

MARINA MAXI

Combination Dual Fiber, Polypropylene Polyester

Product Description:

Marina Maxi is a product of superior technology surpassing properties of normal polypropylene rope. With a very high strength to weight ratio, it allows for substantial size reduction, ease in handling and an overall economic solution. The technically reinforced composition of High Grade Synthetic Compound with Polyester and Polypropylene retains the superior breaking strength. This ideal composition and construction creates extremely low elongation that offers stability during usage.

Properties:

- Construction: 8-12 Strand
- Colour: Orange
- Maker: 2 Blue Marker Yarn
- Specific Gravity: 0.96
- Melting Point: 185 °c
- U.V Resistance: Stabilised (as per customer request)
- Dry & Wet Conditions: Identical Wet & Dry Strengths
- Abrasion Resistance: Good, as per customer request
- Classification: GL & Mills
- Bending Ratio: 0%
- Elongation at Breaking Point: 18%
- Water Absorption: 0%
- Floats/Sinks: Floats

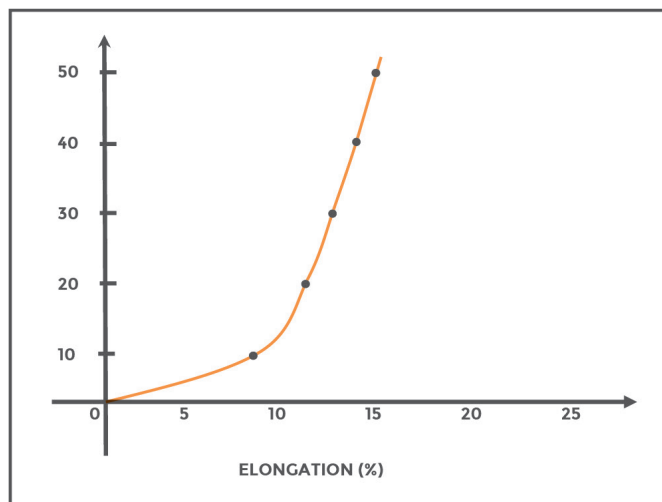
Physical characteristics:

- Floats On Water
- High Breaking Strength
- High Abrasion Resistance
- High Shock Absorption
- No Loss Of Strength When Wet
- Low Weight-Easy Handling
- Very Low Snap-Back Effect
- Low Elongation

Applications:

- Mooring Lines For 0.1 Tanker
- Towing Lines
- Anchoring Lines
- SPM Hawsers
- Messenger Lines
- Offshore Applications

Percentage Elongation:



Test Procedure:

Cyclical loading test

The cyclical loading test is performed at defined levels of loading in wet conditions. The rope sample is loaded with the prescribed number of cycles at individual levels of loading at a prescribed rate until the sample breaks or 2000 cycles at an 80% level of loading is achieved. The achieved number of cycles is used to calculate the TCLL level of loading at which the rope would break at 1000 cycles. The test course is continuously recorded by means of a computer and the final test report is based on this computerized record.

The test equipment is specially designed to test ropes made of synthetic materials which will be used in applications that require cyclical loading. This prototype rope testing for determination of the TCLL value is specified in OCIMF (Oil Companies International Marine Forum) guidelines.

Elongation Test

Total stretch represents the entire length change in a new rope when placed under a given stress (load) and includes the non-recoverable, recoverable overtime and immediately recoverable portions of extension. One of the variables affecting percentages of elongation is intermittent loading vs. sustained loading; plotted graphically, the curves are somewhat different.

Two points are marked on the Marina Maxi Rope by tightly knotting two pieces of strings 30" apart. The rope is put under a load of 20% of its breaking strength and the elongation is less than 15% between the two knots. When the rope is relaxed the distance between the two knots measures 34-1/2" and the string is taut. $(30" + 0.15 \times 30 = 34-1/2")$

Conclusion

If the string would have snapped out then we know that the rope has been loaded more than the breaking strength. Also if the distance between the two points is more than 34-1/2" then the elongation would be more than 15%, both are not the case with Axiom cordages & ropes.

Marina Maxi: 12 Strand

Dia. mm	Dia. Inch	Cir. Inch	Wt. Per 220 Mtrs. In Kgs.	Wt. Per 200 Mtrs. In Kgs.	Wt. Per 220 Mtrs. In Lbs.	Wt. Per 200 Mtrs. In Lbs.	Mtr/ Kg	Feet/ Kg	MBL			Maximum Length Mtr.
									Kgf	Lbs	KN	
52	2-1/16	6-1/2	304	276.36	668.80	608.00	0.72	2.37	51865	114403	508.48	850
56	2-1/4	7	353.00	320.91	776.60	706.00	0.62	2.04	59553	131017	583.85	750
60	2-3/8	7-1/2	407.00	370.00	895.40	814.00	0.54	1.77	67753	149057	664.25	650
64	2-1/2	8	461.00	419.09	1014.20	922.00	0.48	1.57	76465	168223	749.66	580
68	2-15/16	8-1/2	520.00	472.73	1144.00	1040.00	0.42	1.39	85793	188745	841.11	500
72	2-7/8	9	583.00	530.00	1282.60	1166.00	0.38	1.24	95633	210393	937.58	450
76	3	9-1/2	652.00	592.73	1434.40	1304.00	0.34	1.11	106754	234859	1046.61	400
80	3-1/4	10	722.00	656.36	1588.40	1444.00	0.30	1.00	117875	259325	1155.64	350
88	3-15/16	11	876.00	796.36	1927.20	1752.000	0.25	0.82	141450	311190	1386.76	300
96	3-3/4	12	1037.00	942.73	2281.40	2074.00	0.21	0.70	167075	367565	1637.99	250
104	4-1/2	13	1224.00	1112.73	2692.80	2448.00	0.18	0.59	194853	428677	1910.32	220
*108	4-15/16	13-1/2	-	1197.00	-	2633.00	0.16	0.52	206400	454080	2023.53	*200
*112	1-7/8	14	-	1130	-	2486	0.15	0.49	221000	486200	2166.67	*180
*120	5	15	-	1160	-	2552	0.13	0.42	252000	554400	2470.59	*160

Marina Maxi: 8 Strand

Dia. mm	Dia. Inch	Cir. Inch	Wt. Per 220 Mtrs. In Kgs.	Wt. Per 200 Mtrs. In Kgs.	Wt. Per 220 Mtrs. In Lbs.	Wt. Per 200 Mtrs. In Lbs.	Mtr/ Kg	Feet/ Kg	MBL			Maximum Length Mtr.
									Kgf	Lbs	KN	
40	1-5/8	5	174	158.18	382.80	348.00	1.26	4.15	31100	68420	304.90	250
44	1-3/4	5-1/2	213	193.64	468.60	426.00	1.03	3.39	37100	81620	363.73	220
48	1-15/16	6	252	229.09	554.40	504.00	0.87	2.86	43600	95920	427.45	400
52	2-1/16	6-1/2	295.00	268.18	649.00	590.00	0.75	2.45	50600	111320	496.08	375
56	2-1/4	7	343.00	311.82	745.60	686.00	0.64	2.10	58100	127820	569.61	300
60	2-3/8	7-1/2	395.00	359.09	869.00	790.00	0.56	1.83	66100	145420	648.04	275
64	2-1/2	8	448.00	407.27	985.60	896.00	0.49	1.61	74600	164120	731.37	250
68	2-15/16	8-1/2	505.00	459.09	1111.00	1010.00	0.44	1.43	83700	184140	820.59	425
72	2-7/8	9	566.00	514.55	1245.20	1132.00	0.39	1.27	93300	205260	914.71	400
76	3	9-1/2	633.00	575.45	1392.60	1266.00	0.35	1.14	104150	229130	1021.08	350
80	3-1/4	10	701.00	637.27	1542.20	1402.00	0.31	1.03	115000	253000	1127.45	325
84	3-1/2	10-1/2	775.00	704.55	1705.00	1550.00	0.28	0.93	126500	278300	1240.20	275
88	3-15/16	11	850.00	772.73	1870.00	1700.00	0.26	0.85	138000	303600	1352.94	250
96	3-3/4	12	1007.00	915.45	2215.40	2014.00	0.22	0.72	163000	358600	1598.04	220
*100	4	12-1/2	-	998.00	-	2196.00	0.20	0.66	176550	388410	1730.88	*200
*104	4-1/2	13	-	1026.00	-	2257.20	0.18	0.59	190100	418220	1863.73	*190
*112	1-7/8	14	-	1003.00	-	2206.60	0.15	0.49	215160	473352	2109.41	*160
*120	5	15	-	1008.00	-	2217.60	0.13	0.42	247000	543400	2421.57	*140