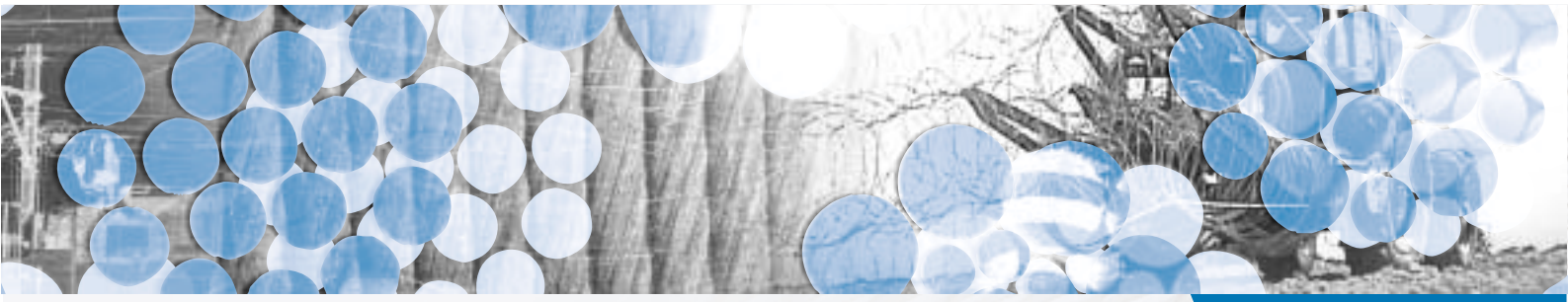

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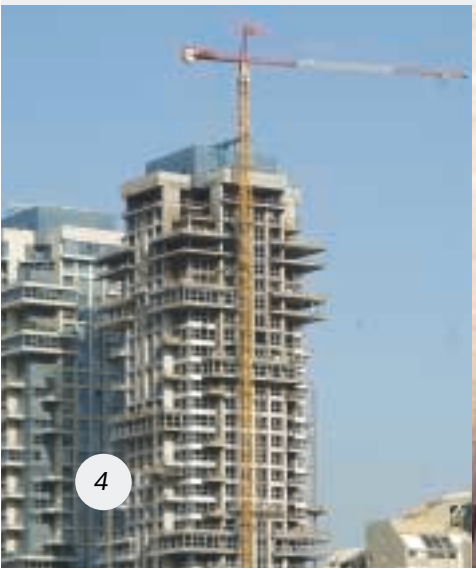
COMPANY PROFILE

HISTORY OF THE COMPANY

Moseroth Ltd. was founded in 1975 in the town of Netivot, Israel by Mr. Ran Pessach.
The mill covers an area of over 20,000 square meters and the company employs 100 people.
The annual volume of sales is in excess of 15,000,000 U.S. dollars.
The Company's main products are:

1. Steel cables 3,000 tons annually
2. Aluminum cables 2,000 tons annually
3. Concertinas 2,500 tons annually
4. Hoisting accessories



MILESTONES IN THE COMPANY'S DEVELOPMENT:

1975
Construction of a factory for production of steel cables.

1983
Construction of a factory for manufacture of concertinas.

1995
Creation of a prestressed concrete cables production line.

1999
Creation of a new production facility and transfer of all the production lines to it.

2000
Creation of production line for aluminum cables.

2001
Development of patent - Rapid Security Barrier.

2002
Development of patent - Spider rescue device for evacuation from high buildings.

2005
Construction of new factory for manufacture of aluminum cables and rescue devices in the framework of the Moseroth Technologies Corp.

THE COMPANY'S PRINCIPAL CUSTOMERS:

1. The Israeli Ministry of Defense and the IDF.
2. The Israel Electrical Company.
3. Israel Ports Development and assets company Ltd.
4. Elevator manufacturers.
5. Building companies.
6. Greenhouse manufacturers.
7. Building hardware stores.

THE COMPANY EXPORTS PRODUCTS TO SEVERAL COUNTRIES, INCLUDING:

1. USA
2. Holland
3. Belgium
4. Greece
5. Cyprus
6. England
7. Germany
8. Finland
9. Canada

QUALITY CONTROL

ISO 9001

The quality control system of Moseroth LTD is ISO 9001 certified since 1995.

The Standards Institution of Israel (SII), which is an independent government body and a member of the IQNet Association, inspects the firm on a regular basis. The quality control system is involved in every aspect of the firm.

Management, production and development are all done according to approved and controlled procedures.

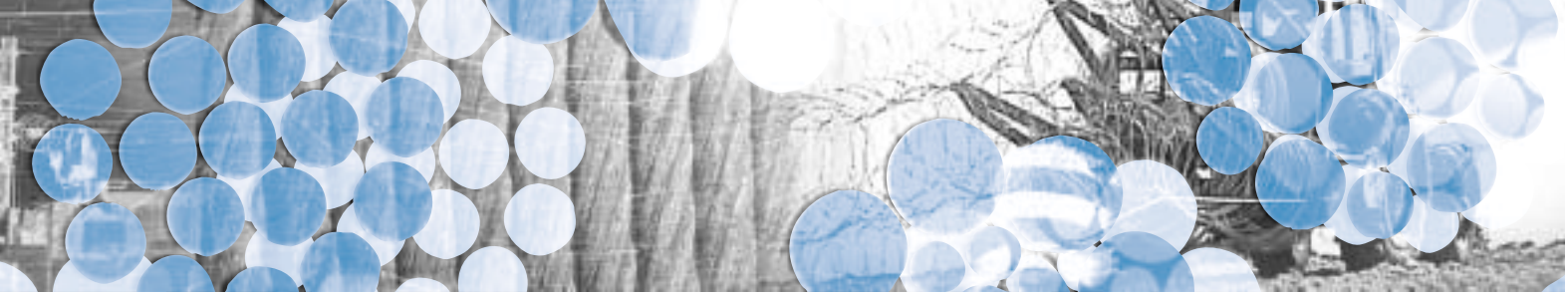
Physical properties of the raw materials, work in process and final products are tested daily.

Our computerized laboratory serves the needs of the company, of our clients and also the needs of other technical laboratories.

The Standards Institution of Israel
SI
ISO 9002
Quality Assured Firm

IQNet
THE INTERNATIONAL CERTIFICATION NETWORK
CERTIFICATE
Quality Management System
ISO 9001:2000

Certificate
This is to certify
that the
Quality Management System of
MOSEROTH LTD
METAVOT



LABORATORY EQUIPMENT INCLUDES:

GEOMETRIC PROPERTIES:

Micrometers
Calipers

MECHANICAL PROPERTIES:

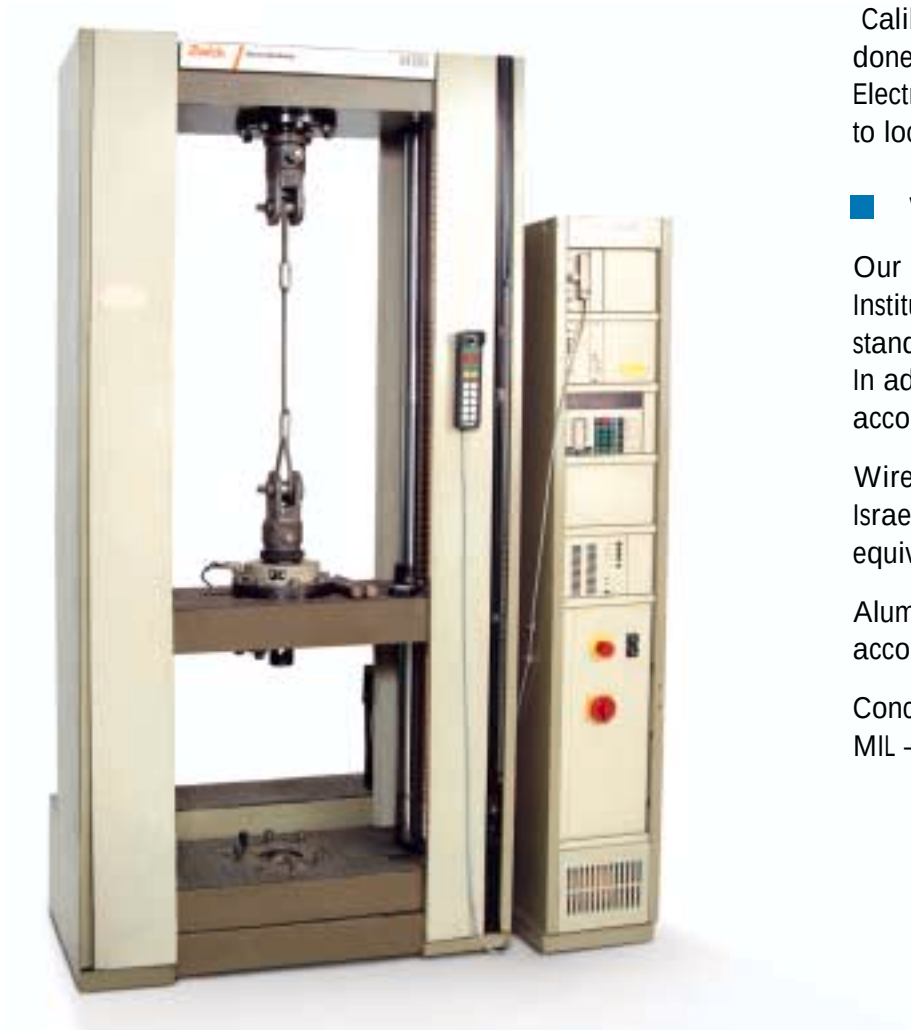
Wire bending testing machine
Wire twisting testing machine
Wire tensile testing machine (up to 1,000 kg)
Wire rope tensile testing machine (up to 25,000 kg)
Wire rope tensile testing bench (up to 150,000 kg)
Wire fatigue testing machine
Wire rope fatigue testing machine

ELECTRICAL PROPERTIES:

Ohm meter
Micro Ohm meter

CHEMICAL PROPERTIES:

Ultrasonic coating thickness meter
Set of test tubes for galvanization test



Calibration of quality control equipment is done at least once a year.
Electronic equipment is used on all machines to locate and prevent defects.

WORKING STANDARDS

Our products are tested by the Standards Institution of Israel (SII), according to Israeli standards.
In addition, the products are manufactured according to international standards.

Wire ropes are manufactured according to: Israeli Standard 565,EN 12385 and other equivalent standards.

Aluminum conductors are manufactured according to: EN50182; IEC JDH6042A/5

Concertinas are manufactured according to: MIL –B-52489-D, NSN –5660-17-0233047

CONTACT US

MOSEROTH LTD.

Ba'alei Hamelacha St. Ind. Area Netivot, Israel 80200
Tel: 972-8-9943666 Fax: 972-8-9942997

MARKETING CENTER

47 Hamerkava St. Ind. Area Holon, Israel 58851
Tel: 972-3-5599260 Fax: 972-3-5599261

מוסרות בע"מ

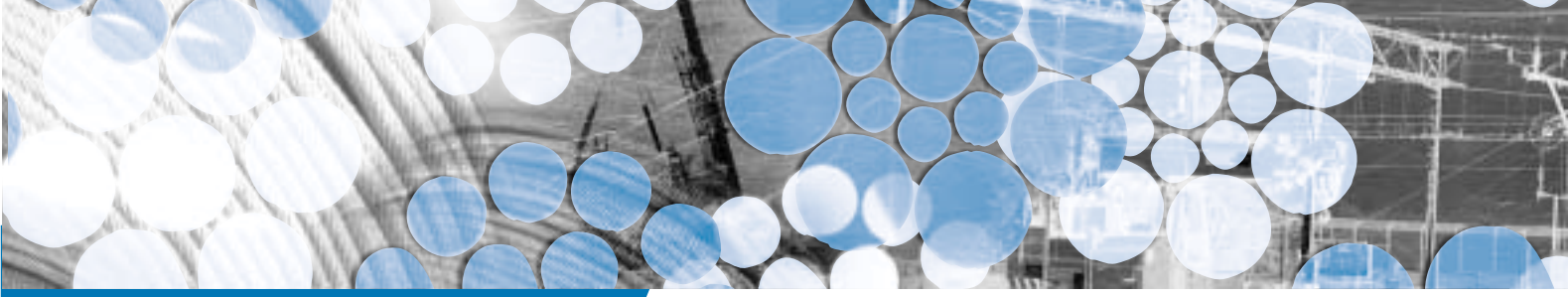
רח' בעלי המלאכה, אזור תעשיה נתיבות 80200
טל: 08-9943666 פקס: 08-9942997

מרכז השיווק

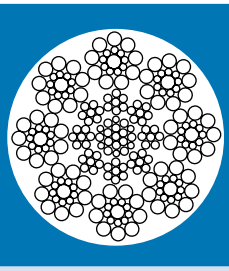
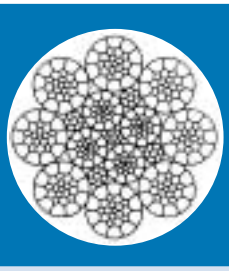
רח' המרכבה 47, אזור תעשיה חולון58851
טל: 03-5599260 פקס: 03-5599261

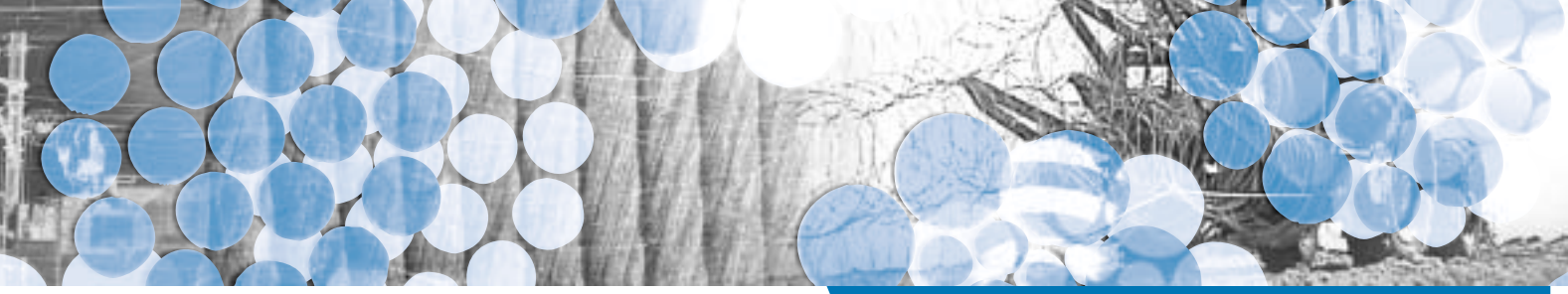
e-mail: mail@moseroth.co.il ▪ marketing center: moni@moseroth.co.il ▪ www.moseroth.co.il

STEEL WIRE ROPES



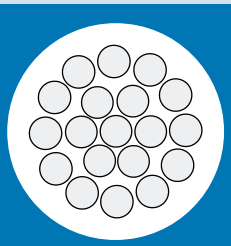
DOUBLE PARALLEL

	 8 STRANDS DOUBLE PARALLEL			 8 STRANDS DOUBLE PARALLEL COMPACTED		
Diameter						
mm	Kg/m	MBL 1960N/mm²	MBL 2160N/mm²	Kg/m	MBL 1960N/mm²	MBL 2160N/mm²
7	0.21	4.000	4.400			
8	0.27	5.170	5.687			
9	0.35	6.500	7.260			
10	0.43	8.230	9.053	0.50	9.400	10.340
12	0.66	12.300	13.530	0.73	11.100	12.210
14	0.89	16.740	18.414	0.95	18.000	19.800
16	1.17	21.870	24.057	1.26	23.800	26.180
18	1.48	27.680	30.448	1.57	29.800	32.780
20	1.83	34.170	37.587	1.97	37.300	41.030
22	2.22	41.350	45.485	2.36	44.600	49.050
24	2.64	49.210	54.131	2.78	52.500	57.750
26	3.10	57.750	63.525	3.27	61.800	67.980
28	3.59	66.980	73.678	3.87	73.200	80.520
30	4.13	76.890	84.579	4.40	83.300	91.630
32	4.70	87.480	96.228	5.04	95.300	104.830
34	5.38	100.200	110.220	5.71	108.000	118.800
36	5.95	110.720	121.792	6.38	121.000	133.100
38	6.71	127.000	139.700	7.14	135.000	148.500
40	7.34	136.690	150.359	7.88	149.000	163.900
42	8.19	156.000	171.600	8.71	165.000	
44	8.96	170.000	187.000	9.60	182.000	



STEEL WIRE ROPES

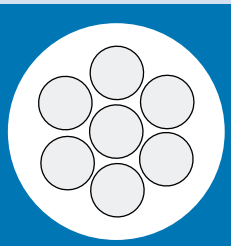
SPIRAL ROPE 1X19 CONSTRUCTION: (1+6+12)



EN 12385

Nominal Diameter	Weight	Calculated Breaking Load	Minimum Breaking Load
		180Kg/mm²	180Kg/mm²
mm	Kg/m	Kg	Kg
1	0,00495	107	94,5
1,5	0.0111	242	213
2	0.0198	430	378
2.5	0.0310	671	591
3	0.0446	967	851
3.5	0.0607	1320	1160
4	0.0793	1720	1510
5	0.124	2690	2360
6	0.178	3870	3400
7	0.243	5260	4630
8	0.317	6870	6050
9	0.401	8700	7660
10	0.495	10700	9450
11	0.599	13000	11400
12	0.713	15500	13600
13	0.837	18200	16000
14	0.971	21100	18500
15	1.11	24200	21300
16	1.27	27500	24200
17	1.43	31000	27300

SPIRAL ROPE 1X7 CONSTRUCTION: (1+6)

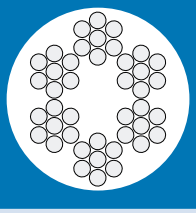


EN 12385

Nominal Diameter	Weight	Calculated Breaking Load	Minimum Breaking Load
		180Kg/mm²	180Kg/mm²
mm	Kg/m	Kg	Kg
0.6	0.00181	39.2	35.3
0.8	0.00372	69.7	62.7
1	0.00502	109	98.6
1.5	0.0113	245	221
2	0.0201	436	392
2.5	0.0314	681	613
3	0.0452	980	882
3.5	0.0615	1330	1206
4	0.0803	1740	1570
4.5	0.102	2210	1980
5	0.126	2720	2450
6	0.181	3920	3530
7	0.246	5340	4800
8	0.321	6970	6270
9	0.407	8820	7940
10	0.502	10900	9800
12	0.723	15700	14100
14	0.984	21300	19200
16	1.29	27900	25100

EN 12385-4 - CLASS 6x7

CONSTRUCTION CROSS SECTION EXAMPLE



6X7-FC

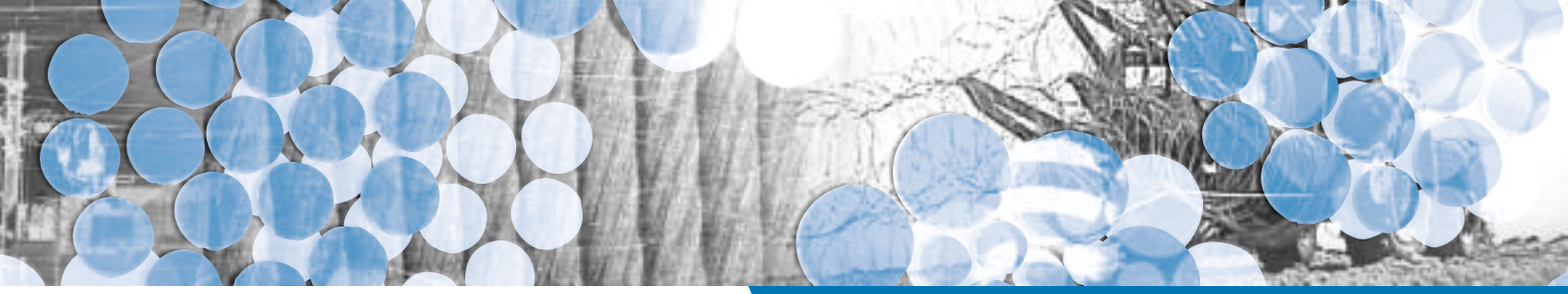
CONSTRUCTION OF ROPE		CONSTRUCTION OF STRAND	
ITEM	QUANTITY	ITEM	QUANTITY
Strands	6	Wires	5 to 9
outer strands	6	Outer wires	4 to 8
layers of strands	1	Layers of wires	1
Wires in rope (excluding metalic core)	30 to 54		

TYPICAL EXAMPLE		No.OF OUTER WIRES		OUTER WIRE FACTOR[1]
ROPE	STRAND	TOTAL	PER STRAND	
6X7	1-6	36	6	0,106

Min. breaking force factor:	K1=0,332	K2=0,359	K3=0,388
Nominal length mass factor[1]	W1=0,345	W2=0,348	
Nominal metallic cross-sectional area factor[1]	C1=0,369	C2=0,432	

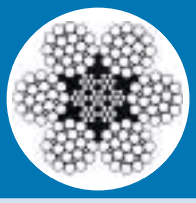
Nominal rope diameter mm	Apporoximate nominal length mass [1] kg/100m		Minimum breaking force kN Rope Grade			
			1770		1960	
	Fibre core	Steel core	Fibre core	Steel core	Fibre core	Steel core
1	2	3	4	5[2]	6	7[2]
2	1,38	1,54	2,35	2,54	2,60	2,81
3	3,11	3,46	5,29	5,72	5,86	6,33
4	5,52	6,14	9,40	10,2	10,40	11,3
5	8.63	9,60	14,7	15,9	16,3	17,6
6	12,4	13,8	21,2	22,9	23,4	25,3
7	16,9	18,8	28,8	31,1	31,9	34,5
8	22,1	24,6	37,6	40,7	41,6	45,0
9	27,9	31,1	47,6	51,5	52,7	57,0
10	34,5	38,4	58,8	63,5	65,1	70,4
11	41,7	46,5	71,1	76,9	78,7	85,1
12	49,7	55,3	84,6	91,5	93,7	101
13	58,3	64,9	99,3	107	110	119
14	67,6	75,3	115	125	128	138
16	88,3	98,3	150	163	167	180
18	112	124	190	206	211	228
20	138	154	235	254	260	281
22	167	186	284	308	315	341
24	199	221	338	366	375	405
26	233	260	397	430	440	476
28	270	301	461	498	510	552
32	353	393	602	651	666	721
36	447	498	762	824	843	912
40	552	614	940	1 040	1 040	1 130

1) Informative only
2) For small diameter ropes (2mm to 7mm) with wire strand core (WSC), k3 may be used for the calculation of breaking forces. The values given in columns 5 and 7 are based om ropes with independent wire rope cores (IWRC).



EN 12385-4 - CLASS 6x19

CONSTRUCTION CROSS SECTION EXAMPLE



6X25F-IWRC

6X19S-FC

CONSTRUCTION OF ROPE		CONSTRUCTION OF STRAND		
ITEM	QUANTITY	ITEM		QUANTITY
Strands	6	Wires		15 to 26
outer strands	6	Outer wires		7 to 12
layers of strands	1	Layers of wires		2 to 3
Wires in rope (excluding steel core)	90 to 156			
TYPICAL EXAMPLE		No.OF OUTER WIRES		OUTER WIRE FACTOR[1)]
ROPE	STRAND	TOTAL	PER STRAND	
6X19S	1-9-9	54	9	0,080
6X25F	1-6-6F-12	72	12	0,064
6X19W	1-6-6+6	72	12 6	0,073
			6	0,055
6X26WS	1-5-5+5-10	60	10	0,074

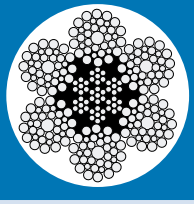
Min. breaking force factor:	K1=0,330	K2=0,356
Nominal length mass factor[1)]	W1=0,359	W2=0,400
Nominal metallic cross-sectional area factor[1)]	C1=0,384	C2=0,449

Nominal rope diameter mm	Apporoximate nominal length mass [1)] kg/100m		Minimum breaking force kN Rope Grade				
			1770		1960		2160
	Fibre core	Steel core	Fibre core	Steel core	Fibre core	Steel core	Steel core
1	2	3	4	5	6	7	8
6	12,9	14,4	21,0	22,7	23,3	25,1	27,7
7	17,6	19,6	28,6	30,9	31,7	34,2	37,7
8	23,0	25,6	37,4	40,3	41,4	44,7	49,2
9	29,1	32,4	47,3	51,0	52,4	56,5	62,3
10	35,9	40,0	58,4	63,0	64,7	69,8	76,9
11	43,3	48,4	70,7	76,2	78,3	84,4	93,0
12	51,7	57,6	84,1	90,7	93,1	100	111
13	60,7	67,6	98,7	106	109	118	130
14	70,4	78,4	114	124	127	137	151
16	91,9	102	150	161	166	179	197
18	116	130	189	204	210	226	249
20	144	160	234	252	259	279	308
22	174	194	283	305	313	338	372
24	207	230	336	363	373	402	443
26	243	270	395	426	437	472	520
28	281	314	458	494	507	547	603
32	368	410	598	645	662	715	787
36	465	518	757	817	838	904	997
40	574	640	935	1 010	1 040	1 120	1 230
44	695	774	1 130	1 220	1 250	1 350	1 490
48	827	922	1 350	1 450	1 490	1 610	1 770
52	971	1 080	1 580	1 700	1 750	1 890	2 080
56	1 130	1 250	1 830	1 980	2 030	2 190	2 410
60	1 290	1 440	2 100	2 270	2 330	2 510	2 770

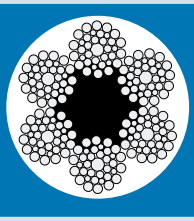
1) Informative only

EN 12385-4 - CLASS 6x36

CONSTRUCTION CROSS SECTION EXAMPLE



6X41WS-IWRC



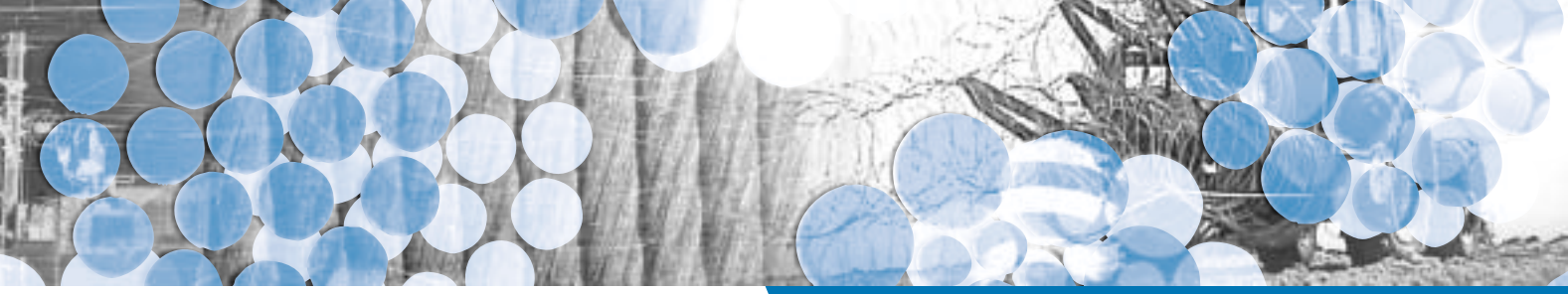
6X36WS-FC

CONSTRUCTION OF ROPE		CONSTRUCTION OF STRAND		
ITEM	QUANTITY	ITEM		QUANTITY
Strands	6	Wires		29 to 57
outer strands	6	Outer wires		12 to 18
layers of strands	1	Layers of wires		3 to 4
Wires in rope (excluding steel core)	174 to 342			
TYPICAL EXAMPLE		No.OF OUTER WIRES		OUTER WIRE FACTOR[1)]
ROPE	STRAND	TOTAL	PER STRAND	
6X31WS	1-6-6+6-12	72	12	0,064
6X36WS	1-7-7+7-14	84	14	0,056
6X41WS	1-8-8+8-16	96	16	0,050
6X49WS	1-8-8-8+8-16	96	16	0,050
6X46WS	1-9-9+9-18	108	18	0,045 5

Min. breaking force factor:	K1=0,330	K2=0,356
Nominal length mass factor[1)]	W1=0,367	W2=0,409
Nominal metallic cross-sectional area factor[1)]	C1=0,393	C2=0,460

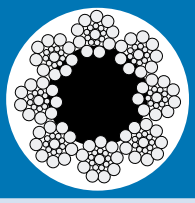
Nominal rope diameter mm	Apporoximate nominal length mass [1)] kg/100m		Minimum breaking force kN Rope Grade				
			1770		1960		2160
	Fibre core	Steel core	Fibre core	Steel core	Fibre core	Steel core	Steel core
1	2	3	4	5	6	7	8
8	23,5	26,2	37,4	40,3	41,4	44,7	49,2
9	29,7	33,1	47,3	51,0	52,4	56,5	62,3
10	36,7	40,9	58,4	63,0	64,7	69,8	76,9
11	44,4	49,5	70,7	76,2	78,3	84,4	93,0
12	52,8	58,9	84,1	90,7	93,1	100	111
13	62,0	69,1	98,7	106	109	118	130
14	71,9	80,2	114	124	127	137	151
16	94,0	105	150	161	166	179	197
18	119	133	189	204	210	226	249
20	147	164	234	252	259	279	308
22	178	198	283	305	313	338	372
24	211	236	336	363	373	402	443
26	248	276	395	426	437	472	520
28	288	321	458	494	507	547	603
32	376	419	598	645	662	715	787
36	476	530	757	817	838	904	997
40	587	654	935	1 010	1 040	1 120	1 230
44	711	792	1 130	1 220	1 250	1 350	1 490
48	846	942	1 350	1 450	1 490	1 610	1 770
52	992	1 110	1 580	1 700	1 750	1 890	2 080
56	1 150	1 280	1 830	1 980	2 030	2 190	2 410
60	1 320	1 470	2 100	2 270	2 330	2 510	2 770

1) Informative only

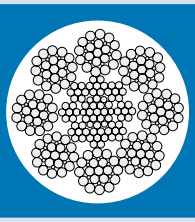


EN 12385-4 - CLASS 8x19

CONSTRUCTION CROSS SECTION EXAMPLE



8X19S-FC



8X25F-IWRC

CONSTRUCTION OF ROPE		CONSTRUCTION OF STRAND		
ITEM	QUANTITY	ITEM		QUANTITY
Strands	8	Wires		15 to 26
outer strands	8	Outer wires		7 to 12
layers of strands	1	Layers of wires		2 to 3
Wires in rope (excluding metallic core)	120 to 208			
TYPICAL EXAMPLE		No.OF OUTER WIRES		OUTER WIRE FACTOR[1)]
ROPE	STRAND	TOTAL	PER STRAND	
8X19S	1-9-9	72	9	0,065 5
8X25F	1-6-6F-12	96	12	0,052 5
8X19W	1-6-6+6	96	12	0,060 6
			6	0,045 0
8X26WS	1-5-5+5-10	80	10	0,060 0

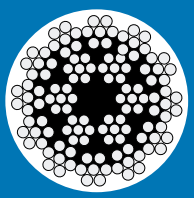
Min. breaking force factor: K1=0,293 K2=0,356
Nominal length mass factor[1)] W1=0,340 W2=0,407
Nominal metallic cross-sectional area factor[1)] C1=0,349 C2=0,457

Nominal rope diameter mm	Apporoximate nominal length mass[1)] kg/100m		Minimum breaking force kN Rope Grade				
			1770		1960		2160
	Fibre core	Steel core	Fibre core	Steel core	Fibre core	Steel core	Steel core
1	2	3	4	5	6	7	8
8	21,8	26,0	33,2	40,3	36,8	44,7	49,2
9	27,5	33,0	42,0	51,0	46,5	56,5	62,3
10	34,0	40,7	51,9	63,0	57,4	69,8	76,9
11	41,1	49,2	62,8	76,2	69,5	84,4	93,0
12	49,0	58,6	74,7	90,7	82,7	100	111
13	57,5	68,8	87,6	106	97,1	118	130
14	66,6	79,8	102	124	113	137	151
16	87,0	104	133	161	147	179	197
18	110	132	168	204	186	226	249
20	136	163	207	252	230	279	308
22	165	197	251	305	278	338	372
24	196	234	299	363	331	402	443
26	230	275	351	426	388	472	520
28	267	319	407	494	450	547	603
32	348	417	531	645	588	715	787
36	441	527	672	817	744	904	997
40	544	651	830	1 010	919	1 120	1 230
44	658	788	1 000	1 220	1 110	1 350	1 490
48	783	938	1 200	1 450	1 320	1 610	1 770
52	919	1 100	1 400	1 700	1 550	1 890	2 080
56	1 070	1 280	1 630	1 980	1 800	2 190	2 410
60	1 220	1 470	1 870	2 270	2 070	2 510	2 770

1) Informative only

EN 12385-4 - CLASS 18x7

CONSTRUCTION CROSS SECTION EXAMPLE



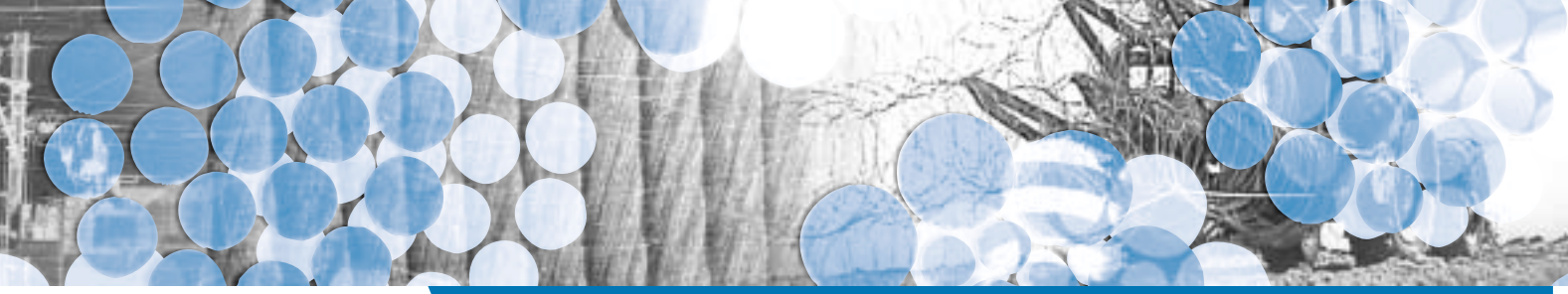
18X7-FC+1

CONSTRUCTION OF ROPE		CONSTRUCTION OF STRAND		
ITEM	QUANTITY	ITEM		QUANTITY
Strands	17 to 18	Wires		5 to 9
outer strands	10 to 12	Outer wires		4 to 8
layers of strands	2	Layers of wires		1
Wires in rope (excluding wire strand centre)	85 to 162			
TYPICAL EXAMPLE		No.OF OUTER WIRES		OUTER WIRE FACTOR[1)]
ROPE	STRAND	TOTAL	PER STRAND	
17X7	1-6	66	6	0,070
18X7	1-6	72	6	0,063 2

Min. breaking force factor: K1=0,328 K3=0,328
Nominal length mass factor[1)] W1=0,382 W3=0,401
Nominal metallic cross-sectional area factor[1)] C3=0,433

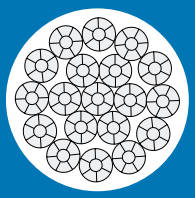
Nominal rope diameter mm	Apporoximate nominal length mass [1)] kg/100m		Minimum breaking force kN Rope Grade	
			1770	1960
	Fibre centre	Steel centre	Fibre or steel centre	Fibre or steel centre
1	2	3	4	5
6	13,8	14,4	20,9	23,1
7	18,7	19,6	28,4	31,5
8	24,4	25,7	37,2	41,1
9	30,9	32,5	47,0	52,1
10	38,2	40,1	58,1	64,3
11	46,2	48,5	70,2	77,8
12	55,0	57,7	83,6	92,6
13	64,6	67,8	98,1	109
14	74,9	78,6	114	126
16	97,8	103	149	165
18	124	130	188	208
20	153	160	232	257
22	185	194	281	311
24	220	231	334	370
26	258	271	392	435
28	299	314	455	504

1) Informative only



POWEROPE 19x7 COMPACTED STRANDS

STEEL CABLE POWEROPE 19X7 "COMPACT"

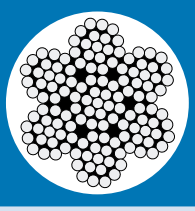


19X(1+6) STEEL CORE

Nominal diameter	Weight	Minimum breaking load	
		1960 N/mm²	200 kg/mm²
mm	kg/100m	kN	kgF
5	11.7	18.7	1900
6	16.8	26.9	2740
6.5	19.8	31.6	3220
7	22.9	36.6	3730
8	29.9	47.8	4880
9	37.9	60.6	6170
9.5	42.2	67.5	6880
10	46.8	74.8	7620
11	56.6	90.5	9220
12	67.4	107.7	10900
13	79.1	126.4	12900
14	91.7	146.6	14900
16	119.8	191.5	19500
18	151.6	242.3	24700
19	169.0	270.0	27500
20	187.0	299.2	30500
22	226.0	362.0	36900
24	270.0	430.8	43900
26	316.0	505.6	51500
28	367.0	586.4	59800
30	421.0	673.1	68600
32	479.0	765.9	78100

MILITARY SPECIFICATION MIL-W-83420E
WIRE ROPE CARBON STEEL AND CORROSION RESISTANT WIRE ROPE

CONSTRUCTION 7x19 7x(1+6+12)



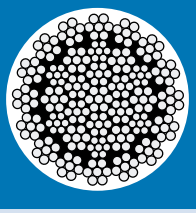
Composion B - Corrosion Resistant Steel

Composion A - Carbon Steel tin or Zinc Coated

Nominal Diametet	Tolerance on Diameter	Construction	Minimum breaking load		Weight per 100 ft	Nominal Diametet
			comp A	comp B		
in	in	———	Lbs	Lbs	Lbs	mm
1/16	0.010	7x19	480	480	0.75	1.58
3/32	0.012	7x19	1000	920	1.74	2.38
1/8	0.014	7x19	2000	1760	2.90	3.17
5/32	0.016	7x19	2800	2400	4.50	3.96
3/16	0.018	7x19	4200	3700	6.50	4.76
7/32	0.018	7x19	5600	5000	9.60	5.55
1/4	0.018	7x19	7000	6400	11.00	6.35
9/32	0.020	7x19	8000	7800	13.90	7.14
5/16	0.022	7x19	9800	9000	17.30	7.93
3/8	0.026	7x19	14400	12000	24.30	9.52

EN 12385-4 - CLASS 35(W)x7

CONSTRUCTION CROSS SECTION EXAMPLE



35(W)x7

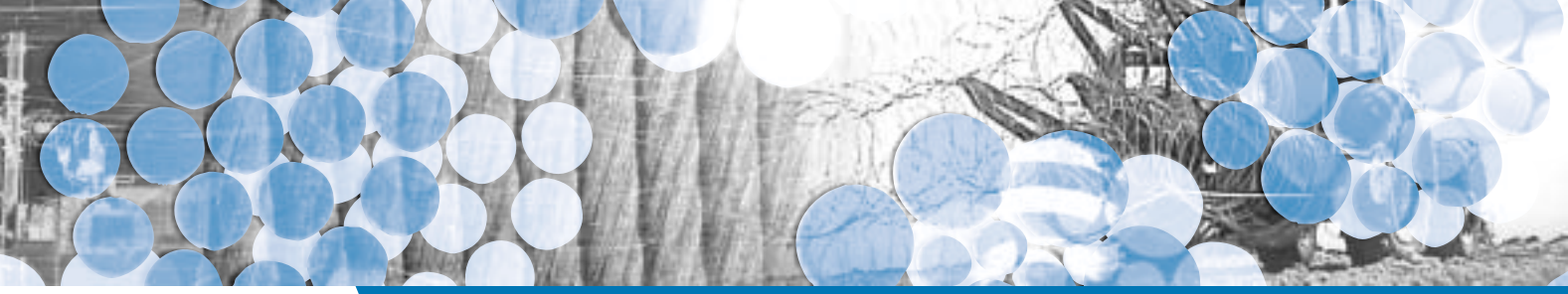
CONSTRUCTION OF ROPE		CONSTRUCTION OF STRAND	
ITEM	QUANTITY	ITEM	QUANTITY
Strands	28 to 40	Wires	5 to 9
outer strands	15 to 18	Outer wires	4 to 8
layers of strands	3	Layers of wires	1
Wires in rope	196 to 280		

TYPICAL EXAMPLE		No.OF OUTER WIRES		OUTER WIRE FACTOR[1]
ROPE	STRAND	TOTAL	PER STRAND	
35(W)X7	1-6	96	6	0,046 1

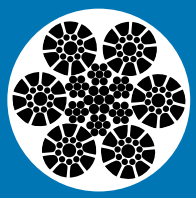
Min. breaking force factor:	K3=0,360[2]	K3=0,350[3]
Nominal length mass factor[1]	W3=0,454	
Nominal metallic cross-sectional area factor[1]	C3=0,480	

Nominal rope diameter mm	Apporoximate nominal length mass [1] kg/100m	Minimum breaking force kN	
		Rope grade 1960	Rope grade 2160
1	2	3	4
8	29,1	45,2	48,4
9	36,8	57,2	61,2
10	45,4	70,6	75,6
11	54,9	85,4	91,5
12	65,4	102	109
13	76,7	119	128
14	89,0	138	148
16	116	181	194
18	147	229	245
20	182	282	302
22	220	342	366
24	262	406	435
26	307	477	511
28	356	553	593
32	465	723	774
36	588	914	980
38	656	1020	1090
40	726	1130	1210

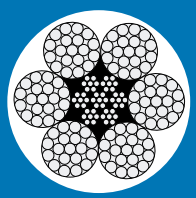
1) Informative only
2) Up to and including rope grade 1960
3) Greater than rope grade 1960 up to and including rope grade 2160



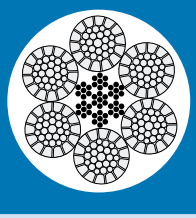
POWEROPE - COMPACTED STRANDS WIRE ROPE



6X19 SEALE



6X25 FILLER

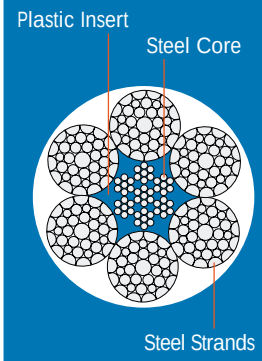


6X36 WARRINGTON-SEALE

Nominal diameter	Weight	Calculated breaking load		Minimum breaking load	
		1960 N/mm²	(200 kg/mm²)	1960 N/mm²	(200 kg/mm²)
mm	kg/m	kN	(t0)	kN	(t0)
8	28.2	65.0	6.63	54.1	5.52
9	36.9	85.1	8.68	68.3	6.97
10	44.9	103.5	10.55	84.3	8.60
11	54.6	126.0	12.85	103.2	10.53
12	64.3	148.3	15.12	123.0	12.55
13	75.8	174.7	17.82	144.9	14.79
14	87.6	201.9	20.59	167.5	17.09
15	100.2	230.9	23.55	192.2	19.61
16	112.9	260.3	26.54	215.6	22.00
17	128.9	279.3	30.32	246.4	25.15
18	141.7	326.7	33.31	270.6	27.61
19	160.5	370.0	37.73	306.7	31.30
20	177.1	408.4	41.64	338.6	34.55
21	196.7	453.5	46.24	375.1	38.27
22	218.2	503.1	51.30	417.2	42.57
23	235.2	542.4	55.31	449.5	45.87
24	257.4	593.5	60.52	490.9	50.09
25	276.1	636.6	64.91	527.1	53.79
26	302.2	696.8	71.05	577.0	58.88
27	322.3	743.2	75.79	616.7	62.93
28	344.9	795.2	81.09	659.0	67.24
29	371.1	855.8	87.27	711.5	72.61
30	395.7	912.5	93.05	757.3	77.28
32	449.1	1035.6	105.60	860.5	87.81
34	507.9	1171.3	119.43	969.6	98.95
35	567.8	1309.4	133.52	1085.0	110.72
38	634.0	1461.8	149.06	1210.2	123.49
40	705.5	1626.8	165.89	1348.5	137.60

1Kg=9.80665 N (Newton)

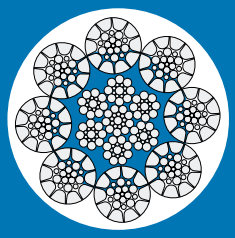
PLASTIC INSERTS FOR STEEL WIRE ROPES



Steel wire rope with a Nylon insulated steel core (I.W.R.C.) has an improved service Life. The combination of Nylon and Steel created the following characteristics when a rope is used in a dynamic application:

- Less inside wear between the rope layers.
- Better corrosion resistance.
- Better shocks absorption.

Users report that, the service life of a wire rope with Nylon insulated steel core can grow up to three times than those of a regular steel wire rope.



NC 8X26

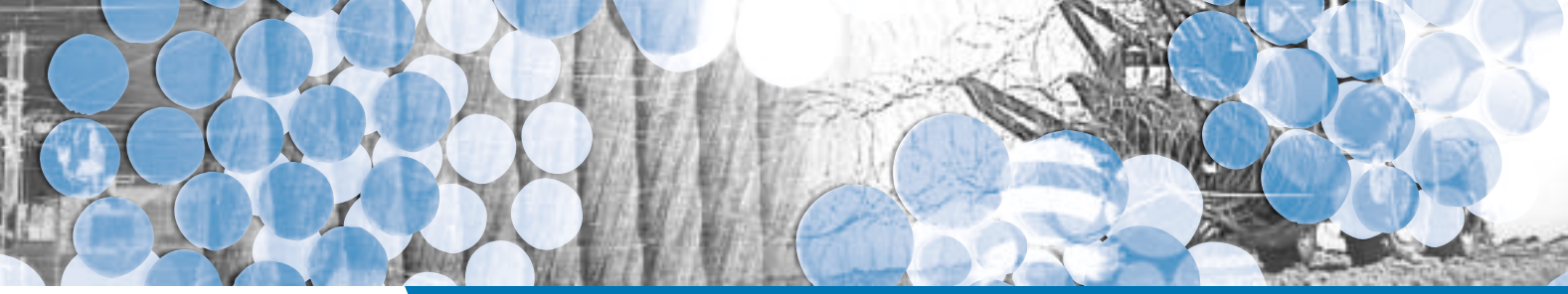
8X26 WARRINGTON SEALE, COMPACTED + NYLON INSULATED I.W.R.C.

NC 8x26 is recommended for:

- Containers bridge cranes (shifting and ship to shore).
- Overhead traveling hoists (indoor and out door).
- Mobile cranes.
- Boom cable.
- Mineral loading cranes.

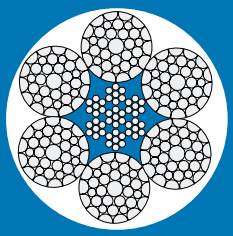
Best performs on single and multiple coiling.

Diameter	Weight	Metalic Cross-Section	Minimum Breaking Load	
mm	kg/m	mm^2	180 kg/mm^2	200 kg/mm^2
13	0.80	89.6	13,650	15,200
14	0.92	103.9	15,850	17,600
15	1.06	119.3	18.200	20.250
16	1.21	135.7	20,700	23,000
18	1.53	171.8	26,250	29,150
19	1.70	191.4	29,200	32,500
20	1.89	212.1	32,400	36,000
22	2.28	256.6	39,200	43,600
24	2.72	305.4	46,700	51,850
26	3.19	358.4	54,800	60,900
28	3.70	415.6	63,550	70,600
30	4.25	477.1	72,950	81,050
32	4.87	546.9	83,600	92,900
34	5.49	617.5	94,450	104,950
36	6.16	692.2	105,850	117,600
38	6.86	778.6	119,050	132,300
40	7.61	854.5	130,700	145,250
42	8.38	943.8	144,350	160,400
44	9.20	1,034	158,150	175,700



PLASTIC INSERTS FOR STEEL WIRE ROPES

6X36 WARRINGTON SEALE COMPACTED + NYLON INSULATED I.W.R.C.



NC 6X36

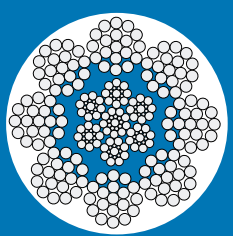
NC 6x36 is recommended for:

- Containers bridge cranes (shifting and ship to shore).
- Overhead traveling hoists (indoor and out door).
- Mobile cranes.
- Boom cable.
- Mineral loading cranes.

Best performs on single and multiple coiling.

Diameter mm	Weight kg/m	Metalic Cross-Section mm^2	Minimum Breaking Load 180 kg/mm^2	Minimum Breaking Load 200 kg/mm^2
13	0.77	86.6	13,050	14,500
14	0.89	100.5	15,150	16,800
15	1.03	115.3	17,400	19,350
16	1.17	131.2	19,800	22,000
18	1.48	166.1	25,050	27,850
19	1.65	185.0	27,950	31,050
20	1.82	205.0	30,950	34,400
22	2.21	248.1	37,500	41,650
24	2.63	295.2	44,600	49,550
26	3.08	346.5	52,350	58,200
28	3.58	401.8	60,700	67,450
30	4.11	461.3	69,700	77,450
32	4.67	524.9	79,300	88,150
34	5.27	592.5	89,550	99,500
36	5.91	664.3	100,400	111,550
38	6.59	740.1	111,850	124,300
40	7.30	820.1	123,950	137,750
42	8.05	904.1	136,650	151,850
44	8.83	992.3	150,000	166,650

8X25 FILLER NYLON INSULATED I.W.R.C.



NC 8X25

NC 8x25 is recommended for:

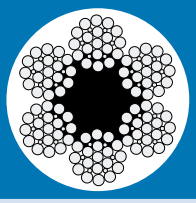
- Containers bridge cranes (shifting and ship to shore).
- Overhead traveling hoists (indoor and out door).
- Mobile cranes.
- Mineral loading cranes.

Best performs on single coiling.

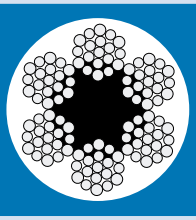
Diameter mm	Weight kg/m	Metalic Cross-Section mm^2	Minimum Breaking Load 180 kg/mm^2	Minimum Breaking Load 200 kg/mm^2
13	0.76	82.1	12,450	13,850
14	0.85	92.0	13,950	15,500
15	1.03	111.6	16,900	18,800
16	1.16	125.8	19,050	21,250
18	1.46	158.6	24,100	26,750
19	1.61	174.9	26,550	29,500
20	1.78	193.1	29,350	32,600
22	2.23	241.9	36,750	40,850
24	2.61	283.5	43,050	47,850
26	3.07	333.4	50,650	56,300
28	3.58	389.1	59,100	65,700
30	4.09	444.4	67,550	75,050
32	4.59	499.4	75,900	84,350
34	5.28	573.5	87,200	96,900
36	5.88	638.8	97,100	107,900
38	6.60	717.1	109,000	121,150
40	7.28	791.1	120,300	133,650
42	8.06	876.4	133,250	148,050
44	8.85	961.4	146,200	162,450

STEEL WIRE ROPES FOR ELEVATORS

CONSTRUCTION CROSS SECTION EXAMPLE



6X25F-FC



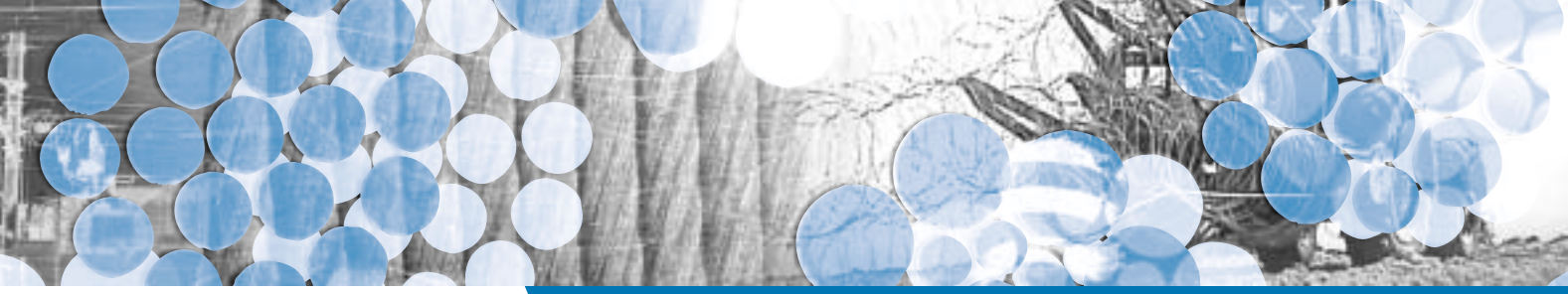
6X19W-FC

CONSTRUCTION OF ROPE		CONSTRUCTION OF STRAND		
ITEM	QUANTITY	ITEM		QUANTITY
Strands	6	Wires		19 to 29
outer strands	6	Outer wires		9 to 14
layers of strands	1	Layers of wires		2
Wires in rope	114 to 174			
TYPICAL EXAMPLE		No.OF OUTER WIRES		OUTER WIRE FACTOR[1)]
ROPE	STRAND	TOTAL	PER STRAND	
6X19S	1-9-9	54	9	0,080
6X25F	1-6-6F-12	72	12	0,064
6X19W	1-6-6+6	72	12 6	0,073 8
			6	0,055 6

Min. breaking force factor: K_2 =0,330
Nominal length mass factor1) W_2 =0,359
Nominal metallic cross-sectional area factor1) C_2 =0,384

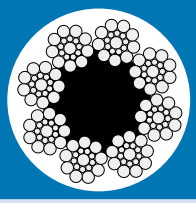
Nominal rope diameter	Apporoximate nominal length mass [1)]	Minimum breaking force kN			
		Dual tensile		Single tensile	
mm	kg/100m	Rope Grade 1180/1770	Rope Grade 1370/1770	Rope Grade 1150	Rope Grade 1770
6	12,9	16,3	17,8	18,7	21,0
6,5	15,2	19,1	20,9	21,9	24,7
8[2)]	23,0	28,9	31,7	33,2	37,4
9	29,1	36,6	40,1	42,0	47,3
10[2)]	35,9	45,2	49,5	51,8	58,4
11[2)]	43,4	54,7	59,9	62,7	70,7
12	51,7	65,1	71,3	74,6	84,1
13[2)]	60,7	76,4	83,7	87,6	98,7
14	70,4	88,6	97,0	102	114
15	80,8	102	111	117	131
16[2)]	91,9	116	127	133	150
18	116	146	160	168	189
19[2)]	130	163	179	187	211
20	144	181	198	207	234
22[2)]	174	219	240	251	283

1) Informative only
2) Preferred sizes

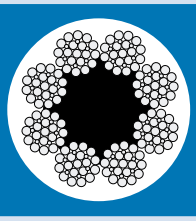


STEEL WIRE ROPES FOR ELEVATORS

CONSTRUCTION CROSS SECTION EXAMPLE



8X19S-FC



8X25F-FC

CONSTRUCTION OF ROPE		CONSTRUCTION OF STRAND	
ITEM	QUANTITY	ITEM	QUANTITY
Strands	8	Wires	19 to 29
outer strands	8	Outer wires	9 to 14
layers of strands	1	Layers of wires	2
Wires in rope	152 to 232		

TYPICAL EXAMPLE		No.OF OUTER WIRES		OUTER WIRE FACTOR[1)]
ROPE	STRAND	TOTAL	PER STRAND	
8X19S	1-8-8	72	9	0,065 5
8X25F	1-6-6F-12	96	12	0,052 5
8X19W	1-6-6+6	96	12	0,060 6
			6	0,045 0

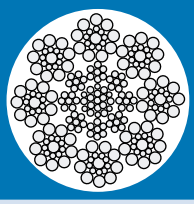
Min. breaking force factor: K_2 =0,293
Nominal length mass factor1) W_2 =0,340
Nominal metallic cross-sectional area factor1) C_2 =0,349

Nominal rope diameter	Apporoximate nominal length mass [1)]	Minimum breaking force kN		
		Dual tensile		Single tensile
mm	kg/100m	Rope Grade 1180/1770	Rope Grade 1370/1770	Rope Grade 1150
8[2)]	21,8	25,7	28,1	29,4
9	27,5	32,5	35,6	37,3
10[2)]	34,0	40,1	44,0	46,0
11[2)]	41,1	48,6	53,2	55,7
12	49,0	57,8	63,3	66,2
13[2)]	57,5	67,8	74,3	77,7
14	66,6	78,7	86,1	90,2
15	76,5	90,3	98,9	104
16[2)]	87,0	103	113	118
18	110	130	142	149
19[2)]	123	145	159	166
20	136	161	176	184
22[2)]	165	194	213	223

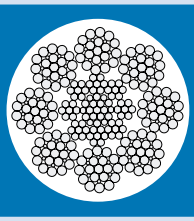
1) Informative only
2) Preferred sizes

STEEL WIRE ROPES FOR ELEVATORS

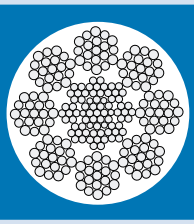
CONSTRUCTION CROSS SECTION EXAMPLE



8X19S-IWRC



8X25F-IWRC



8X19W-IWRC

CONSTRUCTION OF ROPE		CONSTRUCTION OF STRAND		
ITEM	QUANTITY	ITEM		QUANTITY
Strands	8	Wires		19 to 29
outer strands	8	Outer wires		9 to 14
ayers of strands	1	Layers of wires		2
Wires in rope	152 to 232			
TYPICAL EXAMPLE		No.OF OUTER WIRES		OUTER WIRE FACTOR[1)]
ROPE	STRAND	TOTAL	PER STRAND	
8X19S	1-9-9	72	9	0,065 5
8X25F	1-6-6F-12	96	12	0,052 5
8X19W	1-6-6+6	96	12 6	0,060 6
			6	0,045 0

Min. breaking force factor: K_2 =0,356
Nominal length mass factor[1)] W_2 =0,407
Nominal metallic cross-sectional area factor[1)] C_2 =0,457

Nominal rope diameter	Apporoximate nominal length mass [1)]	Minimum breaking force kN			
		Dual tensile		Single tensile	
mm	kg/100m	Rope Grade 1370/1770	Rope Grade 1570/1770	Rope Grade 1570	Rope Grade 1770
8[2)]	26,0	35,8	38,0	35,8	40,3
9	33,0	45,3	48,2	45,3	51,0
10[2)]	40,7	55,9	59,5	55,9	63,0
11[2)]	49,2	67,6	71,9	67,6	76,2
12	58,6	80,5	85,6	80,5	90,7
13[2)]	68,7	94,5	100	94,5	106
14	79,8	110	117	110	124
15	91,6	126	134	126	142
16[2)]	104	143	152	143	161
18	132	181	193	181	204
19[2)]	147	202	215	202	227
20	163	224	238	224	252
22[2)]	197	271	288	271	305

1) Informative only
2) Preferred sizes

ALUMINIUM CONDUCTORS

ALUMINIUM CONDUCTORS

ALUMINIUM CONDUCTORS

- All Aluminium Alloy Conductors - Type AL3
- All Aluminium Alloy Conductors - Type AL1
- Aluminium alloy conductors steel reinforced - Type AL3/ST1A
- Aluminium alloy conductors steel reinforced - Type AL1/ST1A

ALL ALUMINIUM ALLOY CONDUCTORS - TYPE AL3

EN 50182

Code	Old Code	Area	No. of wires	Diameter		Mass per unit lengh	Rated strength	Dc resistance	Final modulus of elasticity	Coefficient of linear expansion	Current carrying capacity
				Wire	Cond						
		mm²		mm	mm	kg/km	kN	Om/km	N/mm²	1/K	A
16-AL3	16	15.9	7	1.7	5.10	43.4	4.69	2,070 1	60 000	2.30E-05	105
24-AL3	25	24.2	7	2.10	6.30	66.2	7.15	1,356 6	60 000	2.30E-05	135
34-AL3	35	34.4	7	2.50	7.50	93.8	10.14	0,957 2	60 000	2.30E-05	170
49-AL3	50	49.5	7	3.00	9.00	135.1	14.60	0,664 7	60 000	2.30E-05	210
48-AL3	50	48.3	19	1.80	9.00	132.7	14.26	0,684 1	57 000	2.30E-05	210
66-AL3	70	65.8	19	2.10	10.50	180.7	19.41	0,502 6	57 000	2.30E-05	255
93-AL3	95	93.3	19	2.50	12.50	256.0	27.51	0,354 6	57 000	2.30E-05	320
117-AL3	120	117	19	2.80	14.00	321.2	34.51	0,282 7	57 000	2.30E-05	365
147-AL3	150	147.1	37	2.25	15.80	405.3	43.40	0,225 6	57 000	2.30E-05	425
182-AL3	185	181.6	37	2.50	17.50	500.3	53.58	0,182 7	57 000	2.30E-05	490
243-AL3	240	242.5	61	2.25	20.30	670.3	71.55	0,137 3	55 000	2.30E-05	585
299-AL3	300	299.4	61	2.50	22.50	827.5	88.33	0,111 2	55 000	2.30E-05	670
400-AL3	400	400.1	61	2.89	26.00	1 105.9	118.04	0,083 2	55 000	2.30E-05	810
500-AL3	500	499.8	61	3.23	29.10	1 381.4	147.45	0,066 6	55 000	2.30E-05	930
626-AL3	625	626.2	91	2.96	32.60	1 737.7	184.73	0,053 4	55 000	2.30E-05	1 075
802-AL3	800	802.1	91	3.35	36.90	2 225.8	236.62	0,041 7	55 000	2.30E-05	1 255
1000-AL3	1000	999.7	91	3.74	41.10	2 774.3	294.91	0,033 4	55 000	2.30E-05	1 450

ALUMINIUM CONDUCTORS

ALL ALUMINIUM ALLOY CONDUCTORS
TYPE AL1
EN 50182

Code	Old Code	Area	No. of wires	Diameter		Mass per unit lengh	Rated strength	Dc resistance	Final modulus of elasticity	Coefficient of linear expansion	Current carrying capacity
				Wire	Cond						
		mm²		mm	mm	kg/km	kN	Om/km	N/mm²	1/K	A
16-AL1	16	15,9	7	1.7	5.10	43.4	3.02	1,798 6	60 000	2.30E-05	110
24-AL1	25	24.2	7	2.10	6.30	66.3	4.36	1,178 7	60 000	2.30E-05	145
34-AL1	35	34.4	7	2.50	7.50	93.9	6.01	0,831 7	60 000	2.30E-05	180
49-AL1	50	49.5	7	3.00	9.00	135.2	8.41	0,577 6	60 000	2.30E-05	225
48-AL1	50	48.3	19	1.80	9.00	132.9	8.94	0,594 4	57 000	2.30E-05	225
66-AL1	70	65.8	19	2.10	10.50	180.9	11.85	0,436 7	57 000	2.30E-05	270
93-AL1	95	93.3	19	2.50	12.50	256.3	16.32	0,308 1	57 000	2.30E-05	340
117-AL1	120	117	19	2.80	14.00	321.5	19.89	0,245 6	57 000	2.30E-05	390
147-AL1	150	147.1	37	2.25	15.80	405.7	26.48	0,196 0	57 000	2.30E-05	455
182-AL1	185	181.6	37	2.50	17.50	500.9	31.78	0,158 8	57 000	2.30E-05	520
243-AL1	240	242.5	61	2.25	20.30	671.1	43.66	0,119 3	55 000	2.30E-05	625
299-AL1	300	299.4	61	2.50	22.50	828.5	52.40	0,096 6	55 000	2.30E-05	710
400-AL1	400	400.1	61	2.89	26.00	1 107.1	68.02	0,072 3	55 000	2.30E-05	855
500-AL1	500	499.8	61	3.23	29.10	1 382.9	82.47	0,057 9	55 000	2.30E-05	990
626-AL1	625	626.2	91	2.96	32.60	1 739.7	106.45	0,046 4	55 000	2.30E-05	1 140
802-AL1	800	802.1	91	3.35	36.90	2 228.3	132.34	0,036 2	55 000	2.30E-05	1 340
1000-AL1	1000	999.7	91	3.74	41.10	2 777.3	159.95	0,029 1	55 000	2.30E-05	1 540

ALUMINIUM CONDUCTORS

ALUMINIUM ALLOY CONDUCTORS STEEL REINFORCED - TYPE AL3/ST1A - EN 50182

Code	Old Code	Areas			No. of wires		Wires diameter		Diameter		Mass per unit lengh	Rated strength	Dc resistance	Final modulus of elasticity	Coefficient of linear expansion	Current carrying capacity
		Al	Steel	Total			Al	Steel	Core	Cond						
		mm²	mm²	mm²	Al	Steel	mm	mm	mm	mm	kg/km	kN	Om/km	N/mm²	1/K	A
15-AL3/3-ST1A	16/2.5	15.3	2.54	17.8	6	1	1.80	1.80	1.80	5.40	61.6	7.48	2,160 2	81 000	1.92E-05	100
24-AL3/4-ST1A	25/4	23.9	3.98	27.8	6	1	2.25	2.25	2.25	6.75	96.2	11.69	1,382 5	81 000	1,92E-05	135
34-AL3/6-ST1A	35/6	34.4	5.73	40.1	6	1	2.70	2.70	2.70	8.10	138.6	16.66	0,960 1	81 000	1,92E-05	165
44-AL3/32-ST1A	44/32	44.0	31.7	75.6	14	7	2.00	2.40	7.20	11.2	369.1	49.08	0,756 6	110 000	1,50E-05	
48-AL3/8-ST1A	50/8	48.3	8.04	56.3	6	1	3.20	3.20	3.20	9.60	194.7	23.08	0,683 5	81 000	1,92E-05	200
51-AL3/30-ST1A	50/30	51.2	29.8	81.0	12	7	2.33	2.33	6.99	11.7	374.6	49.12	0,649 6	107 000	1,53E-05	
70-AL3/11-ST1A	70/12	69.9	11.4	81.3	26	7	1.85	1.44	4.32	11.7	282.0	33.96	0,475 6	77 000	1,89E-05	270
94-AL3/15-ST1A	95/15	94.4	15.3	109.7	26	7	2.15	1.67	5.01	13.6	380.3	45.79	0,352 1	77 000	1,89E-05	330
97-AL3/56-ST1A	95/55	96.5	56.3	152.8	12	7	3.20	3.20	9.60	16.0	706.5	90.40	0,344 4	107 000	1,53E-05	
106-AL3/76-ST1A	105/75	105.7	75.5	181.2	14	19	3.10	2.25	11.30	17.5	885.0	119.56	0,315 5	110 000	1,50E-05	
122-AL3/20-ST1A	120/20	121.6	19.8	141.4	26	7	2.44	1.90	5.70	15.5	490.6	59.09	0,273 4	77 000	1,89E-05	385
122-AL3/71-ST1A	120/70	122.1	71.3	193.4	12	7	3.60	3.60	10.80	18.0	894.2	114.41	0.272 1	107 000	1,53E-05	
128-AL3/30-ST1A	125/30	127.9	29.8	157.8	30	7	2.33	2.33	6.99	16.3	586.6	71.76	0,260 1	82 000	1,78E-05	400
149-AL3/24-ST1A	150/25	148.9	24.2	173.1	26	7	2.70	2.10	6.30	17.1	600.3	72.28	0,223 3	77 000	1,89E-05	445
172-AL3/40-ST1A	170/40	171.8	40.1	211.8	30	7	2.70	2.70	8.10	18.9	787.7	96.36	0,193 7	82 000	1,78E-05	490
184-AL3/30-ST1A	185/30	183.8	29.8	213.6	26	7	3.00	2.33	6.99	19.0	740.4	88.24	0,180 9	77 000	1,89E-05	505
209-AL3/34-ST1A	210/35	209.1	34.1	243.2	26	7	3.20	2.49	7.47	20.3	843.5	100.54	0,159 0	77 000	1,89E-05	555
212-AL3/49-ST1A	210/50	212.1	49.5	261.5	30	7	3.00	3.00	9.00	21.0	972.5	118.96	0,156 9	82 000	1,78E-05	575
231-AL3/30-ST1A	230/30	230.9	29.8	260.8	24	7	3.50	2.33	6.99	21.0	870.1	102.14	0,143 9	74 000	1.96E-05	595
243-AL3/39-ST1A	240/40	243.1	39.5	282.5	26	7	3.45	2.68	8.04	21.8	979.4	116.72	0,136 8	77 000	1,89E-05	605
264-AL3/34-ST1A	265/35	263.7	34.1	297.7	24	7	3.74	2.49	7.47	22.4	993.6	116.64	0,126 0	74 000	1,96E-05	640
304-AL3/49-ST1A	300/50	304.3	49.5	353.7	26	7	3.86	3.00	9.00	24.4	1 226.4	146.16	0,109 2	77 000	1,89E-05	700
305-AL3/39-ST1A	305/40	304.6	39.5	344.1	54	7	2.68	2.68	8.04	24.1	1 150.3	134.88	0,109 3	70 000	1,93E-05	700
339-AL3/30-ST1A	340/30	339.3	29.8	369.1	48	7	3.00	2.33	6.99	25.0	1 170.2	134.12	0,098 0	62 000	2,05E-05	740
382-AL3/49-ST1A	380/50	381.7	49.5	431.2	54	7	3.00	3.00	9.00	27.0	1 441.4	169.01	0,087 2	70 000	1,93E-05	790
386-AL3/34-ST1A	385/35	386.0	34.1	420.1	48	7	3.20	2.49	7.47	26.7	1 332.4	152.74	0,086 2	62 000	2,05E-05	800
434-AL3/56-ST1A	435/55	434.3	56.3	490.6	54	7	3.20	3.20	9.60	28.8	1 640.0	190.04	0,076 6	70 000	1,93E-05	845
449-AL3/39-ST1A	450/40	448.7	39.5	488.2	48	7	3.45	2.68	8.04	28.7	1 547.7	177.39	0,074 1	62 000	2,05E-05	865
490-AL3/64-ST1A	490/65	490.3	63.6	553.8	54	7	3.40	3.40	10.20	30.6	1 851.4	214.54	0,067 9	70 000	1,93E-05	905
550-AL3/71-ST1A	550/70	549.7	71.3	620.9	54	7	3.60	3.60	10.80	32.4	2 075.6	240.52	0,060 5	70 000	1,93E-05	960
562-AL3/49-ST1A	560/50	561.7	49.5	611.2	48	7	3.86	3.00	9.00	32.2	1 937.8	222.11	0,059 2	62 000	2,05E-05	980
679-AL3/86-ST1A	680/85	678.6	86.0	764.5	54	19	4.00	2.40	12.00	36.0	2 547.6	298.17	0,049 0	68 000	1,94E-05	1 080

ALUMINIUM CONDUCTORS

ALUMINIUM ALLOY CONDUCTORS STEEL REINFORCED - TYPE AL1/ST1A - EN 50182

Code	Old Code	Areas			No. of wires		Wires diameter		Diameter		Mass per unit lengh	Rated strength	Dc resistance	Final modulus of elasticity	Coefficient of linear expansion	Current carrying capacity
		Al	Steel	Total			Al	Steel	Core	Cond						
		mm²	mm²	mm²	Al	Steel	mm	mm	mm	mm	kg/km	kN	Om/km	N/mm²	1/K	A
15-AL1/3-ST1A	16/2.5	15.3	2.54	17.8	6	1	1.80	1.80	1.80	5.40	61.6	5.8	1,876 9	81 000	1.92E-05	105
24-AL1/4-ST1A	25\4	23.9	3.98	27.8	6	1	2.25	2.25	2.25	6.75	96.3	8.95	1,201 2	81 000	1,92E-05	140
34-AL1/6-ST1A	35/6	34.4	5.73	40.1	6	1	2.70	2.70	2.70	8.10	138.7	12.37	0,834 2	81 000	1,92E-05	170
44-AL1/32-ST1A	44/32	44.0	31.7	75.6	14	7	2.00	2.40	7.20	11.2	369.3	44.24	0,657 4	110 000	1,50E-05	
48-AL1/8-ST1A	50/8	48.3	8.04	56.3	6	1	3.20	3.20	3.20	9.60	194.8	16.81	0,593 9	81 000	1,92E-05	210
51-AL1/30-ST1A	50/30	51.2	29.8	81.0	12	7	2.33	2.33	6.99	11.7	374.7	42.98	0,564 4	107 000	1,53E-05	
70-AL1/11-ST1A	70/12	69.9	11.4	81.3	26	7	1.85	1.44	4.32	11.7	282.2	26.27	0,413 2	77 000	1,89E-05	290
94-AL1/15-ST1A	95/15	94.4	15.3	109.7	26	7	2.15	1.67	5.01	13.6	380.6	34.93	0,306 0	77 000	1,89E-05	350
97-AL1/56-ST1A	95/55	96.5	56.3	152.8	12	7	3.20	3.20	9.60	16.0	706.8	77.85	0,299 2	107 000	1,53E-05	
106-AL1/76-ST1A	105/75	105.7	75.5	181.2	14	19	3.10	2.25	11.30	17.5	885.3	105.82	0,274 2	110 000	1,50E-05	
122-AL1/20-ST1A	120/20	121.6	19.8	141.4	26	7	2.44	1.90	5.70	15.5	491.0	44.5	0,237 6	77 000	1,89E-05	410
122-AL1/71-ST1A	120/70	122.1	71.3	193.4	12	7	3.60	3.60	10.80	18.0	894.5	97.92	0,236 4	107 000	1,53E-05	
128-AL1/30-ST1A	125/30	127.9	29.8	157.8	30	7	2.33	2.33	6.99	16.3	587.0	56.41	0,226 0	82 000	1,78E-05	425
149-AL1/24-ST1A	150/25	148.9	24.2	173.1	26	7	2.70	2.10	6.30	17.1	600.8	53.67	0,194 0	77 000	1,89E-05	470
172-AL1/40-ST1A	170/40	171.8	40.1	211.8	30	7	2.70	2.70	8.10	18.9	788.2	74.89	0,168 3	82 000	1,78E-05	520
184-AL1/30-ST1A	185/30	183.8	29.8	213.6	26	7	3.00	2.33	6.99	19.0	741.0	65.27	0,157 1	77 000	1,89E-05	535
209-AL1/34-ST1A	210/35	209.1	34.1	243.2	26	7	3.20	2.49	7.47	20.3	844.1	73.36	0,138 1	77 000	1,89E-05	590
212-AL1/49-ST1A	210/50	212.1	49.5	261.5	30	7	3.00	3.00	9.00	21.0	973.1	92.46	0,136 3	82 000	1,78E-05	610
231-AL1/30-ST1A	230/30	230.9	29.8	260.8	24	7	3.50	2.33	6.99	21.0	870.9	72.13	0,125 0	74 000	1,96E-06	630
243-AL1/39-ST1A	240/40	243.1	39.5	282.5	26	7	3.45	2.68	8.04	21.8	980.1	85.12	0,118 8	77 000	1,89E-05	645
264-AL1/34-ST1A	265/35	263.7	34.1	297.7	24	7	3.74	2.49	7.47	22.4	994.4	81.04	0,109 5	74 000	1,96E-05	680
304-AL1/49-ST1A	300/50	304.3	49.5	353.7	26	7	3.86	3.00	9.00	24.4	1227.3	105.09	0,094 9	77 000	1,89E-05	740
305-AL1/39-ST1A	305/40	304.6	39.5	344.1	54	7	2.68	2.68	8.04	24.1	1151.2	96.8	0,094 9	70 000	1,93E-05	740
339-AL1/30-ST1A	340/30	339.3	29.8	369.1	48	7	3.00	2.33	6.99	25.0	1171.2	91.71	0,085 2	62 000	2,05E-05	790
382-AL1/49-ST1A	380/50	381.7	49.5	431.2	54	7	3.00	3.00	9.00	27.0	1442.5	121.3	0,075 8	70 000	1,93E-05	840
386-AL1/34-ST1A	385/35	386.0	34.1	420.1	48	7	3.20	2.49	7.47	26.7	1333.6	102.56	0,074 9	62 000	2,05E-05	850
434-AL1/56-ST1A	435/55	434.3	56.3	490.6	54	7	3.20	3.20	9.60	28.8	1641.3	133.59	0,066 6	70 000	1,93E-05	900
449-AL1/39-ST1A	450/40	448.7	39.5	488.2	48	7	3.45	2.68	8.04	28.7	1549.1	119.05	0,064 4	62 000	2,05E-05	920
490-AL1/64-ST1A	490/65	490.3	63.6	553.8	54	7	3.40	3.40	10.20	30.6	1852.9	150.81	0,059 0	70 000	1,93E-05	960
494-AL1/34-ST1A	495/35	494.4	34.1	528.4	45	7	3.74	2.49	7.47	29.9	1632.6	117.96	0,058 4	61 000	2,09E-05	985
511-AL1/45-ST1A	510/45	510.5	45.3	555.8	48	7	3.68	2.87	8.61	30.7	1765.3	133.31	0,056 6	62 000	2,05E-05	995
550-AL1/71-ST1A	550/70	549.7	71.3	620.9	54	7	3.60	3.60	10.80	32.4	2077.2	166.32	0,052 6	70 000	1,93E-05	1 020
562-AL1/49-ST1A	560/50	561.7	49.5	611.2	48	7	3.86	3.00	9.00	32.2	1939.5	146.28	0,051 5	62 000	2,05E-05	1 040
571-AL1/39-ST1A	570/40	571.2	39.5	610.6	45	7	4.02	2.68	8.04	32.2	1887.1	136.4	0,050 6	61 000	2,09E-05	1 050
653-AL1/45-ST1A	650/45	653.5	45.3	698.8	45	7	4.30	2.87	8.61	34.4	2159.9	156.18	0,044 2	61 000	2,09E-05	1 120
679-AL1/86-ST1A	680/85	678.6	86.0	764.5	54	19	4.00	2.40	12.00	36.0	2549.7	206.56	0,042 6	68 000	1,94E-05	1 150
1046-AL1/45-ST1A	1045/45	1045.6	45.3	1 090.9	72	7	4.3	2.87	8.61	43.0	3248.2	218.92	0,027 7	60 000	2,17E-05	1 580

SECURITY FENCES

RAPID SECURITY BARRIER

RAPID SECURITY BARRIER

REVOLUTIONARY FENCING PRODUCT - 2 MINUTES DEPLOYMENT FOR 300 METER (1000 FT)

CONCEPT

Rapid security barrier is the new revolutionary product of the fencing world. The barrier is a pyramid made of barbed tape concertina, supplied compressed and can be deployed rapidly at a speed of 300 meters (1000 ft.) per 2 minutes. The deployment is automatic and needs minimum manual actions. The result is that a security barrier is erected at a short time with minimum human touch.

DEPLOYMENT

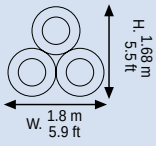
The Deployment of each cassette is done in few seconds by 4 simple steps:

1. Loading the cassette on the truck and driving to the site.
2. Opening the bands.
3. Unloading the end of the pyramid and anchoring it to the ground.
4. Deploying – by driving the truck / tractor.

TECHNICAL INFORMATION AND SIZES

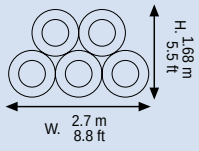
- The Rapid Security Barrier is supplied in compressed cassettes, each 100 meters (330 ft.) compressed to 0.8 meters (2.5 ft). a Cassette can contain up to 1000 meters (3300 ft.).
- Contain patented anchoring system with wire ropes.
- The barrier can be collected after deployment and then reused.
- No need for special trailers/trucks. Deployment/collection equipment can be adjusted to ordinary shovels.
- Electrical interface can be added.

3 Coils



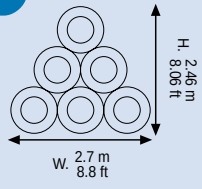
Length		Height		Width		Weight
Compressed	Deployed	Compressed	Deployed	Compressed	Deployed	
0.8m	100m	1.86m	1.68m	2m	1.8m	350kg
2.4m	300m	1.86m	1.68m	2m	1.8m	1050kg
8m	1000m	1.86m	1.68m	2m	1.8m	3500kg

5 Coils



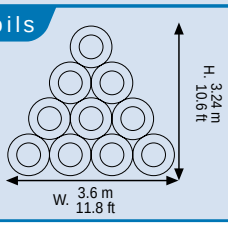
Length		Height		Width		Weight
Compressed	Deployed	Compressed	Deployed	Compressed	Deployed	
0.8m	100m	1.86m	1.68m	3m	2.7m	585kg
1.6m	200m	1.86m	1.68m	3m	2.7m	1170kg
2.4m	300m	1.86m	1.68m	3m	2.7m	1755kg
4m	400m	1.86m	1.68m	3m	2.7m	2925kg

6 Coils



Length		Height		Width		Weight
Compressed	Deployed	Compressed	Deployed	Compressed	Deployed	
0.8m	100m	2.75m	2.46m	3m	2.7m	700kg
1.6m	200m	2.75m	2.46m	3m	2.7m	1400kg
2.4m	300m	2.75m	2.46m	3m	2.7m	2100kg
4m	400m	2.75m	2.46m	3m	2.7m	3500kg

10 Coils



Length		Height		Width		Weight
Compressed	Deployed	Compressed	Deployed	Compressed	Deployed	
0.8m	100m	3.60m	3.24m	4m	3.6m	1170kg
1.2m	150m	3.60m	3.24m	4m	3.6m	1755kg
1.6m	200m	3.60m	3.24m	4m	3.6m	2340kg
2.0m	250m	3.60m	3.24m	4m	3.6m	2925kg

BARBED TAPE CONCERTINA

SHORT BLADE PROFILE

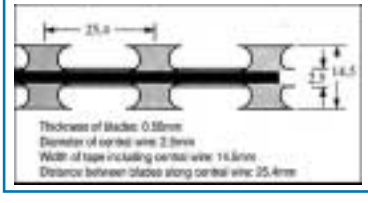
The barbed tape concertina is made of galvanized steel or stainless steel blades wrapped around high tensile galvanized steel or stainless steel wire. Barbed tape concertina with short blade profile uses mainly for military purposes such as borders fencing and military bases fancing.

Further it uses for civil purposes such as industrial yards fencing, private property fencing and prisons fencing. The short barbed tape concertina has the highest cost effectiveness it has as atractive as barbed wire price and much higher efficiency in preventing penetration.

MATERIAL PROPERTIES

Item	Galvanized	Stainless steel	Combination
Core wire	Galvanized steel wire 2.5mm T/S 1560N/mm^2	Stainless steel AISI 302 wire 2.5mm T/S 1560N/mm^2	Galvanized steel wire 2.5mm T/S 1560N/mm^2
Blade	Galvanized steel tape thickness-0.50 mm	Stainless steel AISI 304/430 tape thickness-0.50 mm	Stainless steel AISI 304/430 tape thickness-0.50 mm
Clips	Galvanized steel tape thickness-1.70 mm	Stainless steel AISI 304 tape thickness-1.70 mm	Stainless steel AISI 304 tape thickness-1.70 mm
Handles	Galvanized mild steel 4 mm wire	Soft 4mm stainless steel AISI 304 wire	Galvanized mild steel 4 mm wire

GEOMETRICAL PROPERTIES



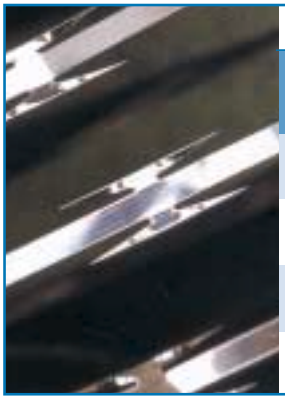
Coil dia	Extension / weight			Recommended clips rows
	33 loops	46 loops	456 loops	
1000mm	7m-9m/8kg	10m-12m/11.5kg	12m-15m/14kg	5 rows
900mm	5m-7m/7kg	8m-10m/10kg	10m-12m/12kg	5 rows
760mm	7m-9m/6kg	10m-12m/8.5kg	12m-15m/10.5kg	3 or 5 rows
630mm	5m-7m/5kg	8m-10m/7kg	10m-12m/9kg	3 rows
450mm	4m-6m/3.5kg	6m-8m/5kg	8m-10m/6kg	3 rows

BARBED TAPE CONCERTINA

LONG BLADE PROFILE

The barbed tape concertina is made of galvanized steel or stainless steel wrapped around high tensile galvanized steel or stainless steel wire.

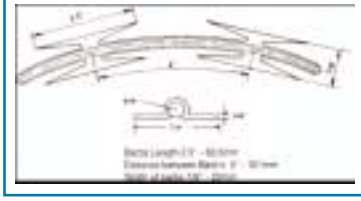
Barbed tape concertina with long blade profile uses mainly for civil purposes such as highly secured strategic sites fencing, prisons fencing, and airports fencing. The long barbed tape concertina has the highest effectiveness in preventing penetration.



MATERIAL PROPERTIES

Item	Galvanized	Stainless steel	Combination
Core wire	Galvanized steel wire 2.5mm T/S 1560N/mm^2	Stainless steel AISI 302 wire 2.5mm T/S 1560N/mm^2	Galvanized steel wire 2.5mm T/S 1560N/mm^2
Blade	Galvanized steel tape thickness-0.60 mm	Stainless steel AISI 304/430 tape thickness-0.60 mm	Stainless steel AISI 304/430 tape thickness-0.60 mm
Clips	Galvanized steel tape thickness-1.70 mm	Stainless steel AISI 304 tape thickness-1.70 mm	Stainless steel AISI 304 tape thickness-1.70 mm
Handles	Galvanized mild steel 4 mm wire	Soft 4mm stainless steel AISI 304 wire	Galvanized mild steel 4 mm wire

GEOMETRICAL PROPERTIES



Coil dia	Extension / weight			Recommended clips rows
	33 loops	46 loops	456 loops	
1000mm	7m-9m/8kg	10m-12m/14kg	12m-15m/17kg	5 rows
900mm	5m-7m/9kg	8m-10m/12kg	10m-12m/15kg	5 rows
760mm	7m-9m/8kg	10m-12m/10kg		3 rows
630mm	5m-7m/6.5kg	8m-10m/7kg		3 rows
450mm	4m-6m/4.5kg			3 rows

BARBED WIRE CONCERTINA

BARBED TAPE CONCERTINA

The barbed wire concertina is made of galvanized steel wire barbs wrapped around high tensile galvanized steel wire core. Barbed wire concertina is used mainly for military purposes such as borders fencing and military bases fencing as well as civil fencing of settelments near front line. The barbed wire concertina is the most economical security barrier.

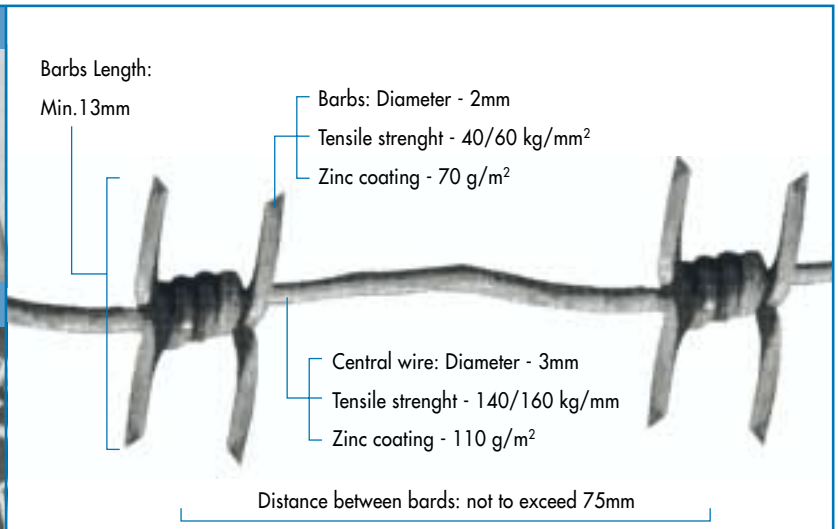
Packing: Each colid tired by wires at 4 points.
Every 5 coils tired to a bundle of 5 coils.
Every 2 bundles of 5 coils tired to a bundle of 10 coils.
Every 4 bundles of 10 coils tired by steel bands to package of 40 coils.

GEOMETRICAL PROPERTIES

Coil Diameter	No. of loops	Extension	Weight	Qty per 20" container
1000mm	56	12m-15m	Min 17 kg/coil	410 coils
1000mm	70	15m-19m	Min 22 kg/coil	330 coils

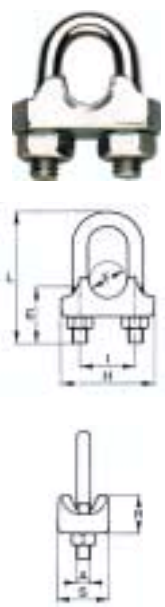
HANDLES: 2 OF 5 MM WIRE PER COIL

CLIPS: 5 ROWS SPACED AROUND THE COIL



ACCESSORIES and WIRE ROPE SLINGS

Robur n.v. Crosby europe GUNNEBO LIFTING



Wire rope clips

F mm	F "	A mm	E mm	H mm	I mm	L min	R mm	S mm	g	Nm	N
3	(1/8)	M4	12	18	9	20	7	10	9	1,25	3
5	(3/16)	M5	13	24	13	24	10	15	20	2,46	3
6	(1/4)	M6	15	27	15	28	11	16	33	4,24	3
8	(5/16)	M6	19	31	17	34	12	18	40	4,24	5
10	(3/8)	M8	22	37	20	42	13	21	79	10,20	5
11	(7/16)	M8	22	41	22	44	14	24	79	10,20	5
13	(1/2)	M10	33	44	25	55	15	26	130	20,11	5
14	(9/16)	M10	33	47	27	57	18	27	145	20,11	5
16	(5/8)	M10	33	51	29	6	20	28	175	20,11	5
18	(11/16)	M12	44	56	34	75	21	32	260	34,43	5
20	(3/4)	M12	44	62	34	75	22	33	290	34,43	5
22	(7/8)	M12	52	65	39	85	25	35	340	34,43	7
26	(1")	M14	50	72	42	95	27	40	490	54,77	7
30	(1"1/8)	M14	50	78	47	110	33	43	620	54,77	8
34	(1"1/4)	M16	55	88	53	120	37	48	840	85,14	8
40	(1"1/2)	M16	60	98	59	140	40	54	1120	85,14	8

Light wire rope clips

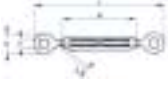
F mm	A mm	E mm	H mm	I mm	L mm	R mm	S mm	g
2	M3	10	17	7	17	6	10	7
3	M3	12	18	8	21	6	10	18
4	M4	13	21	10	23	8	11	25
5	M5	13	25	12	25	10	13	32
6	M6	18	28	14	32	12	16	65
8	M6	18	31	16	35	15	18	80
10	M8	23	38	20	44	18	20	120
13	M10	26	47	25	55	23	26	160
16	M10	32	54	28	68	29	28	260

Thimbles light type

F mm	B mm	C mm	H mm	R mm	S mm	T mm	g
2-3	16	9	16	5,5	0,6	45	2,3
4	19	11	18	6,5	0,7	60	3,0
5	24	14	22	7,5	0,8	75	5,0
6	28	17	26	9,0	1,0	90	8,0
8	33	19	30	12,0	1,2	168	15,0
10	38	21	34	14,5	1,5	210	23,0
12	44	30	46	16,0	1,8	252	44,0
14	49	33	50	18,5	2,0	294	61,0
16	57	40	59	21,0	2,0	336	83,0
18	68	46	69	24,0	2,5	378	135,0
20	78	51	77	27,0	3,0	540	215,0
22	88	56	84	28,0	3,0	594	225,0
25	92	60	91	31,0	3,5	675	330,0
28	109	75	115	39,0	4,0	924	575,0

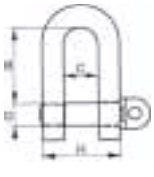
Hook and eye turnbuckles

A mm	A w	B mm	C mm	F mm	H mm	L min	L max	- g	WLL kg	- min
M5	(3/16)	80	6,0	8	17	121	181	49	25	2,0
M6	(1/4)	80	8,0	10	22	132	195	61	60	2,5
M8	(5/16)	105	10,0	11	30	170	251	115	130	2,5
M10	(3/8)	125	12,5	14	36	204	296	202	180	3,5
M11	(7/16)	135	12,5	15	36	221	320	276	220	3,5
M12	(1/2)	140	17,5	17	56	244	350	400	300	4,0
M14	(9/16)	170	21,0	18	66	284	414	650	420	4,0
M16	(5/8)	190	24,0	25	77	330	475	1010	570	6,0
M18	(11/16)	205	27,0	27	85	363	517	1390	700	7,0
M20	(3/4)	220	30,0	28	95	391	555	1840	900	7,5
M22	(7/8)	240	34,0	34	106	433	612	2520	1100	9,0
M24	(1")	260	36,0	36	114	470	662	3450	1300	10,0



Eye and eye turnbuckles

A mm	A w	B mm	F mm	H mm	L min	L max	- g	WLL kg	- min
M5	(3/16)	80	8	16	118	175	48	110	2,0
M6	(1/4)	80	10	20	130	193	62	150	2,5
M8	(5/16)	105	11	22	158	240	109	250	2,5
M10	(3/8)	125	14	27	192	289	194	350	3,5
M11	(7/16)	135	15	29	206	310	267	600	3,5
M12	(1/2)	140	17	33	226	332	325	650	4,0
M14	(9/16)	170	18	35	256	386	520	850	4,0
M16	(5/8)	190	25	49	306	451	820	1150	6,0
M18	(11/16)	205	27	56	338	492	1260	1400	7,0
M20	(3/4)	220	28	59	358	522	1530	1800	7,5
M22	(7/8)	240	34	70	400	579	2220	2240	9,0
M24	(1")	260	36	76	436	628	2740	2600	10,0
M27	(1"1/8)	300	38	82	504	730	4770	3400	11,0
M33	(1"1/4)	300	41	89	516	732	5880	5100	12,0
-	1"3/8	300	43	95	532	740	7220	5500	13,0
-	1"1/2	300	45	102	544	743	8850	6700	14,0

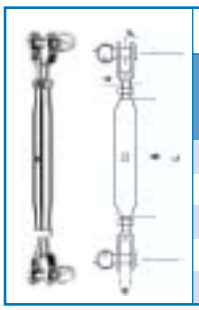


Straight shackles

D mm	D "	B mm	C mm	D1 mm	H mm	S min	g	WLL kg
5	(3/16)	19	10	10	20	5	17	50
6	(1/4)	25	13	13	25	6	30	100
8	(5/16)	32	16	17	32	8	66	200
10	(3/8)	38	19	20	39	10	116	300
11	(7/16)	44	22	22	44	11	163	400
12	(1/2)	51	25	26	49	12	22	500

Carabine hooks

DXL mm	A mm	B mm	C mm	C1 mm	g
4X40	7	13,5	7,0	4	12
5X50	7	16,0	8,0	4	17
6X60	8	18,0	8,5	5	27
7X70	8	22,0	11,0	8	44
8X80	9	22,5	12,0	8	63
9X90	9	26,5	13,0	8	92
10X100	12	30,0	15,0	10	128
11X120	16	36,0	18,0	11	190
12X140	19	44,0	20,0	13	260
13X160	28	50,0	22,0	15	350



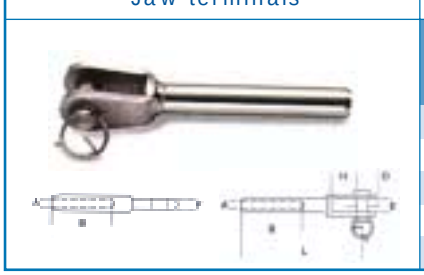
Jaw and jaw rigging turnbuckles

A mm	B mm	F mm	H mm	L min	L max	g
M5	80	5	10	127	189	54
M6	90	5	10	145	190	70
M8	110	7	10	179	265	145
M10	121	9	12	220	300	290
M12	154	12	16	260	375	480

Straight shackles

D mm	B mm	C mm	D1 mm	S min	g
4	14	8	8	4	7
5	17	10	10	5	15
5	17	10	10	5	15
6	21	12	12	6	25
8	23	16	16	8	55
10	34	20	20	10	115
12	41	24	24	12	195
13	45	26	26	13	250
16	51	32	32	16	460
19	61	37	37	19	760

Jaw terminals



A mm	B mm	C mm	D mm	E mm	H mm	L min	g
3	40	6,5	5	6,2	9	65	18
4	45	7,5	6	7,5	9	78	29
5	50	9,0	8	10,5	11	87	53
6	65	11,0	9	12,5	13	106	87
8	75	14,0	12	13,3	22	123	160

Eye terminals

A mm	B mm	C mm	D mm	E mm	H mm	L min	g
3	43	6,5	6,5	13	4	56	14
4	50	8,0	8,5	17	5	63	20
5	50	9,0	10	20	6	76	35
6	67	12,0	12,5	25	8	85	78
8	75	16,0	14,5	29	10	107	165

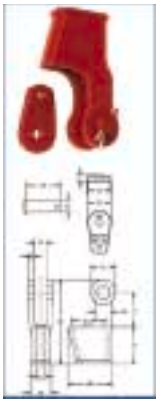
Crosby Clips G-450

Rope Size (in.)	Rope Size (mm)	G-450 Stock No. Galv	Std. Package Qty	Weight Per 100 (kg)	Dimensions (mm) A	B	C	D	E	F	G	H
1/8	3-4	1010015	100	2.72	5.59	18.3	11.2	11.9	10.4	9.65	20.6	23.9
3/16	5	1010033	100	4.54	6.35	24.6	14.2	15.0	12.7	11.2	23.9	28.5
1/4	4-7	1010051	100	9.07	7.87	26.2	12.7	19.1	16.8	14.2	20.2	36.6
5/16	8	1010079	100	13.6	9.65	35.1	19.1	22.4	18.3	17.5	33.3	42.9
3/8	9-10	1010097	100	21.3	11.2	38.1	19.1	25.4	23.1	19.2	41.4	049.3
7/16	11-12	1010113	50	34.5	12.7	47.8	25.4	30.2	26.3	33.3	46.0	58.0
1/2	13	1010131	50	36.3	12.7	47.8	25.4	30.2	28.7	22.4	48.5	58.0
9/16	14-15	1010159	50	47.2	14.2	57.0	31.8	33.3	31.0	23.9	52.5	63.5
5/8	16	1010177	50	48.1	14.2	60.5	31.8	33.3	34.0	23.9	52.5	63.5
3/4	18-20	1010195	25	68	15.9	70.0	36.6	38.1	35.8	26.9	57.0	72.0
7/8	22	1010211	25	96	19.1	79.5	41.2	44.5	40.4	31.8	62.0	80.5
1	24-26	1010239	10	118	19.1	89.0	46.0	47.8	45.2	31.8	67.0	88.0
1 1/8	28-30	1010257	10	132	19.1	98.5	51.0	51.0	48.5	31.8	71.5	91.0
1 1/4	32-34	1010275	10	195	22.4	108	54.0	58.5	55.5	36.6	79.5	105
1 3/8	36	1010293	10	209	22.4	118	58.5	60.5	58.5	36.6	79.5	106
1 1/2	38-40	1010319	10	245	22.4	125	60.5	65.5	62.0	36.6	86.5	113

Eye Hooks S-320

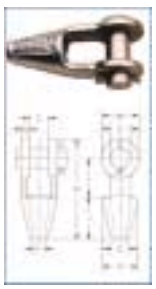
Working Load Limit t: Carbon	Alloy	Bronze	Shank Hooks Stock No.: Carbon G-213-c S.C.	Alloy S-319-A S.C.	Bronze S-319-B S.C.	Shank length Type	Weight Each (kg)	Eye Hooks Stock No.: Carbon S-320-c S.C.	Carbon S-320-c Glav.	Alloy S-320-A S.C.	Weight Each (kg)
.80	1.25	.50	1241044	1240064	1025107	Std.	.23	1220044	1023118	1221024	.25
1.00	1.60	.60	1241114	1240134	1025125	Std.	.34	1220114	1023136	1221094	.34
1.60	2.50	1.00	1241184	1240204	1025143	Std.	.45	1220184	1023154	1221164	.57
2.00	3.20	1.40	1241254	1240274	1025161	Std.	.84	1220254	1023172	1221234	.77
3.20	5.40	2.00	1241324	1240344	1025189	Std.	1.75	122.324	1023190	1221304	1.64
5.00	8.00	3.50	1241394	1240414	1025205	Std.	3.29	1220394	1023216	1221374	3.22
7.50	11.5	5.00	1241464	1240484	1025223	Std.	5.90	1220464	1023234	1221444	5.90
10	16	6.50	1241534	1240554	1025241	Std.	7.83	1220534	1023252	1221514	8.40
15	22	10	1241604	1240624	1025269	Std.	15.0	1220604	1023270	1221584	15.3
20	30	-	1024386	1024803	-	Std.	24.0	1023289	-	1023546	27.2
20	30	-	1024402	1024821	-	Long	38.8	-	-	-	-
25	37	-	1024420	1024849	-	Std.	61.0	1023305	-	1023564	47.6
25	37	-	1024448	1024867	-	Long	78.0	-	-	-	-

Wedge Sockets s-421



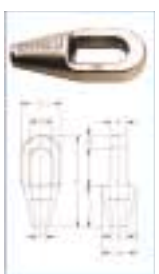
Wire Rope Dia. (in.)	Wire Rope Dia. (mm)	Stock No.: S-421 Complete Wedge and pin s.c.	S-421-W Wedge Only s.c.	S-421 Weight each (kg)	Dimensions (mm) A	B	C	D	F	G	H	J	K	L	P	R	S	T	U	V
3/8	9-10	1040304	1040466	91	143	65.0	20.6	20.6	14.2	28.7	52.2	57.0	26.9	63.5	39.6	11.2	52.0	11.2	31.8	35.0
1/2	11-13	1040322	1040484	2.15	173	87.5	25.5	25.4	17.5	35.1	71.5	76.0	33.3	70.0	49.3	12.7	62.0	13.5	44.5	48.0
5/8	14-16	1040340	1040509	3.52	207	103	31.8	30.2	22.3	44.5	84.0	93.5	38.1	82.5	57.2	14.2	79.5	17.5	51.0	55.5
3/4	18-19	1040368	1040527	5.33	248	122	38.1	35.1	25.4	32.2	100	111	44.5	101	70.0	16.8	92.1	19.8	59.0	65.0
7/8	20-22	1040386	1040545	9.30	283	139	44.5	41.4	28.7	58.5	114	127	51.0	114	79.5	19.1	160	22.3	68.3	74.5
1	24-26	1040402	1040563	13.7	324	155	50.8	50.8	33.3	65.0	127	146	57.0	127	95.0	22.3	117	26.2	73.0	83.5
1 1/8	28	1040420	1040581	19.7	365	171	57.2	57.0	38.1	47.5	140	165	63.5	143	108	25.4	136	30.2	79.5	90.0
1 1/4	30-32	1040448	1040607	26.0	406	187	63.5	63.5	41.4	81.0	152	184	70.0	159	121	28.7	147	33.3	86.0	97.0

Grooveless Open Spelter Socket G-416



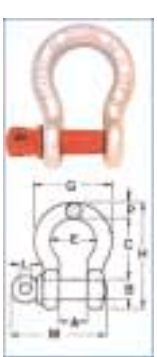
Rope Dia. (in.)	Rope Dia. (mm)	Structural Strand Dia (in.)	Structural Strand Dia (mm)	Stock No. G-416 Galv	Weight Each (kg)	A	C	D	F	G	H	J	L	M	N
1/4	6-7	-	-	235051	.50	116	23.1	17.5	9.65	17.5	39.6	57.2	39.6	33.3	8.89
5/16-3/8	8-10	-	-	235053	.59	124	19.6	20.6	12.7	20.6	42.9	58.5	44.5	39.6	12.5
7/16-1/2	11-13	-	-	235055	1.02	141	25.4	25.4	14.2	23.9	49.9	63.5	51.0	49.3	15.0
9/16-5/8	14-16	1/2	13	235057	1.81	171	31.8	30.2	17.5	28.7	57.0	76.2	63.5	57.2	14.2
3/4	18	9/16-5/8	14-16	235059	2.64	203	38.1	35.1	20.6	31.8	70.0	89.0	76.2	70.0	18.0
7/8	18	9/16-5/8	14-16	235059	2.64	203	38.1	35.1	20.6	31.8	70.0	89.0	76.2	70.0	18.0
1	24-26	13/16-7/8	20-22	235063	7.03	267	51.0	51.0	28.7	45.2	91.0	123	102	95.5	22.4
1 1/8	28-30	15/16-1	24-26	235065	9.75	298	57.2	57.2	31.8	51.0	102	125	114	105	25.4
1 1/4-1 3/8	32-35	1 1/16-1 1/8	28	235067	14.1	333	63.5	63.5	38.1	58.0	116	138	117	121	28.7
1 1/2	38	1 3/16-1 1/4	30-32	235069	21.4	384	76.2	76.2	44.5	76.0	140	165	165	146	33.3
1 5/8	40-42	1 5/16-1 3/8	33-35	235071	24.4	413	76.2	76.2	44.5	76.0	140	165	165	146	33.3
1 3/4-1 7/8	44-48	1 7/16-1 5/8	36-40	235073	37.2	464	89.0	89.0	51.0	79.5	162	191	178	165	39.6

Grooveless Closed Spelter Sockets G417



Rope Dia. (in.)	Rope Dia. (mm)	Structural Strand Dia (in.)	Structural Strand Dia (mm)	Stock No. G-416 Galv	Weight Each (kg)	A	C	D	F	G	H	J	L	M	N
1/4	6-7	-	-	235100	.23	116	12.7	39.6	22.4	9.65	17.5	39.6	75.2	12.7	46.0
5/16-3/8	8-10	-	-	235102	.34	125	15.8	42.9	24.6	12.7	20.6	42.9	57.2	17.5	52.5
7/16-1/2	11-13	-	-	235104	.68	140	17.5	51.0	29.5	14.2	23.9	51.0	63.5	22.4	58.5
9/16-5/8	14-16	1/2	13	235106	1.13	162	20.6	67.0	35.8	17.5	30.2	67.0	76.2	25.4	65.0
3/4	18	9/16-5/8	14-16	235108	1.93	194	26.9	26.2	42.2	20.6	33.3	70.0	89.0	31.8	77.5
7/8	20-22	1 1/16-3/4	18-19	235110	3.29	226	33.3	92.0	48.7	24.6	38.1	82.5	102	38.1	90.5
1	24-26	1 3/16-7/8	20-22	235112	4.76	254	36.6	105	58.5	28.7	44.5	25.5	114	44.5	103
1 1/8	26-30	1 5/16-1	24-26	235114	6.46	283	39.6	114	65.0	31.8	51.0	105	127	51.0	116
1 1/4-1 3/8	32-35	1 1/16-1 1/8	28	235116	8.96	309	41.4	128	71.0	38.1	58.5	119	138	56.5	129
1 1/2	38	1 3/16-1 1/4	30-32	235118	13.2	355	49.3	137	81.0	41.4	70.5	132	151	62.5	155
1 5/8	40-42	1 5/16-1 3/8	33-35	235120	16.3	390	54.0	146	82.5	44.5	76.2	140	165	70.0	171
1 3/4-1 7/8	44-48	1 7/16-1 5/8	36-40	235122	26.0	445	55.5	171	95.5	51.0	79.5	162	191	76.2	198

Crosby Shackles

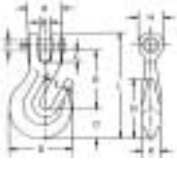


Nominal size (in.)	Working Load Limit (t)	A	B	C	D	E	F	G	H	L	M	N	P
3/16	.33	9.70	6.35	22.4	4.83	15.2	14.2	24.9	37.3	4.06	28.5	-	44.83
1/4	.50	11.9	7.87	28.7	6.35	19.8	15.5	32.5	46.7	4.83	35.1	34.0	6.35
5/16	.75	13.5	9.65	31.0	7.87	21.3	19.1	37.3	53.0	5.59	42.2	40.4	7.87
3/8	1	16.8	11.2	36.6	9.65	26.2	23.1	45.2	63.5	6.35	51.5	47.2	9.65
7/16	1.5	19.0	12.7	42.9	11.2	29.5	26.9	51.5	74.0	7.87	60.5	54.0	11.2
1/2	2	20.6	16.0	47.8	12.7	33.3	30.2	58.5	83.5	9.65	68.5	60.5	12.7
5/8	3.25	26.9	19.1	60.5	16.0	42.9	38.1	74.5	106	11.2	85.0	74.0	17.5
3/4	4.75	31.8	22.4	71.5	19.1	51.0	46.0	89.0	126	12.7	101	87.5	20.6
7/8	6.5	36.6	25.4	84.0	22.4	58.0	53.0	102	148	12.7	114	97.0	24.6
1	8.5	42.9	28.7	95.5	25.4	68.5	60.5	119	167	14.2	129	115	26.9
1 1/8	9.5	46.0	31.8	108	29.5	74.0	68.5	131	190	12.0	142	130	31.8
1 1/4	12	51.5	35.1	119	32.8	82.5	76.0	146	210	17.5	156	140	35.1
1 3/8	13.5	57.0	38.1	133	36.1	92.0	84.0	162	234	19 .1	174	156	38.1
1 1/2	17	60.5	41.4	146	39.1	98.5	92.0	175	254	20.6	187	165	41.2
1 3/4	25	73.0	51.0	178	46.7	127	106	225	313	25.4	231	197	57.0
2	35	82.5	57.0	197	53.0	146	122	253	347	31.0	263	222	61.0
2 1/2	55	105	70.0	267	67.0	184	145	327	453	35.1	330	-	79.5

Clevis chain hook with integrated latch S-314A

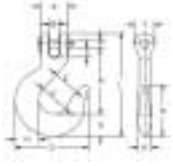
Chain Size (in.)	Chain Size (mm)	S-314A Stock No.	Grage 8 Alloy Chain Working Load Limit t 4:1	Weight Each (kg)
-	6	1225020	1.12	.32
1/4-5/16	7-8	1225021	2.0	.73
3/7	10	1225091	3.2	1.25
1/2	13	1225161	5.4	2.18
5/8	16	1225162	8.2	3.67

Chain Hook A-330



Chain Size (in.)	Chain Size (mm)	Stock No. H-330 Carbon	Stock No. A-330 Alloy	Working Load Limit t H-330 Carbon	Working Load Limit t A-330 Alloy	Weight Each (kg)	Dimensions (mm) A	B	C	D	E	G	H	J	K	L	N	P	R
1/4	7	1027105	1027249	1.18	1.43	.16	25.4	8.13	7.87	46.0	8.64	22.4	18.3	7.87	11.9	77.5	44.5	7.87	41.7
5/16	8	1027123	1027267	1077	2.13	.29	30.2	9.91	9.14	54.0	11.2	24.6	23.1	9.65	15.0	93.0	52.5	9.65	51.5
3/8	10	1027141	1027285	2.45	2.99	.45	35.1	11.4	11.4	64.3	12.7	29.7	25.4	11.2	18.3	109	59.5	11.2	61.0
1/2	13	1027187	1027329	4.17	5.13	.95	47.8	19.1	17.8	90.5	16.8	38.9	31.8	16.0	19.8	145	75.5	16.0	81.0
5/8	16	1027203	1027347	5.22	8.21	1.91	58.0	23.1	21.3	112	19.8	45.2	39.6	20.6	27.7	179	109	19.1	104

Chain Hook A-331

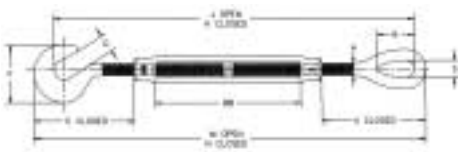


Chain Size (in.)	Chain Size (mm)	Stock No. H-331 Carbon	Stock No. A-331 Alloy	Working Load Limit t H-331 Slip Hook	Working Load Limit t A-331 Slip Hook	Weight Each (kg)	Dimensions (mm) A	B	C	D	E	G	H	J	K	L	N	P	R	T
1/4	7	1027383	1027524	.89	1.25	.23	26.9	11.2	11.2	70.0	23.9	30.2	20.8	22.2	12.7	102	54.0	9.65	65.0	20.6
5/16	8	1027409	1027542	1.30	1.95	.34	31.8	12.7	12.7	77.5	26.9	31.8	23.9	25.4	14.2	115	57.0	11.2	73.0	24.6
3/8	10	1027427	1027560	1.81	2.38	.51	37.3	15.0	15.0	92.0	33.3	38.1	28.7	30.2	16.8	131	65.0	11.9	82.5	26.9
7/16	11	1027445	1027588	2.27	3.18	.93	42.2	16.8	16.8	110	39.6	46.0	35.1	36.6	20.6	152	77.5	14.2	94.0	30.2
1/2	13	1027463	1027604	2.95	4.08	1.25	47.5	19.1	19.1	122	42.9	49.3	39.6	41.4	23.1	166	87.5	16.0	102	33.3
5/8	16	1027481	1027622	4.20	6.12	2.15	58.0	23.1	23.1	143	51.0	60.5	46.0	49.3	27.7	200	102	19.1	125	39.6
3/4	19	-	1027640	-	8.73	5.12	77.5	33.3	33.3	187	63.5	76.0	60.5	63.5	36.6	255	129	25.4	155	53.0

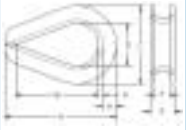
Standard ratchet type load binder L-140

Model	Stock No.	Min-max Chain size (mm)	Working Load limit t	Proof Load (KN)	Minimum Ultimate Strength (KN)	Weight Each (kg)	Handle Legth (mm)	Barrel Length (mm)	Take Up (mm)	Dimensions (mm) A	B	C	E	E1	F	F1	G
R-7	1048404	8-10	2.45	48.04	84.52	4.76	356	254	203	356	35.1	70.0	583	786	638	842	12.7
R-A	1048422	10-13	4.17	81.85	146.80	5.85	356	254	203	356	35.1	70.0	641	845	702	905	16.0
R-C	1048440	13-16	5.90	115.66	204.63	6.52	356	254	203	356	35.1	70.0	670	873	747	951	18.3

TURNBUCKLES

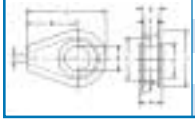


thead Diameter & Take up		Stock No. Glav.	Working Load limit t	Weight Each (kg) t	Dimensions (mm)								
(in.)	(mm)				A	D	E Closed	F	J Open	K Closed	M Open	N Closed	BB
1/4X4	6.35X102	1030011	.18	.14	6.35	11.4	40.4	33.3	282	181	303	202	102
5/16X41/2	7.94X114	1030039	.32	.21	7.94	12.7	49.3	38.1	325	211	351	236	114
3/8X6	9.53X152	1030057	.45	.34	9.53	14.2	58.0	45.0	419	267	450	298	152
1/2X6	12.7X152	1030075	.68	.73	12.7	16.8	74.5	58.0	453	300	492	340	152
1/2X9	12.7X229	1030093	.68	.83	12.7	16.8	74.5	58.0	605	376	645	416	229
1/2X12	12.7X305	1030119	.68	.94	12.7	16.8	74.5	58.0	757	453	797	492	305
5/8X6	15.9X152	1030137	1.02	1.25	15.9	21.3	93.5	71.5	489	337	540	387	152
5/8X9	15.9X229	1030155	1.02	1.42	15.9	21.3	93.5	71.5	641	413	692	464	229
5/8X12	15.9X305	1030173	1.02	1.59	15.9	21.3	93.5	71.5	794	489	845	540	305
3/4X6	19.1X152	1030191	1.36	1.76	19.1	24.9	115	84.5	530	378	591	439	152
3/4X9	19.1X229	1030217	1.36	2.09	19.1	24.9	115	84.5	683	454	744	515	229
3/4X12	19.1X305	1030235	1.36	2.46	19.1	24.9	115	84.5	835	530	896	591	305
3/4X18	19.1X457	1030253	1.36	3.29	19.1	24.9	115	84.5	1140	683	1201	744	457
7/8X12	22.2X305	1030271	1.81	3.67	22.2	28.7	132	96.0	870	565	940	635	305
7/8X18	22.2X457	1030299	1.81	4.51	22.2	28.7	132	96.0	1175	718	1245	787	457
1X6	25.4X152	1030315	2.27	4.23	25.4	31.8	148	108	600	478	678	526	152
1X12	25.4X305	1030333	2.27	5.41	25.4	31.8	148	108	905	600	983	678	305
1X18	25.4X457	1030351	2.27	6.35	25.4	31.8	148	108	1210	753	1288	830	457
1X24	25.4X610	1030379	2.27	7.82	25.4	31.8	148	108	1515	905	1592	983	610
1 1/4X12	31.8X305	1030397	2.27	8.62	31.8	38.1	183	130	964	659	1056	751	305
1 1/4X18	31.8X457	1030413	2.27	10.4	31.8	38.1	183	130	1268	811	1360	903	457
1 1/4X24	31.8X610	1030431	2.27	12.3	31.8	38.1	183	130	1573	964	1665	1056	610
1 1/2X12	38.1X305	103049	3.40	12.5	38.1	47.8	212	146	1040	735	1129	824	305
1 1/2X18	38.1X457	1030477	3.40	14.1	38.1	47.8	212	146	1345	887	1434	976	457
1 1/2X24	38.1X610	1030495	3.40	17.0	38.1	47.8	212	146	1649	1040	1738	1129	610



Extra heavy wire rope thimbles G-414

Rope Dia.		Stock No.		Weight per 100 (kg)	Dimensions (mm)							
(in.)	(mm)	G-414 Glav.	SS-414 Stainless		A	B	C	D	E	F	G	H
1/4	6-7	1037639	1037960	3.06	55.5	41.4	38.1	22.2	10.4	7.11	1.52	5.84
5/16	8	1037657	1037988	5.10	63.5	47.8	46.0	26.9	12.7	8.64	2.03	7.11
3/8	9-10	1037675	1038004	11.3	73.0	54.0	54.0	28.7	16.0	10.4	2.79	8.64
7/16	11-12	1037693	-	13.6	82.5	60.5	60.5	31.8	18.3	11.9	3.30	9.65
1/2	13	1037719	1038022	23.1	92.0	70.0	70.0	38.1	20.6	13.5	3.65	10.4
9/16	14-15	1037737	_	23.1	92.0	70.0	68.5	38.1	22.2	15.0	3.65	10.4
5/8	16	1037755	1038040	34.0	108	82.5	79.5	44.5	24.6	16.8	4.06	12.7
3/4	18-20	1037773	1038068	67	127	95.5	97.0	51.0	31.0	19.8	5.59	16.8
7/8	22	1037791	-	79	140	108	57.0	57.0	35.1	23.9	5.59	19.1
1	24-26	1037817	-	125	156	114	125	63.5	39.6	26.9	6.35	22.2
$1^1/_8$-$1^1/_4$	28-30	1037835	-	181	178	130	149	73.0	46.0	33.3	6.35	28.7
$1^1/_4$-$1^3/_8$	32-34	1037853	-	371	230	165	173	89.0	55.5	36.7	9.65	28.7
$1^3/_8$-$1^1/_2$	36-38	1037871	-	533	229	159	181	89.0	65.0	39.6	12.7	28.7
$1^5/_8$	40	1037899	-	771	286	203	207	102	69.0	43.7	12.7	35.1
$1^3/_4$	44	1037915	-	805	310	229	216	114	72.0	46.7	12.7	33.3



Solid wire rope thimbles S-412

Rope Dia.		S-412 Stock No. S.C.	Weight Each (kg)	Dimensions (mm)										
(in.)	(mm)			A	B	C	D	E	F	G	H	J	K	L
1/2	13	1037121	.30	71.5	44.5	6.35	26.9	19.1	14.2	7.11	22.4	54.0	41.4	39.6
5/8	16	1037149	1.00	119	76.0	9.65	33.3	26.9	20.6	10.4	28.7	86.0	57.0	65.0
3/4	18-20	1037167	1.05	119	76.0	9.65	38.1	26.9	20.6	10.4	35.1	89.0	57.0	65.0
7/8	22	1037185	2.47	154	97.0	12.7	44.5	35.1	26.9	13.5	41.4	114	82.5	87.5
1	24-26	1037201	2.38	154	97.0	12.7	54.0	35.1	26.9	13.5	46.0	114	82.5	87.5
$1^1/_8$	28-30	1037229	4.21	184	116	16.0	60.5	44.5	33.3	16.8	52.5	137	98.5	103
$1^1/_4$-$1^3/_8$	32-36	1037247	4.45	184	116	16.0	67.0	49.3	38.9	19.8	58.5	137	98.5	105

GUNNEBO LIFTING

GUNNEBO WEBBING SLING (GWS)

Flat webbing slings with eyes
According to European Standard EN 1492-1
Safety factor 7:1.
Made of 100% polyester

Type	WLL (tonnes)	Width (mm)	L1 min (M)	Width of eye (mm)	Weight per meter L1 (kg) approx
GWS	1 T	30	0,4	30	0,17
GWS	2 T	60	0,65	35	0,36
GWS	3 T	90	0,9	45	0,56
GWS	4 T	120	1,3	65	0,74
GWS	5 T	150	1,5	80	0,93
GWS	6 T	180	1,6	95	1,12
GWS	8 T	240	1,85	125	1,65
GWS	10 T	180	1,6	180	2,20
GWS	12 T	180	1,6	180	2,20
GWS	15 T	240	1,85	240	3,26

L1= effectiv length
Other sizes can be produced upon request.
Sizes 1-4 ton are packed in a plastic bag with manufacture certificate, bar code and user instruvtion.

The inside length of eye is according to the European standard:
- A minimum of three times the width of the sling for widths up to 150 mm
- A minimum of two and a half time the width of the sling for widths over 150 mm

GUNNEBO LASHING SYSTEM, 50 MM ACC. TO EUROPEAN STANDARD EN 12195-2

LC = lashing capacity: Maximum direct tensile force that a lashing device can withstand when in use.

Safety factor: 2:1 complete system and metal parts
3:1 non-sewn polyester webbing

Elongation: Maximum 7% when polyester webbing subjected to the LC.

Marking: Traceability code similar to lifting products. A protected label ensures traceability at all circumstances.

GUNNEBO LASHING SYSTEM, 50MM

Type	Lashing capacity (tonnes)	Lashing strength (tonnes)	Short part L =	Long part L =
WLG 2T	2	4	0,5 M	9,5 M
WLG 2T	2	4	0,5 M	7,5 M

Standard fitting: wirehook.
Lashings with other fittings can be produced upon request.
Actual STF = 350 da N at SHF = 50 da N.
*1 ton equivalent to 1000daN

GUNNEBO LASHING SYSTEM, 50MM

5 T

Type	Lashing capacity (tonnes)	Lashing strength (tonnes)	Short part L =	Long part L =
WLE 5T	5	10	0,5 M	9,5 M
WLG 5T	5	10	0,5 M	9,5 M
WLS 3T	3	6	0,5 M	9,5 M
WLG 4T	4	8	0,5 M	7,5 M
WLG 4T	4	8	0,5 M	9,5 M

Standard fitting: wirehook 50mm.
Standard fitting WLS: stainless wirehook with latch.
Lashings with other fittings can be produced upon request.

GUNNEBO LASHING SYSTEM, 25-35 MM

WLG 0,5 T

WLG 1,5 T

Type	Lashing capacity (tonnes)	Lashing strength (tonnes)	Width (mm)	Short part L =	Long part L =
WLG 2,5T	2,5	5,0	35	0,5M	4,5M
WLG 2,5T	2,5	5,0	35	0,5M	5,5M
WLG 1,5T	1,5	3,0	25	0,4M	3,6M
WLG 1,5T	1,5	3,0	25	0,5M	4,5M
WLG 0,5T	0,5	1,0	25	0,4M	3,6M
WLG 0,5T	0,5	1,0	25	0,5M	4,5M

Standatd fitting wirehook
25-35 mm lashing are packed in plastic bag with bar code marketing.

WLG 2,5T

Master link type O

Master link type O Connection to chain with G-link

Code	WLL Tonnes*	For Chain size mm 1-leg	2-leg L	Dim. in mm	B	D	Weight appr. kgs
O-6-8	1.25	6	-	100	60	11	0.2
O-86-8	2.5	7,8	6	120	70	14	0.4
O-108-8	4	10	7,8	140	80	17	0.7
O-13-8	6.3	-	-	150	90	19	1
O-1310-8	8	13	10	160	95	22	1.5
O-16-8	11.5	-	-	190	110	25	2.2
O-1613-8	15	16	13	180	105	28	2.7
O-19-8	17	-	-	200	120	30	3.5
0-2216-8	20	19,22	16	240	140	34	5.1
O-26-8	25	-	-	250	150	38	7
O-2619-8	30	26	19	250	150	40	8
O-3222-8	37	32	22	300	180	45	12
O-3626-8	50	36	26	300	200	50	15
O-4028-8	63	40	28	300	200	55	18
O-4532-8	80	45	32	350	200	60	25
O-100T-8	100	-	-	400	250	70	40
0-125T-8	125	-	-	400	250	80	53

Master link type OT

Master link type OT Connection to chain with G-link

Code	WLL Tonnes*	For Chain size mm 3-0 4-leg	L1	L B	Dim. in mm	D	l	b	d	Weight appr. kgs
OT-6-8	5	6	260	150	90	19	110	60	14	1.8
OT-8-8	8	7,8	300	160	95	22	140	80	17	2.8
OT-10-8	16	10	360	200	120	30	160	95	22	6
OT-13-8	30	13	430	250	150	40	180	105	28	13
OT-16-8	40	16	500	300	200	50	200	110	32	23
OT-19-8	50	19	560	300	200	55	260	140	38	32
OT-22-8	75	22	610	350	200	60	260	140	45	46
OT-26-8	100	26	680	400	250	70	280	160	50	68
OT-32-8	125	32	680	400	250	80	280	160	55	87

Chain type KLB

Code	WLL Tonnes*	D	Dim. in mm E	H	Weight appr. kgs
KLB-6-8E	1.12	6	18	8.5	0.8
KLB-7-8E	1.5	7	21	10	1.1
KLB-8-8E	2.0	8	24	11	1.4
KLB-10-8E	3.15	10	30	14	2.2
KLB-13-8E	5.3	13	39	18	3.7
KLB-16-8E	8.0	16	48	22	5.6
KLB-19-8E	11.2	19	57	26	7.8
KLB-22-8E	15.0	22	66	30	11.0
KLB-26-8E	21.2	26	78	35	14.3
KLB-32-8E	31.5	32	96	43	23

Coupling link type G

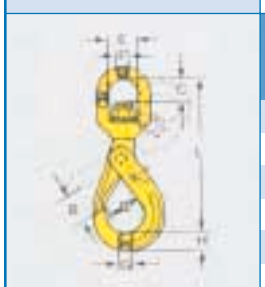
Code	WLL Tonnes*	For Chain size mm	L	Dim. in mm B	G	E	Weight appr. kgs
G-6-8	1.12	6	44	15	7	17	0.1
G-7/8-8	2.0	7,8	56	18	9	22	0.2
G-10-8	3.2	10	68	25	12	26	0.3
G-13-8	5.4	13	88	29	15	33	0.7
G-16-3	8.0	16	104	36	19	40	1.1
G-18/20-8	12.5	19	125	43	22	48	1.8
G-22-8	15.5	22	150	49	24	59	3.0
G-26-8	21.6	26	160	58	29	61	4.6
G-32-8	32.0	32	200	70	36	78	8.6

GUNNEBO LIFTING

Safety hook type BK

Code	WLL Tonnes*	For Chain size mm	L	Dim. in mm			G	H	Weight appr. kgs
				B	E	F			
BK-6-8	1.12	6	109	28	22	10	14	19	0.5
BK-7/8-8	2.0	7,8	137	36	25	11	17	23	0.8
BK-10-8	3.2	10	168	44	32	13	25	29	1.5
BK-13-8	5.4	13	208	54	40	16	28	38	2.8
BK-16-8	8.0	16	254	63	50	20	37	49	5.6
BK-18/20-8	12.5	19	290	68	60	22	42	57	7.9
BK-22-8	15.5	22	320	80	70	24	47	62	11.2
BK-26-8	21.6	26	345	100	80	25	50	68	14.5
BK-28-8	25.0	28	400	120	90	27	62	81	22.0

Swivel Safety hook type BKL

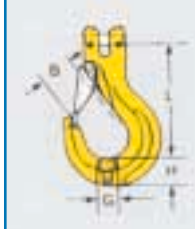


Code	WLL Tonnes*	For Chain size mm	L	Dim. in mm			F	G	H	Weight appr. kgs
				B	E	F				
BKL-6-8	1.12	6	149	28	23	33	11	14	19	0.6
BKL-7/8-8	2.0	7.8	183	36	27	36	12	17	23	1.1
BKL-10-8	3.2	10	218	44	37	42	15	25	29	2.0
BKL-13-8	5.4	13	276	54	43	48	19	28	38	3.8
BKL-16-8	8.0	16	334	63	58	62	22	37	49	6.8
BKL-18/20-8	12.5	19	367	69	80	74	26	42	56	10.8

Safety hook type GBK

Code	WLL Tonnes*	For Chain size mm	D	Dim. in mm		H	Weight appr. kgs
				B	G		
GBK-7/8-8	2.0	7,8	112	34	17	20	0.6
GBK-10-8	3.2	10	137	42	21	26	1.1
GBK-13-8	5.4	13	167	50	26	30	2.0
GBK-16-8	8.0	16	198	60	30	38	4.2

Sling hook type GKN



Code	WLL Tonnes*	For Chain size mm	L	Dim. in mm		H	Weight appr. kgs
				B	G		
GKN-7/8-8	2.0	7,8	96	27	18	22	0.5
GKN-10-8	3.2	10	121	34	23	29	1.0
GKN-13-8	5.4	13	147	42	28	36	2.1
GKN-16-8	8.0	16	170	56	33	43	3.4
GKN-19/20-8	12.5	19	196	60	43	51	6.2

Sling hook type GG

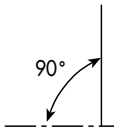
Code	WLL Tonnes*	For Chain size mm	Dim. in mm	B	Weight appr. kgs
			L		
GG-7-8	1.5	7	56	10	0.3
GG-10-8	3.2	10	78	12	0.8
GG-13-8	5.4	13	97	15	1.5
GG-16-8	8.0	16	124	19	2.8
GG-19/20-8	12.5	19	145	22.5	4.8

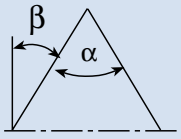
Container hook type CH-3

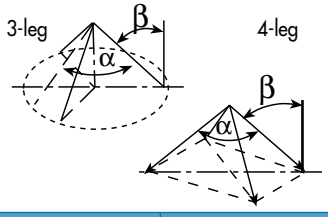
Code	WLL Tonnes*	L	B	Dim. in mm		G	E	Weight appr. kgs
				H	F			
CH-3	12.5	192	70	46	25	47	75	4.0
CH-3 Turned 45° left	12.5							
CH-3 Turned 45° right	12.5							

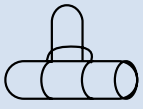
WORKING LOAD LIMITS (TONNES) GRADE 8 CHAIN

Acc. to EN 818-4:1996









For chain size mm		β0°-45° α0°-90°	β 45°-60° α90°-120°	β0°-45° α0°-90°	β 45°-60° α90°-120°	
6	1.12	1.6	1.12	2.36	1.7	1.8
7	1.5	2.12	1.5	3.15	2.24	2.5
8	2.0	2.8	2.0	4.25	3.0	3.15
10	3.15	4.25	3.15	6.7	4.75	5.0
13	5.3	7.5	5.3	11.2	8.0	8.5
16	8.0	11.2	8.0	17.0	11.8	12.5
19	11.2	16.0	11.2	23.6	17.0	18.0
22	15.0	21.2	15.0	31.5	22.4	23.6
26	21.2	30.0	21.2	45.0	31.5	33.5
32	31.5	45.0	31.5	67.0	47.5	50.0

Note: satety factor 4:1. Above limits reter to normal use and equally loaded sling legs.

GUNNEBO LIFTING *GRABIQ*

Chain type KLA 8+ — Grade 8+

Code	WLL Tonnes*	øDmm (nom)	P	W1	Weight kgs/m
EGKN 6-8+	1,5	6	18	8	1,0
EGKN 8-8+	2,5	8	24	11	1,7
EGKN 10-8+	4	10	30	14	2,6
EGKN 13-8+	6,5	13	39	18	4,5
EGKN 16-8+	10	16	48	22	6,6

Master Grab Duo, MGD — All-in-one compact top link for 2-leg slings.

Code	WLL Tonnes*	L	B	E	H	Weight kgs
MG 6-8+	2,1	144	90	60	17	0,7
MG 8-8+	3,5	171	100	75	21	1,4
MG 10-8+	5,6	211	124	90	24	2,5
MG 13-8+	9,1	262	148	105	29	5
MG 16-8+	14	309	175	120	35	8,9

C-Grab, CG — For use with master links and choke.

Code	WLL Tonnes*	L	B	E	H	Weight kgs
CG 6-8+	1,5	80	11	24	19	0,3
CG 8-8+	2,5	107	12	32	24	0,8
CG 10-8+	4	134	15	40	29	1,5
CG 13-8+	6,5	172	18	52	38	3,2
CG 16-8+	10	215	22	64	47	6,1

C-Grab Duo, CGD — For use with master links.

Code	WLL Tonnes*	L	B	E	H	Weight kgs
MG 6-8+	2,1	79	11	24	20	0,5
MG 8-8+	3,5	106	12	32	29	1,3
MG 10-8+	5,6	133	15	40	37	2,5
MG 13-8+	9,1	173	18	52	46	5,5
MG 16-8+	14	215	22	64	57	10,2

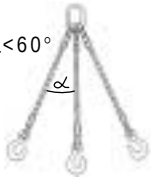
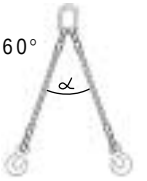
Safety hook, BKG

Code	WLL Tonnes*	L	B	E	H	Weight kgs
BKG 6-8+	1,5	91	29	15	21	0,5
BKG 8-8+	2,5	120	36	20	27	1,0
BKG 10-8+	4	142	44	25	33	1,8
BKG 13-8+	6,5	178	54	32	40	3,1
BKG 16-8+	10	216	61	39	51	5,6

Sling hook, EGKN

Code	WLL Tonnes*	L	B	E	H	Weight kgs
EGKN 6-8+	1,5	86	27	17	20	0,4
EGKN 8-8+	2,5	95	31	17	22	0,5
EGKN 10-8+	4	121	41	23	30	1,0
EGKN 13-8+	6,5	145	49	28	38	2,0
EGKN 16-8+	10	170	59	36	45	3,8

SAFE WORKING LOADS - WIRE ROPE SLINGS. FIBER CORE

Diameter	α<60°	α<60° 	α<60° 		EYE DIMENTION WIDTH x LENGHT
mm	kg	kg	kg	kg	mm
4	320	280	230	160	50x100
5	500	430	350	250	50x100
6	780	680	550	390	50x100
7	1.040	900	740	520	56x112
8	1.400	1.210	990	700	64x128
9	1.740	1.510	1.230	870	72x144
10	2.140	1.850	1.510	1.070	80x160
11	2.600	2.250	1.840	1.300	88x176
12	3.080	2.670	2.180	1.540	96x192
13	3.620	3.130	2.560	1.810	104x208
14	4.180	3.620	2.960	2.090	112x224
15	5.020	4.350	3.550	2.510	120x240
16	5.500	4.760	3.890	2.750	128x256
18	7.000	6.060	4.950	3.500	144x288
20	8.580	7.430	6.070	4.290	160x320
22	10.380	8.990	7.340	5.190	176x352
24	12.340	10.680	8.730	6.170	192x384
26	14.500	12.550	10.250	7.250	208x416
28	16.820	14.560	11.900	8.410	224x448
30	20.000	17.320	14.140	10.000	240x480
32	22.000	19.050	15.560	11.000	256x512
34	24.740	21.420	17.500	12.370	272x544
36	27.780	24.050	19.650	13.890	288x576
40	34.320	29.710	24.270	17.160	320x640

SAFE WORKING LOADS - WIRE ROPE SLINGS. STEEL CORE

8	1.480	1.280	1.050	740	64x128
10	2.320	2.010	1.640	1.160	80x160
12	3.320	2.870	2.350	1.660	96x192
14	4.560	3.950	3.220	2.280	112x224
16	5.900	5.110	4.170	2.950	128x256
18	7.480	6.480	5.290	3.740	144x228
20	9.240	8.000	6.530	4.620	160x320
22	11.200	9.700	7.920	5.600	176x352
24	13.320	11.530	9.420	6.660	192x384
26	15.640	13.540	11.060	7.820	208x416
28	18.140	15.710	12.830	9.070	224x448
30	21.580	18.680	15.260	10.790	240x480
32	23.680	20.500	16.750	11.840	256x512
34	27.020	23.390	19.110	13.510	272x544
36	29.980	25.960	21.200	14.990	288x576
40	37.080	32.100	26.220	18.540	320x640
44	44.780	38.770	31.670	22.390	352x704
48	53.220	46.080	37.640	26.610	384x768
52	62.400	54.030	44.130	31.200	416x832

MOSEROTH LTD.

מוסרות בע"מ
רח' בעלי המלאכה
אזור תעשיה נתיבות
מיקוד: 80200
טל: 08-9943666
פקס: 08-9942997

מרכז השיווק
רח' המרכבה 47
אזור תעשיה חולון
מיקוד: 58851
טל: 03-5599260
פקס: 03-5599261

MARKETING CENTER
47 HAMERKAVA ST.
IND. AREA HOLON
ISRAEL 58851
TEL: 972-3-5599260
FAX: 972-3-5599261

MOSEROTH LTD.
BA'ALEI HAMELACHA ST.
IND. AREA NETIVOT
ISRAEL 80200
TEL: 972-8-9943666
FAX: 972-8-9942997

e-mail: mail@moseroth.co.il ■ marketing center: moni@moseroth.co.il ■ www.moseroth.co.il