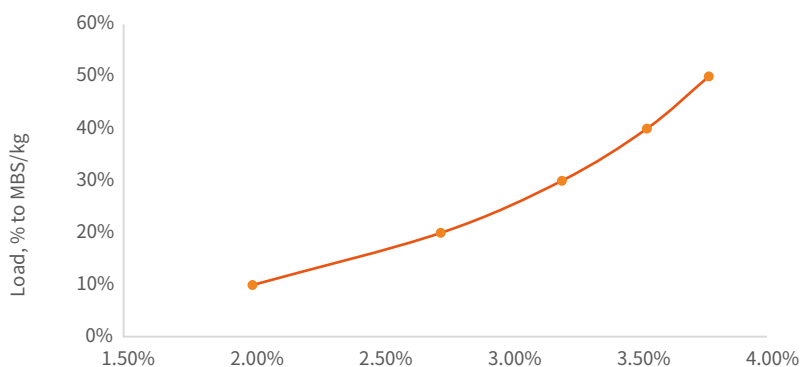
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Optima 4S Elongation



OPTIMA 4S



- UHMWPE/UHMWPE
- Very high strength, firm and round torque free
- Superior wear resistance and durability
- Smooth, reducing frictional heat buildup
- More lighter, floating



WEIGHT



STRENGT



OPTIMA 4C



- Polyester/UHMWPE
- Very high strength, firm and round torque free
- High wear resistance and durability
- Offers improved grip



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