

Table 5.6.1 Chain cable

Mass of HHP bower anchor, in kg	Length of chain cable, in metres	Stud link chain cable diameter, in mm		
		Mild steel (Grade:1 or U1)	Special quality steel (Grade:U2)	Extra special quality steel (Grade:U3)
11	55	8	-	-
13	55	8	-	-
17	55	8	-	-
22	55	9	-	-
27	55	9	-	-
32	82,5	9	-	-
37	82,5	11,2	-	-
44	82,5	11,2	-	-
52	110	11,2	-	-
59	110	12,5	-	-
80	110	12,5	-	-
117	110	14	12,5	-
154	110	16	14	-
197	137,5	17,5	16	-
240	137,5	19	17,5	-
292	137,5	20,5	17,5	-
360	137,5	22	19	-
428	165	24	20,5	-
495	165	26	22	20,5
585	165	28	24	22
675	192,5	30	26	24
765	192,5	32	28	24
855	192,5	34	30	26
968	192,5	36	32	28
1080	220	38	34	30
1193	220	40	34	30
1305	220	42	36	32
1440	220	44	38	34
1575	220	46	40	36
1710	247,5	48	42	36
1845	247,5	50	44	38

Table 5.7.1 Towlines and moorings

Equipment		Towline
Number		(See Note 1)
Exceeding	Not Exceeding	Minimum length, in metres
-	5	90
5	10	90
10	15	90
15	20	90
20	25	110
25	30	110
30	35	110
35	40	135
40	45	135
45	50	135
50	70	180
70	90	180
90	110	180
110	130	180
130	150	180
150	175	180
175	205	180
205	240	180
240	280	180
280	320	180
320	360	180
360	400	180
400	450	180
450	500	180
500	550	180
550	600	180
600	660	180
660	720	180
720	780	180
750	840	180
840	910	180
910	980	180
980	1060	180
1060	1140	180

NOTES

1. [Towline specified for guidance on](#)

2. Wire ropes used for towlines and moorings should be of the following construction with not less than:

144 wires in six strands with seven fibres per strand

222 wires in six strands with one fibre per strand

The wires to be laid around the fibre core in two layers.

1980	247,5	52	46	40		3. Wire ropes for toelines and mooring which the rope is stored on the winch d			
2138	247,5	54	48	42		4. Irrespective of strength of requiremei			
2295	247,5	56	50	44					

Mooring lines				Table 5.5.1 Anchors			
Notes)	Mooring lines			Equipment number		High holding power bower anchors	
	Minimum breaking strength, in kN	Number of lines	Minimum length of each line, in metres	Exceeding	Not exceeding	Number of anchors	Mass of anchor, in kg
				-	5	1	11
	19,9	2	55	13,9	5	10	13
	22,5	2	55	17,6	10	15	17
	27,7	2	55	21,5	15	20	22
	32,9	2	55	24,5			
	38,1	2	55	26,6	20	25	27
	43,3	2	55	28,2	25	30	32
	48,5	2	55	29,6	30	35	37
	53,7	2	55	30,8			
	58,9	2	70	31,8	35	40	44
	64,1	2	85	32,7	40	45	52
	71,0	2	100	35,5	45	50	59
	82,1	2	100	39,3			
	93,2	2	110	43,1	50	70	80
	104,3	2	110	46,6	70	90	117
	115,3	2	120	50,2	90	110	154
	127,8	2	120	54,4			
	143,0	2	120	58,8	110	130	197
	161,1	2	120	64,2	130	150	240
	181,8	3	120	71,1	150	175	292
	204,0	3	140	78,5			
	226,1	3	140	85,8	175	205	360
	248,3	3	140	93,2	205	240	428
	273,2	3	140	100,5	240	280	495
	300,9	3	140	107,9			
	328,6	4	160	112,8	280	320	585
	356,3	4	160	117,7	320	360	675
	386,8	4	160	122,6	360	400	765
	420,1	4	160	127,5			
	453,3	4	170	132,4	400	450	855
	486,5	4	170	137,3	450	500	968
	522,5	4	170	142,2	500	550	1080
	561,3	4	170	147,1			
	602,9	4	180	156,9	550	600	1193
	647,2	4	180	166,7	600	660	1305
					660	720	1440
	Mooring lines are generally to be of a flexible				720	780	1575
	More cores for strengths up to 490 kN				780	840	1710
	One core for strengths exceeding 490 kN				840	910	1845
	The diameter of each strand are to be up in not less than						

lines used in association with mooring winches (on rum) are to be of suitable construction.		910	980	1	1980
nts, no fibre rope is to be less than 12 mm diameter.		980	1060	1	2138
		1060	1140	1	2295

Table F.1 Anchors, anchor cables and lines of sailing craft and motorsailers

Equipment numeral Z [m ³]	Displacement D [t]	Weight of		Anchor cable		Length [m]
		1. anchor ³ [kg]	2. anchor [kg]	Length ⁴ [m]	Nominal thickness ¹ [mm]	
—	up to 0,15	2,5	—	—	—	5 L
—	at 0,20	3,0	—	—	—	
—	at 0,30	3,5	—	—	—	
—	at 0,40	4,5	—	—	—	
—	at 0,50	5,0	—	—	—	
—	at 0,60	5,5	—	—	—	
—	at 0,75	6,5	—	—	—	
—	at 1,00	7,5	—	—	—	
—	at 1,50	8,7	—	—	—	
up to 10	at 2,00	10,5	9,0	22,5	6,0	
at 15	at 3,00	12,0	10,0	24,0	6,0	
at 20	at 4,00	13,0	10,5	25,0	6,0	
at 25	at 5,00	13,5	11,0	26,0	7,0	
at 30	at 6,00	15,0	13,0	27,0	7,0	
at 40	at 8,00	17,0	15,0	29,0	8,0	
at 55	at 12,00	21,0	18,0	32,5	8,0	
at 70	at 17,00	25,0	21,0	36,0	9,0	
at 90	at 23,00	29,0	25,0	40,0	10,0	4,75 L
at 110	at 29,00	34,5	29,0	43,0	10,0	
at 130	at 36,00	40,0	34,0	47,0	11,0	4,5 L
at 155	at 44,00	46,5	40,0	52,5	13,0	
at 180	at 52,00	53,0	45,0	57,0	13,0	
at 210	at 57,00	62,0	53,0	62,0	13,0	
at 245	at 72,00	73,5	62,0	68,0	14,0	
at 280	at 84,00	84,0	71,0	74,0	16,0	4,25 L
at 300	at 100,00	95,0	81,0	78,0	16,0	

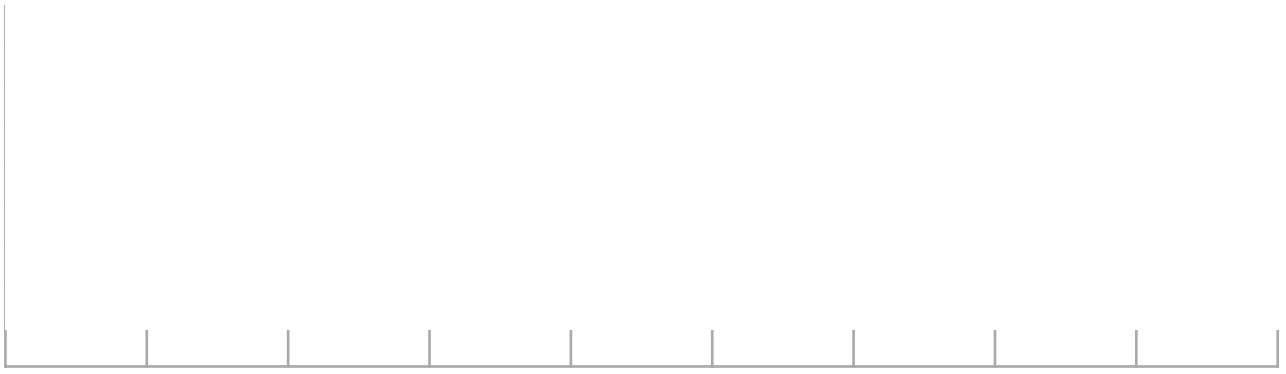
Z Equipment numeral in accordance with Section 1, G.

¹ Nominal thickness of round bar steel chain in accordance with DIN 766, ISO 4565, EN 24565.

² 3-strand hawser-lay polyamide line in accordance with DIN 83330.

³ May be reduced by 25 % if the craft in question operates exclusively on inland waterways (Operating Cat currents and high seas can be excluded. A stock anchor of 1,33 times the weight may be used.

⁴ Applies for one anchor in each case.



Towing line	
gth 1]	Nominal diameter ² [mm]
	12
	12
	12
	12
	12
	14
	14
WL	14
	14
	16
	18
	18
	18
	18
	20
	22
	22
L _{WL}	22
	24
	24
L _{WL}	24
	26
	26
L _{WL}	26
	26
egory V) where strong	

Equipmentnumber Z	127,9
Length	14,625 [m]
Beam	4,55 [m]
H	3,2 [m]
A	0,15 [m3]

