# OPTIMA 3

## High Performance Synthetic Fiber Rope

Optima is made of Ultra-High Molecular Weight Polyethylene (UHMWPE) fiber and is the highest strength synthetic fiber rope available made by ROPERS. Optima3 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 Optima3 is only 1/8 of the steel wire rope.

- ▶ High strength and light weight
- ▶ Non-absorbent, floating on water
- Good wear resistance

- ► Lower upfront costs
- ▶ Perfect bending fatigue and relaxation fatigue













### **Specification**



Diameter		Weight		Minimum Breaking Strength	
inch	mm	lbs/100ft	kg/100m	lbs	kg
1/8	3	0.5	0.7	3,400	1,550
5/32	4	0.8	1.2	5,300	2,420
3/16	5	0.9	1.4	6,800	3,100
1/4	6	1.5	2.2	9,500	4,330
5/16	8	2.3	3.4	14,700	6,700
3/8	10	3.7	5.5	20,800	9,450
7/16	11	4.0	6.0	25,200	11,450
1/2	12	6.4	9.5	34,980	15,900
9/16	14	7.0	10.5	42,200	19,200
5/8	16	10.3	15.4	57,400	26,100
3/4	18	13.4	20.1	76,100	34,600
7/8	22	18.8	28.0	102,300	46,500
1	24	22.2	33.1	121,880	55,400
1 1/16	26	25.7	38.4	144,600	65,700
1 1/8	28	30.5	45.5	152,300	69,200
1 1/4	30	33.9	50.6	171,400	77,900
1 5/16	32	38.6	57.5	202,400	92,000
1 1/2	36	48.3	72.0	228,400	103,800
1 5/8	40	59.0	88.0	284,700	129,400
1 3/4	44	71.4	106.5	342,400	155,600
2	48	84.0	125.2	401,100	182,300
2 1/8	52	97.9	146.0	479,200	217,800
2 1/4	56	113.3	169.0	539,700	245,300
2 1/2	60	129.4	193.0	588,100	267,300
2 5/8	64	147.5	220.0	665,100	302,300
2 3/4	68	166.3	248.0	735,900	334,500
3	72	186.4	278.0	758,600	344,800
3 1/8	76	207.2	309.0	837,500	380,700
3 1/4	80	230.0	343.0	926,200	421,000
3 5/8	88	279.6	417.0	1,120,000	509,100
4	96	333.3	497.0	1,330,600	604,800
4 1/8	100	361.6	539.3	1,415,000	643,200
4 1/4	104	391.1	583.3	1,499,700	681,700
4 1/2	108	421.8	629.0	1,585,100	720,500
4 5/8	112	453.6	676.5	1,670,700	759,400
5	120	520.7	776.6	1,879,500	854,300
5 1/8	125	565.0	842.6	1,998,500	908,400

Specifications are for unspliced strengths, strength will decreases by about 10% after splicing Custom size and length available by request





