## **PRODUCT DATA SHEET**

## TOUGH - MIX PRO<sup>™</sup> 3/8/12

High Tenacity Polyolefin & Polyester Mixed

## Structure: 8/12-strand

The reinforced composition of high tenacity polyester & polyolefin creates superior breaking strength. The technically designed construction provides higher tensile strength, more flexibility and better abrasion resistance than normal composite rope. TOUGH-MIX PLUS retains stability, safety and higher residual tensile strength after repeated mooring operations.

Features:

Specific Gravity: 0.99 Melting Point: 165/260 Abrasion Resistance: Very Good UV Resistance: Very Good UV Resistance: Very Good Water Absorption: 0% Wet-dry Strength Ratio: Dry ≈ Wet Applications: Mooring and Tie-up Lines Mooring Pendants Tug Assist Lines Anchor Lines Towing Lines Mooring Lines

Dia		Circ.	Weight		Code	8-Strand					12-Strand			
						Unspliced MBL		LDBF, Spliced MBL		Code	Unspliced MBL		LDBF, Spliced MBL	
mm	inch	inch	kg/100m	lbs/100ft		ton	kN	ton	kN		ton	kN	ton	kN
24	1	3	30.7	20.6	6109514	13.3	130	11.9	117	6109614	13.7	133.9	12.3	121
26	1-1/16	3-1/4	36.1	24.2	6109515	15.6	153	14.1	138	6109615	16.1	157.6	14.5	142
28	1-1/8	3-1/2	41.8	28.1	6109516	18.0	176	16.1	158	6109616	18.5	181.3	16.6	163
30	1-1/4	3-3/4	48.1	32.3	6109517	20.4	200	18.4	180	6109617	21.0	206.0	18.9	185
32	1-5/16	4	54.7	36.7	6109518	23.0	225	20.7	203	6109618	23.6	231.8	21.3	209
36	1-1/2	4-1/2	69.2	46.5	6109520	29.0	284	26.0	255	6109620	29.8	292.5	26.8	263
40	1-5/8	5	85.4	57.3	6109522	35.4	347	31.8	312	6109622	36.5	357.4	32.8	321
44	1-3/4	5-1/2	103.3	69.4	6109523	42.4	416	38.2	374	6109623	43.7	428.5	39.3	385
48	2	6	122.1	82.0	6109525	50.1	491	45.2	443	6109625	51.6	505.7	46.6	456
52	2-1/8	6-1/2	145.2	97.5	6109526	58.4	572	52.7	516	6109626	60.1	589.2	54.2	531
<b>56</b>	2-1/4	7	167.2	112.3	6109527	67.3	660	60.6	594	6109627	69.4	679.8	62.4	612
60	2-1/2	7-1/2	192.5	129.2	6109528	76.8	753	69.2	678	6109628	79.1	775.6	71.3	698
64	2-5/8	8	218.9	147.0	6109530	86.9	852	78.3	767	6109630	89.5	877.6	80.6	790
68	3-3/4	8-1/2	247.5	166.2	6109531	97.3	954	87.7	859	6109631	100.3	982.6	90.3	885
72	3	9	277.2	186.1	6109533	108.7	1065	97.9	959	6109633	111.9	1097.0	100.8	988
80	3-1/4	10	342.1	229.7	6109536	132.7	1300	119.4	1170	6109636	136.6	1339.0	123.0	1205
88	3-5/8	11	412.5	276.9	6109538	159.8	1566	143.3	1404	6109638	164.6	1613.0	147.6	1446
96	4	12	491.7	330.1	6109540	188.8	1850	169.5	1661	6109640	194.4	1905.5	174.6	1711
104	4-1/4	13	578.6	388.5	6109542	219.1	2147	197.0	1931	6109642	225.7	2211.4	203.0	1989
112	4-5/8	14	665.5	446.8	6109545	253.5	2484	228.7	2241	6109645	261.1	2558.5	235.5	2308
120	5	15	767.8	515.5	6109548	289.3	2835	260.4	2552	6109648	298.0	2920.1	268.2	2629
128	5-1/4	16	874.5	587.1	6109549	326.5	3200	293.5	2876	6109649	336.3	3296.0	302.3	2962
136	5-5/8	17	984.5	661.0	6109551	366.4	3591	329.3	3227	6109651	377.4	3698.7	339.2	3324
144	6	18	1111	745.9	6109552	409.2	4010	367.9	3605	6109652	421.5	4130.3	378.9	3713
152	6-1/4	19	1243	834.5	6109554	453.3	4442	407.8	3996	6109654	466.9	4575.3	420.0	4116
160	6-5/8	20	1375	923.1	6109555	500.1	4901	450.5	4415	6109655	515.1	5048.0	464.0	4547

a. Bespoke diameter and length is available.

b. ±5% tolerance according to ISO 2307:2010.

c. LDBF=Line Design Break Force according to MEG4 0CIMF Guidelines.



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