







DYNE K® SBF WINCHLINE

APPLICATIONS

Winch Line

BENEFITS / FEATURES

Superior Bending Fatigue (SBF) Excellent Breaking Load (SK99)

Buoyant Durable

Very Low Stretch Lightweight Easy to Splice Does not Kink



SPECIFICATIONS

Material : Coated: Dyneema® SK 78/99

 $\begin{tabular}{lll} Specific Gravity & : & 0.97 kg/dm^3 \\ Construction & : & 12 Strand Braided \\ \end{tabular}$

UV Resistance Excellent Chemical Resistance Excellent Melting Point 147°C **Critical Temperature** 65°C Working Stretch <1,5% Fiber Water Absorption: None Wet Abrasion : Excellent Dry Abrasion : Excellent Standard : ISO 10325

Length : 15m, 23m, 30m, 38m or 45m

Other Colours & Larger Diameters Upon Request

DIA (mm)	Weight (kg/ 100m)	B.Load (kgf) SK78	B.Load (kgf) SK99	DIA (inch)	Weight (lbs/ 100ft)	B.Load (lbs) SK78	B.Load (lbs) SK99
6	2,30	3.750	4.425	1/4"	1,55	8.250	9.735
8	4,00	6.600	7.788	5/16"	2,69	14.520	17.134
10	6,10	10.400	12.272	3/8"	4,10	22.880	26.998
12	8,70	15.000	17.700	1/2"	5,85	33.000	38.940
14	11,70	20.400	24.072	9/16"	7,86	44.880	52.958
16	15,10	26.520	31.294	5/8"	10,15	58.344	68.847
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Offspriced Break Load (All Tests are III Accordance with 150 2507)







FORCE K® SBF WINCHLINE

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Winch Line

BENEFITS / FEATURES

Superior Bending Fatigue (SBF)

Buoyant Durable

Very Low Stretch Lightweight Easy to Splice Does not Kink



SPECIFICATIONS

Material : Coated UHMWPE Fiber

Specific Gravity : 0,97 kg/dm³ Construction : 12 Strand Braided

UV Resistance Excellent Chemical Resistance Excellent Melting Point 147°C **Critical Temperature** 65°C Working Stretch : <1,5% Fiber Water Absorption: None Wet Abrasion Excellent Dry Abrasion Excellent

Standard : -

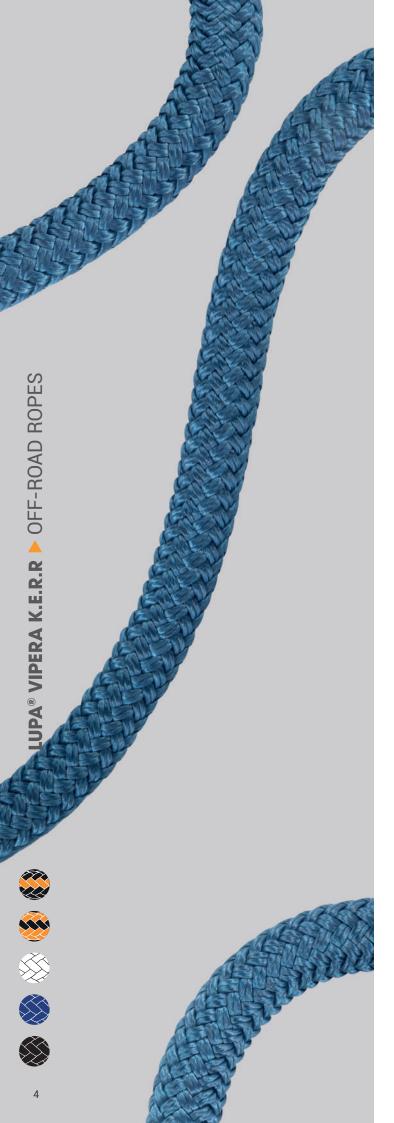
Length : 15m, 23m, 30m, 38m or 45m

Other Colours & Larger Diameters Upon Request

DIA (mm)	Weight (kg/ 100m)	Min. B.Load (kgf) Unspliced	Min. B.Load (kgf) Spliced	DIA (inch)	Weight (lbs/ 100ft)	Min. B.Load (Ibs) Unspliced	Min. B.Load (lbs) Spliced
6	2,30	3.563	3.192	1/4"	1,55	7.838	7.022
8	4,00	6.270	5.681	5/16"	2,69	13.794	12.498
10	6,10	9.880	8.911	3/8"	4,10	21.736	19.604
12	8,70	14.250	12.787	1/2"	5,85	31.350	28.131
14	11,70	19.380	17.442	9/16"	7,86	42.636	38.372
16	15,10	25.194	22.515	5/8"	10,15	55.427	49.533

Unspliced Break Load (All Tests are in Accordance with ISO 2307)





LUPA® VIPERA K.E.R.R

APPLICATIONS

Kinetic Energy Recovery Rope Does not Harden (KERR)

BENEFITS / FEATURES

Does not Kink Soft Hand Durable Flexible Cover High Breaking Load **Excellent Shock Absorption**



GUIDELINES & RECOMMENDATIONS

12 mm Ropes for Light Weight Vehicles, Subaru (All Wheel Drive) 18 mm Ropes for Land Rover (Freelander), Rav4, Lower Weight Pick Up 24 mm Ropes for Jeep (All Models), Land Rover Defender -Discovery - Range Rover, Toyota, Hummer H1-H2-H3, Sportsmobile, Heavy Expedition Vehicles 30 mm Ropes for Mrap (Military), Heavy Motorhomes, Buses,

36 mm Ropes for Full Size Semi Tracks

SPECIFICATIONS

Coaches

Material 100% HT Polyamide Fiber

Type

Specific Gravity 1,14 kg/dm³

Construction Cover: 16-20-24 Plaited

Core: 16 Plaited

UV Resistance Very Good **Chemical Resistance** Good Melting Point 218°C **Critical Temperature** 130°C **Elongation at Break** Approx. %30 Fiber Water Absorption: Approx. %3-4 Wet Abrasion Sufficient Dry Abrasion Good

Standard

5 m, 6 m or 9 m Length

DIA (mm)	Weight (kg/100m)	Min. B.Load (kgf)	DIA (inch)	Weight (lbs/100ft)	Min. B.Load (lbs)
12	9,20	3.190	1/2"	6,18	7.018
18	20,40	7.120	3/4"	13,71	15.664
24	36,65	12.640	1"	24,63	27.808
30	55,60	19.700	1-1/4"	37,36	43.340
36	81,00	28.250	1-1/2"	54,43	62.150
*Unsr	oliced Break I	oad (All Tes	ts are in Acco	ordance with	ISO 2307)

LUPA® SQUARE K.E.R.R

APPLICATIONS

BENEFITS / FEATURES

Kinetic Energy Recovery Rope Does not Harden (KERR) Does not Kink

Does not Harder Does not Kink Soft Hand Durable

High Breaking Load Excellent Shock Absorption

Easy to Splice



GUIDELINES & RECOMMENDATIONS

12 mm Ropes for Light Weight Vehicles, Subaru (All Wheel Drive)
18 mm Ropes for Land Rover (Freelander), Rav4, Lower Weight Pick Up
24 mm Ropes for Jeep (All Models), Land Rover Defender -

Discovery - Range Rover, Toyota, Hummer H1-H2-H3, Sportsmobile, Heavy Expedition Vehicles

30 mm Ropes for Mrap (Military), Heavy Motorhomes, Buses, Coaches

36 mm Ropes for Full Size Semi Tracks

SPECIFICATIONS

Material : 100% HT Polyamide Fiber

Type : L

Specific Gravity : 1,14 kg/dm³

Construction : 8 Strand Plaited (4x2)

UV Resistance : Very Good Chemical Resistance : Good Melting Point : 218°C Critical Temperature : 130°C

Elongation at Break : Approx. %30-35
Fiber Water Absorption : Approx. %3-4
Wet Abrasion : Sufficient
Dry Abrasion : Good
Standard : EN ISO 1140
Length : 5 m, 6 m or 9 m

DIA (mm)	Weight (kg/100m)	Min. B.Load (kgf)	DIA (inch)	Weight (lbs/100ft)	Min. B.Load (lbs)
12	9,00	3.060	1/2"	6,05	6.732
18	20,50	6.875	3/4"	13,78	15.125
24	36,00	12.000	1"	24,19	26.400
30	56,00	19.000	1-1/4"	37,63	41.800
36	81,00	27.500	1-1/2"	54,43	60.500
*Unsi	oliced Break	Load (All tes	ts are in A	ccordance witl	h ISO 2307)





LUPA® ROUND K.E.R.R

APPLICATIONS

BENEFITS / FEATURES

Kinetic Energy Recovery Rope Does not Kink (KERR)

Soft Hand Durable

High Breaking Load **Excellent Shock Absorption**

GUIDELINES & RECOMMENDATIONS

18 mm Ropes for Land Rover (Freelander), Rav4, Lower Weight Pick Up 24 mm Ropes for Jeep (All Models), Land Rover Defender - Discovery -Range Rover, Toyota, Hummer H1-H2-H3, Sportsmobile, Heavy **Expedition Vehicles**

30 mm Ropes for Mrap (Military), Heavy Motorhomes, Buses, Coaches 36 mm Ropes for Full Size Semi Tracks

SPECIFICATIONS

100% HT Polyamide Fiber Material

Type : T

: 1,14 kg/dm³ Specific Gravity Construction : 12 Strand Plaited UV Resistance : Very Good Chemical Resistance : Good : 218°C Melting Point Critical Temperature : 130°C

: Approx.%30-35 Elongation At Break Fiber Water Absorption: Approx. %3-4 Wet Abrasion : Sufficient Dry Abrasion : Good Standard : EN ISO 1140

Length : 5m, 6m, 9m, 12m, 14m, 16m or 20m

DIA (mm)	Weight (kg/100m)	Min. B.Load (kgf)	DIA (inch)	Weight (lbs/100ft)	Min. B.Load (lbs)
18	23,00	8.000	3/4"	15,46	17.600
24	36,00	12.030	1"	24,19	26.466
28	49,00	17.000	1-1/8"	32,93	37.400
30	56,00	19.000	1-1/4"	37,63	41.800
32	64,00	21.125	1-5/16"	43,01	46.475
36	81,00	27.500	1-1/2"	54,43	60.500
*I Insn	liced Break I	nad (All tests	s are in Accou	rdance with I	SO 2307)





DYNE K® SBF EXTENSION

APPLICATIONS

Winch Line

BENEFITS / FEATURES

Superior Bending Fatigue (SBF) Excellent Breaking Load (SK99)

Buoyant Durable

Very Low Stretch Lightweight Easy to Splice Does not Kink



SPECIFICATIONS

Material : Coated: Dyneema® SK 78/99

Specific Gravity : 0,97 kg/dm³ Construction : 12 Strand Braided

UV Resistance Excellent Chemical Resistance Excellent Melting Point 147°C **Critical Temperature** 65°C Working Stretch <1% Fiber Water Absorption: None Wet Abrasion Excellent Dry Abrasion : Excellent : ISO 10325 Standard

Length : 12m, 15m, 23m or 30m

Other Colours & Larger Diameters Upon Request

DIA (mm)	Weight (kg/ 100m)	B.Load (kgf) SK78	B.Load (kgf) SK99	DIA (inch)	Weight (lbs/ 100ft)	B.Load (lbs) SK78	B.Load (lbs) SK99
6	2,30	3.750	4.425	1/4"	1,55	8.250	9.735
8	4,00	6.600	7.788	5/16"	2,69	14.520	17.134
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14	11,70	20.400	24.072	9/16"	7,86	44.880	52.958
16	15,10	26.520	31.294	5/8"	10,15	58.344	68.847
*Uns	pliced B	reak Load	(All Tests	are in A	ccordan	ce with IS	0 2307)



FORCE K® SBF EXTENSION

APPLICATIONS

Winch Line

BENEFITS / FEATURES

Superior Bending Fatigue (SBF)

Buoyant Durable

Very Low Stretch

Lightweight Easy to Splice

Does not Kink



SPECIFICATIONS

Material Coated UHMWPE Fiber

Specific Gravity 0,97 kg/dm³ Construction 12 Strand Braided

UV Resistance Excellent Chemical Resistance Excellent Melting Point 147°C **Critical Temperature** 65°C Working Stretch <1,5% Fiber Water Absorption: None Wet Abrasion : Excellent Dry Abrasion : Excellent

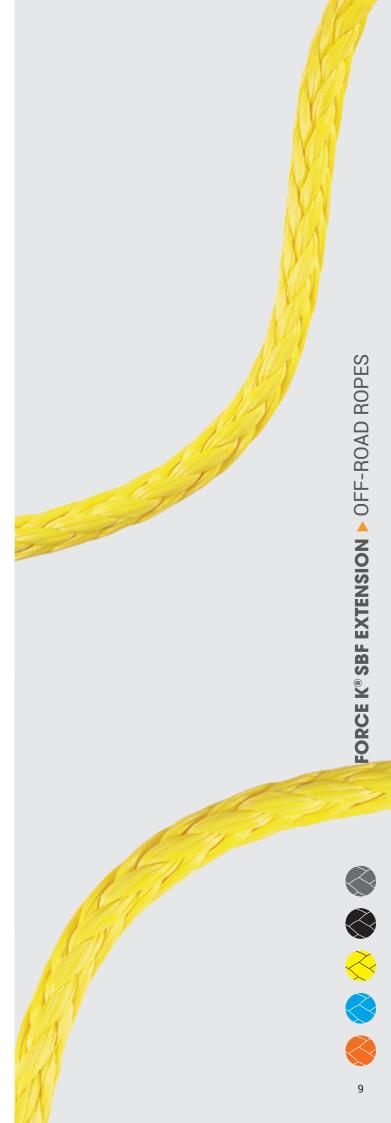
Standard

Length : 12m, 15m, 23m or 30m

Other Colours & Larger Diameters Upon Request

DIA (mm)	Weight (kg/ 100m)	Min. B.Load (kgf) Unspliced	Min. B.Load (kgf) Spliced	DIA (inch)	Weight (lbs/ 100ft)	Min. B.Load (lbs) Unspliced	Min. B.Load (lbs) Spliced
6	2,30	3.563	3.192	1/4"	1,55	7.838	7.022
8	4,00	6.270	5.681	5/16"	2,69	13.794	12.498
10	6,10	9.880	8.911	3/8"	4,10	21.736	19.604
12	8,70	14.250	12.787	1/2"	5,85	31.350	28.131
14	11,70	19.380	17.442	9/16"	7,86	42.636	38.372
16	15,10	25.194	22.515	5/8"	10,15	55.427	49.533





















DYNE K® SBF SHACKLE

APPLICATIONS

BENEFITS / FEATURES

Connection Line

Can be Opened and Closed

Quickly Buoyant

Very Low Stretch

Self-Locking Under Load Easy to Use

Extremely Durable

SPECIFICATIONS

Coated Dyneema® SK 78 Material

Specific Gravity 0,97 kg/dm3 Construction 12 Strand Plaited

UV Resistance Excellent **Chemical Resistance** Excellent Melting Point 147°C **Critical Temperature** 65°C <1,5% Working Stretch Wet Abrasion Excellent **Dry Abrasion** Excellent Standard ISO 10325

Length

Shackle DIA (mm)	Rope DIA (mm)	Total Length in Closed Condition (cm)	Weight (kg)	Min. B.Load (kgf)	Weight (kg)	Min. B.Load (kgf)	Weight (kg)	Min. B.Load (kgf)
		(211.9	Sha	ckle -1	Shac	kle - 2	Shac	ckle - 3
12	7	12,5	0,03	4.670	0,05	10.508	0,07	15.785
14	8	15,0	0,05	5.980	0,07	13.455	0,11	20.212
18	10	17,5	0,09	9.380	0,13	21.105	0,20	31.704
20	12	20,0	0,14	13.460	0,21	30.285	0,32	45.495
24	14	35,0	0,33	18.360	0,49	41.310	0,75	62.057
28	16	40,0	0,48	23.700	0,72	53.325	1,11	80.106
32	18	45,0	0,68	28.500	1,03	64.125	1,57	96.330
34	20	50,0	0,93	34.000	1,39	76.500	2,13	114.920
36	22	55,0	1,24	40.800	1,85	91.800	2,84	137.904
40	24	60,0	1,59	47.940	2,38	107.865	3,65	162.037
44	26	65,0	2,00	55.080	3,00	123.930	4,59	186.170
48	28	70,0	2,49	62.220	3,74	139.995	5,73	210.304
50	30	75,0	3,04	70.380	4,55	158.355	6,98	237.884
54	32	80,0	3,68	79.560	5,52	179.010	8,46	268.913
58	34	85,0	4,41	87.720	6,61	197.370	10,13	296.494
60	36	90,0	5,18	95.880	7,78	215.730	11,92	324.074
64	38	95,0	6,06	106.080	9,10	238.680	13,95	358.550
68	40	100,0	7,05	115.260	10,57	259.335	16,21	389.579
72	42	110,0	8,54	124.440	12,80	279.990	19,63	420.607

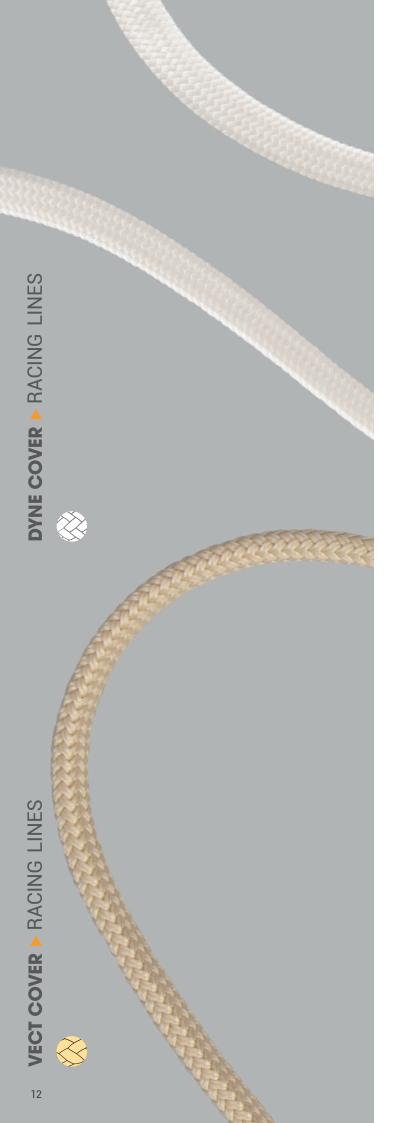












DYNE COVER



APPLICATIONS

Special Cover

BENEFITS / FEATURES

Ideal for Protection Against Abrasion Easy Handling Buoyant

SPECIFICATIONS

Material : 100% Dyneema® SK 78 Fiber

Specific Gravity 0,97 kg/dm³ 24-32 Plaited Construction **UV** Resistance Excellent **Chemical Resistance** Excellent Melting Point : 147°C **Critical Temperature** 65°C Working Stretch <3% Wet Abrasion Excellent Dry Abrasion Excellent

Standard : -

Length : 100-200 m Plastic Spool

Larger Diameters Upon Request

VECT COVER

Vectran

APPLICATIONS

Special Cover

BENEFITS / FEATURES

Ideal for Protection Against Abrasion

Easy Handling Buoyant

SPECIFICATIONS

Material : 100% Vectran® Fiber

Specific Gravity 1,44 kg/dm³ 24-32 Plaited Construction **UV** Resistance Sufficient **Chemical Resistance** Excellent Melting Point 500°C **Critical Temperature** 350°C Working Stretch <3% Wet Abrasion Excellent **Dry Abrasion** Excellent

Standard : -

Length : 100-200 m Plastic Spool

Other Colours & Larger Diameters Upon Request

Weight (kg/100m)	B.Load (kgf)	DIA (inch)	Weight (lbs/100ft)	B.Load (lbs)
		5/32"- 1/4"		
		3/16"- 9/32"		
		1/4"- 5/16"		
		5/32"- 3/8"		
		5/16"- 1/2"		
		3/8"- 5/8"		
		1/2"- 13/16"		
			(kg/100m) (kgf) (inch) 5/32"- 1/4" 3/16"- 9/32" 1/4"- 5/16" 5/32"- 3/8" 5/16"- 1/2" 3/8"- 5/8"	(kg/100m) (kgf) (inch) (lbs/100ft) 5/32"- 1/4" 3/16"- 9/32" 1/4"- 5/16" 5/32"- 3/8" 5/16"- 1/2" 3/8"- 5/8"

Unspliced Break Load (All Tests are in Accordance with ISO 2307)

LUPES® COVER

APPLICATIONS

BENEFITS / FEATURES

Special Cover

Good Knot Retention Supple Surface Easy Handling

SPECIFICATIONS

Material : 100% HT Polyester Fiber

Specific Gravity 1,38 kg/dm³ 24-32 Plaited Construction **UV** Resistance Excellent **Chemical Resistance** Good Melting Point 256°C **Critical Temperature** 170°C **Working Stretch** <13% Wet Abrasion Good Dry Abrasion Good Standard

Length : 100-200 m Plastic Spool

Other Colours & Large Diameters Upon Request

DIA (mm)	Weight (kg/100m)	B. Load (kgf)	DIA (inch)	Weight (lbs/100ft)	B. Load (lbs)
4-6			5/32"- 1/4"		
5-7			3/16"- 9/32"		
6-8			1/4"- 5/16"		
7-10			5/32"- 3/8"		
8-12			5/16"- 1/2"		

*Unspliced Break Load (All tests are in Accordance with ISO 2307)

LUPA® COVER

APPLICATIONS

BENEFITS / FEATURES

Special Cover

Good Knot Retention Supple Surface Easy Handling

SPECIFICATIONS

Material : 100% HT Polyamide Fiber

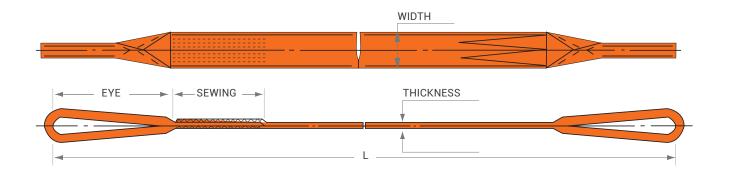
Specific Gravity 1,14 kg/dm³ Construction 24-32 Plaited **UV** Resistance Very Good **Chemical Resistance** Good Melting Point 218°C Critical Temperature : 130°C Working Stretch <20% Wet Abrasion Sufficient Dry Abrasion Good Standard

Length : 100-200 m Plastic Spool

DIA (mm)	Weight (kg/100m)	B. Load (kgf)	DIA (inch)	Weight (lbs/100ft)	B. Load (lbs)
4-6			5/32"- 1/4"		
5-7			3/16"- 9/32"		
6-8			1/4"- 5/16"		
7-10			5/32"- 3/8"		
8-12			5/16"- 1/2"		
*I Insn	liced Break I	oad (All to	ests are in Accor	dance with I	SO 2307)



LE-1 BAND WEBBING SLING





SPECIFICATIONS

Material: 100% HT Polyester Webbing

Standard: EN 1492-1+A1

Safety Factor: 7:1

BENEFITS / FEATURES

High quality product with the 7:1 safety factor Produced from the high strength polyester webbing Various sizes available for every application

Not slippery

High resistance to chemical and oil contamination Custom made slings for specific applications may be made to customer specifications

Various colour are available











	Width (mm)	Working Load (kgf 100%)	Working Load (kgf 80%)	Working Load (kgf 200%)	Angle (0-45°) Working Load (kfg)	Angle (45-60°) Working Load (kgf)	Breaking Load (kgf)	Working Load (kgf)	Length (m)
VIOLET	30-50	1000	800	2000	1400	1000	7000	1000	1-10
GREEN	70	2000	1600	4000	2800	2000	14000	2000	2-10
YELLOW	90	3000	2400	6000	4200	3000	21000	3000	2-10
GRAY	120	4000	3200	8000	5600	4000	28000	4000	4-10
RED	150	5000	4000	10000	7000	5000	35000	5000	4-10
BROWN	180	6000	4800	12000	8400	6000	42000	6000	4-10
BLUE	250	8000	6400	16000	11200	8000	56000	8000	5-10
ORANGE	300	10000	8000	20000	14000	10000	70000	10000	5-10



1. Flat eye



2. Reversed eye



3. Folded eye 1/2 width from 1 side





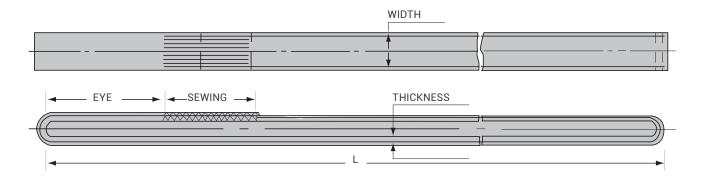
4. Folded eye 1/2 width from 2 sides



5. Folded eye 1/3 width

U	0° 100%	Δ	60° 85%
Δ	30° 95%		90° 75%
Δ	45° 90%	△	120° 50%

LE-2 ROUND WEBBING SLING



SPECIFICATIONS

Material : 100% HT Polyester Webbing

Standard : EN 1492-2+A1

Safety Factor: 7:1

BENEFITS / FEATURES

High quality product with the 7:1 safety factor Produced from the high strength polyester webbing

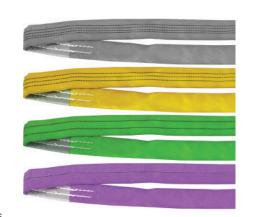
Various sizes available for every application

Not slippery

High resistance to chemical and oil contamination

Custom made slings for specific applications may be made to customer specifications

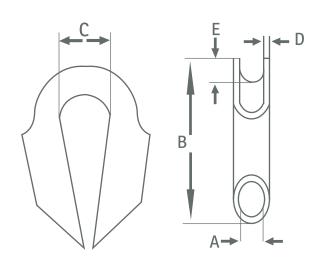
Various colour are available



			_						
	Width (mm)	Working Load (kgf 100%)	Working Load (kgf 80%)	Working Load (kgf 200%)	Angle (0-45°) Working Load (kgf)	Angle (45-60°) Working Load (kgf)	Breaking Load (kgf)	Working Load (kgf)	Length (m)
VIOLET	25	1000	800	2000	1400	1000	7000	1000	1-10
GREEN	50	2000	1600	4000	2800	2000	14000	2000	2-10
YELLOW	75	3000	2400	6000	4200	3000	21000	3000	2-10
GRAY	100	4000	3200	8000	5600	4000	28000	4000	4-10
RED	125	5000	4000	10000	7000	5000	35000	5000	4-10
BROWN	150	6000	4800	12000	8400	6000	42000	6000	4-10
BLUE	200	8000	6400	16000	11200	8000	56000	8000	5-10
ORANGE	250	10000	8000	20000	14000	10000	70000	10000	5-10

U	0° 100%	Δ	60° 85%
Δ	30° 95%	Δ	90° 70%
Δ	45° 90%	_	120° 50%

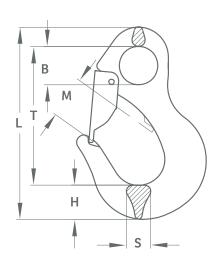
TUBE THIMBLE





Art. No	Rope Size (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Weight (kg)
TM-1.10	8-10	11,60	96	22	3,60	5	0,23
TM-1.13	12-14	13,70	96	23	4,00	5	0,24

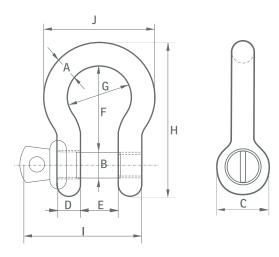
EYE HOOK





Art. No	Size (mm)	Working Load (kg)	B (mm)	H (mm)	L (mm)	M (mm)	S (mm)	T (mm)	Weight (kg)
LH-1.6.8	6-8	1.120	21	20	110	20	17	78	0,30
LH-1.7.8	7-8	1.500	23	21	120	23	18	86	0,40
LH-1.8.8	8-8	2.000	27	22	130	25	19	94	0,50
LH-1.10.8	10-8	3.150	32	29	163	32	22	116	0,90
LH-1.13.8	13-8	5.300	37	35	198	40	28	141	1,60
LH-1.16.8	16-8	8.000	51	38	226	42	29	165	2,40
LH-1.18.8	18-8	10.000	57	50	281	60	40	202	4,40

BOW SHACKLE SC





Art. No	Working Load (kg)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	l (mm)	J (mm)	Weight (kg)
SC-7-9-1	750	9,00	10	20,00	9	13,50	32,00	22	56,00	46,50	40	0,10
SC-7-10-1	1.000	10,00	11	22,50	10	17,00	36,50	26	63,50	54,00	46	0,14
SC-7-11-1	1.500	11,00	13	26,50	11	19,00	43,00	29	74,00	59,50	51	0,19
SC-7-13.5-1	2.000	13,50	16	34,00	13	22,00	51,00	32	89,00	73,00	58	0,36
SC-7-16-1	3.250	16,00	19	40,00	16	27,00	64,00	43	110,00	89,00	75	0,63
SC-7-19-1	4.750	19,00	22	46,00	19	31,00	76,00	51	129,00	103,00	89	1,01
SC-7-22-1	6.500	22,00	25	52,00	22	36,00	83,00	58	144,00	119,00	1.021	1,50

SPECIFICATIONS

Material : Bow and pin high tensile steel, grade 6, quenched and tempered

Safety Factor : MBL equals 6 x WLL

Standard : EN 13889 and meets performance requirements of US Fed. Spec. RR-C-271 Type IVA Class 2, grade A, from 2 t and

upward these shackles comply with ASME B30.26

Finish : Hot dipped galvanized
Temperature Range : -40°C up to +200°C

Certification : 2.1 2.2 3.1 MTC a DNV GL 0378 CE ABS PDA ABS MA



OUR MATERIALS



DYNEEMA® FIBER

Dyneema® is an UHMWPE fiber. DSM invented Dyneema® more than 30 years ago and it has been in production since 1990. The fiber is incredibly versatile with virtually limitless applications. The fiber is manufactured by means of a gel-spinning process that combines extreme strength with incredible softness. Dyneema® is a super-strong fiber based on UHMWPE. It offers maximum strength combined with minimum weight.

Dyneema® SK75 is an extremely high-strength, low-stretch fiber.

Dyneema® SK78 fiber from DSM Dyneema® proved its superior performance under extreme conditions. The high modulus fiber, SK78 has a better stability under constant loads, improved creep feature than its prototype.

Dyneema® SK90 is one of the most advanced high-tech fibers with 12-13% greater strength, has same creep feature as SK-75 fiber. It is a perfect fiber for extreme sailors who are in search of outstanding performance.

Dyneema® SK99 is the newest fiber in Dyneema's SK range - 99 sailing inspirations with Dyneema® spotlights and shares the many ways the world's strongest fiber is extending performance and giving professional and recreational sailors a winning, and safety, edge. SK99 has nearly 20% higher strength than SK78 and keeps the same elongation and creep features as SK75.

Technora[®]

TECHNORA® FIBER

Technora® is a para-aramid fiber made from co-polymers and produced from poly-paraphenylene terephthalamide (ppta). It was independently developed by Teijin and has been commercially available since 1987. This high performance fiber has a range of excellent properties, including high tensile strength, good fatigue resistance, long-term dimensional stability and good resistance to corrosion, heat, chemicals and saltwater.

Vectran

VECTRAN® FIBER

Vectran® is a high-performance multifilament yarn spun from liquid crystal polymer (LCP) produced by Kururay in Japan. Vectran® is currently the only melt spun lcp fiber in the world that is commercially available. The unique combination of characteristics of Vectran® fibers make it superior to many other materials and enable it to perform under conditions in which other materials fail.

Twaron[®]

TWARON® FIBER

Twaron® is a para-aramid, high- performance yarn. Offering well-balanced performance in terms of mechanical properties, chemical resistance and thermal stability, Twaron® is recognized across a wide range of industries as an extremely valuable material with excellent durability. Their experience in aramid production, which extends back more than 30 years, not only guarantees a technically well-established product, it is also the basis for developments, often in close cooperation with our customers, to tailor Twaron® to the specific requirements of various applications.

POLYESTER

POLYESTER

First commercial polyester fiber production: 1953, Dupont company. Polyester is a category of polymers which contain the ester functional group in their main chain. Polyester is the most durable of the common materials. It has good breaking load and a low elongation. It has good resistance against sunlight, external abrasion. Polyester does not lose strength rapidly due to cyclic loading. Polyester has a low co-efficient of friction. Polyester is used as a material for the cover (protection against UV radiation) in the hig-tech ropes and is most widely used fiber in yachting ropes as well as for anchoring lines.

POLYAMIDE

POLYAMIDE

First commercial nylon fiber production: 1939, Dupont company. A manufactured fiber in which the fiber forming substance is a long-chain synthetic polyamide in which less than 85% of the amide-linkages are attached directly (-conh-) to two aliphatic groups. Polyamides-of its strength when wet. The abrasion resistance of polyamide is better in wet conditions than in dry conditions. Polyamide can become stiff (kept in wet condition for too long). The most important polyamides are PA6 and PA6.6. Polyamide is used for mooring lines, sport climbing ropes, safety and rescue ropes.

OUR TREATMENTS



This special polyurethane coating known as long lasting- most efficient kind of protective coating that is being applied to each of our high-tech lines to improve abrasion resistance on the ropes and avoids slippage between cover and core. This particular process offers excellent substrate protection to get better results, which also makes the splicing much easier.



This particular thermal process increases efficiency and strength of Dyneema® ropes, which also achieves significant improvements in the break load of the rope and almost eliminates the 'creep' that helps ropes to have better performance. This procedure contracts the yarns and increases the net fiber density of the rope as well. The ropes become stronger and more durable than standard production performance ropes through these processes.



Dyneema® fiber currently has a lowest stretch among all the other synthetic fibers. However, the constructional elongation will occur during twisting and braiding processes of basic rope manufacturing procedure. Pre-Stretch method is used to minimize this constructional elongation and improve rope strength. When the heat set and Pre-Stretch process applied on the rope together, the both constructional and structural elongation will be reduced yet further increase in strength is also obtained by making the polymer to linear array. We apply this method to all of our high-tech and mid-tech lines to have an excellent product that exceeds our customer's needs.



STANDARDS OF ROPES

EN ISO 9554 Fibre Ropes - General Specifications EN ISO 1968 Fibre Ropes and Cordage - Vocabulary EN ISO 2307 Fibre Ropes - Determination of Certain Physical and Mechanical Properties EN ISO 1140 Fibre Ropes - Polyamide - 3, - 4 and - 8 Strand Ropes EN ISO 1141 Fibre Ropes - Polyester - 3, - 4 and - 8 Strand Ropes EN ISO 1346 Fiber Ropes - Polypropylene - 3, - 4 and - 8 Strand Ropes EN ISO 1181 Fibre Ropes - Manila and Sisal - 3,- 4 and - 8 Strand Ropes ISO 10547 Polyester Fibre Ropes - Double Braid Construction ISO 10554 Polyamide Fibre Ropes - Double Braid Construction ISO 10572 Mixed Polyolef in Fibre Ropes ISO 10325 Fibres Ropes - High Modulus Polyethylene - 8 Strand Braided Ropes, 12 Strand Braided Ropes and Covered Ropes ISO 10556 Fibres Ropes of Polyester/Polyolef in Dual Fibres EN 1891 Personel Protective Equipment for The Prevention of Falls From A Height - Low Stretch Kernmantel Ropes EN 892 Mountaineering Equipment - Dynamic Mountaineering Ropes - Safety

STANDARDS OF ROPES

EN 564

MIL-DTL 24050E Polyamide Fibre Ropes - Double Braid Construction

Requirements and Test Methods

STANDARDS OF SLINGS

EN 1492-1+A1 Textile Slings - Safety - Part 1: Flat Woven Webbing Slings, Made of Man -

Mountaineering Equipment - Accessory Cord - Safety Requirements and Test Methods

Made Fibers for General Purpose Use

EN 1492-2+A1 Textile Slings - Safety - Part 2: Roundslings, Made of Man -

Made Fibers for General Purpose Use

QUALITY - TEST

Kaya Ropes manufactures all kinds of ropes with technical specifications that are suitable for all kind of conditions & ropes made for a specific field with international quality certifications also offering a wide range of construction type and raw materials for every field where the safety of human life and property is of prime concern.

For certain type of products, Kaya Ropes has the type approval and inspection certificates from Turk Loydu. Additionally, Kaya Ropes offers inspection certificates from DNV-GL and Bureau Veritas upon special request from their clients.

































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