

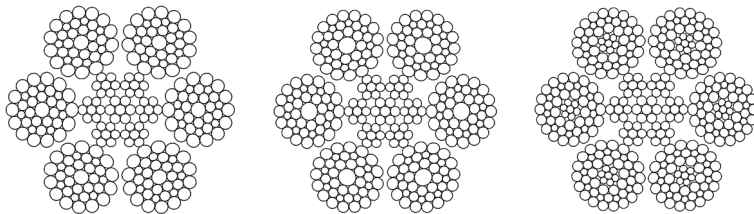
*BruntonShaw*  
STRENGTH IN SERVICE

# ROPES FOR MOORING AND ANCHORING

# 6 STRAND CONVENTIONAL ROPES

Nominal diameter		Mass				Minimum Breaking			
Metric	Imperial	Metric		Imperial		Force		Load	
		Air	Water	Air	Water	EIPS	EEIPS	EIPS	EEIPS
mm	inches	kg/m	kg/m	lb/ft	lb/ft	kN	kN	Tonnes	Tonnes
52	2	10.5	8.86	7.05	5.96	1680	1840	171	188
54	2-1/8	11.0	9.28	7.39	6.24	1760	1930	179	197
		12.4	10.5	8.33	7.06	1970	2160	201	220
58	2-1/4	13.9	11.7	9.34	7.86	2200	2420	224	247
60	2-3/8	15.5	13.1	10.4	8.80	2400	2690	245	274
64	2-1/2	17.3	14.6	11.6	9.81	2690	2950	274	301
67	2-5/8	19.1	16.1	12.8	10.8	2930	3240	299	330
	2-3/4	20.1	16.9	13.6	11.4	3170	3420	323	348
71		20.8	17.5	14.0	11.8	3270	3530	333	360
74	2-7/8	22.2	18.7	14.9	12.7	3450	3740	351	381
		22.8	19.2	15.3	12.9	3540	3840	361	392
	3	24.2	20.4	16.3	13.7	3730	4070	380	415
77		24.7	20.8	16.6	14.0	3810	4160	389	424
80	3-1/8	26.8	22.6	18.0	15.2	4090	4490	417	458
83	3-1/4	29.0	24.5	19.5	16.5	4380	4830	447	493
87	3-3/8	30.4	25.6	20.4	17.2	4640	5030	473	513
		31.3	26.4	21.0	17.7	4780	5180	487	528
90	3-1/2	33.8	28.5	22.7	19.2	5090	5520	519	563
92	3-5/8	35.4	29.9	23.8	20.1	5360	5860	547	598
96	3-3/4	38.7	32.6	26.0	21.9	5740	6270	585	639
	4	42.8	36.1	28.8	24.2	6340	6500	646	663
103		44.0	37.1	29.6	24.9	6520	6680	665	681

*These figures are for guidance only. Other features, such as MBF, dimensions and lay type can be designed on request.*



- Suitable for anchor mooring and pennants
- Conforming to API Specification 9A and other International Standards

# TITAN - 6 STRAND

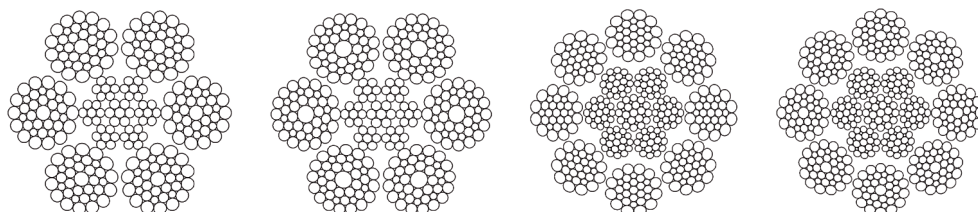
Nominal diameter		Mass				Minimum Breaking					
Metric Imperial		Metric		Imperial		Force Load		Force Load		Force Load	
		Air	Water	Air	Water	TITAN		SUPERTITAN		TITANMAX	
mm	inches	kg/m	kg/m	lb/ft	lb/ft	kN	Tonnes	kN	Tonnes	kN	Tonnes
52	2	10.7	9.02	7.19	6.06	1950	199	2120	217		
54	2-1/8	11.2	9.45	7.53	6.35	2040	208	2220	227		
		12.7	10.7	8.54	7.19	2300	234	2490	254		
58	2-1/4	14.2	12.0	9.54	8.06	2540	259	2760	282		
60	2-3/8	15.7	13.2	10.6	8.87	2810	287	3060	312		
64	2-1/2	17.5	14.8	11.8	9.95	3100	316	3370	343		
67	2-5/8	19.3	16.3	13.0	11.0	3390	346	3690	376		
	2-3/4	20.5	17.3	13.7	11.6	3590	366	3900	397		
71		21.2	17.9	14.2	12.0	3710	378	4030	410		
74	2-7/8	22.6	19.1	15.2	12.9	3930	400	4270	435		
		23.2	19.6	15.6	13.2	4030	411	4380	447		
	3	24.8	20.9	16.6	14.0	4280	437	4650	474	4840	494
77		25.3	21.3	17.0	14.3	4370	446	4750	484	4940	504
80	3-1/8	27.4	23.1	18.4	15.5	4710	480	5120	522	5320	543
83	3-1/4	29.6	25.0	19.9	16.8	5070	517	5510	562	5730	584
	3-3/8	31.1	26.2	20.9	17.6	5170	526	5730	584	5960	608
87		32.0	27.0	21.5	18.1	5320	542	5900	602	6140	626
90	3-1/2	34.4	29.0	23.1	19.5	5670	578	6290	642	6670	680
92	3-5/8	36.8	31.0	24.7	20.8	5990	611	6660	679	6970	710
96	3-3/4	39.5	33.3	26.5	22.4	6330	645	7030	717	7260	740
	4	43.2	36.4	29.0	24.4	6930	706	7700	784		
103		44.4	37.4	29.8	25.1	7120	726	7910	806		
105	4-1/8	47.4	40.0	31.9	26.9	7310	745	8120	828		
108	4-1/4	50.2	42.3	33.7	28.4	8030	819	8930	910		
115	4-1/2	56.2	47.4	37.8	31.9	8860	903	9850	1000		
121	4-3/4	62.6	52.8	42.1	35.5	9760	995	10840	1110		
127	5	69.4	58.5	46.6	39.3	10800	1100	12000	1220		

These figures are for guidance only. Other features, such as MBF, dimensions and lay type can be designed on request.

# TITAN - 8 STRAND

Nominal diameter		Mass				Minimum Breaking			
Metric Imperial		Metric		Imperial		Force Load		Force Load	
		Air	Water	Air	Water	TITAN		SUPERTITAN	
mm	inches	kg/m	kg/m	lb/ft	lb/ft	kN	Tonnes	kN	Tonnes
121	4-3/4	64.1	54.1	43.1	36.4	9760	1000	10800	1110
127	5	71.0	59.9	47.7	40.3	10800	1100	12000	1220
134	5-1/4	78.3	66.0	52.6	44.4	12100	1240		
140	5-1/2	85.9	72.4	57.7	48.7	13300	1360		
146	5-3/4	93.9	79.2	63.1	53.2	14600	1490		
154	6	102	86.0	68.5	57.8	15800	1620		

These figures are for guidance only. Other features, such as MBF, dimensions and lay type can be designed on request.

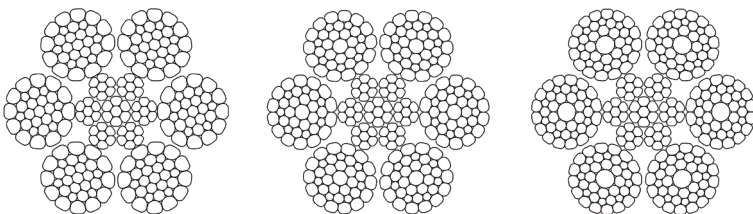


- Recommended for anchor mooring and pennants
- High load capacity
- High shock resistance

# TITAN - 6 STRAND COMPACTED

Nominal diameter		Mass				Minimum Breaking	
Metric	Imperial	Metric		Imperial		Force	Load
		Air	Water	Air	Water		
mm	inches	kg/m	kg/m	lb/ft	lb/ft	kN	Tonnes
52	2	11.6	9.78	7.80	6.57	2300	234
54	2-1/8	12.2	10.3	8.20	6.92	2400	245
		13.2	11.1	8.87	7.46	2590	264
56		14.1	12.0	9.48	8.00	2790	284
58	2-1/4	14.8	12.5	9.95	8.40	2900	296
60	2-3/8	16.2	13.7	10.9	9.21	3200	326
64	2-1/2	18.2	15.3	12.2	10.3	3580	365
67	2-5/8	20.1	17.0	13.5	11.4	3950	403
	2-3/4	22.0	18.6	14.8	12.5	4340	443
71		22.7	19.1	15.3	12.8	4480	457
	2-7/8	24.0	20.2	16.1	13.6	4740	483
74		24.7	20.8	16.6	14.0	4860	496
	3	26.2	22.1	17.6	14.9	5160	526
77		26.7	22.5	17.9	15.1	5270	537
80	3-1/8	28.4	24.0	19.1	16.1	5600	571
83	3-1/4	30.8	26.0	20.7	17.5	6060	618
	3-3/8	33.1	27.9	22.2	18.8	6530	666
87		34.1	28.8	22.9	19.4	6730	686
90	3-1/2	35.6	30.0	23.9	20.2	7020	716
92	3-5/8	38.2	32.2	25.7	21.6	7290	743
96	3-3/4	41.0	34.6	27.6	23.3	7820	797
	3-7/8	43.7	36.9	29.4	24.8	8140	830
	4	46.6	39.3	31.3	26.4	8680	885
103		47.8	40.3	32.1	27.1	8910	909

*These figures are for guidance only. Other features, such as MBF, dimensions and lay type can be designed on request.*

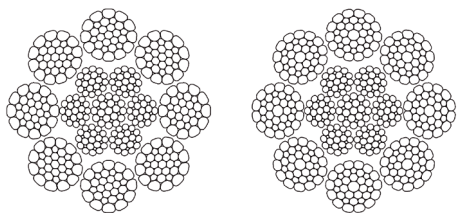


- Recommended for mooring and anchor lines
- High load capacity
- High shock resistance

# TITAN - 8 STRAND COMPACTED

Nominal diameter		Mass				Minimum Breaking	
Metric	Imperial	Metric		Imperial		Force	Load
		Air	Water	Air	Water		
mm	inches	kg/m	kg/m	lb/ft	lb/ft	kN	Tonnes
52	2	11.9	10.0	8.00	6.75	2300	234
54	2-1/8	12.4	10.5	8.33	7.06	2400	245
		13.4	11.3	9.01	7.59	2600	265
56		14.4	12.1	9.68	8.13	2800	285
58	2-1/4	15.1	12.7	10.2	8.54	2910	297
60	2-3/8	16.6	14.0	11.2	9.41	3210	327
64	2-1/2	18.5	15.6	12.4	10.5	3590	366
67	2-5/8	20.5	17.3	13.8	11.6	3960	404
	2-3/4	22.5	19.0	15.1	12.8	4350	444
71		23.2	19.6	15.6	13.2	4490	458
	2-7/8	24.5	20.7	16.5	13.9	4750	484
74		25.2	21.3	16.9	14.3	4870	497
	3	26.7	22.5	17.9	15.1	5170	527
77		27.3	23.0	18.3	15.5	5280	538
80	3-1/8	29.0	24.5	19.5	16.5	5610	572
83	3-1/4	31.4	26.5	21.1	17.8	6070	619
	3-3/8	33.8	28.5	22.7	19.2	6540	667
87		34.8	29.4	23.4	19.8	6740	687
90	3-1/2	36.4	30.7	24.5	20.6	7030	717
92	3-5/8	38.1	32.1	25.6	21.6	7070	721
96	3-3/4	40.9	34.5	27.5	23.2	7590	774
	3-7/8	43.6	36.8	29.3	24.7	7900	806
	4	46.5	39.2	31.3	26.3	8420	859
103		47.7	40.2	32.1	27.0	8660	883
105	4-1/8	49.4	41.7	33.2	28.0	8960	914
108	4-1/4	52.5	44.3	35.3	29.8	9520	971
115	4-1/2	58.8	49.6	39.5	33.3	10700	1090
121	4-3/4	65.6	55.3	44.1	37.2	11900	1210
127	5	72.6	61.2	48.8	41.1	13200	1340

*These figures are for guidance only. Other features, such as MBF, dimensions and lay type can be designed on request.*



- Recommended for mooring and anchor lines
- High load capacity
- Smoother contact surface in respect to conventional ropes



**Global Design Centre**

Usha Martin Italia srl  
Via Nikolajewka 1  
25062 Concesio (BS)  
Italy

**SALES**

**Brunton Shaw**

Sandy Lane, Worksop  
S80 3ES  
UK  
Tel +44 1909 537 600

**Usha Martin Limited**

2a Shakespeare Sarani  
700071 Kolkata  
India  
Tel +91 33 3980 0300

**De Ruiter Staalkabel b.v.**

Kerkeplaat 10  
3313 LC Dordrecht  
The Netherlands  
Tel +31 78 8200600

**European Management & Marine Corp.**

Howe Moss Place  
AB21 0GS  
Scotland  
Tel +44 1224 775151

**Usha Martin Americas Inc.**

701 Plastics Avenue  
TX 77020  
Houston  
USA  
Tel +1 713 676 1800

**Usha Martin Singapore Pte Ltd**

91 Tuas Bay Drive  
637307  
Singapore  
Tel +65 6265 7756

**Usha Martin China Co Ltd.**

No. 122 East Fu Te No. 1 Rd.  
China ( Shanghai ) Pilot Free  
Trade Zone  
Postal Code: 200131  
Tel +86 21 6858 8699