

MOORTUF FX

POLYOLEFIN & POLYESTER, 8- AND 12-STRAND

Moortuf FX offers a high strength to weight ratio and is an excellent replacement for heavier polyester lines. It's unique blend of polyester and polypropylene in each strand makes for a highly efficient construction. Moortuf FX is torque balanced, has excellent wear resistance, and is one of the quickest ropes to splice.

Moortuf FX is an excellent choice as mooring, tie-up and pendant lines, tug assist lines and for general purpose heavy marine applications.

Features & Benefits

- Low stretch
- High strength
- Torque free
- Easy splicing
- Soft hand
- Excellent abrasion resistance
- Lighter than 100% polyester ropes

Applications

- Vessel mooring lines
- Tug assist lines
- General purpose heavy marine applications

Type approved product



Nominal Diameter		Size (circ in.)	Approximate Weight		Minimum Tensile Spliced		Minimum Tensile Unspliced	
inch	mm		lbs/100ft	kg/100m	lbs	MT (tonnes)	lbs	MT (tonnes)
8- and 12-Strand								
32	1-5/16	4	32	48	43,439	19.7	48,290	21.9
34	1-3/8	4-1/8	36	54	48,951	22.2	54,464	24.7
36	1-1/2	4-1/2	41	61	54,905	24.9	61,079	27.7
38	1-9/16	4-3/4	46	68	61,299	27.8	68,135	30.9
40	1-5/8	5	50	75	67,914	30.8	75,411	34.2
42	1-11/16	5-1/4	56	83	74,088	33.6	82,247	37.3
44	1-3/4	5-1/2	61	91	80,483	36.5	89,523	40.6
46	1-7/8	5-3/4	67	100	87,318	39.6	97,020	44.0
48	2	6	73	109	94,154	42.7	104,517	47.4
50	2-1/16	6 1/4	79	118	102,092	46.3	113,337	51.4
52	2-1/8	6 1/2	85	127	110,250	50.0	122,378	55.5
54	2-3/16	6 3/4	93	138	117,747	53.4	130,757	59.3
56	2-1/4	7	99	148	125,465	56.9	139,356	63.2
58	2-3/8	7 1/4	107	159	134,285	60.9	149,279	67.7
60	2-1/2	7 1/2	115	171	143,766	65.2	159,642	72.4
62	2-9/16	7 3/4	122	182	152,586	69.2	169,565	76.9
64	2-5/8	8	130	193	161,847	73.4	179,928	81.6
66	2-11/16	8 1/4	138	206	171,770	77.9	190,953	86.6
68	2-3/4	8 1/2	146	218	182,133	82.6	202,419	91.8
70	2-7/8	8 3/4	155	231	192,056	87.1	213,444	96.8
72	3	9	164	244	202,419	91.8	224,910	102.0
74	3-1/16	9 1/4	173	258	213,444	96.8	237,038	107.5
76	3-1/8	9 1/2	183	273	224,690	101.9	249,606	113.2
78	3-3/16	9 3/4	193	288	236,156	107.1	262,395	119.0
80	3-1/4	10	203	303	248,063	112.5	275,625	125.0
82	3-3/8	10-1/4	213	318	259,088	117.5	287,973	130.6
84	3-1/2	10-1/2	224	334	270,554	122.7	300,542	136.3
86	3-9/16	10-3/4	235	350	282,020	127.9	313,331	142.1
88	3-5/8	11	246	367	293,706	133.2	326,340	148.0
90	3-11/16	11-1/4	258	384	306,275	138.9	340,232	154.3
92	3-3/4	11-1/2	268	400	319,064	144.7	354,564	160.8
94	3-7/8	11-3/4	280	417	332,073	150.6	368,897	167.3
96	4	12	292	435	345,303	156.6	383,670	174.0
98	4-1/16	12-1/4	305	454	359,856	163.2	399,767	181.3
100	4-1/8	12-1/2	317	473	374,409	169.8	416,084	188.7
102	4-3/16	12-3/4	331	493	389,624	176.7	432,842	196.3
104	4-1/4	13	344	513	404,838	183.6	449,820	204.0
106	4-3/8	13-1/4	358	533	420,714	190.8	467,460	212.0
108	4-1/2	13-1/2	371	553	437,031	198.2	485,541	220.2
110	4-9/16	13-3/4	385	574	453,569	205.7	503,843	228.5
112	4-5/8	14	399	595	470,327	213.3	522,585	237.0
114	4-11/16	14-1/4	413	616	487,305	221.0	541,328	245.5
116	4-3/4	14-1/2	428	638	504,504	228.8	560,511	254.2
118	4-7/8	14-3/4	443	660	521,924	236.7	579,915	263.0
120	5	15	458	683	539,784	244.8	599,760	272.0

Tensile Strengths are determined in accordance with Cordage Institute CI-1500, Test Methods for Fiber Rope and ISO 2307. Published Minimum Tensile Strength (MTS) assumes spliced eye terminations at each end of the rope. Weights actually calculated at linear density under stated preload (200d²) plus 4%. Diameter and circumference size published are nominal and reflect rope size after loading (10 cycles) to 50% of MTS. See reverse side for application and safety information.

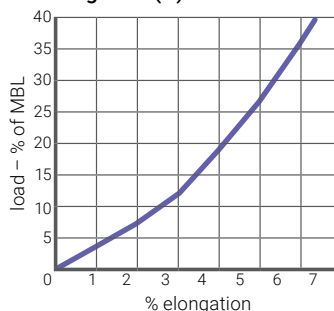
MOORTUF FX

Technical Information

Specific gravity	0.98*
Melting point	329°F (165°C)
Critical temp.	140°F (60°C)
Coefficient of friction	0.12–0.15*
Elongation at break	15–20%
Fiber water absorption	0–1%
UV resistance	good
Wet abrasion	good
Dry abrasion	good

* value based on data supplied by the fiber manufacturer for new, dry fiber

Moortuf FX, 8- and 12-Strand
Elongation (%)



Rope Specifications

Minimum Tensile Strength Minimum tensile strengths shown are for new (unused) rope and will decrease after use. All tests are performed in accordance with Cordage Institute Standard CI 1500-02. The rope strength will be reduced after use due to heat, abrasion, ultraviolet or chemical exposure. The tensile strengths may be further reduced by up to 50% as a result of knots or kinks. Minimum tensile strengths are defined as two standard deviations (typical about 10%) below the average.

Maximum Working Loads Maximum working loads are determined by dividing the tensile strength by the safety factor. The safety factor is a function of the physical properties of the rope, the age and history of the rope, the type of service it will be subjected to and the risks involved if failure occurs. For a rope manufacturer to give blanket working load recommendations would be like a car manufacturer giving the "safe driving speed" of their cars. Obviously the conditions of use far outweigh the design characteristics of the rope. Typically safety factors vary from 3:1 (for new rope used in applications with uniform loading and where failure would cause little or no risk to equipment or personnel) to 20:1 (for conditions involving moderate shock loading, possibility of snags or kinks or where failure could cause severe risk to equipment or personnel).

Rope Weights Rope weights shown are average and may vary plus or minus 5%.

Working Elongation Working elongation is shown from a preload tension of 200 times the diameter squared per the Cordage Institute Standard.

Special Requirements

Factory Splicing Various types are available for all of our ropes. Splices can be provided with various types of chafe protection or coatings.

Custom Lengths Special constructions are available on request.

Rope Terminations Cortland International can provide custom terminations such as thimbles, links, rings and custom hardware. Terminations are available in plastic, bronze, stainless steel and galvanized steel. Please call, or email your requirements to contact@cortlandinternational.com for a quotation.

Special Coatings Coatings such as polyurethane, polyethylene and vinyl esters may be applied to any of the synthetic ropes to improve snag resistance, sunlight resistance or for color coding. Cortland can provide ropes with a variety of finishes to meet your needs.

Commercial and Military Specifications Certificates of compliance are supplied at no charge if requested when placing the order. Certified test reports can be provided at an additional charge when requested at the time of the order.