



### Construction

6x7 (1+6)

Steel Ropes

Rope Diameter mm	Unit Mass kg/m	Additional breaking load (kg)						Minimum breaking load (kg)									
		180		200		220		180		200		220					
		1770	1960	1770	1960	2160	1770	1960	1770	1960	2160	1770	1960	2160			
		kg/mm <sup>2</sup>	N/mm <sup>2</sup>	kg/mm <sup>2</sup>	N/mm <sup>2</sup>	kg/mm <sup>2</sup>	N/mm <sup>2</sup>	kg/mm <sup>2</sup>	N/mm <sup>2</sup>	kg/mm <sup>2</sup>	N/mm <sup>2</sup>	kg/mm <sup>2</sup>	N/mm <sup>2</sup>	kg/mm <sup>2</sup>	N/mm <sup>2</sup>	kg/mm <sup>2</sup>	N/mm <sup>2</sup>
8.00	0.229	4250	4725	5197	3830	4252	4678										
9.00	0.289	5380	5980	6578	4840	5382	5920										
10.00	0.357	6640	7383	8121	5980	6644	7309										
11.00	0.432	8040	8933	9826	7240	8040	8844										
12.00	0.515	9570	10631	11694	8610	9568	10525										
13.00	0.604	11200	12477	13725	10100	11229	12352										
14.00	0.701	13000	14470	15917	11700	13023	14325										
15.00	0.804	14950	16611	18272	13455	14950	16445										
16.00	0.915	17000	18900	20790	15300	17010	18711										
17.00	1.033	19202	21336	23470	17282	19202	21123										
18.00	1.158	21500	23920	26312	19400	21528	23681										
19.00	1.29	23986	26652	29317	21588	23987	26385										
20.00	1.43	26600	29531	32484	23900	26578	29236										
21.00	1.576	29302	32558	35814	26372	29302	32232										
22.00	1.73	32200	35732	39306	28900	32159	35375										
23.00	1.891	35149	39054	42960	31634	35149	38664										
24.00	2.059	38300	42525	46777	34400	38272	42099										
25.00	2.234	41528	46142	50756	37375	41528	45681										
26.00	2.416	44917	49907	54898	40425	44917	49408										
27.00	2.605	48438	53820	59202	43594	48438	53282										
28.00	2.802	52093	57881	63669	46883	52093	57302										

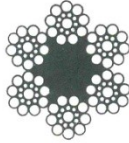


### Construction

7x7 (1+6)

Steel Ropes

Rope Diameter mm	Unit Mass kg/m	Additional breaking load (kg)						Minimum breaking load (kg)									
		180		200		220		180		200		220					
		1770	1960	1770	1960	2160	1770	1960	1770	1960	2160	1770	1960	2160			
		kg/mm <sup>2</sup>	N/mm <sup>2</sup>	kg/mm <sup>2</sup>	N/mm <sup>2</sup>	kg/mm <sup>2</sup>	N/mm <sup>2</sup>	kg/mm <sup>2</sup>	N/mm <sup>2</sup>	kg/mm <sup>2</sup>	N/mm <sup>2</sup>	kg/mm <sup>2</sup>	N/mm <sup>2</sup>	kg/mm <sup>2</sup>	N/mm <sup>2</sup>	kg/mm <sup>2</sup>	N/mm <sup>2</sup>
8.00	0.252	4933	5481	6029	4133	4592	5052										
9.00	0.318	6243	6937	7631	5231	5812	6394										
10.00	0.393	7708	8564	9420	6458	7176	7893										
11.00	0.476	9326	10362	11399	7814	8683	9551										
12.00	0.566	11099	12332	13565	9210	10333	11366										
13.00	0.664	13026	14473	15920	10914	12127	13340										
14.00	0.771	15107	16785	18464	12658	14064	15471										
15.00	0.885	17342	19269	21196	14531	16145	17760										
16.00	1.006	19731	21924	24116	16533	18370	20207										
17.00	1.136	22275	24750	27225	18664	20738	22812										
18.00	1.274	24973	27747	30522	20925	23249	25574										
19.00	1.419	27824	30916	34008	23314	25904	28495										
20.00	1.573	30830	34256	37682	25833	28703	31573										
21.00	1.734	33990	37767	41544	28481	31645	34810										
22.00	1.903	37305	41450	45595	31258	34731	38204										
23.00	2.08	40773	45303	49834	34164	37960	41756										
24.00	2.264	44396	49329	54261	37199	41332	45466										
25.00	2.457	48172	53525	58877	40364	44849	49333										
26.00	2.658	52103	57893	63682	43657	48508	53359										
27.00	2.866	56188	62431	68675	47080	52311	57542										
28.00	3.082	60427	67142	73856	50632	56258	61884										



### Construction

#### 6x19 SEALE (1+9+9)

Steel Ropes

Rope Diameter mm	Unit Mass kg/m	Additional breaking load (kg)						Minimum breaking load (kg)					
		180 1770		200 1960		220 2160		180 1770		200 1960		220 2160	
		kg/mm <sup>2</sup>	N/mm <sup>2</sup>	kg/mm <sup>2</sup>	N/mm <sup>2</sup>	kg/mm <sup>2</sup>	N/mm <sup>2</sup>	kg/mm <sup>2</sup>	N/mm <sup>2</sup>	kg/mm <sup>2</sup>	N/mm <sup>2</sup>	kg/mm <sup>2</sup>	N/mm <sup>2</sup>
8.00	0.238	4433	4926	5419	3813	4236	4660						
9.00	0.302	5611	6234	6858	4826	5362	5898						
10.00	0.373	6927	7697	8467	5957	6619	7281						
11.00	0.451	8382	9313	10245	7208	8009	8810						
12.00	0.537	9975	11084	12192	8579	9532	10485						
13.00	0.63	11707	13008	14309	10068	11187	12305						
14.00	0.73	13577	15086	16595	11677	12974	14271						
15.00	0.838	15586	17318	19050	13404	14894	16383						
16.00	0.954	17734	19704	21674	15251	16946	18640						
17.00	1.077	20020	22244	24468	17217	19130	21043						
18.00	1.207	22444	24938	27432	19302	21447	23591						
19.00	1.345	25007	27786	30564	21506	23896	26285						
20.00	1.49	27709	30788	33866	23830	26477	29125						
21.00	1.643	30549	33943	37338	26272	29191	32110						
22.00	1.803	33528	37253	40978	28834	32037	35241						
23.00	1.971	36645	40717	44788	31515	35016	38518						
24.00	2.146	39900	44334	48768	34315	38127	41940						
25.00	2.329	43295	48106	52916	37234	41371	45508						
26.00	2.519	46828	52031	57234	40272	44747	49221						
27.00	2.716	50499	56110	61721	43429	48255	53080						
28.00	2.921	54309	60343	66378	46706	51896	57085						
29.00	3.134	58258	64731	71204	50102	55669	61235						
30.00	3.353	62345	69272	76199	53617	59574	65531						
31.00	3.581	66571	73967	81364	57251	63612	69973						
32.00	3.815	70935	78816	86698	61004	67782	74560						

### Construction

#### 6x19 SEALE (1+9+9)



Steel Ropes

Rope Diameter mm	Unit Mass kg/m	Additional breaking load (kg)						Minimum breaking load (kg)					
		180 1770		200 1960		220 2160		180 1770		200 1960		220 2160	
		kg/mm <sup>2</sup>	N/mm <sup>2</sup>	kg/mm <sup>2</sup>	N/mm <sup>2</sup>	kg/mm <sup>2</sup>	N/mm <sup>2</sup>	kg/mm <sup>2</sup>	N/mm <sup>2</sup>	kg/mm <sup>2</sup>	N/mm <sup>2</sup>	kg/mm <sup>2</sup>	N/mm <sup>2</sup>
8.00	0.262	5143	5714	6286	4118	4575	5033						
9.00	0.332	6509	7232	7955	5212	5791	6370						
10.00	0.41	8036	8928	9821	6434	7149	7864						
11.00	0.496	9723	10803	11884	7785	8650	9515						
12.00	0.59	11571	12857	14143	9265	10295	11324						
13.00	0.693	13580	15089	16598	10874	12082	13290						
14.00	0.803	15750	17500	19250	12611	14012	15413						
15.00	0.922	18080	20089	22098	14477	16085	17694						
16.00	1.049	20571	22857	25142	16471	18301	20132						
17.00	1.184	23223	25803	28383	18594	20661	22727						
18.00	1.328	26035	28928	31821	20846	23163	25479						
19.00	1.48	29008	32232	35455	23227	25808	28389						
20.00	1.639	32142	35714	39285	25736	28596	31455						
21.00	1.807	35437	39374	43312	28374	31527	34680						
22.00	1.984	38892	43213	47535	31141	34601	38061						
23.00	2.168	42508	47231	51954	34036	37818	41600						
24.00	2.361	46285	51428	56570	37060	41178	45296						
25.00	2.526	50222	55803	61383	40213	44681	49149						
26.00	2.771	54320	60356	66392	43494	48327	53160						
27.00	2.988	58579	65088	71597	46904	52116	57328						
28.00	3.213	62999	69999	76999	50443	56048	61653						
29.00	3.447	67579	75088	82597	54111	60123	66135						
30.00	3.689	72320	80356	88391	57907	64341	70775						
31.00	3.939	77222	85802	94382	61831	68702	75572						
32.00	4.197	82284	91427	100570	65885	73206	80526						



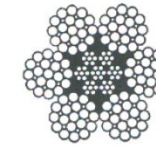


### Construction

### 6x19 Filler (1+6/6+12)

Steel Ropes

Rope Diameter mm	Unit Mass kg/m	Additional breaking load (kg)			Minimum breaking load (kg)		
		180	1770	200	1960	220	2160
		kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>
8.00	0.243	4524	5027	5529	3891	4323	4755
9.00	0.308	5726	6362	6998	4924	5471	6018
10.00	0.38	7069	7854	8639	6079	6754	7430
11.00	0.46	8553	9503	10454	7356	8173	8990
12.00	0.548	10179	11310	12441	8754	9726	10699
13.00	0.643	11946	13273	14601	10273	11415	12556
14.00	0.745	13854	15394	16933	11915	13239	14563
15.00	0.855	15904	17671	19439	13678	15197	16717
16.00	0.973	18096	20106	22117	15562	17291	19020
17.00	1.099	20428	22698	24968	17568	19520	21472
18.00	1.232	22902	25447	27992	19696	21884	24073
19.00	1.373	25518	28353	31188	21945	24383	26822
20.00	1.521	28274	31416	34558	24316	27018	29719
21.00	1.677	31172	34636	38100	26808	29787	32766
22.00	1.84	34212	38013	41815	29422	32691	35961
23.00	2.011	37393	41548	45702	32158	35731	39304
24.00	2.19	40715	45239	49763	35015	38905	42796
25.00	2.376	44179	49087	53996	37994	42215	46437
26.00	2.57	47784	53093	58402	41094	45660	50226
27.00	2.772	51530	57256	62981	44316	49240	54164
28.00	2.981	55418	61575	67733	47659	52955	58250
29.00	3.198	59447	66052	72657	51124	56805	62485
30.00	3.422	63617	70686	77754	54711	60790	66869
31.00	3.654	67929	75477	83024	58419	64910	71401
32.00	3.893	72382	80425	88467	62249	69165	76082



### Construction

### 6x19 Filler (1+6/6+12)

Steel Ropes

Rope Diameter mm	Unit Mass kg/m	Additional breaking load (kg)			Minimum breaking load (kg)		
		180	1770	200	1960	220	2160
		kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>
8.00	0.268	5248	5831	6414	4202	4669	5136
9.00	0.339	6642	7380	8118	5318	5909	6500
10.00	0.418	8200	9111	10022	6565	7295	8024
11.00	0.506	9921	11024	12126	7944	8827	9709
12.00	0.602	11807	13119	14431	9454	10505	11555
13.00	0.707	13857	15397	16937	11096	12328	13561
14.00	0.82	16071	17857	19642	12868	14298	15728
15.00	0.941	18449	20499	22549	14772	16413	18055
16.00	1.071	20991	23323	25656	16807	18675	20542
17.00	1.209	23697	26330	28963	18974	21082	23190
18.00	1.355	26567	29518	32470	21272	23635	25999
19.00	1.51	29600	32889	36178	23701	26334	28968
20.00	1.673	32798	36442	40087	26262	29179	32097
21.00	1.844	36160	40178	44196	28953	32170	35387
22.00	2.024	39686	44095	48505	31776	35307	38838
23.00	2.212	43376	48195	53015	34731	38590	42449
24.00	2.409	47229	52477	57725	37816	42018	46220
25.00	2.614	51247	56941	62636	41034	45593	50152
26.00	2.827	55429	61588	67747	44382	49313	54245
27.00	3.049	59775	66416	73058	47862	53180	58498
28.00	3.279	64285	71427	78570	51473	57192	62911
29.00	3.517	68958	76620	84282	55215	61350	67485
30.00	3.764	73796	81996	90195	59088	65654	72219
31.00	4.019	78797	87553	96308	63093	70104	77114
32.00	4.283	83963	93293	102622	67230	74669	82169





### Construction

### 6x19 STANDARD (1+6+12)

Steel Ropes

Rope Diameter mm	Unit Mass kg/m	Additional breaking load (kg)			Minimum breaking load (kg)		
		180	1770	200	1960	220	2160
		kg/mm <sup>2</sup>	N/mm <sup>2</sup>	kg/mm <sup>2</sup>	N/mm <sup>2</sup>	kg/mm <sup>2</sup>	N/mm <sup>2</sup>
8.00	0.221	4117	4574	5032	3540	3934	4327
9.00	0.28	5210	5789	6368	4481	4979	5477
10.00	0.346	6432	7147	7862	5532	6147	6761
11.00	0.419	7783	8648	9513	6694	7437	8181
12.00	0.498	9263	10292	11321	7966	8851	9736
13.00	0.585	10871	12079	13287	9349	10388	11426
14.00	0.678	12608	14008	15409	10842	12047	13252
15.00	0.778	14473	16081	17689	12447	13830	15213
16.00	0.886	16467	18297	20126	14162	15735	17309
17.00	1.001	18590	20655	22721	15987	17763	19540
18.00	1.121	20841	23157	25472	17923	19915	21906
19.00	1.249	23221	25801	28381	19970	22189	24408
20.00	1.384	25730	28588	31447	22127	24586	27045
21.00	1.526	28367	31519	34671	24396	27106	29817
22.00	1.675	31133	34592	38051	26774	29749	32724
23.00	1.831	34027	37808	41589	29264	32515	35767
24.00	1.993	37051	41167	45284	31864	35404	38944
25.00	2.162	40203	44670	49136	34574	38416	42257
26.00	2.339	43483	48315	53146	37395	41551	45706
27.00	2.522	46892	52103	57313	40327	44808	49289
28.00	2.713	50430	56033	61637	43370	48189	53008
29.00	2.91	54097	60107	66118	46523	51692	56862
30.00	3.114	57892	64324	70757	49787	55319	60851
31.00	3.325	61815	68684	75552	53161	59068	64975
32.00	3.543	65868	73187	80505	56646	62940	69234

### Construction

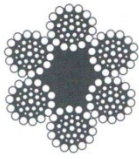
### 6x19 STANDARD (1+6+12)



Steel Ropes

Rope Diameter mm	Unit Mass kg/m	Additional breaking load (kg)			Minimum breaking load (kg)		
		180	1770	200	1960	220	2160
		kg/mm <sup>2</sup>	N/mm <sup>2</sup>	kg/mm <sup>2</sup>	N/mm <sup>2</sup>	kg/mm <sup>2</sup>	N/mm <sup>2</sup>
8.00	0.244	4775	5306	5837	3824	4249	4673
9.00	0.308	6044	6715	7387	4839	5377	5915
10.00	0.381	7462	8291	9120	5975	6638	7302
11.00	0.461	9029	10032	11035	7229	8032	8836
12.00	0.548	10745	11939	13132	8603	9559	10515
13.00	0.643	12610	14011	15412	10097	11219	12341
14.00	0.746	14625	16250	17875	11710	13011	14312
15.00	0.856	16789	18654	20519	13443	14936	16430
16.00	0.974	19102	21224	23347	15295	16994	18694
17.00	1.101	21564	23960	26356	17266	19185	21103
18.00	1.233	24176	26862	29548	19357	21508	23659
19.00	1.374	26936	29929	32922	21568	23964	26361
20.00	1.522	29846	33163	36479	23898	26553	29209
21.00	1.678	32906	36562	40218	26348	29275	32203
22.00	1.842	36114	40127	44139	28917	32130	35342
23.00	2.013	39472	43858	48243	31605	35117	38628
24.00	2.192	42979	47754	52530	34413	38237	42060
25.00	2.379	46635	51817	56998	37341	41490	45639
26.00	2.573	50440	56045	61649	40388	44875	49363
27.00	2.774	54395	60439	66483	43554	48393	53233
28.00	2.984	58499	64999	71499	46840	52045	57249
29.00	3.201	62752	69724	76697	50246	55828	61411
30.00	3.425	67154	74616	82078	53770	59745	65720
31.00	3.657	71706	79673	87641	57415	63794	70174
32.00	3.897	76407	84896	93386	61179	67977	74774





### Construction

## 6x36 WARRINGTON SEALE 1+7+(7+7)+14

Steel Ropes

Rope Diameter mm	Unit Mass kg/m	Additional breaking load (kg)						Minimum breaking load (kg)					
		180 1770		200 1960		220 2160		180 1770		200 1960		220 2160	
		kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>
8.00	0.243	4524	5027	5529	3800	4222	4645						
9.00	0.308	5726	6362	6998	4809	5344	5878						
10.00	0.380	7069	7854	8639	5938	6597	7257						
11.00	0.460	8553	9503	10454	7185	7983	8781						
12.00	0.548	10179	11310	12441	8550	9500	10450						
13.00	0.643	11946	13273	14601	10035	11150	12264						
14.00	0.745	13854	15394	16933	11638	12931	14224						
15.00	0.855	15904	17671	19439	13360	14844	16328						
16.00	0.973	18096	20106	22117	15200	16889	18578						
17.00	1.099	20428	22698	24968	17160	19066	20973						
18.00	1.232	22902	25447	27992	19238	21375	23513						
19.00	1.373	25518	28353	31188	21435	23816	26198						
20.00	1.521	28274	31416	34558	23750	26389	29028						
21.00	1.677	31172	34636	38100	26185	29094	32004						
22.00	1.840	34212	38013	41815	28738	31931	35124						
23.00	2.011	37393	41548	45702	31410	34900	38390						
24.00	2.190	40715	45239	49763	34201	38001	41801						
25.00	2.376	44179	49087	53996	37110	41233	45357						
26.00	2.570	47784	53093	58402	40138	44598	49058						
27.00	2.772	51530	57256	62981	43285	48095	52904						
28.00	2.981	55418	61575	67733	46551	51723	56895						
29.00	3.198	59447	66052	72657	49935	55484	61032						
30.00	3.422	63617	70686	77754	53438	59376	65314						
31.00	3.654	67929	75477	83024	57060	63400	69741						
32.00	3.893	72382	80425	88467	60801	67557	74312						
33.00	4.141	76977	85530	94083	64661	71845	79030						
34.00	4.395	81713	90792	99871	68639	76265	83892						
35.00	4.658	86590	96211	105832	72736	80817	88899						
36.00	4.928	91609	101788	111966	76951	85502	94052						
37.00	5.205	96769	107521	118273	81286	90318	99349						
38.00	5.490	102070	113411	124753	85739	95266	104792						
39.00	5.783	107513	119459	131405	90311	100346	110380						
40.00	6.083	113097	125664	138230	95002	105558	116113						



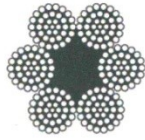
### Construction

## 6x36 WARRINGTON SEALE 1+7+(7+7)+14

Steel Ropes

Rope Diameter mm	Unit Mass kg/m	Additional breaking load (kg)						Minimum breaking load (kg)					
		180 1770		200 1960		220 2160		180 1770		200 1960		220 2160	
		kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>
8.00	0.268	5248	5831	6414	4104	4560	5016						
9.00	0.339	6642	7380	8118	5194	5772	6349						
10.00	0.418	8200	9111	10022	6413	7125	7838						
11.00	0.506	9921	11024	12126	7760	8622	9484						
12.00	0.602	11807	13119	14431	9235	10261	11287						
13.00	0.707	13857	15397	16937	10838	12042	13246						
14.00	0.820	16071	17857	19642	12569	13966	15362						
15.00	0.941	18449	20499	22549	14429	16032	17635						
16.00	1.071	20991	23323	25656	16417	18241	20065						
17.00	1.209	23697	26330	28963	18533	20592	22652						
18.00	1.355	26567	29518	32470	20778	23086	25395						
19.00	1.510	29600	32889	36178	23150	25723	28295						
20.00	1.673	32798	36442	40087	25651	28502	31352						
21.00	1.844	36160	40178	44196	28281	31423	34565						
22.00	2.024	39686	44095	48505	31038	34487	37936						
23.00	2.212	43376	48195	53015	33924	37693	41463						
24.00	2.409	47229	52477	57725	36938	41042	45147						
25.00	2.614	51247	56941	62636	40080	44534	48987						
26.00	2.827	55429	61588	67747	43351	48168	52985						
27.00	3.049	59775	66416	73058	46750	51944	57139						
28.00	3.279	64285	71427	78570	50277	55863	61450						
29.00	3.517	68958	76620	84282	53932	59925	65917						
30.00	3.764	73796	81996	90195	57716	64129	70542						
31.00	4.019	78798	87553	96308	61628	68475	75323						
32.00	4.283	83963	93293	102622	65668	72964	80261						
33.00	4.554	89293	99215	109136	69836	77596	85355						
34.00	4.835	94787	105319	115851	74133	82370	90607						
35.00	5.123	100445	111605	122766	78558	87286	96015						
36.00	5.420	106266	118074	129881	83111	92345	101580						
37.00	5.725	112252	124724	137197	87792	97547	107302						
38.00	6.039	118402	131557	144713	92602	102891	113180						
39.00	6.361	124715	138573	152430	97540	108378	119215						
40.00	6.692	131193	145770	160347	102606	114007	125407						





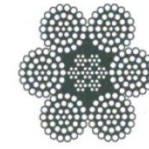
## Construction

## 6x37 STANDARD (1+6+12+18)

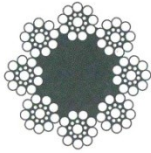
Rope Diameter mm	Unit Mass kg/m	Additional breaking load (kg)						Minimum breaking load (kg)					
		180 1770		200 1960		220 2160		180 1770		200 1960		220 2160	
		kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>
8.00	0.221	4117	4574	5032	3396	3774	4151						
9.00	0.280	5210	5789	6368	4298	4776	5254						
10.00	0.346	6432	7147	7862	5307	5896	6486						
11.00	0.419	7783	8648	9513	6421	7135	7848						
12.00	0.498	9263	10292	11321	7642	8491	9340						
13.00	0.585	10871	12079	13287	8968	9965	10961						
14.00	0.678	12608	14008	15409	10401	11557	12713						
15.00	0.778	14473	16081	17689	11940	13267	14594						
16.00	0.886	16467	18297	20126	13585	15095	16604						
17.00	1.000	18590	20655	22721	15336	17041	18745						
18.00	1.121	20841	23157	25472	17194	19104	21015						
19.00	1.249	23221	25801	28381	19157	21286	23415						
20.00	1.384	25730	28588	31447	21227	23586	25944						
21.00	1.526	28367	31519	34671	23403	26003	28603						
22.00	1.675	31133	34592	38051	25685	28538	31392						
23.00	1.830	34027	37808	41589	28073	31192	34311						
24.00	1.993	37051	41167	45284	30567	33963	37359						
25.00	2.162	40203	44670	49136	33167	36852	40538						
26.00	2.339	43483	48315	53146	35874	39860	43845						
27.00	2.522	46892	52103	57313	38686	42985	47283						
28.00	2.713	50430	56033	61637	41605	46228	50850						
29.00	2.910	54097	60107	66118	44630	49589	54547						
30.00	3.114	57892	64324	70757	47761	53067	58374						
31.00	3.325	61815	68684	75552	50998	56664	62331						
32.00	3.543	65868	73187	80505	54341	60379	66417						
33.00	3.768	70049	77832	85615	57790	64212	70633						
34.00	4.000	74359	82621	90883	61346	68162	74978						
35.00	4.238	78797	87552	96307	65008	72231	79454						
36.00	4.484	83364	92627	101889	68775	76417	84059						
37.00	4.737	88060	97844	107629	72649	80721	88794						
38.00	4.996	92884	103204	113525	76629	85144	93658						
39.00	5.263	97837	108708	119579	80716	89684	98652						
40.00	5.536	102919	114354	125789	84908	94342	103776						
41.00	5.816	108129	120143	132157	89206	99118	109030						
42.00	6.103	113468	126075	138683	93611	104012	114413						
43.00	6.397	118935	132150	145365	98122	109024	119926						
44.00	6.698	124531	138368	152205	102738	114154	125569						
45.00	7.006	130256	144729	159202	107461	119402	131342						
46.00	7.321	136110	151233	166356	112291	124767	137244						
47.00	7.643	142092	157880	173668	117226	130251	143276						
48.00	7.972	148203	164670	181137	122267	135853	149438						

## Construction

## 6x37 STANDARD (1+6+12+18)



Rope Diameter mm	Unit Mass kg/m	Additional breaking load (kg)						Minimum breaking load (kg)					
		180 1770		200 1960		220 2160		180 1770		200 1960		220 2160	
		kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>
8.00	0.244	4775	5306	5837	3668	4076	4483						
9.00	0.308	6044	6715	7387	4642	5158	5674						
10.00	0.381	7462	8291	9120	5731	6368	7005						
11.00	0.461	9029	10032	11035	6935	7705	8476						
12.00	0.548	10745	11939	13132	8253	9170	10087						
13.00	0.643	12610	14011	15412	9686	10762	11838						
14.00	0.746	14625	16250	17875	11233	12481	13730						
15.00	0.856	16789	18654	20519	12895	14328	15761						
16.00	0.974	19102	21224	23347	14672	16302	17932						
17.00	1.100	21564	23960	26356	16563	18404	20244						
18.00	1.233	24176	26862	29548	18569	20633	22696						
19.00	1.374	26936	29929	32922	20690	22989	25288						
20.00	1.522	29846	33163	36479	22925	25472	28019						
21.00	1.678	32906	36562	40218	25275	28083	30891						
22.00	1.842	36114	40127	44139	27739	30821	33904						
23.00	2.013	39472	43858	48243	30318	33687	37056						
24.00	2.192	42979	47754	52530	33012	36680	40348						
25.00	2.379	46635	51817	56998	35820	39800	43780						
26.00	2.573	50440	56045	61649	38743	43048	47353						
27.00	2.774	54395	60439	66483	41781	46423	51065						
28.00	2.984	58499	64999	71499	44933	49926	54918						
29.00	3.201	62752	69724	76697	48200	53555	58911						
30.00	3.425	67154	74616	82078	51581	57313	63044						
31.00	3.657	71706	79673	87641	55077	61197	67317						
32.00	3.897	76407	84896	93386	58688	65209	71730						
33.00	4.145	81257	90285	99314	62413	69348	76283						
34.00	4.400	86256	95840	105424	66253	73615	80976						
35.00	4.662	91405	101561	111717	70208	78009	85810						
36.00	4.932	96702	107447	118192	74277	82530	90783						
37.00	5.210	102149	113499	124849	78461	87179	95897						
38.00	5.496	107745	119717	131689	82759	91955	101150						
39.00	5.789	113491	126101	138711	87172	96858	106544						
40.00	6.089	119386	132651	145916	91700	101889	112078						
41.00	6.398	125429	139366	153303	96342	107047	117752						
42.00	6.713	131623	146247	160872	101099	112333	123566						
43.00	7.037	137965	153294	168624	105971	117745	129520						
44.00	7.368	144457	160507	176558	110957	123286	135614						
45.00	7.707	151097	167886	184675	116058	128953	141848						
46.00	8.053	157887	175430	192973	121273	134748	148223						
47.00	8.407	164827	183141	201455	126603	140670	154737						
48.00	8.769	171915	191017	210119	132048	146720	161392						



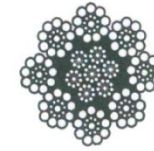
## Construction

## 8x19 SEALE (1+9+9)

Rope Diameter mm	Unit Mass kg/m	Additional breaking load (kg)						Minimum breaking load (kg)					
		180		200		220		180		200		220	
		1770	1960	1770	1960	2160	1770	1960	1770	1960	2160	1770	1960
		kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>
8.00	0.223	3936	4373	4810	3306	3673	4041						
9.00	0.282	4981	5535	6088	4184	4649	5114						
10.00	0.348	6150	6833	7516	5166	5740	6314						
11.00	0.422	7441	8268	9095	6251	6945	7640						
12.00	0.502	8856	9839	10823	7439	8265	9092						
13.00	0.589	10393	11548	12702	8730	9700	10670						
14.00	0.683	12053	13393	14732	10125	11250	12375						
15.00	0.784	13837	15374	16912	11623	12914	14206						
16.00	0.892	15743	17492	19242	13224	14694	16163						
17.00	1.007	17773	19747	21722	14929	16588	18246						
18.00	1.129	19925	22139	24353	16737	18597	20456						

## Construction

## 8x19 SEALE (1+9+9)



Rope Diameter mm	Unit Mass kg/m	Additional breaking load (kg)						Minimum breaking load (kg)					
		180		200		220		180		200		220	
		1770	1960	1770	1960	2160	1770	1960	1770	1960	2160	1770	1960
		kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>
8.00	0.272	5195	5772	6350	3901	4335	4768						
9.00	0.344	6575	7306	8036	4937	5486	6035						
10.00	0.425	8118	9020	9921	6095	6773	7450						
11.00	0.514	9822	10914	12005	7376	8195	9015						
12.00	0.612	11689	12988	14287	8777	9753	10728						
13.00	0.718	13719	15243	16767	10301	11446	12591						
14.00	0.833	15910	17678	19446	11947	13275	14602						
15.00	0.957	18265	20294	22323	13715	15239	16763						
16.00	1.088	20781	23090	25399	15604	17338	19072						
17.00	1.229	23460	26066	28673	17616	19573	21531						
18.00	1.377	26301	29223	32146	19749	21944	24138						





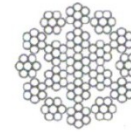
Construction

18x7

Rope Diameter mm	Unit Mass kg/m	Additional breaking load (kg)						Minimum breaking load (kg)					
		180 1770		200 1960		220 2160		180 1770		200 1960		220 2160	
		kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>
10.00	0.383	7351	8168	8985	5734	6371	7008						
11.00	0.463	8895	9883	10872	6938	7709	8480						
12.00	0.551	10586	11762	12938	8257	9174	10092						
13.00	0.647	12424	13804	15185	9691	10767	11844						
14.00	0.750	14409	16010	17611	11239	12487	13736						
15.00	0.861	16540	18378	20216	12902	14335	15769						
16.00	0.980	18819	20910	23001	14679	16310	17941						
17.00	1.106	21245	23606	25967	16571	18413	20254						
18.00	1.240	23818	26465	29111	18578	20643	22707						

Construction

19x7



Rope Diameter mm	Unit Mass kg/m	Additional breaking load (kg)						Minimum breaking load (kg)					
		180 1770		200 1960		220 2160		180 1770		200 1960		220 2160	
		kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>	kgf/mm <sup>2</sup>	N/mm <sup>2</sup>
10.00	0.402	7792	8658	9524	5906	6562	7218						
11.00	0.486	9429	10476	11524	7146	7940	8734						
12.00	0.579	11221	12468	13715	8504	9449	10394						
13.00	0.679	13169	14632	16096	9981	11090	12199						
14.00	0.788	15273	16970	18667	11575	12862	14148						
15.00	0.904	17533	19481	21429	13288	14765	16241						
16.00	1.029	19949	22165	24382	15119	16799	18479						
17.00	1.162	22520	25022	27525	17068	18964	20861						
18.00	1.302	25247	28053	30858	19135	21261	23387						